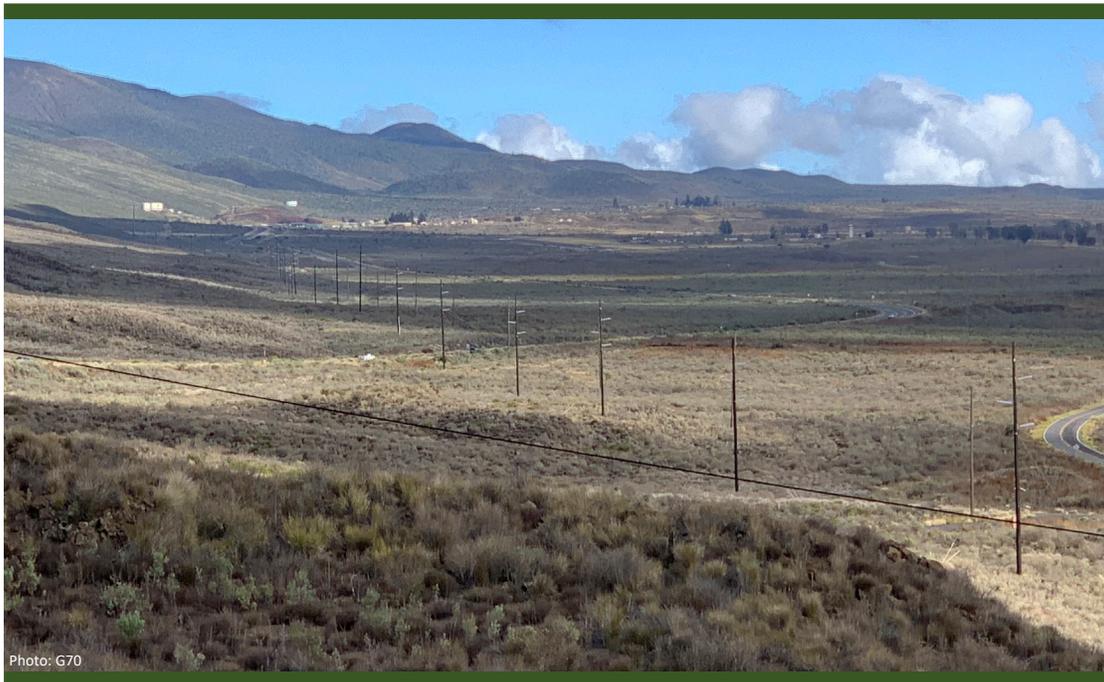


# ARMY TRAINING LAND RETENTION AT PŌHAKULOA TRAINING AREA

## DRAFT ENVIRONMENTAL IMPACT STATEMENT VOLUME II: APPENDICES

PŌHAKULOA TRAINING AREA, ISLAND OF HAWAII, HAWAII



PREPARED FOR DIRECTORATE OF PUBLIC WORKS, U.S. ARMY GARRISON-HAWAII

PREPARED BY U.S. ARMY CORPS OF ENGINEERS, HONOLULU DISTRICT  
UNDER CONTRACT W9128A19D0004

APRIL 2022



# ARMY TRAINING LAND RETENTION AT PŌHAKULOĀ TRAINING AREA

DRAFT ENVIRONMENTAL IMPACT STATEMENT

VOLUME II: APPENDICES

PŌHAKULOĀ TRAINING AREA, ISLAND OF HAWAII, HAWAII



PREPARED FOR DIRECTORATE OF PUBLIC WORKS, U.S. ARMY GARRISON-HAWAII

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UNDER CONTRACT W9128A19D0004

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**NOTE ABOUT USE OF HAWAIIAN DIACRITICAL MARKINGS:**

This document honors the proper use and presentation of Hawaiian language including use of diacritical marks, the glottal stop and the macron (‘okina and kahakō). When Hawaiian words are used in a proper name of an agency or organization that does not utilize diacritical marks, then official titles are shown without diacritical marks. Diacriticals may not appear in direct quotes or public comments. Elsewhere in this document, diacritical markings are used for Hawaiian terminology, proper names and place names.



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## **EIS Notices**

Notice of Intent

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# **Notice of Intent**

(Office of the Federal Register, *Federal Register*, September 4, 2020)



notice in the **Federal Register** to announce and seek comment on a rule review for 16 CFR parts 1107 and 1109, that is being conducted in fiscal year 2021 (85 FR 52078). Accordingly, the issues raised by crib manufacturers on testing and certification under 16 CFR parts 1107 and 1109, will be considered further in that proceeding.

The staff's briefing package containing the review is available on the CPSC website at: <https://www.cpsc.gov/Research—Statistics/Toys-and-Childrens-Products>, [www.regulations.gov](http://www.regulations.gov), and from the Commission's Division of the Secretariat at the location listed in the **ADDRESSES** section of this notice.

**Alberta E. Mills,**

*Secretary, Consumer Product Safety Commission.*

[FR Doc. 2020–19572 Filed 9–3–20; 8:45 am]

**BILLING CODE 6355–01–P**

## CORPORATION FOR NATIONAL AND COMMUNITY SERVICE

### Agency Information Collection Activities; Submission to the Office of Management and Budget for Review and Approval; Comment Request; Civic Engagement and Volunteering; Current Population Survey Supplement

**AGENCY:** Corporation for National and Community Service.

**ACTION:** Notice.

**SUMMARY:** The Corporation for National and Community Service (CNCS) has submitted a public information collection request (ICR) entitled The Civic Engagement and Volunteering Supplement for review and approval in accordance with the Paperwork Reduction Act.

**DATES:** Written comments must be submitted to the individual and office listed in the **ADDRESSES** section by October 5, 2020.

**ADDRESSES:** Written comments and recommendations for the proposed information collection should be sent within 30 days of publication of this notice to [www.reginfo.gov/public/do/PRAMain](http://www.reginfo.gov/public/do/PRAMain). Find this particular information collection by selecting “Currently under 30-day Review—Open for Public Comments” or by using the search function.

**FOR FURTHER INFORMATION CONTACT:** Copies of this ICR, with applicable supporting documentation, may be obtained by calling the Corporation for National and Community Service, Mary Hyde, at 202–606–6834 or email to [mhyde@cns.gov](mailto:mhyde@cns.gov).

**SUPPLEMENTARY INFORMATION:** The OMB is particularly interested in comments which:

- Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of CNCS, including whether the information will have practical utility;
- Evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions;
- Propose ways to enhance the quality, utility, and clarity of the information to be collected; and
- Propose ways to minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology.

### Comments

A 60-day Notice requesting public comment was published in the **Federal Register** on July 1, 2020 at Vol. 85 No. 127 FR 39537–39538. This comment period ended August 31, 2020. No public comments were received from this Notice.

*Description:* This information collection will be used to generate civic health reports at the National, State, and Metropolitan Statistical Area (MSA) levels and to disseminate these data to various stakeholders including state and local government offices, researchers, students and civic groups for strategic planning, grant writing purposes and research.

*Title of Collection:* Civic Engagement and Volunteering Supplement.

*OMB Control Number:* 3045–0139.

*Type of Review:* Renewal.

*Respondents/Affected Public:* U.S. Residents 16 years of age and older.

*Total Estimated Number of Annual Responses:* Approximately U.S. 60,000 residents.

*Total Estimated Number of Annual Burden Hours:* 6,670.

*Abstract:* CNCS has partnered with the U.S. Census to collect data and produced annual volunteering reports since 2002. CNCS is also mandated by the Serve America Act (2009) to produce an annual Civic health assessment in partnership with the National Conference on Citizenship. The proposed survey will be the only source of nationally representative data on the number of Americans who are active in their communities, through volunteering, social interactions, political activities and civic behaviors.

The purpose of collecting data on civic engagement and volunteering is to provide scholars, government officials and policymakers with official government measurement on civic behaviors in the United States.

Dated: August 28, 2020.

**Mary Hyde,**

*Director, Office of Research and Evaluation.*

[FR Doc. 2020–19589 Filed 9–3–20; 8:45 am]

**BILLING CODE 6050–28–P**

## DEPARTMENT OF DEFENSE

### Department of the Army

#### Environmental Impact Statement for Army Training Land Retention at Pōhakuloa Training Area in Hawai'i

**AGENCY:** Department of the Army; Defense (DOD).

**ACTION:** Notice of Intent.

**SUMMARY:** In accordance with the National Environmental Policy Act (NEPA) and the Hawai'i Environmental Policy Act (HEPA), the Department of the Army (Army) announces its intent to prepare an Environmental Impact Statement (EIS) to address the Army's proposed retention of up to approximately 23,000 acres of land currently leased to the Army by the state of Hawai'i (“State-owned land”) at Pōhakuloa Training Area (PTA) on the island of Hawai'i. As the proposed retention involves State-owned land, the EIS will be a joint NEPA–HEPA document; therefore, the public scoping processes will run concurrently and will jointly meet NEPA and HEPA requirements.

**DATES:** The Army invites public comments on the scope of the EIS during a 40-day public scoping period, beginning on the publication date of this Notice of Intent in the **Federal Register**.

**ADDRESSES:** Written comments should be submitted via the EIS website at: <https://home.army.mil/hawaii/index.php/PTAEIS>. Alternatively, comments can be emailed to [usarmy.hawaii.nepa@mail.mil](mailto:usarmy.hawaii.nepa@mail.mil), or mailed to: ATLR PTA EIS Comments, P.O. Box 3444, Honolulu, HI 96801–3444.

**FOR FURTHER INFORMATION CONTACT:** Please contact Mr. Michael Donnelly, PTA Public Affairs Officer, at (808) 969–2411 or by email to [michael.o.donnelly.civ@mail.mil](mailto:michael.o.donnelly.civ@mail.mil).

**SUPPLEMENTARY INFORMATION:** PTA has been used for training as early as 1938, but was not used routinely until 1943. PTA was formally established in 1956

through a maneuver agreement granted by the Territory of Hawai'i. In 1964, the State granted a 65-year lease of approximately 23,000 acres of land to the Army for military purposes. The lease expires on August 16, 2029. The 23,000 acres of State-owned land contain utilities, critical infrastructure, maneuver land, and key training facilities, some of which are not available elsewhere in Hawai'i. The land also provides access to approximately 110,000 acres of adjacent U.S. Government-owned land at PTA.

PTA encompasses approximately 132,000 acres of land used for training military personnel for combat. It is the only U.S. training area in the Pacific region where training units can complete all mission essential tasks, and the only U.S. training facility in the Pacific region that can accommodate larger than company-sized units for live-fire and maneuver exercises. The U.S. Army Hawaii (USARHAW) and other U.S. military units that train at PTA include the 25th Infantry Division, U.S. Marine Corps, U.S. Navy, U.S. Air Force, Hawaii National Guard, and U.S. Army Reserve.

The Army's retention of State-owned land within PTA is needed to enable USARHAW to continue to conduct military training to meet its current and future training requirements.

Retention of State-owned land is needed to allow access between major parcels of U.S. Government-owned land at PTA, retain substantial Army infrastructure investments, allow for future facility and infrastructure modernization, preserve limited maneuver area, provide austere environment training, and maximize use of the impact area in support of USARHAW-coordinated training. To understand the environmental consequences of the decision to be made, the EIS will evaluate the potential direct, indirect, and cumulative impacts of a range of reasonable alternatives that meet the purpose of, and need for, the Proposed Action. Alternatives to be considered, including the no action alternative, are (1) Full Retention, (2) Modified Retention, and (3) Minimum Retention and Access. Other reasonable alternatives raised during the scoping process and capable of meeting the project purpose and need will be considered for evaluation in the EIS.

Native Hawaiian organizations; Federal, state, and local agencies; and the public are invited to be involved in the scoping process for the preparation of this EIS by participating in a scoping meeting and/or submitting written comments. The scoping process will help identify potential environmental

impacts and key issues of concern to be analyzed in the EIS. Written comments must be sent within 40 days of publication of the Notice of Intent in the **Federal Register**. In response to the coronavirus (COVID-19) pandemic in the United States and the Center for Disease Control's recommendations for social distancing and avoiding large public gatherings, the Army will not hold public scoping meetings for this action. In lieu of the public scoping meetings, the Army will use other alternative means to enable public participation such as virtual meetings using online meeting/collaboration tools, teleconference, social media, or email, as appropriate. An EIS Scoping Virtual Open House and two in-person scoping comment stations will be held on Wednesday, September 23, 2020 from 4–9 p.m. During the EIS Scoping Virtual Open House, video presentations can be viewed online at <https://home.army.mil/hawaii/index.php/PTAEIS> and oral and written comments will be accepted. Oral comments will be accepted via phone by calling (808) 300-0220. The two in-person scoping comment stations will also be open to the public to accept oral comments via phone and written comments: One in-person scoping comment station will be in Hilo, and the other will be in Waimea, both on the island of Hawai'i; individuals making comments will maintain recommended social distance. Notification of the EIS Scoping Virtual Open House and in-person scoping comment stations date and time will also be published and announced in local news media outlets and on the EIS website. For those who do not have ready access to a computer or the internet, the scoping materials posted to the EIS website will be made available upon request by mail. Inquiries and requests for scoping materials may be made to Michael Donnelly, PTA Public Affairs Officer at (808) 969-2411 or by email at [michael.o.donnelly.civ@mail.mil](mailto:michael.o.donnelly.civ@mail.mil).

**Brenda S. Bowen,**

*Army Federal Register Liaison Officer.*

[FR Doc. 2020-19620 Filed 9-3-20; 8:45 am]

**BILLING CODE 5061-AP-P**

## DEPARTMENT OF DEFENSE

### Office of the Secretary

#### Uniform Formulary Beneficiary Advisory Panel; Notice of Federal Advisory Committee Meeting

**AGENCY:** Under Secretary of Defense for Personnel and Readiness, Department of Defense (DoD).

**ACTION:** Notice of Federal Advisory Committee meeting.

**SUMMARY:** The DoD is publishing this notice to announce the following Federal Advisory Committee meeting of the Uniform Formulary Beneficiary Advisory Panel will take place.

**DATES:** Open to the public Wednesday, September 23, 2020, from 12:00 p.m. to 6:00 p.m. (Eastern Daylight Time).

**ADDRESSES:** The open meeting will be held online. The phone number for remote access is CONUS: 888-469-2037; OCONUS: 1-517-308-9287; PARTICIPANT CODE: 8227323. These numbers and the dial-in instructions will also be posted on the Uniform Formulary Beneficiary Advisory Panel website at: <https://www.health.mil/About-MHS/OASDHA/Defense-Health-Agency/Operations/Pharmacy-Division/Beneficiary-Advisory-Panel>.

**FOR FURTHER INFORMATION CONTACT:**

Colonel Paul J. Hoerner, USAF, 703-681-2890 (Voice), [dha.ncr.j-6.mbx.baprequests@mail.mil](mailto:dha.ncr.j-6.mbx.baprequests@mail.mil) (Email). Mailing address is 7700 Arlington Boulevard, Suite 5101, Falls Church, VA 22042-5101. Website: <https://www.health.mil/About-MHS/OASDHA/Defense-Health-Agency/Operations/Pharmacy-Division/Beneficiary-Advisory-Panel>. The most up-to-date changes to the meeting agenda can be found on the website.

**SUPPLEMENTARY INFORMATION:** This meeting is being held under the provisions of the Federal Advisory Committee Act (FACA) (5 U.S.C., Appendix), the Government in the Sunshine Act (5 U.S.C. 552b), and 41 CFR 102-3.140 and 102-3.150.

The Panel will review and comment on recommendations made to the Director, Defense Health Agency, by the Pharmacy and Therapeutics Committee, regarding the Uniform Formulary.

*Purpose of the Meeting:* The DoD is publishing this notice to announce that the following Federal Advisory Committee meeting of the Uniform Formulary Beneficiary Advisory Panel will take place.

#### Agenda

1. Sign-In
2. Welcome and Opening Remarks
3. Scheduled Therapeutic Class Reviews (Comments will follow each agenda item)
  - a. Psoriasis Agents—NA
  - b. Sleep Disorders—Wakefulness Promoting Agents
  - c. White Blood Cell Stimulants—Filgrastims
  - d. White Blood Cell Stimulants—Pegfilgrastims

# **Amended Notice of Intent**

(Office of the Federal Register, *Federal Register*, September 23, 2020)



Sally Luttrell—Assistant Inspector General for Investigations.

Deborah L. Harker—Assistant Inspector General for Audit.

Pauletta Battle—Deputy Assistant Inspector General for Financial Management and Transparency Audits.

Susan Barron—Deputy Assistant Inspector General for Financial Sector Audits.

Donna F. Joseph—Deputy Assistant Inspector General for Cyber and Financial Assistance Audits.

*Treasury Inspector General for Tax Administration/Department of the Treasury*

Phone Number: (202) 622-6500

CIGIE Liaison—David Barnes (Acting) (202) 622-3062

Lori Creswell—Deputy Chief Counsel.

Gladys Hernandez—Chief Counsel.

Heather Hill—Assistant Inspector General for Audit, Management Services and Exempt Organizations.

James Jackson—Deputy Inspector General for Investigations.

Nancy LaManna—Assistant Inspector General for Audit, Management, Planning, and Workforce Development.

Russell Martin—Assistant Inspector General for Audit, Returns Processing, and Accounting Services.

Michael McKenney—Deputy Inspector General for Audit.

Susan Moats—Assistant Inspector General for Investigations—Field.

Trevor Nelson—Assistant Inspector General for Investigations, Cyber, Operations and Investigative Support.

Richard Varn II—Chief Information Officer.

Danny Verneuille—Assistant Inspector General for Audit, Security, and Information Technology Services.

Matthew Weir—Assistant Inspector General for Audit, Compliance, and Enforcement Operations.

*Department of Veterans Affairs*

Phone Number: (202) 461-4603

CIGIE Liaison—Brandy Beckham (202) 264-9376

David Case—Deputy Inspector General.

John D. Daigh—Assistant Inspector General for Healthcare Inspections.

Julie Kroviak—Deputy Assistant Inspector General for Healthcare Inspections.

Melanie Krause—Assistant Inspector General for Management and Administration.

Gopala Seelamneni—Deputy Assistant Inspector General for Management and Administration/Chief Technology Officer.

Tara Porter—Deputy Assistant Inspector General for Management and Administration

Dated: September 11, 2020.

**Shiji S. Thomas,**

*Chair, CIGIE Oversight.gov Subcommittee/Forensic Accounting Manager, NSF OIG.*

[FR Doc. 2020-20959 Filed 9-22-20; 8:45 am]

**BILLING CODE 6820-C9-P**

## DEPARTMENT OF DEFENSE

### Department of the Army

#### Environmental Impact Statement for Army Training Land Retention at Pōhakuloa Training Area in Hawai'i; Correction

**AGENCY:** Department of the Army; Defense (DOD).

**ACTION:** Notice of intent; correction.

**SUMMARY:** The Department of the Army (Army) published a document in the **Federal Register** of September 4, 2020, concerning its continuing intent to prepare an Environmental Impact Statement to address the Army's proposed retention of up to approximately 23,000 acres of land currently leased to the Army by the state of Hawai'i ("State-owned land") at Pōhakuloa Training Area (PTA) on the island of Hawai'i. The document referenced two in-person comment stations previously associated with the Virtual Scoping Open House to be held Wednesday, September 23, 2020. Now, however, because of the national and local orders and proclamations in response to the coronavirus (COVID-19) pandemic in the United States, including: The County of Hawai'i Mayor's COVID-19 Emergency Rule No. 11 dated August 25, 2020, and the Office of the Governor, State of Hawaii Office Twelfth Proclamation Related to the COVID-19 Emergency dated August 20, 2020, the Army is canceling the in-person comment stations. Only the in-person comment stations will be cancelled; the EIS Scoping Virtual Open House will be held as planned.

**FOR FURTHER INFORMATION CONTACT:** Mr. Michael Donnelly, PTA Public Affairs Officer, at [michael.o.donnelly.civ@mail.mil](mailto:michael.o.donnelly.civ@mail.mil) or (808) 969-2411.

#### SUPPLEMENTARY INFORMATION:

##### Correction

In the **Federal Register** of September 4, 2020, in FR Doc. 2020-19620, on page 55263, in the third column, correct the **SUPPLEMENTARY INFORMATION** caption to read:

**SUPPLEMENTARY INFORMATION:** PTA has been used for training as early

as 1938, but was not used routinely until 1943. PTA was formally established in 1956 through a maneuver agreement granted by the Territory of Hawai'i. In 1964, the State granted a 65-year lease of approximately 23,000 acres of land to the Army for military purposes. The lease expires on August 16, 2029. The 23,000 acres of State-owned land contain utilities, critical infrastructure, maneuver land, and key training facilities, some of which are not available elsewhere in Hawai'i. The land also provides access to approximately 110,000 acres of adjacent U.S.

Government-owned land at PTA. PTA encompasses approximately 132,000 acres of land used for training military personnel for combat. It is the only U.S. training area in the Pacific region where training units can complete all mission essential tasks, and the only U.S. training facility in the Pacific region that can accommodate larger than company-sized units for livefire and maneuver exercises. The U.S. Army Hawaii (USARHAW) and other U.S. military units that train at PTA include the 25th Infantry Division, U.S. Marine Corps, U.S. Navy, U.S. Air Force, Hawaii National Guard, and U.S. Army Reserve. The Army's retention of State-owned land within PTA is needed to enable USARHAW to continue to conduct military training to meet its current and future training requirements. Retention of State-owned land is needed to allow access between major parcels of U.S. Government-owned land at PTA, retain substantial Army infrastructure investments, allow for future facility and infrastructure modernization, preserve limited maneuver area, provide austere environment training, and maximize use of the impact area in support of USARHAW-coordinated training. To understand the environmental consequences of the decision to be made, the EIS will evaluate the potential direct, indirect, and cumulative impacts of a range of reasonable alternatives that meet the purpose of, and need for, the Proposed Action. Alternatives to be considered, including the no action alternative, are (1) Full Retention, (2) Modified Retention, and (3) Minimum Retention and Access. Other reasonable alternatives raised during the scoping process and capable of meeting the project purpose and need will be considered for evaluation in the EIS. Native Hawaiian organizations; Federal, state, and local agencies; and the public are invited to be involved in the scoping process for the preparation of this EIS by participating in a scoping meeting and/or submitting written comments.

The scoping process will help identify potential environmental impacts and key issues of concern to be analyzed in the EIS. Written comments must be sent within 40 days of publication of the Notice of Intent in the **Federal Register**. In response to the coronavirus (COVID-19) pandemic in the United States and the Center for Disease Control's recommendations for social distancing and avoiding large public gatherings, the Army will not hold public scoping meetings for this action. In lieu of the public scoping meetings, the Army will use other alternative means to enable public participation such as virtual meetings using online meeting/collaboration tools, teleconference, social media, or email, as appropriate. An EIS Scoping Virtual Open House will be held on Wednesday, September 23, 2020 from 4–9 p.m. During the EIS Scoping Virtual Open House, video presentations can be viewed online at <https://home.army.mil/hawaii/index.php/PTAEIS> and oral and written comments will be accepted. Oral comments will be accepted via phone by calling (808) 300–0220. Notification of the EIS Scoping Virtual Open House date and time will also be published and announced in local news media outlets and on the EIS website. For those who do not have ready access to a computer or the internet, the scoping materials posted to the EIS website will be made available upon request by mail. Inquiries and requests for scoping materials may be made to Michael Donnelly, PTA Public Affairs Officer at (808) 969–2411 or by email at [michael.o.donnelly.civ@mail.mil](mailto:michael.o.donnelly.civ@mail.mil).

**Brenda S. Bowen,**

*Army Federal Register Liaison Officer.*

[FR Doc. 2020–20966 Filed 9–22–20; 8:45 am]

**BILLING CODE 5061–AP–P**

## DEPARTMENT OF DEFENSE

### Office of the Secretary

[Docket ID DoD–2020–OS–0075]

### Proposed Collection; Comment Request

**AGENCY:** National Defense University, DoD.

**ACTION:** Information collection notice.

**SUMMARY:** In compliance with the *Paperwork Reduction Act of 1995*, the National Defense University announces a proposed public information collection and seeks public comment on the provisions thereof. Comments are invited on: Whether the proposed collection of information is necessary

for the proper performance of the functions of the agency, including whether the information shall have practical utility; the accuracy of the agency's estimate of the burden of the proposed information collection; ways to enhance the quality, utility, and clarity of the information to be collected; and ways to minimize the burden of the information collection on respondents, including through the use of automated collection techniques or other forms of information technology. **DATES:** Consideration will be given to all comments received by November 23, 2020.

**ADDRESSES:** You may submit comments, identified by docket number and title, by any of the following methods:

*Federal eRulemaking Portal:* <http://www.regulations.gov>. Follow the instructions for submitting comments.

*Mail:* DoD cannot receive written comments at this time due to the COVID–19 pandemic. Comments should be sent electronically to the docket listed above.

*Instructions:* All submissions received must include the agency name, docket number and title for this **Federal Register** document. The general policy for comments and other submissions from members of the public is to make these submissions available for public viewing on the internet at <http://www.regulations.gov> as they are received without change, including any personal identifiers or contact information.

**FOR FURTHER INFORMATION CONTACT:** To request more information on this proposed information collection or to obtain a copy of the proposal and associated collection instruments, please write to National Defense University, 300 5th Avenue SW, Building 62, Washington, DC 20319, ATTN: LTC Ann Summers, or call (202) 685–3323.

### SUPPLEMENTARY INFORMATION:

*Title; Associated Form; and OMB Number:* Master's Degree Application Form for International Students; OMB Control Number 0704–XXXX.

*Needs and Uses:* This form is used to collect the information required to admit international students to an NDU master's degree program. The respondents are prospective international students who wish to be admitted to an NDU master's degree program. They respond to this information collection in partial fulfillment of NDU application and admissions requirements. The completed collection instrument is processed by the NDU registrars and a

committee of NDU faculty who review the application in consideration of admission to a master's degree program. The successful effect of this information collection is to satisfy NDU master's degree application requirements for international students so that an admissions decision can be made.

*Affected Public:* Foreign Nationals.

*Annual Burden Hours:* 30 hours.

*Number of Respondents:* 120.

*Responses per Respondent:* 1.

*Annual Responses:* 120.

*Average Burden per Response:* 15 minutes.

*Frequency:* Annually.

*Dated:* September 11, 2020.

**Aaron T. Siegel,**

*Alternate OSD Federal Register Liaison Officer, Department of Defense.*

[FR Doc. 2020–21022 Filed 9–22–20; 8:45 am]

**BILLING CODE 5001–06–P**

## DEPARTMENT OF DEFENSE

### Office of the Secretary

[Docket ID DoD–2020–OS–0076]

### Privacy Act of 1974; System of Records

**AGENCY:** Office of the Secretary of Defense (OSD), Department of Defense (DoD).

**ACTION:** Notice of a modified system of records.

**SUMMARY:** The OSD is modifying a system of records titled “National Language Service Corps (NLSC) Records,” DHRA 07. The NLSC system is a cost-effective solution to the tactical and strategic management of foreign language support needs within the U.S. military and civilian enterprise for operations, plans, and workforce requirements. It provides a surge capability from individuals who are generally unavailable to the Government by tapping into our nation's population of skilled citizens who speak hundreds of languages critical to our nation's needs.

Initially established as a pilot program maintaining a pool of linguists proficient in ten languages, NLSC has since expanded its capabilities to support over 414 languages and dialects and provide over 4,000 man-hours of support to federal agencies annually. To meet the increasing need for professionals with language skills, in 2018, the NLSC expanded the reach of linguist support from DoD organizations to all federal government agencies and is modifying the system to accommodate this growth.

# **Notification for the Environmental Impact Statement Preparation Notice**

(State of Hawai'i Office of Environmental Quality Control,  
*The Environmental Notice, September 8, 2020*)





# The Environmental Notice

September 8, 2020

David Y. Ige, Governor

*The Environmental Notice* provides public notice for projects undergoing environmental review in Hawai'i as mandated under Section 343-3, Hawai'i Revised Statutes, the Environmental Impact Statement Law. Along with publishing Environmental Assessments and Environmental Impact Statements for projects in Hawai'i, *The Environmental Notice* also includes other items related to the shoreline, coastal zone, and federal activities.



The ford crossing of the Waimea River on Kaua'i isn't much different today than it was over 100 years ago

Photo from the [Waimea River Ford Crossing Draft EA](#) (Hawai'i State Archives)

## HAWAII

### Army Training Land Retention at Pōhakuloa Training Area (EIS Preparation Notice)

<b>HRS §343-5(a) Trigger</b>	(1) Propose the use of state or county lands or the use of state or county funds (2) Propose any use within any land classified as a conservation district	
<b>District(s)</b>	Hāmākua and North Hilo	
<b>TMK(s)</b>	(3) 4-4-015:008; 4-4-016:005; 7-1-004:007; 3-8-001:013; 3-8-001:022	
<b>Permit(s)</b>	Numerous (see document)	
<b>Approving Agency/ Accepting Authority</b>	Board of Land and Natural Resources, State of Hawai'i Russell Tsuji, DLNR, Land Division, (808) 587-0419, <a href="mailto:dlnr.land@hawaii.gov">dlnr.land@hawaii.gov</a> 1151 Punchbowl St., Room 220, Honolulu, HI 96813	
<b>Applicant</b>	U.S. Army Garrison-Hawaii & U.S. Army Installation Management Command Gregory Wahl, (808) 656-3093, <a href="mailto:Gregory.t.wahl.civ@mail.mil">Gregory.t.wahl.civ@mail.mil</a> for questions, or <a href="mailto:usarmy.hawaii.nepa@mail.mil">usarmy.hawaii.nepa@mail.mil</a> to cc comments U.S. Army Garrison Hawaii Directorate of Public Works - Environmental 948 Santos Dumont Ave., Building 105, 3rd Floor, Wheeler Army Airfield, Schofield Barracks, HI 96857-5013	
<b>Consultant</b>	G70; 111 S. King Street, Suite 170, Honolulu, HI 96813 Jeff Overton, (808) 523-5866, <a href="mailto:ATLR-PTA-EIS@g70.design">ATLR-PTA-EIS@g70.design</a>	
<b>Status</b>	Administrative public review and comment period starts. <b>Comments are due by October 14, 2020.</b> Click the title link above or navigate to <a href="https://home.army.mil/hawaii/index.php/PTAEIS">https://home.army.mil/hawaii/index.php/PTAEIS</a> to access and read the document, then address comments to the approving agency/accepting authority at <a href="http://atlrptaeis.commentinput.com">http://atlrptaeis.commentinput.com</a> and copy the <a href="#">applicant</a> and the <a href="#">consultant</a> . A virtual public scoping meeting will be held on September 23, 2020 4 - 9 p.m; to participate, navigate to <a href="https://home.army.mil/hawaii/index.php/PTAEIS">https://home.army.mil/hawaii/index.php/PTAEIS</a>	

The Pōhakuloa Training Area (PTA) on Hawai'i Island encompasses approximately 133,000 acres of federally-owned and state-owned land. The U.S. Government leases approximately 23,000 acres at PTA from the State. The 65-year lease expires on August 16, 2029. The Army proposes to retain up to 23,000 acres of State-owned land in support of continued military training. The retention will preserve access between major parcels of U.S. Government-owned land in PTA, retain substantial Army infrastructure investments, and allow for future facility and infrastructure modernization. Loss of this land would substantially impact the ability of the Army to meet training requirements and mission of readiness. The Proposed Action does not involve new training, construction, or resource management activities at PTA. Instead, it is a real estate action that would enable continued military use of the land. A Notice of Intent for this action has also [been published](#) in the Federal Register.

### Hilo Scrap Metal Yard Closure and Remediation--Final EA (FONSI)

<b>HRS §343-5(a) Trigger</b>	(1) Propose the use of state or county lands or the use of state or county funds	
<b>District(s)</b>	South Hilo	
<b>TMK(s)</b>	(3) 2-1-013:150 (por.)	
<b>Permit(s)</b>	Numerous (see document)	
<b>Proposing/ Determining Agency</b>	Department of Environmental Management, County of Hawai'i Gene Quiamas, (808) 961-8270, <a href="mailto:Gene.Quiamas@hawaiicounty.gov">Gene.Quiamas@hawaiicounty.gov</a> 345 Kekūānō'a Street, Suite 41, Hilo, HI 96720	
<b>Consultant</b>	Wilson Okamoto Corporation; 1907 S. Beretania Street, Suite 400, Honolulu, HI 96826 Rebecca Candilasa, (808) 946-2277, <a href="mailto:rcandilasa@wilsonokamoto.com">rcandilasa@wilsonokamoto.com</a>	
<b>Status</b>	Finding of No Significant Impact (FONSI) determination	

The County of Hawai'i Department of Environmental Management is planning to permanently close and remediate the site of the former Hilo Scrap Metal Yard located in Hilo on Hawai'i Island. The proposed action consists of excavating and disposing of all waste materials and all lead contaminated soils in the project area. As an alternative, DEM is also analyzing the cost benefits of only disposing of excavated non-recyclable waste materials and consolidating the lead-contaminated soils onsite, grading to optimize future use, and capping with an engineered cover system to prevent direct contact exposure to the lead-contaminated soil. Other activities may include conducting site assessments, post-excavation confirmation sampling, grading, backfilling portions of the site with clean aggregate, and vegetating. Once the site has been remediated, DEM plans to use the site in the future for consolidation of existing solid waste management program components in the area.

**Affidavit of Publication  
for Scoping Public Notices**



AFFIDAVIT OF PUBLICATION

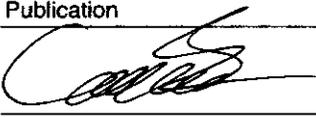
IN THE MATTER OF  
PUBLIC NOTICE

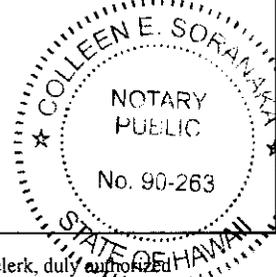
STATE OF HAWAII )  
 ) SS.  
City and County of Honolulu )

Doc. Date: \_\_\_\_\_ # Pages: 1

Notary Name: COLLEEN E. SORANAKA First Judicial Circuit

Doc. Description: Affidavit of Publication

  
Notary Signature \_\_\_\_\_ Date \_\_\_\_\_



Lisa Sakakida being duly sworn, deposes and says that she is a clerk, duly authorized to execute this affidavit of Oahu Publications, Inc. publisher of The Honolulu Star-Advertiser, MidWeek, The Garden Island, West Hawaii Today, and Hawaii Tribune-Herald, that said newspapers are newspapers of general circulation in the State of Hawaii, and that the attached notice is true notice as was published in the

Honolulu Star-Advertiser 3 times on:  
09/06, 09/14, 09/20/2020

MidWeek 0 times on:

The Garden Island 0 times on:

Hawaii Tribune-Herald 3 times on:  
09/06, 09/14, 09/20/2020

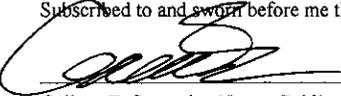
West Hawaii Today 3 times on:  
09/06, 09/14, 09/20/2020

Other Publications: 0 times on:

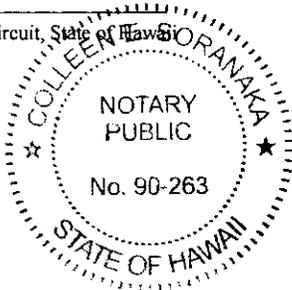
And that affiant is not a party to or in any way interested in the above entitled matter.

  
\_\_\_\_\_  
Lisa Sakakida

Subscribed to and sworn before me this 22nd day of September A.D. 2020

  
\_\_\_\_\_  
Colleen E. Soranaka, Notary Public of the First Judicial Circuit, State of Hawaii  
My commission expires: Jan 06 2024

Ad # 0001292078



**U.S. Army to Prepare Environmental Impact Statement for Army Training Land Retention at Pohakuloa Training Area on Hawaii Island**

In accordance with the National Environmental Policy Act (NEPA) and the Hawaii Environmental Policy Act (HEPA), the Department of the Army (Army) announces its intent to prepare an Environmental Impact Statement (EIS) to address the Army's proposed retention of up to approximately 23,000 acres of land currently leased to the Army by the State of Hawaii ("State-owned land") at Pohakuloa Training Area (PTA) on the island of Hawaii. The EIS will be a joint NEPA-HEPA document as the proposed retention involves State-owned land; therefore, the public scoping processes will run concurrently and will jointly meet NEPA and HEPA requirements.

The Army invites public comments on the scope of the EIS during a 40-day public scoping period beginning Sept. 4, 2020. Comments can be submitted on the EIS website: <https://home.army.mil/hawaii/index.php/PTAEIS>, as well as emailed to [usarmy.hawaii.nepa@mail.mil](mailto:usarmy.hawaii.nepa@mail.mil), or mailed to: ATLR PTA EIS Comments, P.O. Box 3444, Honolulu, HI 96801-3444. All comments must be postmarked or submitted by October 14, 2020, to be considered in preparation of the EIS.

The public is invited to participate in an online scoping open house Sept. 23, 2020, to take place on the project website: <https://home.army.mil/hawaii/index.php/PTAEIS>. During the virtual open house participants can:  
1) View online presentations.  
2) Call (808) 300-0220 to submit oral comments from 4 p.m. - 9 p.m. (Sept. 23 only).

For more information or accessibility requests, please contact Mr. Michael Donnelly, PTA Public Affairs Officer, at [michael.o.donnelly.ch@mail.mil](mailto:michael.o.donnelly.ch@mail.mil) or (808) 969-2411.  
(WHT/HTH/SA1292078 9/6, 9/14, 9/20/20)

ICSP NO.: \_\_\_\_\_



# Scoping Comments and Responses

Federal Agencies

State of Hawai'i Agencies

County of Hawai'i Agencies

Elected Officials

Organizations

Individuals

Responses to Scoping Comments



# **Federal Agencies**



# Federal Agencies

U.S. Department of the Interior,  
National Park Service, National Natural  
Landmarks Program ..... US-1  
U.S. Environmental Protection Agency, Pacific  
Islands Office Region 9 ..... US-4



**From:** NPS\_Environ\_Rev@nps.gov  
**Sent:** Tuesday, October 20, 2020 3:34 AM  
**To:** USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
**Cc:** Danette\_Woo@nps.gov; lani\_pettebone@nps.gov  
**Subject:** [Non-DoD Source] NPS Comments, ER-20/0375: Land Retention at Poʻhakuloa Training Area (PTA), Hawaii

All active links contained in this email were disabled. Please verify the identity of the sender, and confirm the authenticity of all links contained within the message prior to copying and pasting the address to a Web browser.

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Dear Sir/Madam,

Using the link(s) below, you can download NPS comments on ER-20/0375, the Land Retention at Poʻhakuloa Training Area (PTA), Hawaii.

If you have questions, please contact Danette Nolan at [Danette\\_Woo@nps.gov](mailto:Danette_Woo@nps.gov).

ER-20\_0375 NPS comments.doc: Caution-  
<https://irma.nps.gov/ERTS/Download/394e48344467674d47702b633032725a33617461574163493974362b4155572b7242796c4e6d777a5756544b30775a497566395266413d3d>

U.S. Department of the Interior  
National Park Service  
National Natural Landmarks Program



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Comments for ER Control Number: ER-20/0375

LJenkins@nps.gov

9/14/2020

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The Pohakulua Training Area minimally overlaps with the Mauna Kea National Natural Landmark on the Island of HI.

U.S. Department of the Interior  
National Park Service  
National Natural Landmarks Program



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**Name:** Mauna Kea

**Location:** Island of Hawaii

**Description:**

Mauna Kea, rising to an elevation of 13,784 feet above sea level, is the highest insular volcano in the world. Lake Waiau is located below the summit at an elevation of 13,020 feet above sea level making it the highest lake in the United States. A remarkable cluster of cinder and spatter cones fan outward and down slope from the summit. During the Pleistocene Epoch an ice cap covered Mauna Kea summit above the 11,200-foot level. Evidence of glaciations abounds on the set slopes in the form of glacial striae, boulders, polish and grooves. The boundary of the 83,900-acre landmark site is the striae as the boundary of the Mauna Kea Forest Reserve located 25 miles west-northwest of the city of Hilo.

**Significance:**

Few sites possess better credentials to justify their national significance than does Mauna Kea. First, it is the exposed portion of the highest insular mountain in the United States, standing more than 30,000 feet above its submerged base at the bottom of the Pacific. Second, on its summit slopes is found the highest lake in the United States. Thirdly, though located in the tropics, indisputable evidence of glaciations is present above the 11,000-foot level. Additionally, and possibly transcending all of these qualifications, is the fact that Mauna Kea is the most majestic expression of shield volcanism in the Hawaiian Archipelago, if not the world.

**Ownership:** Federal, State

**Designation:** November 1972

**Evaluation:** Robert H. Rose, National Park Service, 1972





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105-3901

October 8, 2020

Gregory Wahl  
U.S. Army Garrison-Hawaii  
P.O. Box 3444  
Honolulu, Hawaii 96801-3444

Subject: Scoping comments for the Army Training Land Retention at Pohakuloa Training Area (PTA) in Hawai'i

Dear Gregory Wahl:

The U.S. Environmental Protection Agency has reviewed the Federal Register notice published on September 4, 2020 requesting comments on the Department of the Army's decision to prepare an Environmental Impact Statement for the subject project. Our comments are provided pursuant to the National Environmental Policy Act, Council on Environmental Quality regulations (40 CFR Parts 1500-1508) and our NEPA review authority under Section 309 of the Clean Air Act.

The Army proposes to retain up to approximately 23,000 acres of land currently leased to the Army by the state of Hawai'i at the Pohakuloa Training Area (PTA) on the island of Hawai'i. The EIS will be a joint NEPA-Hawai'i Environmental Policy Act (HEPA) document. According to the Hawai'i EIS preparation notice (EISPN), the Proposed Action is a real estate action that would enable continued military use of State-owned land and does not involve new training, construction, or resource management activities at PTA.

Because the NOI was published prior to the effective date for the updated CEQ NEPA regulations, we assume the Army will be following the former CEQ NEPA Regulations. If the Army chooses to apply the new regulations to the project per 40 CFR 1506.13, we recommend notifying the public and previous commenters of this change and indicating this in the Draft EIS and on the project website.

We have the following comments for your consideration in preparation of the DEIS:

**Range contamination and off-range migration**

***Range contamination***

For the affected environment, the NEPA document should clearly identify all contaminated areas onsite and in the immediate vicinity that have the potential to affect State-owned lands. Document the existing levels of contamination that resulted from military use since the ranges became operational and since the initial land retention, including the contamination left by military munitions and explosives of concern (unexploded ordnance and other hazardous munitions materials left behind from military live-fire training or testing, open burning and open detonation, and munitions treatment, destruction and burial activities). Describe any cleanup activities that have been done in the past or any cleanup that would be done prior to or during the proposed future retention period.

This discussion should include the extent of depleted uranium contamination at PTA and the status of any cleanup efforts. Disclose the locations of known depleted uranium munitions contamination on the ranges and the potential for release under continuing actions enabled by the federal decision. According to Figure 3 in a paper posted on the Army Garrison Hawaii's website,<sup>1</sup> the area of maximum DU impact appears to border State land. We recommend summarizing historical monitoring data and current monitoring requirements pursuant to the U.S. Nuclear Regulatory Commission source material license.

### ***Off-range migration***

Include a summary and discussion of the current or most recent Operational Range Assessment and a summary of other reports that address potential for off-range migration of munitions constituents. We recommend posting relevant documents and reports on the project website. Discuss off-range migration including via the air/dust pathway and stormwater runoff pathway and consider exposure pathways for both human and ecological receptors.

### **Alternatives Analysis**

We appreciate the identification of two alternatives in addition to the proposed action in the Notice of Intent. Alternative 2 would retain approximately 20,000 acres of State-owned land and not retain approximately 3,000 acres which the Army indicates is rarely used for training. Alternative 3 would retain even less State-owned land but the amount and location are not presented and will be identified in the Draft EIS. According to the Hawai'i EISPN, most of the 3,000 acres not retained under Alternative 2 are federally designated critical habitat for Palila (*Loxioides bailleui*). This critically endangered bird species is found only on Mauna Kea and an important part of Hawaiian heritage. Since the Army has indicated that this land is rarely used for training, we recommend the Army consider this alternative as preferred, at a minimum. Depending on impacts to training and the feasibility of Alternative 3, once evaluated, the Army may want to consider Alternative 3 as preferred.

The NOI and EISPN also indicate that a variety of land retention methods are possible but the DEIS will evaluate title (full ownership) since it is assumed this method would result in the greatest impacts. The Army states it would indicate how impacts would be greater or reduced under other land retention methods. While negotiation cannot occur until after the EIS process, the Army could still incorporate different land retention methods into its range of alternatives to compare impacts of the different methods. Varying time periods for land retention could also be evaluated as alternatives. The NOI indicates that the current lease period is 65 years. Additionally, while the EISPN indicates the proposed action does not involve new resource management activities, an alternative that incorporates additional resource protections could be formulated, consistent with 40 CFR 1502.14 (e)<sup>2</sup> which suggests that agencies evaluate an alternative that includes mitigation measures not already included in the proposed action or alternatives. As a suggestion, this mitigated alternative could include additional protections for native plant species. For example, we are aware of the innovative vertebrate pest control experiments by the Oahu Army Natural Resource Program using a new fertility-control product for rodents that impact native species. This and/or other resource protections, such as additional ungulate fencing, could be incorporated into an alternative.

### **Air Quality**

Hawaii is currently in attainment for all National Ambient Air Quality Standards. We recommend the DEIS identify sources of air emissions on the PTA, particularly dust generated from training activities

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<sup>1</sup> [https://home.army.mil/hawaii/application/files/8115/5961/1870/EstimatingPublicExposureToDU\\_2011.pdf](https://home.army.mil/hawaii/application/files/8115/5961/1870/EstimatingPublicExposureToDU_2011.pdf)

<sup>2</sup> Formerly 40 CFR 1502.14 (f)

such as vehicle use on gravel and dirt roads and emissions from ordnance use and explosives detonations. Address public concerns regarding DU-contaminated dust, identify whether impact areas and areas of routine disturbance have been tested recently for the presence of DU, and identify ongoing monitoring to address community concerns.

**Cultural Resources and Consultation with Native Hawaiian Community**

The DEIS should document compliance with the National Historic Preservation Act (NHPA). Identify the progress towards identifying archaeological sites in the impact areas and areas of ongoing disturbance. The NHPA requires that, in carrying out the requirements of Section 106, each federal agency must consult with any Native Hawaiian organization that attaches religious and cultural significance to historic properties that may be affected by the agency’s undertakings. We note that the Advisory Council on Historic Preservation has a handbook for consultation with Native Hawaiian organizations in the Section 106 process<sup>3</sup> that may be useful. We recommend the DEIS describe the process and progress of Section 106 consultation between the Army and any Native Hawaiian organizations that have shown an interest in the action, issues that were raised, and how those issues are being addressed in the development of the proposed action and alternatives.

We appreciate the opportunity to provide comments on the preparation of the DEIS. If you have any questions, please contact me at (415) 947-4178 or [yitulano.karen@epa.gov](mailto:yitulano.karen@epa.gov).

Sincerely,

Karen Vitulano  
Environmental Review Branch

cc: Russell Tsuji, Hawaii Department of Land and Natural Resources

---

<sup>3</sup> <https://www.energy.gov/sites/prod/files/2016/02/f30/Native%20Hawaiian%20Consultation%20Handbook.pdf>



# **State of Hawai'i Agencies**



# State of Hawai'i Agencies

Department of Hawaiian Home Lands.....	HI-1
Department of Health, Hazard Evaluation and Emergency Response Office .....	HI-3
Department of Land and Natural Resources.....	HI-5
Department of Land and Natural Resources, Engineering Division.....	HI-7
Department of Land and Natural Resources, Commission on Water Resource Management.....	HI-9
Department of Land and Natural Resources, Land Division .....	HI-11
Department of Transportation .....	HI-12



DAVID Y. ICE  
GOVERNOR  
STATE OF HAWAII

JOSH GREEN  
1<sup>ST</sup> GOVERNOR  
STATE OF HAWAII



WILLIAM J. AILA, JR.  
CHAIRMAN  
HAWAIIAN HOMES COMMISSION

TYLER I. GOMES  
DEPUTY TO THE CHAIRMAN

**STATE OF HAWAII  
DEPARTMENT OF HAWAIIAN HOME LANDS**

P. O. BOX 1879  
HONOLULU HAWAII 96895

October 14, 2020

Ref.:PO-20-237

Mr. Gregory Wahl  
U.S. Army Garrison-Hawaii & U.S. Army Installation Management Command  
948 Santos Dumont Ave., Building 105, 3<sup>rd</sup> Floor, Wheeler Army Airfield  
Schofield Barracks, HI 96857-5013

Dear Mr. Wahl:

RE: Department of Hawaiian Home Lands (DHHL) Comments on the Environmental Impact Statement Preparation Notice for the Army Training Land Retention at Pōhakuloa Training Area; TMKs: (3) 4-4-015:008; (3) 4-4-016:005, (3) 7-1-004:007, (3) 3-8-001:013 & (3) 3-8-001:022

DHHL hereby submits the following comments regarding the Environmental Impact Statement Preparation Notice (EISPN) that was published in the OEQC Bulletin on September 8, 2020.

**EISPN Section 3.3.1 History of Land Ownership**

DHHL appreciates that the DLNR EISPN preparation notice letter dated August 27, 2020 acknowledges that TMK (3) 3-8-001:013 & (3) 3-8-001:022 (approx. 250 acres) are Hawaiian Home Lands. However, absent in the discussion of section 3.3.1 of the EISPN regarding the history of land ownership is the acknowledgement that these two parcels of land were set-aside as Hawaiian Home Lands via the Hawaiian Homes Commission Act, 1920 (HHCA), 42 Stat. 108 and are under the jurisdiction of the Hawaiian Homes Commission. Furthermore, this section did not acknowledge that the subsequent leasing of these two TMK parcels by the state Board of Land and Natural Resources (BLNR) to the Army without the consent of the Hawaiian Homes Commission was an unauthorized use of Hawaiian Home Lands.

To remedy the unauthorized use of Hawaiian Home Lands across the state, the Hawai'i State Legislature approved the Act 14 SpSLH 1995 (Act 14). Twenty-five years after the passage of the Act 14 Settlement, the state still has not completed land exchanges with DHHL for the unauthorized use of Hawaiian Home Lands. It should also be noted that a land exchange between DHHL and DLNR is now also subject to the approval of the U.S. Department of Interior (DOI) per 43 CFR Part 47. DHHL looks forward to working with DLNR and U.S. DOI to execute a land exchange agreement and complete this portion of the Act 14 Settlement.

Should a section on the history of land ownership be included in a Draft EIS, then the above discussion should be included in that section.

**EISPN Section 3.4 Hazardous and Toxic Materials and Wastes**

The EISPN acknowledges the presence of hazardous materials within the project area of PTA including the presence of uranium and other harmful substances. Hazardous materials like uranium may decompose over time into tiny sediment particles. As a neighboring land owner, DHHL is very concerned that the presence of hazardous materials within the project area when decomposed could easily be transmitted to neighboring lands via wind, rain run-off, or other methods. Water table testing and air quality testing should be conducted not just within the project area, but also on neighboring landowner properties as part of the studies undertaken during the EIS process in order to detect the potential spread of hazardous materials onto neighboring properties. Furthermore, the EIS should describe in detail the Army's plans to clean-up and contain hazardous materials within the project area.

**EISPN Section 4 Relationship to Plans, Policies, and Controls**

The EIS should also include a discussion of this proposed action with conformance to the DHHL Aina Mauna Legacy Plan and DHHL Hawaii Island Plan. We note that DHHL's plans were not included under the list of State of Hawai'i plans and policies.

Mahalo for the opportunity to comment. Should you or the Army have any questions please feel free to contact the DHHL Planning Office at [dhhl.planning@hawaii.gov](mailto:dhhl.planning@hawaii.gov).

Sincerely,



William J. Ailā Jr., Chairman  
Hawaiian Homes Commission

- C: Members of the Hawaiian Homes Commission (via email)
- Hawaii Island Homestead Associations (via email)
- Department of Land and Natural Resources (via email)
- U.S. Department of Interior Office of Native Hawaiian Relations (via email)



STATE OF HAWAII  
DEPARTMENT OF HEALTH  
P. O. BOX 3378  
HONOLULU, HI 96801-3378

In reply, please refer to:  
File:  
177012 SL

October 13, 2020

Mr. Michael Donnelly  
PTA Public Affairs Officer  
ATLR PTA EIS Comments  
P.O. Box 3444  
Honolulu, Hawaii 96801-3444

**Facility/Site:** Pohakuloa Training Center

**Subject:** Comments on the Army Training Land Retention at Pōhakuloa Training Area Environmental Impact Statement Preparation Notice, Pōhakuloa Training Area, Island of Hawai'i, Hawai'i; dated August 2020

Dear Mr. Donnelly:

The Hawaii Department of Health (HDOH), Hazard Evaluation and Emergency Response (HEER) Office has reviewed the Environmental Impact Statement Preparation Notice (EISPN) referenced above and has the following comments:

1. It is our understanding that the Hawaii Supreme Court has affirmed that the State Department of Land and Natural Resources (DLNR) is required to ensure the Army is in compliance with terms of the lease agreement, including on-going clean-up of unexploded ordnance (UXO) and other environmental contaminants. Please provide information regarding the status of that judgement, oversight by DLNR, and the Army's compliance status in the EIS.
2. If the property is returned to the State, please include requirements for the clean-up of UXO, munitions Debris (MD), and other environmental contaminants at the site **prior to** the return of the property. The HEER Office oversees clean-up activities at DoD sites in Hawaii under a DoD-State Memorandum of Agreement (DSMOA) Cooperative Agreement. The HEER Office does not oversee clean-up at *active* ranges. However, at the former Pu'u Pa'a Training Area (formerly part of Pohakuloa) the HEER Office is currently overseeing the Army's clean-up (following the CERCLA process) of UXO and MD that were left behind when the property was returned to Parker Ranch. Apparently, no plan had been made to clean-up the leased land *before* it was returned to Parker Ranch almost 20 years ago. Clean-up while the Army still controls the property is preferable.

Mr. Michael Donnelly  
October 13, 2020  
Page 2 of 2

3. The HEER Office currently oversees the Army's long-term management of a landfill (Landfill 2) that appears to be located within the State leased land. Please include requirements for the Army to continue long-term management in compliance with CERCLA requirements, if the land is returned to the State.
4. The EISPN states that other Recognized Environmental Conditions (RECs) are present at the site that need to be assessed. Any releases that are identified during those investigations (i.e., contaminant concentrations greater than the Tier 1 Environmental Action Levels [EALs]) must be reported to the HEER Office following our Release Notification process (see <https://health.hawaii.gov/heer/how-to-report-a-release-spill/>).
5. The Army's website (<https://home.army.mil/hawaii/index.php/garrison/dpw/du>) states that "Any DU [Deleted Uranium] residue present is limited to impact areas well within the perimeter of operational ranges. These areas are not publicly accessible. Very few range and safety personnel access the impact areas of our operational ranges. Those people that work in these areas are trained to recognize potential hazards associated with military munitions." The EISPN is unclear, stating in Section 3.4 that CRECs on the State-owned land *include* DU spotting rounds; but also stating that "the rounds landed in the impact area, which is outside of the State-owned land." Bearing in mind that Munitions Constituents (MC) can impact firing points and range floors, as well as impact area(s), please include an assessment for DU on the State land as part of the EIS. Even if the land is not returned to the State, this assessment and any clean-up to address both chemical and radiological hazards associated with DU should be conducted to meet the requirements of the Supreme Court Order.

Should there be any questions, please do not hesitate to call me at 586-5815, or via e-mail at [sven.lindstrom@doh.hawaii.gov](mailto:sven.lindstrom@doh.hawaii.gov).

Sincerely,



Sven Lindstrom  
Site Discovery, Assessment, and Remediation  
Hazard Evaluation and Emergency Response Office  
Hawaii Department of Health

cc: Karen Vitulano (EPA Region 9, via e-mail)

**From:** Nakamura, Darlene K <darlene.k.nakamura@hawaii.gov>  
**Sent:** Tuesday, October 13, 2020 1:55 PM  
**To:** ATLR-PTA-EIS@g70.design; USARMY Wheeler AAF ID-Pacific Mailbox NEPA  
Comments  
**Subject:** [Non-DoD Source] Request for Comments - Army Training Land Retention (ATLR)  
at Pohakuloa Training Area (PTA) - EISPN  
**Attachments:** Pohakuloa Training Area.signed.pdf

All active links contained in this email were disabled. Please verify the identity of the sender, and confirm the authenticity of all links contained within the message prior to copying and pasting the address to a Web browser.

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Attached are comments from the Hawaii Department of Land and Natural Resources to the above-entitled subject project.

DAVID Y. IGE  
GOVERNOR OF HAWAII



SUZANNE D. CASE  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE  
MANAGEMENT

STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
LAND DIVISION

POST OFFICE BOX 621  
HONOLULU, HAWAII 96809

October 13, 2020

G70

Attention: Mr. Jeff Overton  
111 South King Street, Suite 170  
Honolulu, Hawaii 96813

via email: [ATLR-PTA-EIS@g70.design](mailto:ATLR-PTA-EIS@g70.design)

Dear Mr. Overton:

SUBJECT: EISPN for the Army Training Land Retention at **Pohakuloa Training Area** located at Hamakua and North Kona, Island of Hawaii; TMKs: (3) 4-4-015:008; (3) 4-4-016:005; (3) 7-1-004:007; (3) 3-8-001:013; and (3) 3-8-001:022

Thank you for the opportunity to review and comment on the subject matter. The Land Division of the Department of Land and Natural Resources (DLNR) distributed or made available a copy of your request pertaining to the subject matter to DLNR's Divisions for their review and comments.

At this time, enclosed are comments from the (a) Engineering Division, (b) Commission on Water Resource Management, and (c) Land Division – Hawaii District on the subject matter. Should you have any questions, please feel free to contact Darlene Nakamura at (808) 587-0417 or email: [darlene.k.nakamura@hawaii.gov](mailto:darlene.k.nakamura@hawaii.gov). Thank you.

Sincerely,

*Russell Tsuji*

Russell Y. Tsuji  
Land Administrator

Enclosures

cc: Central Files  
U.S. Army Garrison-Hawaii (USAG-HI) (w/copies) (email: [usarmy.hawaii.nepa@mail.mil](mailto:usarmy.hawaii.nepa@mail.mil))  
U.S. Army Installation Management Command (w/copies) (same email as above)



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
LAND DIVISION

POST OFFICE BOX 621  
HONOLULU, HAWAII 96809

September 11, 2020

MEMORANDUM

FROM:

~~TO:~~

**DLNR Agencies:**

- Div. of Aquatic Resources
- Div. of Boating & Ocean Recreation
- Engineering Division** ([DLNR.ENGR@hawaii.gov](mailto:DLNR.ENGR@hawaii.gov))
- Div. of Forestry & Wildlife ([rubyrosa.t.terrago@hawaii.gov](mailto:rubyrosa.t.terrago@hawaii.gov))
- Div. of State Parks ([curt.a.cottrell@hawaii.gov](mailto:curt.a.cottrell@hawaii.gov))
- Commission on Water Resource Management ([DLNR.CWRM@hawaii.gov](mailto:DLNR.CWRM@hawaii.gov))
- Office of Conservation & Coastal Lands ([sharleen.k.kuba@hawaii.gov](mailto:sharleen.k.kuba@hawaii.gov))
- Land Division – Hawaii District ([gordon.c.heit@hawaii.gov](mailto:gordon.c.heit@hawaii.gov))
- Historic Preservation ([DLNR.Intake.SHPD@hawaii.gov](mailto:DLNR.Intake.SHPD@hawaii.gov))

TO:

**FROM:**

Russell Y. Tsuji, Land Administrator

*Russell Tsuji*

**SUBJECT:**

EISPN for the Army Training Land Retention at **Pohakuloa Training Area**

**LOCATION:**

Hamakua and North Kona, Island of Hawaii; TMKs: (3) 4-4-015:008; (3) 4-4-016:005; (3) 7-1-004:007; (3) 3-8-001:013; and (3) 3-8-001:022

**APPLICANT:**

U.S. Army Garrison-Hawaii & U.S. Army Installation Management Command

Transmitted for your review and comment is information on the above-referenced subject matter. Please submit any comments by **October 12, 2020**.

*The EISPN can be found on-line at: <http://health.hawaii.gov/oeqc/> (Click on The Environmental Notice in the middle of the page.)*

If no response is received by the above date, we will assume your agency has no comments. Should you have any questions about this request, please contact Darlene Nakamura at [darlene.k.nakamura@hawaii.gov](mailto:darlene.k.nakamura@hawaii.gov). Thank you.

- ( ) We have no objections.
- ( ) We have no comments.
- (  ) Comments are attached.

Signed: *CS*  
 Print Name: Carty S. Chang, Chief Engineer  
 Division: Engineering Division  
 Date: Oct 2, 2020

Attachments  
cc: Central Files

**DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION**

**LD/Russell Y. Tsuji**

**Ref: EISPN for the Army Training Land Retention at Pohakuloa Training Area**

**Location: Hamakua and North Kona, Island of Hawaii**

**TMK(s): (3) 4-4-015:008; (3) 4-4-016:005; (3) 7-1-004:007; (3) 3-8-001:013;  
and (3) 3-8-001:022**

**Applicant: U.S. Army Garrison-Hawaii & U.S. Army Installation  
Management Command**

**COMMENTS**

The rules and regulations of the National Flood Insurance Program (NFIP), Title 44 of the Code of Federal Regulations (44CFR), are in effect when development falls within a Special Flood Hazard Area (high risk areas). State projects are required to comply with 44CFR regulations as stipulated in Section 60.12. Be advised that 44CFR reflects the minimum standards as set forth by the NFIP. Local community flood ordinances may stipulate higher standards that can be more restrictive and would take precedence over the minimum NFIP standards.

The owner of the project property and/or their representative is responsible to research the Flood Hazard Zone designation for the project. Flood Hazard Zones are designated on FEMA's Flood Insurance Rate Maps (FIRM), which can be viewed on our Flood Hazard Assessment Tool (FHAT) (<http://gis.hawaiiinfip.org/FHAT>).

If there are questions regarding the local flood ordinances, please contact the applicable County NFIP coordinating agency below:

- Oahu: City and County of Honolulu, Department of Planning and Permitting (808) 768-8098.
- Hawaii Island: County of Hawaii, Department of Public Works (808) 961-8327.
- Maui/Molokai/Lanai County of Maui, Department of Planning (808) 270-7253.
- Kauai: County of Kauai, Department of Public Works (808) 241-4896.

Signed:   
CARTY S. CHANG, CHIEF ENGINEER

Date: Oct 2, 2020

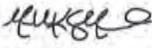


STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE MANAGEMENT  
P.O. BOX 621  
HONOLULU, HAWAII 96809

October 6, 2020

REF: RFD.5466.8

TO: Mr. Russell Tsuji, Administrator  
Land Division

FROM: M. Kaleo Manuel, Deputy Director   
Commission on Water Resource Management

SUBJECT: EISPN for the Army Training Land Retention at Pohakuloa Training Area

FILE NO.: RFD.5466.8  
TMK NO.: (3) 4-4-015:008; (3) 4-4-016:005; (3) 7-1-004:007; (3) 3-8-001:013; and (3) 3-8-001:022

Thank you for the opportunity to review the subject document. The Commission on Water Resource Management (CWRM) is the agency responsible for administering the State Water Code (Code). Under the Code, all waters of the State are held in trust for the benefit of the citizens of the State, therefore all water use is subject to legally protected water rights. CWRM strongly promotes the efficient use of Hawaii's water resources through conservation measures and appropriate resource management. For more information, please refer to the State Water Code, Chapter 174C, Hawaii Revised Statutes, and Hawaii Administrative Rules, Chapters 13-167 to 13-171. These documents are available via the Internet at <http://dlnr.hawaii.gov/cwrm>.

Our comments related to water resources are checked off below.

- 1. We recommend coordination with the county to incorporate this project into the county's Water Use and Development Plan. Please contact the respective Planning Department and/or Department of Water Supply for further information.
- 2. We recommend coordination with the Engineering Division of the State Department of Land and Natural Resources to incorporate this project into the State Water Projects Plan.
- 3. We recommend coordination with the Hawaii Department of Agriculture (HDOA) to incorporate the reclassification of agricultural zoned land and the redistribution of agricultural resources into the State's Agricultural Water Use and Development Plan (AWUDP). Please contact the HDOA for more information.
- 4. We recommend that water efficient fixtures be installed and water efficient practices implemented throughout the development to reduce the increased demand on the area's freshwater resources. Reducing the water usage of a home or building may earn credit towards Leadership in Energy and Environmental Design (LEED) certification. More information on LEED certification is available at <http://www.usgbc.org/leed>. A listing of fixtures certified by the EAP as having high water efficiency can be found at <http://www.epa.gov/watersense>.
- 5. We recommend the use of best management practices (BMP) for stormwater management to minimize the impact of the project to the existing area's hydrology while maintaining on-site infiltration and preventing polluted runoff from storm events. Stormwater management BMPs may earn credit toward LEED certification. More information on stormwater BMPs can be found at <http://planning.hawaii.gov/czm/initiatives/low-impact-development/>
- 6. We recommend the use of alternative water sources, wherever practicable.
- 7. We recommend participating in the Hawaii Green Business Program, that assists and recognizes businesses that strive to operate in an environmentally and socially responsible manner. The program description can be found online at <http://energy.hawaii.gov/green-business-program>.
- 8. We recommend adopting landscape irrigation conservation best management practices endorsed by the Landscape Industry Council of Hawaii. These practices can be found online at [http://www.hawaiiscape.com/wp-content/uploads/2013/04/LICH\\_Irrigation\\_Conservation\\_BMPs.pdf](http://www.hawaiiscape.com/wp-content/uploads/2013/04/LICH_Irrigation_Conservation_BMPs.pdf).

- 9. There may be the potential for ground or surface water degradation/contamination and recommend that approvals for this project be conditioned upon a review by the State Department of Health and the developer's acceptance of any resulting requirements related to water quality.
- 10. The proposed water supply source for the project is located in a designated water management area, and a Water Use Permit is required prior to use of water. The Water Use Permit may be conditioned on the requirement to use dual line water supply systems for new industrial and commercial developments.
- 11. A Well Construction Permit(s) is (are) are required before the commencement of any well construction work.
- 12. A Pump Installation Permit(s) is (are) required before ground water is developed as a source of supply for the project.
- 13. There is (are) well(s) located on or adjacent to this project. If wells are not planned to be used and will be affected by any new construction, they must be properly abandoned and sealed. A permit for well abandonment must be obtained.
- 14. Ground-water withdrawals from this project may affect streamflows, which may require an instream flow standard amendment.
- 15. A Stream Channel Alteration Permit(s) is (are) required before any alteration can be made to the bed and/or banks of a steam channel.
- 16. A Stream Diversion Works Permit(s) is (are) required before any stream diversion works is constructed or altered.
- 17. A Petition to Amend the Interim Instream Flow Standard is required for any new or expanded diversion(s) of surface water.
- 18. The planned source of water for this project has not been identified in this report. Therefore, we cannot determine what permits or petitions are required from our office, or whether there are potential impacts to water resources.
  
- OTHER: Planning - The existing and any new proposed water source(s) and existing and any increase in projected water demands for the project, both potable and non-potable, should be identified and the calculations used to estimate demands should be provided. A discussion of the potential impacts on water resources and other public trust uses of water should be included, and any proposed mitigation measures described. Water conservation and efficiency measures to be implemented should also be discussed.

If you have any questions, please contact Lenore Ohye of the Commission staff at 587-0216.

DAVID Y. IGE  
GOVERNOR OF HAWAII



SUZANNE D. CASE  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE  
MANAGEMENT

STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
LAND DIVISION

POST OFFICE BOX 621  
HONOLULU, HAWAII 96809

September 11, 2020

MEMORANDUM

TO: DLNR Agencies:  
 \_\_\_ Div. of Aquatic Resources  
 \_\_\_ Div. of Boating & Ocean Recreation  
 X Engineering Division ([DLNR.ENGR@hawaii.gov](mailto:DLNR.ENGR@hawaii.gov))  
 X Div. of Forestry & Wildlife ([rubyrosa.t.terrago@hawaii.gov](mailto:rubyrosa.t.terrago@hawaii.gov))  
 X Div. of State Parks ([curt.a.cottrell@hawaii.gov](mailto:curt.a.cottrell@hawaii.gov))  
 X Commission on Water Resource Management ([DLNR.CWRM@hawaii.gov](mailto:DLNR.CWRM@hawaii.gov))  
 X Office of Conservation & Coastal Lands ([sharleen.k.kuba@hawaii.gov](mailto:sharleen.k.kuba@hawaii.gov))  
 X Land Division – Hawaii District ([gordon.c.heit@hawaii.gov](mailto:gordon.c.heit@hawaii.gov))  
 X Historic Preservation ([DLNR.Intake.SHPD@hawaii.gov](mailto:DLNR.Intake.SHPD@hawaii.gov))

FROM: Russell Y. Tsuji, Land Administrator *Russell Tsuji*  
 SUBJECT: EISPN for the Army Training Land Retention at **Pohakuloa Training Area**  
 LOCATION: Hamakua and North Kona, Island of Hawaii; TMKs: (3) 4-4-015:008; (3) 4-4-016:005; (3) 7-1-004:007; (3) 3-8-001:013; and (3) 3-8-001:022  
 APPLICANT: U.S. Army Garrison-Hawaii & U.S. Army Installation Management Command

Transmitted for your review and comment is information on the above-referenced subject matter. Please submit any comments by **October 12, 2020**.

The EISPN can be found on-line at: <http://health.hawaii.gov/oegc/> (Click on The Environmental Notice in the middle of the page.)

If no response is received by the above date, we will assume your agency has no comments. Should you have any questions about this request, please contact Darlene Nakamura at [darlene.k.nakamura@hawaii.gov](mailto:darlene.k.nakamura@hawaii.gov). Thank you.

- ( ) We have no objections.
- (  ) We have no comments.
- ( ) Comments are attached.

Signed:   
 Print Name: GORDON C. HEIT  
 Division: Land Division  
 Date: 9/23/20

Attachments  
cc: Central Files

**From:** Torres, Natasha P <Natasha.P.Torres@hawaii.gov>  
**Sent:** Tuesday, October 13, 2020 12:00 PM  
**To:** Case, Suzanne D; Tsuji, Russell Y; dlnr.Id@hawaii.gov  
**Cc:** USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments; ATLR-PTA-EIS@g70.design  
**Subject:** [Non-DoD Source] STP 8.3048 ARMY TRAINING LAND RETENTION AT POHAKULOA TRAINING AREA (PTA)(20-088) (part 1) - signed  
**Attachments:** STP 8.3048 ARMY TRAINING LAND RETENTION AT POHAKULOA TRAINING AREA (PTA)(20-088) (part 1) - signed.pdf

All active links contained in this email were disabled. Please verify the identity of the sender, and confirm the authenticity of all links contained within the message prior to copying and pasting the address to a Web browser.

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Aloha,

Please see attached for your viewing and handling. No hard copy will be transmitted.

Kindly acknowledge receipt of this email.

Thank you,  
Natasha Torres  
Statewide Transportation Planning Office  
Hawai'i Department of Transportation  
Phone: (808) 831-7973 | Fax: (808) 831-7995



**STATE OF HAWAII**  
**DEPARTMENT OF TRANSPORTATION**  
869 PUNCHBOWL STREET  
HONOLULU, HAWAII 96813-5097

IN REPLY REFER TO:  
**DIR 0842**  
**STP 8.3048**

October 12, 2020

TO: SUZANNE D. CASE, CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES

ATTN: RUSSELL TSUJI, LAND DIVISION ADMINISTRATOR  
DEPARTMENT OF LAND AND NATURAL RESOURCES

FROM: JADE T. BUTAY   
DIRECTOR OF TRANSPORTATION

SUBJECT: ENVIRONMENTAL IMPACT STATEMENT PREPARATION NOTICE  
(EISPN)  
ARMY TRAINING LAND RETENTION AT POHAKULOA TRAINING  
AREA (PTA)  
TAX MAP KEYS: (3) 4-4-015:008; 4-4-016:005; 7-1-004:007; 3-8-001:013  
AND 022

The State of Hawaii, Department of Transportation (HDOT) has reviewed the subject EISPN and understands the U.S. Army is proposing to retain up to 23,000 acres of State-owned land in support of continued military training.

The EISPN indicates in Section 3.10 that the Army utilizes airports, harbors, and roadways for the transport of equipment, munitions, and supplies to and from PTA, and for deployment training which includes vehicle convoys to move personnel and equipment. It should be noted that the Hilo International Airport and Ellison Onizuka Kona International Airport are both under the jurisdiction of our Airports Division; Hilo Harbor and Kawaihae Harbor are both under our Harbors Division; and Saddle Road and Mamalahoa Highway are under the jurisdiction of our Highways Division.

HDOT's Airports and Highways Divisions have determined that the proposed action does not appear to have any adverse impact to their respective facilities and have no comments to provide at this time.

However, our Harbors Division requests that activities that involve both Hilo and Kawaihae Harbor be done in coordination with the Harbors Division, Hawaii District Office.

HDOT also understands that additional information and analysis of potential impacts to transportation facilities will be provided within the Draft Environmental Impact Statement (DEIS); therefore, HDOT reserves the right to provide additional comments once the DEIS is made available for review.

If there are any questions, please contact Mr. Blayne Nikaido of the Statewide Transportation Planning Office at (808) 831-7979 or via email at [blayne.h.nikaido@hawaii.gov](mailto:blayne.h.nikaido@hawaii.gov).

c: Gregory Wahl – U.S. Army Garrison-Hawaii  
Jeff Overton – G70

# **County of Hawai'i Agencies**



# County of Hawai'i Agencies

Department of Water Supply..... CNTY-1

Planning Department..... CNTY-2





**DEPARTMENT OF WATER SUPPLY • COUNTY OF HAWAI'I**

345 KEKŪANAŌ'A STREET, SUITE 20 • HILO, HAWAI'I 96720

TELEPHONE (808) 961-8050 • FAX (808) 961-8657

October 13, 2020

Mr. Jeff Overton  
G70  
111 South King Street, Suite 170  
Honolulu, HI 96813

Dear Mr. Overton:

**Subject: Environmental Impact Statement Preparation Notice for the Army Training Land Retention at Pohakuloa Training Area**  
**Tax Map Key (3) 4-4-015:008, (3) 4-4-016:005, (3) 7-1-004:007, (3) 3-8-001:013 and (3) 3-8-001:022**

Thank you for allowing us the opportunity to comment on the subject Environmental Impact Statement Preparation Notice.

Please be informed that the Army has an existing standpipe facility in Waimea that is served by an existing 3-inch meter. The Department does not deliver water to the Catonment at Pohakuloa Training Area.

Should there be any questions, please contact Mr. Ryan Quitoriano of our Water Resources and Planning Branch at 961-8070, extension 256.

Sincerely yours,

Keith K. Okamoto, P.E.  
Manager-Chief Engineer

RQ:dfg

copy – U.S. Army Garrison-Hawai'i and U.S. Army Installation Management Command

**From:** Sullivan, Kevin <Kevin.Sullivan@hawaiicounty.gov>  
**Sent:** Tuesday, October 13, 2020 4:30 PM  
**To:** USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
**Cc:** michelel@g70.design; Wahl, Gregory T CIV USARMY USAG (USA);  
dlnr.land@hawaii.gov; Yee, Michael; Morrison, Bethany;  
oeqchawaii@doh.hawaii.gov; Mori, Ashley; Borce, Loreto V Jr LTC USARMY  
IMCOM PACIFIC (USA); Donnelly, Michael O'Malley CIV USARMY IMCOM PACIFIC  
(USA); ATLR-PTA-EIS@g70.design  
**Subject:** [Non-DoD Source] Fw: PTA Environmental Impact Statement (EIS), Notice of  
Intent (NOI) update (UNCLASSIFIED)  
**Attachments:** EIS-POHAKULOA TRAINING AREA.PDF

All active links contained in this email were disabled. Please verify the identity of the sender, and confirm the authenticity of all links contained within the message prior to copying and pasting the address to a Web browser.

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Aloha All,  
Please accept the attached input(7pages) to the below EIS scoping period.  
Mahalo!

Kevin Sullivan, AICP  
Planner IV Long Range Division,  
County of Hawaii Planning Department  
808-961-8135

---

**From:** Yee, Michael  
**Sent:** Sunday, September 6, 2020 8:48 AM  
**To:** Mori, Ashley  
**Cc:** Morrison, Bethany  
**Subject:** FW: PTA Environmental Impact Statement (EIS), Notice of Intent (NOI) update (UNCLASSIFIED)

Please intake to Bethany.

---

**From:** Borce, Loreto V Jr LTC USARMY IMCOM PACIFIC (USA) <[loreto.v.borce.mil@mail.mil](mailto:loreto.v.borce.mil@mail.mil)>  
**Sent:** Thursday, September 03, 2020 7:34 PM  
**Subject:** PTA Environmental Impact Statement (EIS), Notice of Intent (NOI) update (UNCLASSIFIED)

CLASSIFICATION: UNCLASSIFIED

Please convert to HTML-

Aloha Kakou,

I hope all is well with you and your 'ohana especially as we all continue to adjust to this new normalcy. As the PTA team and I continue to better understand and react to the impacts of COVID-19, **THE HEALTH, SAFETY AND WELL-BEING** of the PTA employees and the local communities remain my **TOP** priority. There has been a steep learning curve at PTA, as the team and I continue to keep everyone safe while continuing to provide training support to rotational training units. That said, please do not hesitate to reach out to me or the PTA team if we can be of assistance and/or would like us to share some of our COVID-19 lessons learned.

I am writing today to inform you that the Environmental Impact Statement or EIS for the retention of Leased Land at Pohakuloa Training Area (PTA) officially begins tomorrow, 04 SEP 2020. The Army will publicly announce its intent to prepare an Environmental Impact Statement (EIS) on the proposed retention of up to approximately 23,000 acres of land at PTA currently leased from the State of Hawaii. This Notice of Intent is published in the Federal Register and will kick off a 40-day public comment period, running 04 SEP 2020 through 14 OCT 2020.

Typically an in-person public meeting is held during the scoping period which is scheduled on 23 SEP 2020. Due to the COVID-19 situation and my priority in keeping the local community safe, we will host a virtual public scoping on 23 SEP 2020. Participants will be able to view recorded online presentations and can utilize a call-in number to submit oral comments from 1600-2100. The four methods of providing input and feedback are as follows:

1. e-mail [usarmy.hawaii.nepa@mail.mil](mailto:usarmy.hawaii.nepa@mail.mil) < Caution-mailto:usarmy.hawaii.nepa@mail.mil > from 4 Sept. to 14 Oct
2. US Mail (ATLR PTA EIS Comments, P.O. Box 3444, Honolulu, HI 96801-3444) from 4 Sept. to 14 Oct
3. Website (Caution-<https://home.army.mil/hawaii/index.php/PTAEIS> < Caution-<https://home.army.mil/hawaii/index.php/PTAEIS> > ) (23 Sept is the comment block)
4. Telephone (808) 300-0220 on 23 Sept

Lastly, the public affairs channel will provide more information in order to keep everyone updated and encourage participation. If you have any questions, please e-mail Mike Donnelly, the PAO for PTA [atmichael.o.donnelly.civ@mail.mil](mailto:atmichael.o.donnelly.civ@mail.mil) < Caution-mailto:michael.o.donnelly.civ@mail.mil >

Mahalo nui loa,  
JR

v/r,

LORETO V. BORCE, JR  
LTC, FA  
Garrison Commander  
USAG-Pohakuloa Training Area, HI  
Office: (808) 969-2407  
Work Cell: (808) 228-6598  
NIPR: [loreto.v.borce.mil@mail.mil](mailto:loreto.v.borce.mil@mail.mil) < Caution-mailto:loreto.v.borce.mil@mail.mil >  
SIPR: [loreto.v.borce.mil@mail.smil.mil](mailto:loreto.v.borce.mil@mail.smil.mil) < Caution-mailto:loreto.v.borce.mil@mail.smil.mil >

Pohakuloa Training Area Facebook:

Caution-<https://www.facebook.com/PohakuloaTrainingArea/> < Caution-  
<https://www.facebook.com/PohakuloaTrainingArea/> >

"GOD, grant me the serenity to accept the things I cannot change, courage to change the things I can,  
and the wisdom to know the difference."

CLASSIFICATION: UNCLASSIFIED

Harry Kim  
Mayor

Roy Takemoto  
Managing Director

West Hawai'i Office  
74-5044 Ane Keohokālole Hwy  
Kailua-Kona, Hawai'i 96740  
Phone (808) 323-4770  
Fax (808) 327-3563



## County of Hawai'i PLANNING DEPARTMENT

Michael Yee  
Director

April Surprenant  
Acting Deputy Director

East Hawai'i Office  
101 Pauahi Street, Suite 3  
Hilo, Hawai'i 96720  
Phone (808) 961-8288  
Fax (808) 961-8742

10/12/2020

U.S. Army Garrison-Hawai'i & U.S. Army Installation Management Command  
Lt. Col. Loreto V. Borce, Jr.  
Garrison Commander  
USAG-Pohakuloa Training Area, HI

Dear Commander Borce,

**Subject: Environmental Impact Statement Preparation Notice for the Army Training Land Retention at Pohakuloa Training Area**  
**Applicant: U.S. Army Garrison-Hawai'i & U.S. Army Installation Management Command**  
**Project: Army Training Land Retention at Pohakuloa Training Area**  
**TMKs: (3) 4-4-015:008, (3) 4-4-016:005, (3) 7-1-004:007, (3) 3-8-001:013 & (3) 3-8-001:022, County & State of Hawai'i**

Thank you for including us in your scoping efforts. We understand the United States Army has initiated the EIS process under the National Environmental Policy Act (NEPA), guided by the Council on Environmental Quality NEPA implementing regulations in Title 40 Code of Federal Regulations (C.F.R.) Parts 1500–1508, and Army NEPA implementing regulations in Title 32 C.F.R. Part 651. The EIS has also been initiated under Hawai'i Revised Statutes (HRS) Chapter 343 and Hawai'i Administrative Rules Chapter 11-200.1 (HEPA).

The Hawai'i County Planning Department hereby provides 'comment' toward scoping of the above action (EIS); pursuant to the 40-day public scoping period and in accordance with the applicant's intent to prepare a single EIS, (NEPA/HEPA) as allowed under HAR § 11-200.1-31. Statute requires cooperation with federal agencies "to the fullest extent possible."<sup>1</sup> The Planning Department, is not only central coordinating agency<sup>2</sup> for the County, but the agency responsible for managing Hawai'i County's General Plan (GP), including capital improvements and subsequent Community-level Development Plans (CDP), which focus on community engagement.

We understand public involvement<sup>3</sup> is a requisite element of the scoping process<sup>4</sup>; with "coordination at each phase or milestone (more frequently if needed) of the project", including, "two-way communication channels...dynamic in nature, and ... updated regularly to reflect the needs of the local

<sup>1</sup> HRS 343-5(h), HAR 11-200-25(2).

<sup>2</sup> HRS §46-18; HCC Chapter 2, Article 12

<sup>3</sup> 32 CFR § 651.47 Public Involvement & Appendix D to Part 651 - Public Participation Plan

<sup>4</sup> 40 CFR § 1501.7(a)(1) Scoping

U.S. Army Garrison-Hawai'i & U.S. Army Installation Management Command  
Lt. Col. Loreto V. Borce, Jr.  
Garrison Commander  
USAG-Pohakuloa Training Area, HI  
October 9, 2020  
Page 2

community”<sup>5</sup>. The challenge with a joint NEPA/HEPA document is often the coordination of the public review and comment period and the additional time needed for early consultation; oftentimes, “identifying and applying other processes and procedures to accomplish the appropriate level of public involvement”<sup>6</sup> can be an additional challenge. We note that the NOI was initiated 4 days in advance of the EISPN<sup>7</sup>.

I am transmitting for your scoping efforts, “Planning Department Recommendations for Community Stakeholder Consultation”; including a recommended stakeholder consultation list. ([Attachment 1](#)). While we understand the transactional nature of the Army’s current action, continued use(s) of land has unique circumstances and long-term impacts determining any area(s) of potential effects. U.S. Military activity in Hawai’i certainly has environmental significance; we submit that the proposed action may have concerns at least as broad as the island of Hawai’i.

One of the specific considerations under HEPA is the effects of a proposed action on the cultural practices of the community, (HRS 343-2). We request the action be presented for input to the County’s Cultural Resource Commission no later than the DEIS and that they receive the recordings of oral comments from public scoping meeting(s). You may coordinate through our Planning Division; please contact: Alex Roy (alex.roy@hawaiicounty.gov) with copies to myself.

In closing, we understand at this time, the proposed action(s) do not anticipate to result in realignment<sup>8</sup> or annexation of any territory. We look forward to reviewing a NEPA cost-benefit analysis<sup>9</sup> and we request close involvement in assessing any potential compatibility solutions; including but not limited to those administered under The Office of Economic Adjustment’s (OEA) programs of assistance or any additional capacity under sway of U.S. Pacific Command (PACOM).

Finally, while the Planning Department is the central coordinating agency for the County of Hawai’i, we recommend contacting each County Dept. for input. Unlike under NEPA, there is no review period under HEPA and consequently no option for a public comment period on a Final EIS. Rather, HEPA requires acceptance or nonacceptance of a Final EIS for an applicant action within 30 days (which may be extended up to 45 days at an applicant’s request)<sup>10</sup>. Acceptance must occur before a proposed action may be implemented or approved.

If you have any question regarding this letter, please feel free to contact me at (808) 961-8125 or via email at michael.yee@hawaiicounty.gov

Sincerely,



MICHAEL YEE  
Planning Director

---

<sup>5</sup> 32 CFR § 651.47(a)(3) - Public involvement.

<sup>6</sup> 32 CFR § 651.47(e)(4) - Public involvement

<sup>7</sup> See: 40 CFR § 1501.7 - Scoping. 32 CFR § 651.53 - Modifications of the scoping process. 40 CFR § 1507.3(e) - Agency procedures.

<sup>8</sup> 10 U.S. Code § 2687(g)(3)

<sup>9</sup> 40 CFR § 1502.23

<sup>10</sup> HRS 343-5(e); HAR 11-200.1-28

U.S. Army Garrison-Hawai'i & U.S. Army Installation Management Command  
Lt. Col. Loreto V. Borce, Jr.  
Garrison Commander  
USAG-Pohakuloa Training Area, HI  
October 9, 2020  
Page 3

Cc:

**Approving Agency/Accepting Authority:**

Suzanne Case, DLNR

Russell Tsuji, Chairman, BLNR, State of Hawai'i: DLNR, Land Division, (808) 587-0419,  
dlnr.land@Hawai'i.gov 1151 Punchbowl St., Room 220, Honolulu, HI 96813

**Applicant cc:** U.S. Army Garrison-Hawai'i & U.S. Army Installation Management Command

Gregory Wahl, (808) 656-3093, Gregory.t.wahl.civ@mail.mil

U.S. Army Garrison Hawai'i Directorate of Public Works – Environmental

948 Santos Dumont Ave., Building 105, 3rd Floor, Wheeler Army Airfield, Schofield Barracks, HI  
96857-5013

**Consultant:** Jeff Overton, G70; 111 S. King Street, Suite 170, Honolulu, HI 96813

(808) 523-5866, [ATLR-PTA-EIS@g70.design](mailto:ATLR-PTA-EIS@g70.design)

**Other:** HI-DOH-[Office](#) of Environmental Quality Control (OEQC)

235 South Beretania Street, Suite 702, Honolulu, Hawai'i 96813

(808) 586-4185, [oeqcHawai'i@doh.Hawai'i.gov](mailto:oeqcHawai'i@doh.Hawai'i.gov)

## Planning Department Recommendations for Community Stakeholder Consultation.

The recommended stakeholder consultation list provided in this section is based on the Planning Department's role as the agency managing Hawai'i County's General Plan (GP) and subsequent Community Development Plans (CDP). The Department under Title 32 CFR 651.47 Subpart (G) and HAR 11-200.1-23 Subpart (B) and (C) deems it appropriate that we recommend the preparers of the EIS consult and/ or request comments from these organization as part of its community scoping phase.

Management of CDPs mandates community engagement via the Action Committee but frequently requires broader community outreach. Planning Staff (Long-Range Land Use Division) periodically has to consider relevant community-based organizations who have a stake in land use issues. In January 2018, the Long-Range Division compiled a list of these community organizations across the island of Hawai'i grouped by CDP region. While the original 2018 list was not completely exhaustive we filtered that list to retain organizations whose missions best correlated with one or more of the following impacts identified in the PTA EIS Preparation Notification: Air Quality, Biological Resources, Cultural and Historic Resources, Economic Development, Hazardous Waste, Noise Pollution, Transportation and Waste Disposal.

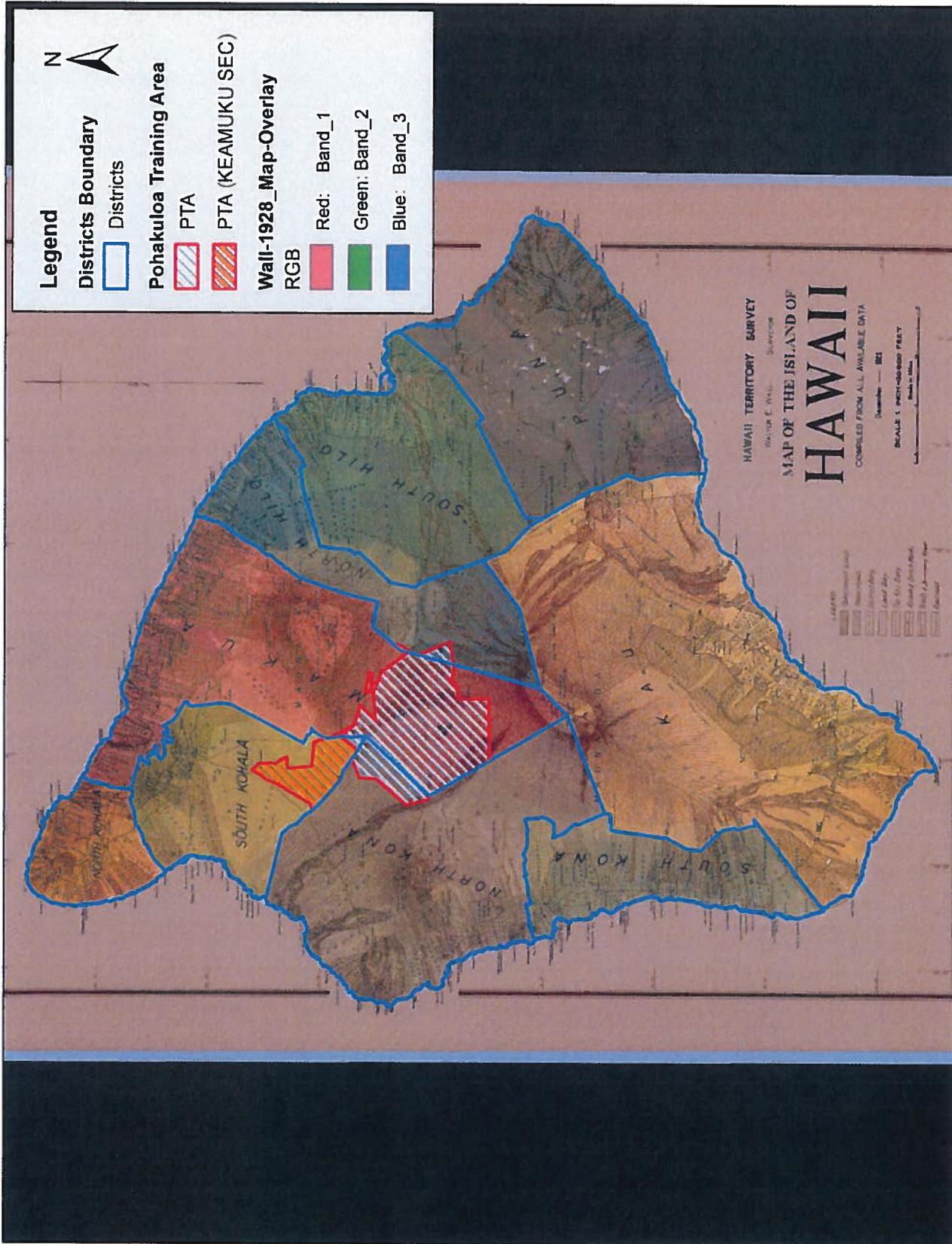
The Department finds that this recommended list of Island-wide stakeholders is relevant as the Pohakuloa Plain / portion of Ka'ohē, Hāmākua that is situated between the summits of Mauna Kea, Mauna Loa, and Hualālai is a crossroads of the entire island. This is evidenced both in current and ancient times, the former by the current Daniel K. Inouye (DKI) Highway and the later evidenced by ancient trails. As local road networks eventually connect to DKI Highway, Historic and State Registered Map research proves that district level trails connected to major hinterland trails that passed through the Pohakuloa Plain (Figures 1 & 2).

Therefore, given the spatial centrality of Pohakuloa and its modern and cultural/ historic connections to the whole of Hawai'i Island we feel that this island wide recommended consultation list is pertinent and so encourage the U.S. Army and its consultant to engage with these stakeholders to inform the scope of the forthcoming EIS.

### Recommended Stakeholder Consultation List

Organization Name	Website
Agroforestry	<a href="https://www.agroforestry.org/">https://www.agroforestry.org/</a>
Ala Kahakai Trail Association	<a href="http://www.alakahakaitrail.org/">http://www.alakahakaitrail.org/</a>
Conservation Council for Hawai'i	<a href="https://www.conservehawaii.org/">https://www.conservehawaii.org/</a>
Conservation International Hawai'i	<a href="https://www.conservation.org/places/hawaii">https://www.conservation.org/places/hawaii</a>
Friends of the Hakalau Forest National Wildlife Refuge	<a href="http://www.friendsofhakalauforest.org/">http://www.friendsofhakalauforest.org/</a>

Hawai'i County Economic Council	<a href="http://hceoc.net/">http://hceoc.net/</a>
Hawai'i Forest Industry Association	<a href="http://www.hawaiiforest.org/">http://www.hawaiiforest.org/</a>
Hawai'i Pacific Bird Habitat Joint Venture	<a href="http://www.pacificbirds.org/about-pacific-birds/where-we-work/hawaii/">http://www.pacificbirds.org/about-pacific-birds/where-we-work/hawaii/</a>
Hawai'i Wetland Joint Venture	<a href="http://wildhawaii.org/">http://wildhawaii.org/</a>
Hawai'i Wildlife Fund	<a href="http://www.hawaiiwildlifecenter.org/">http://www.hawaiiwildlifecenter.org/</a>
Hawai'i Wildlife Center	<a href="https://www.hilt.org/">https://www.hilt.org/</a>
Hawaiian Islands Land Trust	<a href="http://www.kahea.org/">http://www.kahea.org/</a>
KAHEA: The Hawaiian-Environmental Alliance	<a href="http://kona-kohala.com/">http://kona-kohala.com/</a>
Kona-Kohala Chamber of Commerce	<a href="http://kuahawaii.org/about/">http://kuahawaii.org/about/</a>
KUA (Kua'āina Ulu 'Auamo)	<a href="http://oahurcd.org/">http://oahurcd.org/</a>
O'ahu Resource Conservation & Development Council	<a href="https://pathhawaii.org/">https://pathhawaii.org/</a>
People's Advocacy for Trails Hawai'i	<a href="https://sierraclubhawaii.org/">https://sierraclubhawaii.org/</a>
Sierra Club, Hawai'i Chapter	<a href="https://www.nature.org/en-us/about-us/where-we-work/united-states/hawaii/">https://www.nature.org/en-us/about-us/where-we-work/united-states/hawaii/</a>
The Nature Conservancy	<a href="https://www.outdoorcircle.org/">https://www.outdoorcircle.org/</a>
The Outdoor Circle	<a href="https://www.tpl.org/our-work/hawaii">https://www.tpl.org/our-work/hawaii</a>
The Trust for Public Land, Hawaiian Islands Program	<a href="http://geography.manoa.hawaii.edu/">http://geography.manoa.hawaii.edu/</a>
University of Hawai'i Department of Geography	<a href="http://manoa.hawaii.edu/durp/">http://manoa.hawaii.edu/durp/</a>
University of Hawai'i Department of Urban and Regional Planning	<a href="http://www.hawaiiforestinstitute.org/">http://www.hawaiiforestinstitute.org/</a>
Hawai'i Forest Institute	<a href="http://www.hawaiiwildfire.org/">http://www.hawaiiwildfire.org/</a>
Hawai'i Wildfire Management Organization	<a href="http://sustainablebioresources.com/native-plants/about-hoomalu-kau/">http://sustainablebioresources.com/native-plants/about-hoomalu-kau/</a>
Ho'omalū Ka'u	<a href="http://kohalacenter.org/">http://kohalacenter.org/</a>
Kohala Center	<a href="http://kohalacenter.org/kwp">http://kohalacenter.org/kwp</a>
South Kohala Watershed Partnership	<a href="https://dlnr.hawaii.gov/swcd/">https://dlnr.hawaii.gov/swcd/</a>
Mauna Kea Soil and Water Conservation District	<a href="https://www.waikoloa.org/page/29336~674063/South-Kohala-Traffic-Safety-Committee">https://www.waikoloa.org/page/29336~674063/South-Kohala-Traffic-Safety-Committee</a>
South Kohala Traffic Safety Committee	<a href="https://waikoloadryforest.org/">https://waikoloadryforest.org/</a>
Waikoloa Dry Forest Initiative	<a href="https://www.agroforestry.org/">https://www.agroforestry.org/</a>



**Figure 1 - Historic Map Overlay: 1928 Walter E. Wall, Map of the Island of Hawai'i. Territory of Hawai'i. Hawai'i State Registered Maps: 1891 W.D. Alexander, Central Hawai'i. Hawaiian Government Survey. State Registered Map #1718 WIDE. 1927 Thos J.K. Evens, Government Lands of Hulunanai, Kaunaloa, and Ki, Puna Hawai'i. State Registered Map #2863. 1922 Walter E. Wall, Addition to Upper Waiakea Forest Reserve, Waiakea, South Hilo, Hawai'i. Territory of Hawai'i. State Registered Map #2765. Part of Waiakea - Hilo, Hawai'i. State Registered Map #0672.**

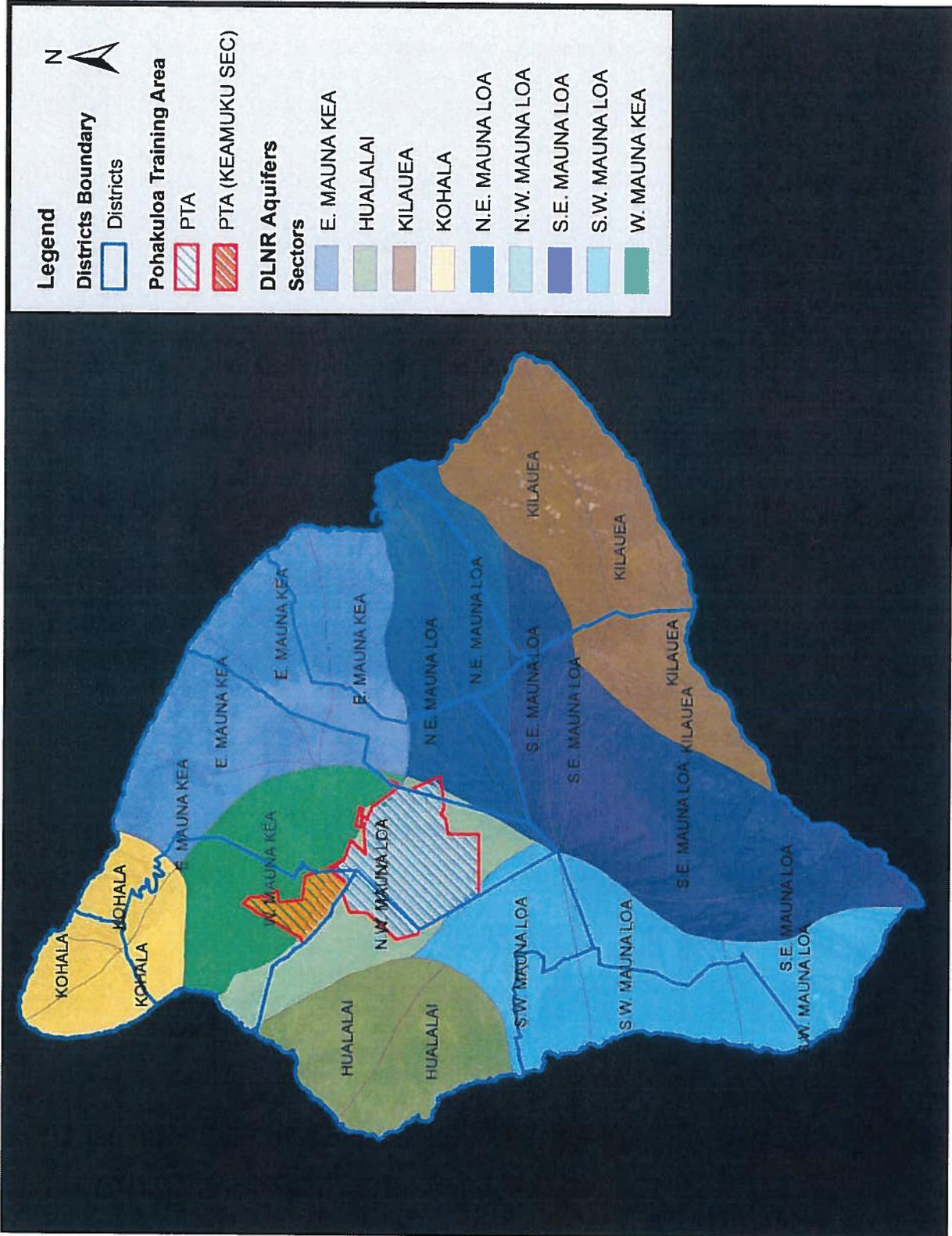


Figure 2 – DLNR Aquifer Data – [https://files.hawaii.gov/dbedt/op/gis/data/aquifers\\_dlnr.pdf](https://files.hawaii.gov/dbedt/op/gis/data/aquifers_dlnr.pdf)  
 Pohakuloa from State Reserves Data – [https://files.hawaii.gov/dbedt/op/gis/data/reserves\\_summary.pdf](https://files.hawaii.gov/dbedt/op/gis/data/reserves_summary.pdf)



## **Elected Officials**



# Elected Officials

Council Member Herbert M. "Tim" Richards III,  
District 9 ..... EO-1



County of Hawai'i  
Council District 9 -  
North and South Kohala



Phone: (808) 961-8564  
(808) 887-2069

Email: [tim.richards@hawaiiicounty.gov](mailto:tim.richards@hawaiiicounty.gov)

**Chair:** Committee on Agriculture,  
Water, Energy, and Environmental  
Management

**Vice Chair:** Committee on Finance

**HERBERT M. "TIM" RICHARDS, III**  
**HAWAI'I COUNTY COUNCIL**  
**District 9**

25 Aupuni Street, Ste. 1402, Hilo, Hawai'i 96720

October 13, 2020

ATLR PTA EIS Comments  
Via online testimony submission to  
<https://home.army.mil/hawaii/index.php/PTAEIS>

RE: Army Training Land Retention at Pōhakuloa Training Area  
Notice of Intent for Environmental Impact Statement

To whom it may concern:

As a Hawai'i County Council Member and the sitting Vice Chair on the Committee of Finance, and the Chair on the Committee on Agriculture, Water, Energy, and Environmental Management for the County of Hawai'i, and as a life-time rancher on Hawai'i Island, I understand the nexus of the key components of the U.S. Army Pōhakuloa Training Area (PTA) as a whole and how it benefits our island state. However, many do not.

I appreciate the opportunity to comment during the public scoping period as it is a very important step when working towards a successful Environmental Impact Statement (EIS), especially more so during a time of cultural impasse that our island and state has seen of late. That said, I would like to suggest the following be taken into consideration for elaboration during the EIS:

1. Analyze the cultural effects of the proposed retention of 23,000 acres of State-owned land at PTA. This should be practical through a Cultural Impact Assessment (CIA) with consultation with Native Hawaiian organizations, practitioners, and other stakeholders on the identification of historic or existing traditional practices and/or beliefs that may be impacted by the proposed retention of land.
2. Provide a detailed economic impact report (EIP) of PTA and its bearing upon the greater community and state. During these unprecedented times, it would deem much more receptive by the island community to understand the benefits of having PTA on island and providing with the opportunity to expand its land mass.

Again, I appreciate the opportunity to submit suggestions during this public scoping process.

Sincerely,

HERBERT M. "TIM" RICHARDS, III  
Hawai'i County Council, District 9



# **Organizations**



# Organizations

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University of Hawai'i, Institute of Astronomy.....	O-207



**From:** Adam Cohen <acohen@au.edu>  
**Sent:** Saturday, September 26, 2020 9:16 AM  
**To:** USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
**Cc:** tbeasley  
**Subject:** [Non-DoD Source] Letter of Support for PTA Lease Retention  
**Attachments:** AUI\_PTA-EIS\_Letter of Support.pdf

All active links contained in this email were disabled. Please verify the identity of the sender, and confirm the authenticity of all links contained within the message prior to copying and pasting the address to a Web browser.

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Dear Sir/Madam,

Attached, please find a letter from Associated Universities Inc. (AUI) in support of the lease retention for the United States Army Hawai'i Pōhakuloa Training Area.

If you have any questions, please let me know.

Sincerely,  
Adam

*Adam Cohen, PhD  
President and CEO  
AUI  
1400 16th Street, NW, Suite 730  
Washington, DC 20036  
Caution-www.au.edu < Caution-http://www.au.edu >  
[acohen@au.edu](mailto:acohen@au.edu) (202) 462-1676 (o) +1 (609) 477-6673 (c)*



1400 16th Street, NW Suite 730  
Washington, DC 20036

9/26/2020

ATLR PTA EIS Comments  
P.O. Box 3444  
Honolulu, HI 96801-3444  
[usarmy.hawaii.nepa@mail.mil](mailto:usarmy.hawaii.nepa@mail.mil)

Dear Sir/Madam,

Thank you for the opportunity to comment on the lease retention for the United States Army Hawaii (USARHAW) Pōhakuloa Training Area (PTA). Associated Universities Inc. (AUI) supports the PTA proposal to retain approximately 23,000 acres of State-owned land at the PTA for the continued use of important infrastructure and support services for the region. Under the proposal, the State land would remain under the Army oversight through the planned expiration of the current lease. Following approval of the retention of the State-owned land, Army would continue to conduct current levels and types of training, ensure the facility, utility and infrastructure maintenance and repair activities, and importantly, ensure the ongoing natural and cultural resources stewardship of the land. The Army also would continue to permit and coordinate training and other activities by other PTA users.

We value the large investment that State is making in this critical piece of support infrastructure for the state of Hawai'i. As such, AUI is in favor of the lease renewal proposal as the best and most viable option to deliver an ongoing land management while offering the means to support the complex needs of the AUI efforts with the Mauna Kea Observatories (MKO). The MKO facilities are located in a special land use zone known as the "Astronomy Precinct", which is located within Mauna Kea Science Reserve. The Astronomy Precinct was established in 1967 and is located on land protected by the Historical Preservation Act for its significance to Hawaiian culture.

This letter of support summarizes the key items that will protect and improve the quality of life, and safety and health of the important natural and scientific resources in the area. AUI regards this as an opportunity for a future collaboration to enhance the following:

- The PTA would provide essential fire and medical first responder support for the MKOs. This availability significantly reduces response times and protects valuable scientific instruments and personnel.
- The PTA would support efforts to supplement Mauna Kea resource management.
- The PTA would support the MKO's "dark sky" initiatives to protect the night sky, as well as wildlife and sensitive ecosystems. This is particularly important given their close proximity to the summit.

AUI believes that the retention of the PTA lease will ensure continuity of the physical, visual and safety controls for the Mauna Kea that would deteriorate should the retention option not be selected. We also encourage collaboration to assure the important synergies discussed above are realized.

Sincerely,

Dr. Adam Cohen,  
AUI President/CEO.



# Environmental Caucus of The Democratic Party of Hawai'i

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via EIS website: <https://home.army.mil/hawaii/index.php/ptaeis/public-involvementand>

Email: [ATLR-PTA-EIS@g70.design](mailto:ATLR-PTA-EIS@g70.design)

Wednesday, October 14, 2020

U.S. Army Garrison-Hawai'i  
U.S. Army Installation Management Command

Mr. Jeff Overton, Agent  
Agent: G70  
111 S. King Street, Suite 170  
Honolulu, Hawaii 96813

## **Scoping Comments for the Draft Environmental Impact Statement for the Army Training Land Retention at Pōhakuloa Training Area, Island of Hawai'i**

Aloha, U.S. Army Garrison-Hawai'i and U.S. Army Installation Management Command:

Thank you for the opportunity for the Environmental Caucus of the Democratic Party of Hawai'i ("DPH") to provide comments relating to the Draft Environmental Impact Statement ("EIS") for the Army Training Land Retention ("ATLR") at Pōhakuloa Training Area ("PTA"), Island of Hawai'i, State of Hawai'i, pursuant to the EIS Preparation Notice, dated August, 2020.

The Democratic Party of Hawai'i has an enrolled membership of 116,066 active and associate members in the State of Hawai'i. The Environmental Caucus of the Democratic Party is a semi-autonomous organization of over 5,000 DPH members. We advocate to advance the Party's environmental Platform planks and Resolutions, including those adopted by DPH members at the Democratic State Convention in 2018 that are quoted below.

Fundamentally, we object to the renewal of the lease of 22,971 acres of stolen, ceded State lands (Hawaii Revised Statutes ("HRS") §343-5(a)(1)) in a Conservation District (HRS §343-5(a)(2)) and county Forest Reserve that was entered into between the Army and the State of Hawaii in 1964 in consideration of \$1.00 for a 65-year lease to expire in 2029. For multiple reasons summarized here, we object to the continuation of the lease and the continued failure of the Army to adequately clean up the site. We reluctantly use the draft EIS process as an inadequate means of redress to express our concerns, as permitted under the National Environmental Policy Act ("NEPA").

The reasons for this opposition are simple: the U.S. Military has historically and systematically

abused and degraded the environment and has not been not been environmentally sound in its clean-up and restoration. There are more than 40,000 hazardous sites across the country polluted by U.S. military operations, affecting a total amount of land larger than the entire state of Florida. Many of these sites have extensive groundwater and soil pollution, or present a risk of exploding bombs and munitions, even if they are open to the public. Some have been converted to parks and wildlife reserves and even housing developments. Many sites were part of old defense facilities that have long since shut down, and may not be known locally, even though a risk of exposure to contaminants may still be present. Even sites where the DOD says it has already completed its response can present an ongoing threat or risk to the public. While the data pinpoint a precise location, contamination from that location may well affect a much larger area, including public and private lands and the water supplies beneath them. You may want to investigate environmental concerns in an area surrounding a defense site for connections to the pollution there. <https://www.propublica.org/article/reporting-recipe-bombs-in-your-backyard>

There are 25 hazardous sites at the PTA. Many of these sites have been declared “clean” by the DOD but are still not safe for use by people. This military installation is safe only with the following conditions in place: fences, signs, local use ordinances, prohibit or otherwise manage excavation, prohibit residential use, landfill restriction, prohibit activities that would impact the landfill cap (or cover system), and drainage system, landfill restriction - prohibit excavation on landfill cap or cover system, landfill restriction - restrict access to the site.

Currently, the PTA has one HIGH RISK active site where cleanup remains ongoing. The Pu‘u Pa‘a site is of high risk and is subject to the removal of unexploded munitions and ordnance at an estimated cost of \$90 million plus expected future cost of cleanup and an expected final cleanup action to occur in November 2045. The high risk assessment is made by the DOD which prioritizes the cleanup of sites that pose greatest threat to safety, human health, and the environment.

A second site subject to removal of unexploded munitions and ordnance is located at the former Bazooka Range. Its cleanup cost in 2015 plus future cost of cleanup was expected to be \$1.7 million with a final cleanup action in June 2017.

The other 23 inactive sites are: (1) Humu‘ula Sheep Station – West Training and Maneuver Area (explosives and munitions cleanup, restricted access, 2012); (2) Landfill 2 (WSC#7) (hazardous substances cleanup, restricted access, 1997); (3) PBA@MMRP Pōhakuloa (explosives and munitions cleanup, restricted access, 2008); (4) former FFTA PIT (WSC#11) Fire/crash Training Area (hazardous substances cleanup, restricted access, 1997); (5) former STG Area behind Building T-31 (WSC#12) spill site area (hazardous substances cleanup, restricted access, 1997); (6) Artillery Firing Area Powder Burn (hazardous substances cleanup, restricted access, 1994); (7) Impact Area (WSC#1) Unexploded munitions and ordnance area (hazardous substances cleanup, restricted access, 1990); (8) POL Storage Area (WSC#3) Spill Site Area (hazardous substances cleanup, restricted access, 1995); (9) Underground Storage Tanks Sites (7) (WSC#4) (hazardous substances cleanup, restricted access, 1990); (10) Maintenance Area (WSC#5) Spill Site Area (hazardous substances cleanup, restricted access, 1995); (11) Ammunition STG Magazines (8) (WSC#8) Spill Site Area (hazardous substances cleanup, restricted access, 1990); (12) Foam Storage Shed (WSC#9) Spill Site Area (hazardous substances cleanup, 1990); (13) Underground Storage Tanks Site (WSC#10) (hazardous substances cleanup, restricted access, 1990); (14) Former Transformer STG Area (WSC#13) Spill Site Area (hazardous substances cleanup, 1995); (15) 43 Septic tanks/12 Leach Wells (WSC#15) Surface Disposal Area (hazardous substances cleanup, restricted access, 1990);

(16) Underground Storage Tanks Bldg 186 (hazardous substances cleanup, restricted access, 1994); (17) Vehicle Refueling Area Maintenance Yard (hazardous substances cleanup, restricted access, 1997); (18) Equipment Storage Area (hazardous substances cleanup, restricted access, 1996); (19) Abandoned Landfill 1 (WSC#6) (hazardous substances cleanup, restricted access, 1997); (20) Humu‘ula Sheep Station-East Unexploded Munitions and Ordnance Area (Explosives and Munitions, restricted access, 2006); (21) Bradshaw Field Storage Area (WSC#2) Spill Site Area (hazardous substances cleanup, restricted access, 1995); (22) Kulani Burn Pile Burn Area (Explosives and munitions, no access, 2013); (23) Kulani Boys’ Home Unexploded Munitions and Ordnance Area (Explosives and munitions, no access, 2012).

<https://projects.propublica.org/bombs/installation/HI9214522234002100#b=15.512459942662547,174.06437,31.555618072891495,-147.263755&c=shrink>

Given the U.S. Military’s use of hazardous substances, explosives and ordnance necessitating numerous cleanups leaving the land with restricted or no access available, it appears that the purpose of NEPA cannot be accomplished by the continuation of military training at Pōhakuloa as the land can never be restored and enjoyed even after thirty years of cleanup.

PTA is not the only site of subject to hazardous substances, explosives and ordnances necessitating numerous cleanups, In fact, there are 115 Military Installations with hazardous sites in the State of Hawai‘i with a total past and future cleanup cost of \$2.77B and of the 115 Military Installations, 43 are determined by the DOD to be HIGH and MEDIUM hazardous risk Installations. *See*, chart below:

<b><u>MILITARY INSTALLATION</u></b>	<b><u>#HAZ. SITES</u></b>	<b><u>CITY</u></b>	<b><u>COUNTY</u></b>	<b><u>RISK OF HARM</u></b>
<b>PEARL HARBOR NAVAL STATION</b>	145	PEARL HARBOR	Honolulu	High Risk
<b>LUALUALEI NAVAL MAGAZINE</b>	40	WAI‘ANAE	Honolulu	High Risk
<b>WAHIAWA NCTAMS EASTPAC</b>	30	WAHIAWĀ	Honolulu	High Risk
<b>PEARL HARBOR NSY</b>	27	PEARL HARBOR	Honolulu	High Risk
<b>PŌHAKULOA TRAINING AREA</b>	25	KAWAIHAE HARBOR	Hawaii	High Risk
<b>WAIKOLOA MANEUVER AREA</b>	25	WAIKOLOA	Hawaii	High Risk
<b>PEARL HARBOR FISC</b>	17	PEARL HARBOR	Honolulu	High Risk
<b>NAVFAC HAWAII PEARL HARBOR</b>	17	PEARL HARBOR	Honolulu	High Risk
<b>WAIKAKALAUVA AMMO STORAGE</b>	7	MILILANI	Honolulu	High Risk
<b>WAIKANE TRAINING AREA</b>	3	WAIKĀNE	Honolulu	High Risk
<b>‘AIEA MILITARY RESERVATION</b>	2	‘AIEA	Honolulu	High Risk
<b>MAUI BOMBING TARGETS</b>	2	MAUI	Maui	High Risk
<b>HE‘EIA COMBAT TRAINING CAMP</b>	2	KAHALU‘U	Honolulu	High Risk

<b>MAKANALUA BOMBING RANGE</b>	1	MOLOKA'I	Kalawao	High Risk
<b>RABBIT ISLAND</b>	1	WAIMANALO BAY	Honolulu	High Risk
<b>PACIFIC JUNGLE COMBAT</b>	1	PUNALU'U/KAHANA	Honolulu	High Risk
<b>PAKINI BOMBING RANGE</b>	1	KA'U	Hawaii	High Risk
<b>KAHUKU TRAINING CAMP</b>	1	KAHUKU	Honolulu	High Risk
<b>FORT SHAFTER</b>	54	HONOLULU	Honolulu	Medium Risk
<b>KANEHOE BAY MCB</b>	33	KĀNE'OHE BAY	Honolulu	Medium Risk
<b>WHEELER ARMY AIRFIELD</b>	31	HONOLULU	Honolulu	Medium Risk
<b>BELLOWS AIR FORCE STATION</b>	28	BELLOWS AFS	Honolulu	Medium Risk
<b>MAKUA MILITARY RESERVATION</b>	10	O'AHU	Honolulu	Medium Risk
<b>PEARL HARBOR NSB</b>	7	PEARL HARBOR	Honolulu	Medium Risk
<b>JFHQ HI ARNG</b>	4	HONOLULU	Honolulu	Medium Risk
<b>BIG ISLAND BOMBING TARGETS</b>	3	ISLAND OF HAWAI'I	Hawai'i	Medium Risk
<b>PALMYRA ISLAND</b>	2	PALMYRA	So. Pacific	Medium Risk
<b>MAKAPU'U LIGHT HOUSE RES</b>	2	MAKAPU'U	Honolulu	Medium Risk
<b>ARMY IMPACT RANGE</b>	2	HILO	Hawai'i	Medium Risk
<b>WAIMEA TRAINING SITE</b>	1	WAIMEA	Kaua'i	Medium Risk
<b>WAILUA ARTILLERY IMPACT AREA</b>	1	WAILUA	Kaua'i	Medium Risk
<b>O'AHU ISLAND TARGET</b>	1	MOKUAUIA	Honolulu	Medium Risk
<b>AHUKINI</b>	1	OFFSHORE AHUKINI	Kaua'i	Medium Risk
<b>WAIMEA FALLS PARK</b>	1	HALE'IWA	Honolulu	Medium Risk
<b>GROVE FARM ARTY IMP</b>	1	LIHUE	Kaua'i	Medium Risk
<b>MOKU HO'ONIKI ISLAND</b>	1	MOLOKA'I	Maui	Medium Risk
<b>RANGE D-400-L</b>	1	WAHIAWA	Honolulu	Medium Risk
<b>PAPOHAKU RANGLAND SUB</b>	1	MOLOKA'I ISLAND	Maui	Medium Risk
<b>UNEXPLODED ORD REMOVAL</b>	1	MOLOKINI ISLAND	Maui	Medium Risk
<b>CENTER COMBAT RANGE</b>	1	WAHIAWĀ	Honolulu	Medium Risk
<b>KANE PU'U NAVAL BOMBING RANGE</b>	1	LANAI	Maui	Medium Risk

<b>KA'U BOMBING RANGE</b>	1	VOLCANO	Hawai'i	Medium Risk
<b>WAIAWA TRAINING AREA</b>	1	WAIAWA	Honolulu	Medium Risk

<https://projects.propublica.org/bombs/installation/HI9214522234002100#b=15.512459942662547,174.06437,31.555618072891495,-147.263755&c=shrink>

The point of providing this listing is to demonstrate the absolutely terrible record of the U.S. military in exercising its stewardship responsibilities as a lessee of lands in the State of Hawai'i.

Given the multitude of Military Installations throughout the State of Hawai'i that remain high and medium risk of injury and contamination, the Environmental Caucus of the Democratic Party of Hawai'i remains steadfast in its opposition to the proposed retention of the PTA for the continuation of uninterrupted military training pursuant to NEPA, Article XI, Section 1 of the Hawai'i State Constitution; the Precautionary Principle; and Ching v. Case, 145 Hawai'i 148, 449 P.3d 1146 (2019).

The Hawai'i State Constitution, Article XI, Section 1, states:

For the benefit of present and future generations, the State and its political subdivisions shall conserve and protect Hawai'i's natural beauty and all natural resources, including land, water, air, minerals, and energy sources, and shall promote the development and utilization of these resources in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State. All public natural resources are held in trust by the State for the benefit of the people.

The Hawai'i Supreme Court has declared that this section makes the Public Trust Doctrine ("PTD") a fundamental element of Constitutional Law in the State of Hawai'i.

Specifically, under Article XI, Section 1, of the Hawai'i State Constitution, the State has an obligation to protect, control, and regulate the use of Hawai'i's water resources for the benefit of its people. The Hawai'i Supreme Court has declared that this Constitutional provision created a duty for the State to protect public trust purposes. The Public Trust Doctrine, therefore, seeks to protect the following Public Trust purposes:

1. Domestic water use of the general public, particularly drinking water,
2. The exercise of Native Hawaiian and traditional and customary rights including appurtenant rights,
3. Reservations of water for Hawaiian Home Land allotments, and
4. Maintenance of waters in their natural state. (Water Resource Protection Plan (2008), Commission on Water Resource Management)

Both the Hawai'i Supreme Court and the Commission on Water Resource Management have declared that the Public Trust Doctrine applies with equal force to groundwater as it does to surface water.

The Precautionary Principle is a duty under the Public Trust Doctrine. The PTD is a preventive doctrine, not a remedial one, as the Hawai'i Supreme Court recognized when it found that the

Precautionary Principle was an inherent attribute of the PTD. In endorsing the Precautionary Principle, the Hawai‘i Supreme Court rejected the requirement of scientific certainty before acting to protect Public Trust Purposes, noting that to do so will often allow for only reactive, not preventive regulation.

In 2018, the Democratic Party of Hawai‘i, out of concern and an abundance of caution over military degradation, devastation, and desecration of the State’s Public Trust lands, affecting hundreds of thousands of *Kanaka Maoli*, residents, businesses, and visitors to the State of Hawai‘i, adopted the following Resolution:

GOV:2018-18 Urging the Congressional Delegation to Actively Work to Ensure that the Military Protects Our Natural Resources

Whereas, Damaging the land and impairing natural resources is inconsistent with protecting the homeland; and

Whereas, Military activities have contaminated our groundwater at Red Hill, littered the landscape of Pōhakuloa with unexploded ordnance, adversely affected archaeological sites and habitat at Mākua, and rendered substantial portions of Kaho‘olawe unsafe; and

Whereas, The military once claimed that it was a matter of national security that it be allowed to continue to bomb Kaho‘olawe and continue to train at Mākua, but that has proven to be inaccurate; and

Whereas, A state judge questioned the Army’s veracity and reliability when it claimed to regularly clean up debris after each training exercise at Pōhakuloa; and

Whereas, Although the Navy argues that its fuel has not found its way into our drinking water wells, yet it is undisputed that leaks from some of its Red Hill tanks have contaminated our groundwater in an unacceptable manner; now, therefore, be it Resolved,

That the Democratic Party of Hawai‘i urge all members of the Hawai‘i Congressional Delegation to actively work to ensure that the military takes all necessary action to prevent degradation of our natural resources and clean up the existing contamination; and be it

Ordered, That copies of this Resolution be transmitted to the Hawai‘i Congressional delegation.

[End quote]

For these reasons, the Environmental Caucus of the Democratic Party of Hawai‘i opposes the renewal of the 65-year lease for PTA between the U.S. Army and DLNR. In this light, it rejects the process involved in developing a draft EIS for the U.S. Army. Further, given that the U.S. Army – Hawai‘i (“USARHAW”) is retaining the U.S. Army Corps of Engineers, Honolulu District

under contract W9128A19D0004 to process the EIS, we urge the U.S. Army to retain a disinterested third-party to conduct an Environmental Impact Statement before it proceeds to negotiate for the retention of the PTA.

Pursuant to the EIS Preparation Notice, dated August 2020, the proposed EIS will evaluate the following 14 affected environmental subject areas: (1) land use, (2) biological resources, (3) archaeological and cultural resources, (4) hazardous and toxic materials and wastes, (5) air quality and greenhouse gases, (6) noise, (7) geology, topography and soils, (8) socioeconomics and environmental justice, (9) water resources, (10) transportation and traffic, (11) airspace, (12) electromagnetic spectrum, (13) utilities, and (14) human health and safety.

The Army Training Land Retention area at PTA is not in compliance with the **National Environmental Policy Act of 1969** (“NEPA”), 42 U.S.C. § 4321. The purposes of NEPA are to declare a national policy that will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; to enrich the understanding of the ecological systems and natural resources important to the Nation; and to establish a Council on Environmental Quality. Clearly, the continuous of act of maintaining (1) live-fire and non-live-fire artillery firing points; (2) ranges for mounted, dismounted, and aviation training; and (3) support facilities, including ammunition storage areas and helicopter and tilt-rotor aircraft landing zones fails to encourage productive and enjoyable harmony between man and his environment as the environment suffers irreparable harm; fails to promote efforts that prevents or eliminates damage to the environment and biosphere as the target areas remain littered with spent munitions and fragments and unexploded ordnance and contaminated with depleted uranium, which fails to stimulate the health and welfare of man; and it fails to enrich the understanding of the rare ecological systems and natural resources and wildlife important to the Nation.

Pursuant to the EIS Preparation Notice, dated August 2020, the proposed EIS will evaluate the affected environmental areas: (1) land use in a Conservation District, Open, and zoned Forest Reserve, (2) biological resources where 35% of the plants found at PTA are indigenous or endemic and 25 federally listed species, one of which is threatened and 19 plants are listed as endangered, and the terrestrial mammal, the Hawaiian hoary bat, is listed as endangered, and there a endangered inveterate species and four endangered bird species and 5,000 acres of the State-owned land are designated as critical habitat for the endangered Palila, (3) archaeological and cultural resources as only 45% of the accessible land has been surveyed for archaeological sites and about 450 acres of the State-owned land are closed to personnel and vehicles to protect cultural resources, (4) hazardous and toxic materials and wastes on munitions and explosives of concern which include unexploded ordnance, discarded military munitions, and munitions constituents, and historically unknown quantities and types of hazardous material were disposed of on State-owned land, (5) air quality and greenhouse gases, including sulfur dioxide, nitrogen dioxide, carbon monoxide, ozone, and lead from military vehicles, aircraft flight operations, boilers, internal combustion engines, dust from vehicle use on gravel and dirt roads and emissions from ordnance use and explosives detonations and training in the 1960s using 20-millimeter spotter rounds containing a depleted uranium alloy, fragments of rounds were documented in the impact area in 2008, (6) noise including live-fire ordnance, large and small caliber weapons and military movement of vehicles and aircraft, (7) geology, topography and soils including Ahi Quarry with a vein of highly desirable “blue rock” for its hardness, abrasion resistance and tensile strength, (8) socioeconomics and environmental justice including 120 military and civilian personnel working at PTA cantonment and

approximately 12,000 military personnel trained at PTA over roughly 200,000 troop training days, and whether the impact on low-income and minority populations including Native Hawaiian and other Pacific Islander bear a disproportionate burden of negative effects resulting from federal actions, (9) water resources including the Waikahalulu Gulch, Pōhakuloa Gulch, and ‘Auwaiakeakua Gulch, and Flood Zone X, (10) transportation and traffic including the Old Saddle Road which is the primary access to the State-owned land, (11) airspace including aviation training consisting of aerial gunnery and assault support for ground troops, (12) electromagnetic spectrum including radio, short-wave radio, television signals, and microwaves, (13) utilities, including electrical, potable water, wastewater, stormwater, solid waste, fire protection water, and communications equipment, and (14) human health and safety including hazardous material and depleted uranium, explosive safety-quantity distance arcs, surface danger zones, clear zones, accident potential zones, natural hazards, multiple ammunition storage areas, impact area of a live-fire range with projectiles that have a 1:1,000,000 probability of escapement, and a runway that possess an increased potential for aircraft accidents.

We believe that a comprehensive and objective analysis U.S. military activities at Pōhakuloa pursuant to these 14 enumerated factors must lead inexorably to the conclusion that the military needs to cease further gunnery activities, engage in thorough clean-up of the site, and return it to the people of Hawai‘i not later than the original lease expiration date in 2029. It must also pay arrearages for the grossly insufficient rent.

The environmental damages from the continued military training use at PTA are substantial. We continue to oppose further retention of the PTA by the DOD as the risk of damage to the environment and ecosystem is great and the likelihood of restoration is low to the detriment to the Native Hawaiian community, the community at large, and indigenous plants and animals.

Mahalo for the opportunity to provide comments,

/s/ Alan B. Burdick

Chair, Environmental Caucus of the Democratic Party of Hawai‘i

Email: [burdick808@gmail.com](mailto:burdick808@gmail.com)

/s/ Melodie Aduja

Vice-Chair, Environmental Caucus of the Democratic Party of Hawai‘i

Chair, Human Environmental Impacts Committee

Email: [legislativepriorities@gmail.com](mailto:legislativepriorities@gmail.com)

**ET AL.  
NATIVE TENANTS  
HAWAI'I KINGDOM**

**ATLR PTA EIS  
P.O.Box 3444  
Honolulu, Hawai'i 96801-3444**

**The state of Hawai'i has and is doing fraudulent acts by illegal ownership to the *ceded* lands. They have no say to the land which belongs to the *Original native tenants*. From 1893 to present the so called united states of America (federal) and the state of Hawai'i (under federal rules) has illegally occupied our lands. Fraudulent Annexation; fraudulent occupation, fraudulent acts of war crime imposed upon *Hawai'i Kingdom's Original native tenants*.**

**In violation of International Laws and against the will of Native Tenants, (Hawai'i Kingdom), the United States Military expansion in Hawai'i Kingdom continues their fraudulent acts. (Hague Convention IV, Section III, Military Authority, Article 42, 43, 45, 46, 55, 56).**

**We have better use to our lands than seeing you use it for bombing and all other military usage.**

**You have vast lands in the U.S.A.. Go there. Our islands have been stressed, battered and left barren from you.**

**We don't want you here; we have not and will not approve of you being here.**

**We NATIVE TENANTS of the HAWAI'I KINGDOM wholeheartedly DO NOT approve of you *LEASING ANY PART OR ALL OF OUR ISLANDS*.**

**Public Notice    Public Notice    Public Notice**

**U.S. Army to Prepare Environmental Impact Statement for Army Training Land Reversion at Pohakuloa Training Area on Kauai Island**

In accordance with the National Environmental Policy Act (NEPA) and the Hawaii Environmental Policy Act (HEPA), the Department of the Army (Army) announces its intent to prepare an Environmental Impact Statement (EIS) to address the Army's proposed reversion of up to approximately 23,000 acres of land currently leased to the Army by the State of Hawaii ("State-owned land") at Pohakuloa Training Area (PTA) on the island of Hawaii. The EIS will be a joint NEPA-HEPA document as the proposed reversion involves State-owned land; therefore, the public scoping processes will run concurrently and will jointly meet NEPA and HEPA requirements.

The Army invites public comments on the scope of the EIS during a 60-day public scoping period beginning Sept. 4, 2020. Comments can be submitted on the EIS website: <https://hawaii.army.mil/hawaii/index.php/PTAES>, as well as emailed to [esarmy.hawaii.mega@hawaii.mil](mailto:esarmy.hawaii.mega@hawaii.mil), or mailed to: ATR PTA EIS Comments, P.O. Box 3444, Honolulu, HI 96801-3444. All comments must be postmarked or submitted by October 14, 2020, to be considered in preparation of the EIS.

The public is invited to participate in an online scoping open house Sept. 23, 2020, to take place on the project website: <https://hawaii.army.mil/hawaii/index.php/PTAES>. During the virtual open house participants can:

- 1) View online presentations.
- 2) Call (808) 300-0220 to submit oral comments from 4 p.m. - 9 p.m. (Sept. 23 only).

For more information or accessibility requests, please contact Mr. Michael Donnelly, PIA Public Affairs Officer, at [michael.a.donnelly.civ@mail.mil](mailto:michael.a.donnelly.civ@mail.mil) or (808) 969-2411.

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## The Myth of Ceded Lands and the State of Hawai'i's Claim to Perfect Title

By Dr. Keanu Sai

In the recent Ceded lands hearing at the Supreme Court in Washington, D.C., on February 25, 2009, Attorney General Mark Bennett repeatedly asserted in the hearings that the State of Hawai'i has perfect title to over one million acres of land that were transferred to the United States government upon annexation in 1898 and then transferred to the State of Hawai'i in 1959. This is an incorrect statement. This falsehood, however, is not based on arguments for or against the highly charged Hawaiian sovereignty movement; rather, it is a simple question to answer since ownership of land is not a matter of rhetoric but dependent on a sequence of deeds in a chain of title between the party granting title and the party receiving title. In fact, the term "perfect title" in real estate terms means "a title that is free of liens and legal questions as to ownership of the property. A requirement for the sale of real estate."

What determines a perfect title is a chain of title that doesn't have a missing link. Here in Hawai'i all titles originate from the Hawaiian Kingdom government whether by Royal Patents or Land Commission Awards and all subsequent conveyances between individuals are registered at the Bureau of Conveyances located at the corner of Punchbowl and Beretania Streets on the ground floor of the Kalanimoku Building. An example of a chain of title would be the Hawaiian Kingdom government to Joe Smith, Joe Smith to Alex White, Alex White to Alapa'i, Alapa'i to Yao Wong, Yao Wong to Jonathan Judd. If there is no record of the deed between Alapa'i and Yao Wong there is a break in the chain of title and therefore Jonathan Judd cannot claim to have a perfect title, which is a "requirement for the sale of real estate."

For so-called Ceded Lands, being the Hawaiian Kingdom government and Crown lands, the chain of title is supposedly from the Hawaiian Kingdom government and Queen Lili'uokalani to the Provisional government, the Provisional government to the Republic of Hawai'i, the Republic of Hawai'i to the United States, the United States to the State of Hawai'i. In this chain, however, there are two missing links and not just one. On January 17, 1893, the Provisional government seized control of the Government and Crown lands without conveyance, but through revolt, and after investigating the revolt, President Cleveland reported to the Congress on December 18, 1893 that the Provisional government was neither *de facto* (a successful revolution), nor *de jure* (the lawful government), but self-proclaimed (committing the crime of high treason). On November 13, 1893, U.S. Ambassador Albert Willis began to negotiate with the Queen, on behalf of President Cleveland, to grant amnesty for these criminals and an agreement to restore the Hawaiian Kingdom government was concluded with the condition that the Queen grant amnesty after the government was restored.

The other missing link is that there is no record of conveyance from the so-called Republic of Hawai'i to the United States when the Hawaiian Islands were supposedly annexed in 1898. According to the Merriam-Webster Dictionary, the term cede is "to

yield or give up esp. by treaty." In order for countries to cede territory to the United States it must be made by treaty, e.g. Louisiana Purchase from France in 1803, or the Alaska Purchase from Russia in 1867. For Hawai'i, there are two failed treaties of cession, the first in 1893 and the other in 1897, but the first was permanently withdrawn from the Senate by Cleveland in March of 1893, and the second was not able to be ratified by the Senate because of protests by the Queen and Hawaiian subjects. Instead, the United States enacted a Congressional joint resolution proclaiming that the Hawaiian Islands had been annexed. The joint resolution of annexation is not a treaty or conveyance from the so-called Republic of Hawai'i. It is a unilateral declaration that was used to seize and occupy the Hawaiian Islands during the Spanish-American War. The United States today could no more annex Iraq by a joint resolution than it could annex the Hawaiian Islands by joint resolution in 1898. Congressional laws have no effect beyond the borders of the United States.

If there is no record of a deed from the Hawaiian Kingdom government and the Queen to the Provisional government transferring Government and Crown lands, there is a break in the chain of title and therefore the State of Hawai'i cannot claim to have a perfect title, which is a "requirement for the sale of real estate." As far as the term "Ceded lands," there is no such thing because the Government and Crown lands were never "yielded or given up by treaty" to the United States in the first place. Confusing cession for occupation is tantamount to confusing adoption for kidnapping. This is not a case of semantics, but ignorance of the legal and political history of Hawai'i.

**For more information:**

- Download my doctoral dissertation titled "*American Occupation of the Hawaiian Kingdom: Beginning the Transition from Occupied to Restored State*" (PDF) at <http://www.hawaiiankingdom.org>
- Download my article titled "*Establishing an acting Regency in order to Restore the Hawaiian Kingdom Government: A Countermeasure Necessitated to Protect the Interest of the Hawaiian State*" (PDF) at <http://www.hawaiiankingdom.org>
- Download my law journal article titled "*A Slippery Path Towards Hawaiian Indigeneity: An Analysis and Comparison between Hawaiian State Sovereignty and Hawaiian Indigeneity and its Use and Practice in Hawai'i Today*" (PDF) and other publications at <http://www2.hawaii.edu/~anu/publications>
- Information on Hawaiian Kingdom Laws at <http://www.hawaiiankingdom.org>

## **THE UNITED STATES OCCUPATION OF THE HAWAII KINGDOM (A NEUTRAL NATION)**

**The United States Of America Has Unlawfully Occupied The  
Kingdom of Hawai'i For Over 127 Years**

**In January 1893, the U.S. Minister to the Kingdom of Hawai'i,  
John Stevens, conspired with, the "Committee of Safety",  
Thirteen (13) residents of the Hawai'i Kingdom, Americans, German,  
Englishmen and Hawai'i born subjects of foreign extraction, take  
over the government of Hawai'i Islands.**

**On the morning of January 16, 1893, two members of the committee,  
Hawai'i subjects Messrs. Thurston and Smith, committing treason  
and fearing for their lives, asked Minister Stevens for assurances of  
protection in the events of failure. He promised them they would be  
protected by the United States.**

### **AN ACT OF WAR**

**On the afternoon of January 16, 1893 the United States military  
invaded the Hawai'i Kingdom and positioned themselves to attack  
Queen Liliu'okalani's Palace and her Government.**

**The next day the committee of safety, now under the protection of  
the U.S. military, proclaimed the establishment of the Provisional  
Government. Thus, began the United States occupation of the  
Kingdom of Hawai'i, A NEUTRAL INDEPENDENT NATION.**

### **FRAUDULENT ANNEXATION**

**Hawai'i Subjects of the Hawai'i Kingdom Opposed Their Nation  
Being Annexed to the United States**

**U.S. Minister John Stevens confirmed it was a U.S. occupational government by immediately recognizing the Provisional Government as the de facto government February 14, 1893, only 28 days after the occupation, the Provisional Government tried to have the Hawai'i Kingdom annexed to the United States. The annexation attempt failed.**

**In 1898, the Provisional Government renamed itself, The Republic of Hawai'i, still the U.S. occupational government, again tried to annex the Hawai'i Kingdom to the United States, but 98% of Hawai'i Native Tenants, responded by circulating and signing petition opposing the annexation. The annexation attempt failed again.**

**Unable to annex the Hawai'i Kingdom, and needing the Hawai'i Islands for their upcoming war with Spain, the United States resorted to fraud. They purportedly annexed the Hawai'i Kingdom with the Newlands Resolution, a U.S. Congressional resolution that had and has no effect of law outside the borders of the United States.**

**Only treaties of annexation between de jure (lawful) governments of two (2) states can lawfully constitute annexation.**

**There was no annexation, only continuing United States occupation.**

## **UNITED STATES CONFESSES**

**The U.S. Organic Act of April 30, 1900, that created the Territory of Hawai'i, extended U.S. citizenship to Hawai'i citizens and asserted jurisdiction of the U.S. over the Hawai'i Kingdom, is unlawful. The 1959 Statehood Act, creating the State of Hawai'i is also unlawful. Both Acts were created by the United States government and violate International Laws of Occupation.**

**The Native Tenants of the Hawai'i Kingdom has full rights to their own sovereign nation is being violated by the United States occupation of the Hawai'i Kingdom**

**In 1993, a hundred years (100), the United States admitted their crimes against the Hawai'i people. Their confession was called the Apology Bill, passed into law by the U.S. Congress as Public Law 103-150.**

**International Law PROHIBITS Nations from increasing their territories by military aggression and occupation.**

## **U.S. VIOLATES TREATIES**

**Under International Law, U.S. law and Hawai'i Kingdom law, the treaties in existence between the two (2) nations, the Hawai'i Kingdom and the United States, were binding on each other, On, January 16, 1893, on this date, in violation of the "Treaty of Friendship", "Commerce", "Navigation and Extradition of 1850", The U.S. committed, what President Cleveland call at the time, An "ACT OF WAR" by landing United States military troops on Hawai'i soil.**

## **UNITED STATES OCCUPATION**

**The United States has disguised their theft of the Hawai'i Kingdom with four (4) occupational governments, First was the Provisional Government; Second was the Republic of Hawai'i Third was the Territory of Hawai'i The Same traitors were part of all of them. The fourth, created in 1959 is called the State of Hawai'i. It's another despotic United States government, put in power by the U.S. occupiers of the Hawai'i Kingdom.**

## **INTERNATIONAL LAW**

**All Acts and Laws of the United States Affecting the Hawai'i Kingdom and Hawai'i Nationals Are Unlawful and Violates International Laws**

**The U.S. is in Violation of the 1907 Hague Conventions International Law**

**1907 Hague Convention IV Section III Military Authority over the territory of the hostile State.**

**ARTICLE 42. Territory is considered occupied when it is actually placed under the authority of the hostile army.**

**ARTICLE 43. The authority of the legitimate power having in fact passed into the hands of the occupant, the latter shall take all the measures in his power to restore, and ensure, as far as possible, public order and safety, while respecting, unless absolutely prevented, the laws in force in the country.**

**ARTICLE 45.** It is forbidden to compel the inhabitants of occupied territory to swear allegiance to the hostile Power

**ARTICLE 46.** Family honour and rights, the lives of persons, and private property, as well as religious convictions and practice, cannot be confiscated.

**ARTICLE 55.** The occupying State shall be regarded only as administrator and usufructuary of public buildings, real estate, forests, and agricultural estates belonging to the hostile State, and situated in the occupied country. It must safeguard the capital of these properties and administer them in accordance with the rules of usufruct. (*without damaging or diminishing the properties*).

**ARTICLE 56.** The property of municipalities, that of institutions dedicated to religion, charity and education, the arts and sciences, even when state property, shall be treated as private property.

All seizure of, destruction or willful damage done to institutions of this character, historic monuments, works of art and science, is forbidden, and should be made the subject of legal proceedings.

## **UNITED NATIONS**

**Under Article 73 of the United Nations Charter, The United States, is obligated, as a matter of sacred trust, "To bring about self-government of the people within territories deemed non-self governing".**

**Hawai'i was designated as such a territory. (U.N. General Assembly Resolution 66 (I) (1946). In 1959 Hawai'i was removed from the U.N. list of Non-self Governing Peoples, After unlawfully becoming a state of the United States.**

**The United States is continuing its unlawful occupation of the Hawai'i Kingdom and continues the genocide of Native Tenants of Hawai'i Kingdom and their culture.**

**In Violation of International Laws and against the will of the Native Tenants of Hawai'i Kingdom, A Neutral Nation, the U. S. Military still continues growth expansion Through illegal occupation.**

**From:** Shari Chang <[schang@gshawaii.org](mailto:schang@gshawaii.org)>  
**Sent:** Thursday, September 24, 2020 9:21 AM  
**To:** USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
**Subject:** [Non-DoD Source] Army Training Land retention Pōhakuloa EIS letter of support  
**Attachments:** Army Training Land Retention Pohakuloa EIS 9.24.20.pdf

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Aloha please note enclosed is our letter of support for the Army Training Land retention Pōhakuloa EIS. If you need any further information, please advise.  
Mahalo  
Shari Chang



Shari W. Chang  
Chief Executive Officer  
Girl Scouts of Hawai'i  
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September 24, 2020

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*Ex Officio*  
Rylee Balatico-Fujioka  
Madison Frisbie  
Alexis Kleeman

*Ex Officio*

Shari W. Chang  
*Chief Executive Officer*

RE: Army Training Land Retention at Pōhakuloa Training Area EIS

Aloha,

Girl Scouts of Hawai'i fully supports retaining the Army Land Training area at Pōhakuloa on Hawaii Island.

As an immediate neighbor of the training area we have only seen positive community contribution by those training in that area. They have partnered with Girl Scouts of Hawai'i and others in numerous community support projects and we feel this is important to take into consideration. They also provide a sense of security for an area that is remote and have assisted us in emergency situations. If the land lease is not renewed we will lose a valuable community partner at a time when community support partnerships are critical to create positive impact for Hawaii Island.

We hope you will approve the land lease renewal and would be willing to answer any additional questions that you may have.

Mahalo nui loa,

Shari W. Chang

CEO

**From:** Miles Yoshioka <miles.yoshioka@hicc.biz>  
**Sent:** Wednesday, October 14, 2020 8:34 AM  
**To:** USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
**Subject:** [Non-DoD Source] Support testimony attached  
**Attachments:** HICC PTA EIS Scoping Letter 100620.pdf

All active links contained in this email were disabled. Please verify the identity of the sender, and confirm the authenticity of all links contained within the message prior to copying and pasting the address to a Web browser.

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Aloha,  
Thank you for the opportunity to voice our support.  
Sincerely,

Miles Yoshioka  
Executive Officer  
Hawai'i Island Chamber of Commerce  
1321 Kino'ole Street  
Hilo, HI 96720  
Phone: 808-935-7178  
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# Hawai'i Island Chamber of Commerce

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October 7, 2020

To: PTA EIS Scoping Project

From: Hawai'i Island Chamber of Commerce

Subject: Testimony Regarding Army Retention of State Land at Pohakuloa Training Area (PTA) as part of the Environmental Impact Statement (EIS)

Submitted via email to [usarmy.hawaii.nepa@mail.mil](mailto:usarmy.hawaii.nepa@mail.mil)

The Hawai'i Island Chamber of Commerce, formed in 1898 by the business community of the Island of Hawai'i has continued to be a dedicated supporter of the Pohakuloa Training Area and the many benefits this military installation brings to our community. PTA supports our island in many ways including the following:

1. Providing essential fire and medical first responder support in the saddle area (from mile marker 17 on the east side to the upper road on the west side, and from the top of Maunakea to the top of Maunaloa). This is extremely important to the health and safety of the many drivers, hunters, and visitors in the area.
2. Providing training opportunities for the Hawai'i County Fire Department with the only Class A (real wood) fire training facility on the island.
3. Providing training grounds for our National Guard and Hawai'i County Police with the only live fire training range on the island.
4. Providing jobs and injecting money into the local community via construction and service contracts. Additionally, of the 230 people who work at PTA, only five are military.
5. Funding a Cultural Resources Program that participates in site monitoring, site protection, surveying, and public outreach. They currently manage 1254 identified cultural sites.
6. Funding a Natural Resources Program that protects 26 threatened and endangered species (20 plants and 6 animals) like the Banded Rump Storm Petrel that nests on PTA. They propagate rare plants in a greenhouse on property and have created a native seed bank.
7. Providing food left over from training to the local foodbank.
8. Requiring visiting soldiers to volunteer in the local community. Recent events have included restoring native fish ponds, replacing the Waimea park playground, and picking up trash in the Volcano area.

For these and other reasons, the Hawai'i Island Chamber of Commerce strongly supports the renewal of lease for the state land at PTA.

Mahalo,

Keith Marrack, Military Affairs Committee Chair  
Hawai'i Island Chamber of Commerce

# Hawai'i Peace and Justice

Please see attached comments.

October 14, 2020

Kyle Kajihiro, Ph.D.  
Lecturer, Ethnic Studies and Geography, University of Hawai'i at Mānoa  
kkajihir@hawaii.edu

## **Scoping Comments on the Environmental Impact Statement (EIS) for Army Training Land Retention at Pōhakuloa Training Area (PTA)**

### **Historical and Cultural Context**

In its approach to the preparation of this EIS, the Army must situate Kānaka ʻŌiwi (Native Hawaiians) as a genealogical, cultural, and spiritual embodiment of the ʻāina (land) itself. Any activities that affect the environment will have significant effects on Kānaka ʻŌiwi, especially those with closer genealogical ties to the land. This will necessarily affect interpretations of the significance of impacts on natural and cultural resources and environmental justice.

Public Law 103-150 recognizes two key facts: (1) the importance of land to Kānaka ʻŌiwi, and (2) as a condition of the Admissions Act, public trust lands of the Hawaiian Kingdom were to be held by the State for, among other things, "... the betterment of the condition of Native Hawaiians." Further, Public Law 103-150 finds, in relevant part, "Whereas, the indigenous Hawaiian people never directly relinquished their claims to their inherent sovereignty as a people or over their national lands to the United States, either through their monarchy or through a plebiscite or referendum; Whereas, the health and well-being of the Native Hawaiian people is intrinsically tied to their deep feelings and attachment to the land" (P.L. 103-150 1993).

### **Purpose and Need Statement**

The issue at the core of the purpose and need statement in the EIS must be the Army's responsibility as lessee to care for the land as defined by the terms of General Lease (GL) 3849. In the case *Clarence Ching and Mary Maxine Kahaulelio vs. Suzanne Case*, Judge Gary Chang ruled:

Public trust lands are state-owned lands that are held for the use and benefit of the people in general of the State of Hawaii. The State of Hawaii is the trustee of these public lands in the public trust. The trustee of the public lands trust has the highest duty to preserve and maintain the trust lands. This duty is broadly coined in the concept of

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"malama 'aina"—to care for the land. (*Clarence Ching and Mary Maxine Kahaulelio vs. Suzanne Case* 2018)

Therefore, the Army as lessee is governed by the terms of the lease to mālama 'āina.

The purpose and need statement must be rewritten to reflect this duty to clean up and restore the land it leases from the state. The court has found that Army activities have caused environmental damage in violation of the terms of the lease and that the State has a duty to enforce the terms of the lease consistent with the principle of mālama 'āina (care for the land).

## Alternatives Statement

In line with this purpose and need, the *preferred alternative* should be: returning the leased parcel GL 3849 back to the people of Hawai'i (via the Department of Land and Natural Resources) after restoring it to its condition prior to the Army's use of this land. The Army must fulfill its agreements to return Pōhakuloa to the people of Hawai'i in its original state by 2029.

The alternatives analysis must also consider other locations outside of Hawai'i where the proposed training activities may be conducted. In the process of stationing the Stryker Brigade Combat Team (SBCT) in Hawai'i, the public was frequently told that Hawai'i was the only place where the unit could be stationed. And yet, in 2016, less than ten years after the decision to station the SBCT in Hawai'i was finalized, the Army moved the SBCT to Washington State.

## Affected Environment

Defining the scope of the affected environment requires thinking along both *temporal* and *spatial* axes.

**Temporal Scope: Environmental effects of past, present, and foreseeable future activities:** In order to provide an accurate assessment of environmental impacts for proposed actions, an EIS must begin with a thorough understanding of the baseline and current ecological and cultural conditions of the affected site.

*Baseline conditions* at the Pōhakuloa Training Area are the environmental conditions which existed *prior to military use of the land*. A reasonably accurate picture of baseline conditions can be determined by extrapolating from historical records, oral histories, cultural, archaeological, and geophysical studies, and biological studies of relatively intact native ecosystems in neighboring areas which have similar environmental conditions.

Understanding *current environmental conditions* at PTA requires a comprehensive study of the *cumulative environmental effects of all past military activities* at PTA. This study must consider effects of the proposed action that are reasonably foreseeable and have a reasonably close causal relationship to the proposed action or alternatives, including how the proposed action may compound or increase the adverse effects of past military activities.

**Spatial Scope: Region of Influence (ROI):** The geographical scope of analysis, or region of influence (ROI) must include environmental effects of proposed military activities on all lands within the PTA boundary, the neighboring areas, as well as more distant sites which are operationally linked to the proposed action and affected environment, such as Kawaihae Harbor. The rationale for this is that the state-owned parcel in question (general lease 3849) is identified as key to providing access and support to all training activities at PTA. The EIS must also consider the cumulative effects of the proposed action with other non-military projects in the affected area.

## **Land Use**

The EIS should incorporate a complete history of land title and land use with maps. A central issue is the Army's use of public trust lands (also known as "ceded lands"). The status of these lands are unique in that they are held in trust for a number of public purposes defined by the Statehood Act. The EIS should explain the decision making process, with relevant documentation, for the initial negotiation and approval of G.L. 3849.

**DHHL Land:** Also at issue is the Army's use of land owned by the Department of Hawaiian Home Land (DHHL).

- What decision making steps were followed to lease DHHL land to the Army?
- How are DHHL beneficiaries being involved in the decision making for renewal of the lease?

**No Condemnation:** A document titled "Information Paper: Subject: Land leased to the U.S. Army by the State of Hawaii for Training" (Army Garrison Hawaii 2015), states that "Major actions associated with entering into a new lease are broken down into (3) Phases," with the Phase III including the step "Proceed with Acquisition or Condemnation" (Army Garrison Hawaii 2015). Condemnation of the land would be an egregious breach of trust and abuse of power.

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Nothing is more politically inflammatory in Hawai‘i than the forcible taking of land, especially public trust lands considering the injustice of the U.S.-military backed overthrow Queen Lili‘uokalani and the unlawful means by which the United States claims to have annexed Hawaiian territory.

The military’s condemnation of 187-acres of Kamaka family land in Waikāne after failing to clear UXO is another bitter reminder of grievous injustice by the military. The present EIS must unequivocally state that there will be no use of eminent domain to condemn the State-owned parcel at Pōhakuloa.

**State Land Use Regulations:** Most of PTA falls within the State Conservation District. As stated above, the Army has a duty to fulfill its obligations under the lease, consistent with State land use regulations, to mālama ‘āina.

### **Cultural Resources**

To date, investigations into the number and significance of cultural sites have been superficial. The EIS should include a thorough inventory of the historic sites in the area, discussion of the cultural significance of Pōhakuloa itself, in relation to the larger cultural landscape, and a discussion as to how the condition of these sites has changed while the Army has used these lands. Kānaka ‘Ōiwi and the general public currently only have limited access to Pōhakuloa, and therefore, are denied the right to fully enjoy and conduct cultural, religious, or subsistence gathering practices until the lands are cleaned up and restored.

The EIS must incorporate a comprehensive Cultural Impact Assessment (CIA). Pursuant to the Hawai‘i Environmental Policy Act (HEPA), and Articles IX and XII of Hawai‘i State Constitution government agencies are required “to promote and preserve cultural beliefs, practices, and resources of native Hawaiians and other ethnic groups” (Guide to the Implementation and Practice of the Hawaii Environmental Policy Act, 2012, 11). The CIA must include an analysis of adverse cultural impacts on Kanaka ‘Ōiwi and other cultural practices by military activities at PTA which have occurred in the past, and which may occur in the future as a result of proposed military activities.

**Cultural Landscapes:** The CIA must consider the entire connected cultural landscape of Ka‘ohe ahupua‘a, Mauna a Wākea (Mauna Kea), and the surrounding cultural landscapes. Hawai‘i law recognizes that in addition to built structures, a cultural resource may also be a

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natural feature of the landscape, such as a mountain, hill, rock, tree, stream, or animal which has cultural significance to Kānaka ʻŌiwi. This study should include an in-depth cultural landscape study (CLS) and ethnographic survey (ES).

The Papakū Makawalu methodology, developed by the Edith Kanakaʻole Foundation, would be appropriate to employ in the assessment of the cultural meanings and significance of the affected area.

- What does the name Pōhakuloa signify?
- What is the relationship of Pōhakuloa to Mauna a Wākea (Mauna Kea)?
- What is the significance of the ahupuaʻa name Kaʻohe and the fact that it encompasses Mauna a Wākea (Mauna Kea), Pōhakuloa, parts of Mauna Loa, and a portion of the windward coastline?
- How does this land division relate to the history of the important chief ʻUmi a Līloa?
- How does Pōhakuloa relate to the heiau Ahu a ʻUmi to the west of the PTA boundary?

**Cultural Sites and Resources:** Affected sites include, but are not limited to alanui (trails), ahu and heiau (shrines and temples), puʻu (hills), rocks, caves and lava tubes, plants and animals used in traditional healing, hunting grounds, sites for harvesting birds, sites for observation and study of celestial bodies, burial sites, quarries and workshops for tools, and sources of water.

- How have military activities affected the cultural sites in Pōhakuloa?
- How have military activities affected the availability and quality of plant, animal, and mineral resources for Kanaka ʻŌiwi cultural practices.
- What are the effects of live fire training on lava tubes and cultural artifacts in PTA?

**Cultural Practices:** Pursuant to the Army's lease agreement and legal obligations, the Army must mālama ʻāina to restore ola (life) and create a safe and healthy environment for the well-being of flora, fauna and all interdependent life forms including the native tenants/hoa ʻāina/beneficiaries. The native tenants must include, but are not limited to: hunters and gatherers, lāʻau lapaʻau (herbal medicine practitioners), cultural and religious/spiritual practitioners and their relationship to the ʻāina. Adverse impacts on cultural practices include, but are not limited to restrictions on access due to security or safety restrictions, the destruction of cultural or religious sites, the destruction of environmental resources used in cultural practices, and the disruptions of the view plane and serenity of the area caused by explosions, vehicle and aircraft noise, and smoke and dust.

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- What Kānaka ‘Ōiwi cultural practices have been conducted in the past and are currently conducted in the ROI?
- What cultural sites and resources are needed for the revival and/or perpetuation of these cultural practices?
- How will the Army improve the ability of Kānaka ‘Ōiwi and the public to have safe, meaningful, and regular cultural access to Pōhakuloa?
- How will the Army increase the opportunities for Kānaka ‘Ōiwi and the public to safely participate in mālama ‘āina (environmental and cultural restoration activities) at Pōhakuloa?

## **Biological Resources**

**Native Ecosystems:** The EIS must adopt an ecosystems approach to analyzing the effects of the proposed military activities on the natural resources. This means studying the components, structures, and functioning of affected ecosystems. Individual species cannot be considered in isolation from their ecosystems. Nor can they be considered as separate from cultural relationships with humans. Ecosystems and species that inhabit them are also cultural resources for Kānaka ‘Ōiwi.

**Threatened and Endangered Species:** It is imperative that all rare, threatened and or endangered organisms within the area remain protected. The EIS must incorporate a complete inventory of all rare, threatened and/or endangered plant, insect and animal species including those identified as Native Hawaiian ‘Aumakua and Kinolau (Divine Bodily Manifestations Of Hawaiian Deities) within PTA and neighboring areas which are likely to be affected by activities on the range. Some of the species of particular concern should include, but not be limited to the following: Palila, ‘I‘iwi and all forest birds, Nēnē, Pueo, ‘Ōpe‘ape‘a, ‘Io, ‘Ua‘u, ‘Iwa and other sea birds. Also the forest flowers and trees that must be considered include; ancient Lehua, Māmane, ‘Iliahi (Aoa), Koa, ‘Akoko and all other rare, threatened and endangered species of plants that represent Hawaiian ‘Aumakua and/or Kinolau.

- What occurrences of rare threatened and endangered species have been documented within PTA?
- Cultural monitors have testified that they have heard the singing of Palila in PTA construction areas. Please provide documentation of recent or previously undocumented occurrences of any rare, threatened, and endangered species.

- I have read that historically, there may have been as many as 90,000 ‘Ua‘u nesting burrows. What is the current status and the future outlook for recovery of the ‘Ua‘u population? How are they affected by the noise and activity of military training?

**Invasive Species:** The EIS should fully disclose the extent of invasive species threats at PTA.

- What is the inventory and extent of invasive species threats at Pōhakuloa?
- What is the status of ungulates within the area used by the Army and what is the extent of damage they have caused?
- What is the Army doing to control these threats?
- Please provide any incident reports of damage to endangered species or habitats by invasive species.
- Please provide any incident reports of accidental releases or introductions of invasive species, such as: hitchhiking fountain grass or fireweed on vehicles or personnel or the introduction of invasive species such as fire ants, rodents, snakes, spiders, rhinoceros beetles as stowaways on cargo boats, vehicles, and aircraft.

**Wildfires:** The EIS must provide a complete history of wildfires at Pōhakuloa, including the dates, causes, extent of damage, and responses.

- How are wildfires documented, and where is this information reported and archived?
- What have been the impacts on fires to protected species and habitats?
- What have been the impacts of fires on cultural sites and resources?
- How have fire incidents affected the transformation of the ecology?
- How are biologists and cultural resources specialists documenting the impacts of fires?

## **Socioeconomics / Environmental Justice**

**Environmental Justice Analysis:** As mentioned above, the greatest environmental justice impacts will be borne by Kānaka ‘Ōiwi who have the most profound connection to the lands in question. The environmental justice analysis in the EIS must not use demographic data to claim that there are negligible environmental justice impacts because all ethnic groups are considered minorities on Hawai‘i island. The key considerations in determining environmental justice impacts include:

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- Who has the longest history, deepest connections, and profound knowledge about Pōhakuloa?
- Who has the greatest stake and is most directly affected by the environmental and cultural impacts there?
- Who has suffered the greatest historical injustice, cultural disintegration, and dispossession as a result of the history of the U.S.-backed overthrow of the Hawaiian Kingdom and the subsequent seizure of Hawaiian land by the federal government?
- Whose cultural practices are most adversely affected by Army activities in Pōhakuloa?
- Who is exposed to the greatest risk of exposure to toxins, injury, or death in the exercise of their cultural practices?
- How are subsistence hunters, la‘au lapa‘au practitioners, and Kanaka ‘Ōiwi religious practitioners affected by the access restrictions and hazards at PTA?

**Department of Hawaiian Homelands (DHHL):** Another important issue is the impact of military use of DHHL lands and Kanaka ‘Ōiwi beneficiaries. The EIS should include feedback from beneficiaries about the use of DHHL land by the military.

**Economic Costs:** Some questions about the economic impacts of the military activities at PTA:

- What are the costs of clean up and restoration of environmental damage caused by military activity?
- What is the depreciation in the land’s value as a result of military activities?
- How does the loss of value adversely affect the general public and Native Hawaiians as beneficiaries of the public land trust?
- What are the opportunity costs?
- What economic value can be gained by restoring the ecological and cultural integrity of Pōhakuloa?

## **Noise**

Noise is one of the major complaints about military training at PTA. The EIS should include consultations with residents of neighboring communities about the effects of noise.

- How does noise affect the value of homes?
- How does it affect quality of life?

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- What public health affects might be induced by chronic noise?
- How are veterans' mental health affected by the noise?
- How does noise affect the behaviors of animals, especially endangered species?

### **Air Quality**

The EIS must provide thorough data on air quality at Pōhakuloa.

- What kinds of documentation and reporting is conducted when there are incidents that may adversely affect air quality, such as a fire or training event?
- What emissions of air pollutants have been reported at PTA?
- What toxins or hazardous substances have been detected in airborne particulate matter during fires or training events?

### **Water Resources**

The ahupua'a of Ka'ōhe refers to bamboo, which is a kinolau of Kāne, a deity associated with sources of fresh water.

- What is the history and status of aquifers in the vicinity of PTA?
- How has live fire training affected aquifers within PTA? Does the pulverization of lava in the impact areas increase the soil's permeability and the infiltration of contaminants into the groundwater?
- Where are the wells? What is the history of water usage? What has been the impact of past uses of aquifers on Mauna a Wākea?
- Did the Army request a UH researcher to conduct test drilling for water at Pōhakuloa? Was this research funded by the Army?
- What has been the role of the Hawai'i State Water Commission in approving or overseeing this prospecting activity?
- What is the Army's proposed water use at PTA?

### **Natural Hazards, Geology, and Soils**

- What are the impacts on lavas and soils in the impact range?
- Are they changing the permeability of the ground?
- What are the projected impacts if Mauna Loa erupts?

## Visual Resources

Wide open spaces and views of the mountains is part of the significance of Pōhakuloa. As a site that usually sits above the tradewind inversion layer, the skies are often clear.

- What are the Kanaka 'Ōiwi visual resources at Pōhakuloa?
- What is the cultural significance of different view planes?

## Public Facilities and Infrastructure

- What are the effects on the quality of roads?
- What are the impacts of military use on Kawaihae harbor facilities?
- How are convoys affecting traffic?
- How do residents feel about the traffic disruptions?

## Toxic and Hazardous Substances

The EIS must include comprehensive information characterizing toxic and hazardous substances in soil, groundwater, surface water runoff, uptake in plants and animals, air emissions, and air borne particulate matter. The Contaminants of Concern (COC) that should be investigated include, but are not limited to:

- Munitions and explosives of concern (MEC);
- Metals, including lead from small arms munitions, mercury, beryllium, cadmium, arsenic, copper, aluminum,
- Depleted uranium (DU), strontium 90, and other radioactive contaminants,
- PCBs, dioxins and furans,
- Energetics and explosive constituents and their byproducts,
- Per- and polyfluoroalkyl substances (PFAS) which is commonly found in fire-fighting foam,
- Perchlorate, a common chemical in rocket fuels,
- Petroleum, oil, and lubricants (POLs),
- Volatile organic compounds (VOCs), including solvents, pesticides, and herbicides,
- Benzene, Toluene, Ethylbenzene, and Xylene (BTEX) and Polycyclic Aromatic Hydrocarbons (PAHs),

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- Asbestos,
- Various kinds of air pollution emissions.

### **Cumulative Impacts**

The EIS must incorporate data and analysis of the environmental effects of all past military activities at PTA, including:

- A comprehensive list of all military activities ever conducted at PTA, including any nuclear, biological, and chemical weapons tests and military activities by other service branches and foreign militaries.
- A comprehensive study of toxic and hazardous substances and their effects on the human and natural environment.
- A comprehensive list of federal actions since 2001 within the entire PTA boundary and at sites on Hawai'i Island which are connected to the affected environment in the EIS, and a summary of their environmental impacts.
- A description of all munitions used, the quantities used, the explosive yields, contaminants associated with these munitions, the extent of unexploded ordnance contamination, and the results of any removal actions.
- A comprehensive report on wildfires, their causes, responses, and environmental consequences.

The EIS must also take into account the combined environmental and cultural impacts of all past, present, and reasonably foreseeable future projects at or near the project area. Past projects include:

- Infantry Platoon Battle Course;
- Kawaihae Harbor improvements (state facilities);
- Stryker Brigade Combat Team training support facilities (prior to cessation of Stryker training at PTA)—with the removal of the Stryker Brigade from Hawai'i, why has there not been a reversion of land acquired and developed for the aborted project?;
- changes in military aircraft training at PTA, including the Urban Close Air Support Range and an Aviation Bulls-Eye Range;
- Multi-Purpose Range Complex facilities.

Present and reasonably foreseeable actions that must be taken into consideration include:

- PTA Cantonment Facilities Improvement Program modernization projects;
- Daniel K. Inouye Highway extension;
- State small boat and commercial harbor improvements at Kawaihae Harbor;
- marine sciences center at Kawaihae Harbor;
- Department of Hawaiian Home Lands development plans;
- State airport plans;
- Mauna Kea Observatories Thirty-Meter Telescope—opposition to the telescope has sparked widespread protest across Hawai‘i and around the world; these energies will spill over into Pōhakuoa;
- and other recreational and residential community plans.

**Characterizing the Natural Resources, Cultural Resources, and Environmental Impacts within the Impact Area:** Given the dangers of the UXO in the impact area, this vast area remains a blank spot on the map. The absence of cultural and environmental resources on Army maps does not mean that there are no resources there. It simply reflects the fact that no one has looked or been able to look. It is a map of our ignorance about Pōhakuoa. As a result, any EIS for PTA without an investigation of the impact area will be fatally flawed because it will not provide a complete picture of the affected environment or the environmental impacts.

The present EIS must do better to characterize the cultural and natural resources and impacts within the impact area. The Army should explore different unmanned aerial vehicle technologies to conduct aerial surveys of the impact area. Aerial imagery and remote sensing technologies can detect and map the topography, differentiate between different types of vegetation and land composition, identify archaeological structures, and even detect UXO and munitions debris. As the landscape and hazards are mapped in finer detail, planners can begin to explore new techniques for removing UXOs, perhaps using robotics, or adopting creative demining techniques and technologies.

Again, the Army has a duty to clean up and restore the environmental damage caused by its activities. This EIS must begin the process of fulfilling those responsibilities.

### **Restoration of past environmental impacts**

General Lease 3849 requires that that the Army “make every reasonable effort to ...remove or deactivate all live or blank ammunition upon completion of a training exercise or prior to entry by the said public, whichever is sooner” and remove “all trash, garbage and other

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waste materials[.]” Cultural monitors, who spent extensive time on State lands at the PTA, observed military debris, including unexploded ordnance and spent shell casings, scattered across the area leased by the Army. The EIS should fully disclose the extent to which the Army has complied with this lease provision and should include a thorough investigation of the entire area to determine whether there is any military debris (including unexploded ordnance) on the land that the Army has been using. Further the EIS must outline plans for the clean up and restoration of state-owned land at PTA affected by military contamination.

The *Real Property Master Plan Pohakuloa Training Area, Hawai‘i Island - Final (Digest)* states that “Specific data on UXO at PTA is not available at the time of this study” (HHF Planners 2020, 35). All areas used for live munitions training in the past, present or foreseeable future must be surveyed and characterized for unexploded ordnance (UXO) hazards.

Therefore the Army should disclose its unexploded ordnances (UXO) protocol for full transparency, accountability and confidence of adequacy. Mālama ‘Āina (to care for), requires cleanup and restoration of the land, and therefore means:

- Pōhakuloa is to be restored to its natural habitat with healthy ecosystems that Kanaka Maoli can access and utilize as right holders/practitioners of the ‘āina.
- The process for clean-up must include restoring the ‘āina to its original condition and beauty.

**Former Bazooka Range:** In a draft document entitled "Action Memorandum for the Time Critical Removal Action", that was prepared in March 2015 by the United States Army Garrison at Wheeler Army Airfield on Schofield Barracks in Wahiawa, O‘ahu, Hawai‘i, it was reported that the former Bazooka Range MRS is located at the Pōhakuloa Training Area. The former Bazooka Range was apparently used as a military maneuver area through the early 2000s. During a site inspection of the Bazooka Range area that was jointly conducted by DLNR and the Army in 2014, the area was found to be "heavily contaminated on the surface with material potentially presenting an explosive hazard (MPPEH) and munition debris (MD)." (Emphasis added.) A subsequent inspection by two military explosive ordnance disposal units found that the following types of ordnance were observed to be present:

- M29A2 training rounds with dummy M405 fuse
- Practice 81mm mortars, and
- High explosive anti-tank (HEAT) rifle grenades.

Other suspected fired ordnance at the Bazooka Range area also included:

- M28A2 bazooka rounds with M404 fuse, and

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- M30 white phosphorus (WP) bazooka rounds.

The Army noted that the sheer densities and quantities of ordnance that are present on the ground at the former Bazooka Range area "coupled with the accessibility to the public make for the potential for significant danger to public health and welfare." The estimated cost of remediating the danger as of March 2015 was \$2,353,000. The Army recommended that the removal of ordnance danger because of the significant possibility that ordnance exists at the former Bazooka Range area that "presents an imminent and substantial endangerment to public health, or welfare, or the environment." Any EIS should disclose the status of the cleanup of the Former Bazooka Range:

- Has it been completely cleaned up?
- Is it safe to enter?
- How much waste was collected?
- What types of waste was removed?
- Where and how was it disposed of?

### **Failed Public Involvement**

Although the COVID-19 pandemic creates difficulties for in-person participation, new video conferencing technologies could have allowed for meaningful remote participation in public information sessions. Unfortunately, the virtual scoping open house session on September 23 failed to take advantage of the technology and instead offered the public what amounted to an audio-visual brochure. The posting of slides and the audio recordings of the text did not fulfill the need for public involvement. Many people had questions, but there was no way to ask questions of subject matter experts. The result was that members of the public who wished to participate went away frustrated and disillusioned by the process.

I have tried to obtain more background information on the proposed real estate action. My searches led me to a digest of the *Real Property Master Plan (RPMP) Pohakuloa Training Area, Hawai'i Island - Final* (HHF Planners 2020a). While this was helpful, I wished to study the full master plan. However, the document was not publicly available. Also, the RPMP makes reference to a number of documents that would be relevant to understanding the proposed action. Please make these documents publicly available:

- U.S. Army Engineering and Support Center Huntsville, Alabama. 2009. "Enhanced Area Development Plan, Pohakuloa Training Area, Hawai'i." Final Submittal.
- U.S. Army Garrison Hawaii. 2020. *Integrated Natural Resources Management Plan*.

October 14, 2020

- U.S. Army Region Hawaii. 2015. "Memo for Commander, USARHAW, Approach to Training in Hawaii: A Strategy for PTA." October 25.
- U.S. Department of Defense, Assistant Secretary of Defense. 2018. "Approval of Major Land Acquisition Waiver Request - US Army Hawaii Training Sites, Hawaii." June 4.
- PTA Area Development Plan (ADP). 2015.

Thank you for your consideration of these comments.

## References

- Army Garrison Hawaii. 2015. "Information Paper: Subject: Land Leased to the U.S. Army by the State of Hawaii for Training."
- Apology to Native Hawaiians*. 1993. Public Law 103-150. 103rd Congress.
- HFH Planners. 2020a. "Real Property Master Plan Pohakuloa Training Area, Hawai'i Island - Final (Digest)."
- . 2020b. "Programmatic Environmental Assessment Pōhakuloa Training Area Real Property Master Plan Adoption, Hawai'i Island, Hawai'i." U.S. Army Corps of Engineers, U.S. Army Garrison Hawaii.
- Office of Environmental Quality Control, State of Hawai'i. 2012. "Guide to the Implementation and Practice of the Hawaii Environmental Policy Act."
- "National Environmental Policy Act Implementing Regulations." 2020. Council on Environmental Quality.

October 14, 2020

RE: Army Training Land Retention at Pōhakuloa Training Area on Hawai'i Island

To Whom It May Concern,

The Kona-Kohala Chamber of Commerce is a 501(c)(6) non-profit organization with nearly 500 member businesses that represent upwards of 20,000 employees in the Kona and Kohala districts on the island of Hawai'i. Our mission is to provide leadership and advocacy for a successful business environment in West Hawai'i.

**The Kona-Kohala Chamber of Commerce supports the U.S. military's training mission at Pōhakuloa and a new State lease for Pōhakuloa Training Area (PTA).**

PTA is a premier training area in Hawai'i and the Pacific. For Hawai'i Island, PTA employs 230 people, infuses \$74 million in the local economy annually, provides crucial first response for fire and rescue on Daniel K. Inouye Highway and regularly engages with the community through education and outreach.

The vision of the Kona-Kohala Chamber of Commerce is to enhance the quality of life for our community through a strong, sustainable economy. The economic impact of PTA can readily be quantified through expenditures such as Quonset hut, rock quarry, drainage and other infrastructure projects where local companies are used as much as possible. Additionally, travel to Hawai'i Island by soldiers feeds into our local economy, especially on the Kona side. However, PTA's reach goes far beyond providing positive economic impacts on Hawai'i Island. PTA connects to our community through multiple venues including Experience PTA Day, tours, community speaking engagements, participation in parades, dedication to Civil Air Patrol and Boys and Girls Club, and active memberships in local chambers and community associations. PTA has earned the respect of our community through relationship building and authentic, effective communication.

The Kona-Kohala Chamber of Commerce knows how crucial this land lease is to the overall operations of PTA and to the U.S. military in Hawai'i and the Pacific. We strongly support continued military use of the State-owned land at Pōhakuloa Training Area.

Sincerely,



Wendy J. Laros, M.Ed.  
Executive Director, Kona-Kohala Chamber of Commerce

**From:** Susan  
**Sent:** Wednesday, October 14, 2020 8:48 PM  
**To:** USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
**Subject:** [Non-DoD Source] PTA EIS SCOPING INPUT  
**Attachments:** PTAEIS.doc

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**None but ourselves can free our minds ~Bob Marley**

## MAKA'ALA O KA HANA WAI

Moku O Keawe

Waikahekahe

RR#3 Box 1022

Pahoa, H.I. 96778

RE: Army Training Land Retention at Pohakuloa Training Area  
Environmental Impact Statement Preparation  
Public Scoping Process Input

To Whom It May Concern:

This letter is in response to the request for comments on the scope of the PTA EIS. First and foremost it must be stated, as is noted in the PTA EIS Scoping document that Ko Hawai'i Pae 'Aina: The Archipelagic Kingdom of the Hawaiian Islands still exists through today. There is no Treaty of Annexation, but there were Treaties between the USA and the Hawaiian Kingdom which were broken upon the landing of United States troops onto the grounds of the I'olani Palace in Honolulu on January 16, 1893. The US Military continued to support the small group of insurgents which made it impossible for the law enforcement of the Hawaiian Kingdom to rescue their held captive Queen Liliuo'kalani and to enforce Kingdom Law. There was no legal Statehood vote. Because the islands were held in a TRUST situation and eligible for de-colonization, a vote was held as a requirement of the UN (International Law) The required participation of the 'injured parties', the Hawaiians could not happen because of voter registration required USA citizenship, income minimums and property ownership requirements, yet the US military were encouraged and allowed to vote even though the voting military did not all meet the requirements of property ownership. The ballot also was also fraudulent in that it did not offer the required options of 'Free Association' nor 'Independence' which is also a requirement of international law for a plebecite.

We are positive others will be addressing this historical at some length; therefore, we shall move forward to address our EIS related concerns.

Section 3.1 states the classification of the lands which the Army currently holds its training. As Conservation Land. Environmental Conservation is defined as "used in a way that is sustainable". For your consideration: How sustainable is it to continue riddling the land with bombs and munitions for over 60 years with no completed clean up? Section 3.4 should be expanded for complete clean-up of all munitions and toxic waste on ALL military training lands.

The EIS needs to address ALL of Pohakuloa for ALL of the military claimed areas are subjected to bombing and artillery fire. That means all 132,000 acres need to be CLEANED UP as REQUIRED by the Terms of the Lease Agreement. The lease states that the land must be cleared of all munitions after EACH exercise. It is evident from the summaries in Section 3.4 that the required level of clean-up has not yet happened. This serious IMPACT on the ENVIRONMENT must be addressed in the EIS and used as a excuse to not complete a comprehensive EIS including ALL of the Pohakuloa areas of training, target practice and munitions experimentations.

With regard to the Cultural Impact, please note that under communities consulted there was not one Hawaiian Homestead Community listed, yet this island has the most Hawaiian Homestead Communities of any island! Food for thought ... Why is that? Can you do better? Please do so! Expansion of your consultation list to include the Native Hawaiian communities is imperative!

Section 3,9 Water Resources. In the statistics about rainfall and groundwater it is stated there are 3 intermittent streams that run through PTA with one of them combining with a 4<sup>th</sup> intermittent stream within the far northern border of the Training Area, and those 5 streams make up all the groundwater runoff for the entire 133,000 acres of Training Area. It is imperative that the aquifers at the 4500 foot elevation be protected from ALL potential contamination!

Please consider mitigation measures for any oil or fluid leaks from the equipment and trucks that travel all over this property. and whose fluids may permeate the ground

eventually making its way down to the aquifer. We understand that the Army has a strict maintenance program, but we also know that the number one breakdown on equipment is broken hydraulic hoses and fittings. A hydraulic leak on a pressurized hose can empty an entire oil tank in no time at all, and tanks on equipment can be anywhere from 10 gallons to 50 gallons and more. This is something most don't even consider, but we know the Army can change that! Since there are mostly dirt roads crisscrossing the facility, considering this type of mitigation measures should be a top priority and can help ensure a future with clean water in our aquifers that are only 1700 feet below the surface of Pohakuloa.

In conclusion these are the main topics of concern for our organization. We thank you for your attention in these matters and look forward to their inclusion in the Draft PTA EIS.

Sincerely,

Susan Rosier,  
Community Advocate

# Mālama Mākua

Mālama Mākua stands in staunch opposition to the renewing of U.S. Army leases anywhere in the Hawaiian islands, many of which currently expire in 2029, including sacred Pōhakuloa and sacred Mākua Valley on O‘ahu. Pōhakuloa and Mākua are both breathtaking wahi pana (legendary place, often sacred) that are culturally vital to the Kānaka Maoli (Native Hawaiians), the Indigenous people of the Hawaiian islands, and are thereby critical to all of the Hawaiian archipelago.

The definition of the way we use the word "‘āina" has become too narrow over time. In ancient times, ‘āina did not only refer to land, but to all that inhabit the environment. From the Earth to plants, to animals, to humans, all of it is ‘āina. We are ‘āina. Every time a bomb is detonated anywhere in the Hawaiian islands, Ko Hawai‘i Pae ‘Āina, not just the land, but the ‘āina, all of us, are impacted.

Mālama Mākua stands with U.S. Army COL (ret.) Ann Wright, and countless Kānaka Maoli cultural practitioners and non-Native allies, in staunch opposition to any new military leases of land in Hawai‘i. In fact, both COL Wright and Mālama Mākua call for the termination of the existing leases. In an op-ed published in the Honolulu Star-Advertiser on Monday, Oct. 12, 2020, COL Wright wrote:

"In violation of the terms of the lease, the Army has damaged native ecosystems, left unexploded ordnance, depleted uranium, and other contaminants, and harmed Native Hawaiian cultural sites. Hawaiian cultural practitioners Clarence Ku Ching and Mary Maxine Kahaulelio filed suit against the state DLNR in 2014, claiming the state breached its trust duties by failing to enforce the lease.

"Four years later, state Circuit Judge Gary Chang ruled in Ching and Kahaulelio's lawsuit that the DLNR failed to care for the Big Island property, lacking inspections over the first nearly 50 years of the lease. The judge said that the state has a duty to ‘mālama ‘āina,‘ called two DLNR inspection reports ‘grossly inadequate,‘ and ordered the state to develop and potentially execute a plan to obtain adequate funding for a comprehensive cleanup of the land."

There is no reason to believe the Army will be a better tenant under a new lease, or that the state of Hawai‘i will hold the Army to its lease obligations. Regardless, the Hawaiian islands, currently under a prolonged U.S. military occupation, have a long history of being peace-loving, dating back to when Hawaiian Kingdom monarch Kamehameha III declared the Hawaiian Kingdom a neutral state on May 16, 1854.

We, Mālama Mākua, call on the U.S. military to stop all discussions relating to the renewal of expiring leases that impact Hawaiian soil and Hawaiian waters and terminate all current military leases in the Hawaiian archipelago.

**From:** Healani Sonoda-Pale <healanipale@gmail.com>  
**Sent:** Wednesday, October 14, 2020 1:56 PM  
**To:** USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
**Cc:** Kealoha; Clarence Ching; mmkahualelio@yahoo.com  
**Subject:** [Non-DoD Source] Pohakuloa Training Area EIS Comments  
**Attachments:** Pohakuloa Letters Submitted.xlsx; Ae Like Pohakuloa Letter.pdf

Aloha,

Attached is the spreadsheet compilation of the 494 form letters (many with individual comments) that you should have received via email over the past three weeks.

I've also attached the PDF version of the statement by Maxine Kahualelio and Clarence "Ku" Ching that all 494 persons listed on the attached spreadsheet signed on to.

Sincerely,

M. Healani Sonoda-Pale, Ka Lahui Hawai'i Komike Kalai'aina  
Maxine Kahualelio, Mauna Kea Moku Nui 'Aelike/Consensus Building 'Ohana  
Clarence "Ku" Ching, Mauna Kea Moku Nui 'Aelike/Consensus Building 'Ohana  
Kealoha Pisciotta, Mauna Kea Hui



**Primary Message for Pōhakuloa:**

The Army is currently seeking public comments for an Environmental Impact Statement (EIS) and an extended lease for Pōhakuloa. The scoping period will be open from September 23rd to October 14th, 2020. Attached are Uncle Ku Ching’s and Aunt Maxine Kaha’ulelio’s recent statement to the Army Commanders. The Mauna Kea Moku Nui `Aelike Consensus Building `Ohana supports our kūpuna and their statements with: 1) mālama `āina: calling for the Army and state to abide by the State of Hawai`i’s Supreme court’s ruling in Ching vs Case to mālama `āina and abide by their existing lease agreement to clean up; 2) a request in good faith for a schedule and plan of action for clean up of the Pōhakuloa training area; and 3) no extended leases to continue destroying the `āina beyond the end of the Army’s current lease (2029).



Photo L to R: UNCLE KU CHING, SUMMER SYLVA, DAVID FRANKEL AND AUNTY MAXINE KAHAULELIO

**Uncle Ku Ching and Aunt Maxine Kaha’ulelio’s Recent Statement Submitted to the Army Commanders at Pōhakuloa: Standard of Policy and Behavior at Pohakuloa Training Area**

**WHEREAS**, Under the Hawai`i Constitution, all public natural resources are held in trust by the State for the common benefit of Hawai`i’s people and the generations to come. Additionally, the Constitution specifies that the public lands “ceded” to the United States by the so-called Republic of Hawai`i following the overthrow of the Hawaiian Monarchy and returned to Hawai`i upon its admission to the Union hold a special status under law. These lands are held by the State IN TRUST for the benefit of Native Hawaiians and the general public. Accordingly, The Hawai`i State Constitution places upon the State duties with respect to these trusts much like those of a common law trustee, including fiscal duties and responsibilities, an obligation to protect and preserve the resources however they are utilized.

**WHEREAS**, Several parcels of ceded land on the island of Hawai`i that are indisputably held in public trust by the State have been leased to the federal government of the United States of America for military training purposes, subject to a number of lease conditions designed to protect the land from long-term damage or contamination. The State must monitor the leased trust land and the United States’ compliance with the lease terms to ensure the trust property is ultimately safeguarded for the benefit of Hawai`i’s people.

**WHEREAS**, The State’s duty to protect and preserve trust land is an obligation to reasonably monitor a third party’s (the U.S. Army’s) use of the property, and that this duty exists. To hold otherwise would permit the State to ignore the risk of impending damage to the land, leaving trust beneficiaries powerless to prevent irreparable harm before it occurs.

**WHEREAS**, On August 17, 1964, the State of Hawai`i Department of Land and Natural Resources (DLNR) entered into a written agreement to lease three tracts of ceded land, Lease No. S-3849, situated at Ka’ohe, Hāmākua and Pu’uanahulu, North Kona, Hawai`i to the United States for military purposes. The 22,900 acre tract of land, which is contained within the Pōhakuloa Training Area (PTA), was leased to the United States for a term of sixty-five years, to expire on August 16, 2029. In exchange, the United States paid the DLNR one dollar.

**WHEREAS**, The lease gives the United States the right to “have unrestricted control and use of the demised premises.” The lease also establishes several duties that the United States is obligated to fulfill during the course of the lease. The lease, among other things, requires that the United States “make every reasonable effort to ... remove and deactivate all live or blank ammunition upon completion of a training exercise or prior to entry by the public, whichever is sooner. In Paragraph 14 of the lease, the United States agrees to “take reasonable action during its use of the premises herein demised to prevent unnecessary damage to or destruction of vegetation, wildlife and forest cover, geological features and related natural resources” and to “avoid pollution or contamination of all ground and surface waters and remove or bury all trash, garbage and other waste materials resulting from [the United States’ use of the said premises.”

**WHEREAS**, and Furthermore, the United States agrees that, if required by the State upon the surrender of the property at the termination of the lease, it will “remove weapons and shells used in connection with its training activities.”

**WHEREAS**, Under article XII, section 4 and article XI, section 1 of the Hawai‘i Constitution, the State is the trustee of the public “ceded” lands trust and of public natural resources, and it therefore has a trust duty to “monitor, inspect and investigate to ensure that public trust lands are not being damaged. The State of Hawai‘i, as the trustee of such lands, has “the highest (Constitutional and fiduciary) duty to preserve and maintain the trust lands (for the beneficiaries).”

**WHEREAS**, and Additionally, The Ka Pa‘akai court held that the Hawai‘i Constitution places “an affirmative duty on the State and its agencies to preserve and protect traditional and customary native Hawaiian rights.”

**WHEREAS**, Acknowledging the intention of the Admission Act and the “Aloha” of the Hawai‘i State Constitution,

**WHEREAS**, As a further guideline, the courts (including the Hawai‘i Supreme Court), in compliance to its (the State’s) duty to comply with its public trust and fiduciary obligations, suggest - that it should “promptly initiate and undertake affirmatively to “Malama ‘Aina” the PTA” - to care for the land, and,

**BE IT RESOLVED**, In order to operate at the highest possible standards and good faith, We adopt the principle of “Malama ‘Aina” (to care for the land) to accompany and be an integral part of all behavior, policies, rules, regulations and activities taking place at Pohakuloa Training Area.

### **Specific Talking Points for the EIS**

The Army’s lease requires that it “make every reasonable effort to ...remove or deactivate all live or blank ammunition upon completion of a training exercise or prior to entry by the said public, whichever is sooner” and remove “all trash, garbage and other waste materials[.]” Cultural monitors, who spent extensive time on State lands at the PTA, observed military debris, including unexploded ordnance and spent shell casings, scattered across the area leased by the Army. The EIS should fully disclose the extent to which the Army has complied with this lease provision and should include a thorough investigation of the entire area to determine whether there is any military debris (including unexploded ordnance) on the land that the Army has been using.

### **Former Bazooka Range**

In a draft document entitled “Action Memorandum for the Time Critical Removal Action”, that was prepared in March 2015 by the United States Army Garrison at Wheeler Army Airfield on Schofield Barracks in Wahiawa, O‘ahu, Hawai‘i, it was reported that the former Bazooka Range MRS is located at the Pōhakuloa Training Area. The former Bazooka Range was apparently used as a military maneuver area through the early 2000s. During a site inspection of the Bazooka Range area that was jointly conducted by DLNR and the Army in 2014, the area was found to be “heavily contaminated on the surface with material potentially presenting an explosive hazard (MPPEH)and munition debris (MD).” (Emphasis added.) A subsequent inspection by two military explosive ordnance disposal units found that the following types of ordnance were observed to be present:

1. M29A2 training rounds with dummy M405 fuse
2. Practice 81mm mortars, and
3. High explosive anti-tank (HEAT) rifle grenades

### **Other suspected fired ordnance at the Bazooka Range area also included:**

1. M28A2 bazooka rounds with M404 fuse, and
2. M30 white phosphorus (WP) bazooka rounds

The Army noted that the sheer densities and quantities of ordnance that are present on the ground at the former Bazooka Range area “coupled with the accessibility to the public make for the potential for significant danger to public health and welfare.” The estimated cost of remediating the danger as of March 2015 was \$2,353,000. The Army recommended that the removal of ordnance danger because of the significant possibility that ordnance exists at the former Bazooka Range area that “presents an imminent and substantial endangerment to public health, or welfare, or the environment.”

### **Any EIS should disclose the status of the cleanup of the Former Bazooka Range.**

1. Has it been completely cleaned up?
2. Is it safe to enter? How much waste was collected?

3. What did it comprise of?
4. Where was it disposed of?

It is important for the Army to acknowledge that Native Hawaiians (Kanaka Maoli) are an embodiment of the `āina and as a result it is imperative that our lands are returned to their natural state and condition by leaseholders upon expiration of their leases. To fully understand the Native Hawaiian people's political and spiritual relationship to the land, two key facts outlined in the U.S. Apology to the Hawaiian people must be considered; 1) the federal government has recognized the importance of the land to the Hawaiian people, and 2) in order for the Admissions Act to pass, the U.S. Congress required a provision be included clarifying that all the lands of Hawai'i be held by the State for, among other things, "... the betterment of the condition of Native Hawaiians." Public Law 103-150 affirms this stating in relevant part: "Whereas, the indigenous Hawaiian people never directly relinquished their claims to their inherent sovereignty as a people or over their national lands to the United States, either through their monarchy or through a plebiscite or referendum; Whereas, the health and well-being of the Native Hawaiian people is intrinsically tied to their deep feelings and attachment to the land [Please See Public Law 103-150 the Apology Resolution (November 23, 1993)]."

Therefore regarding unexploded munitions, we call upon the Army in good faith to disclose its unexploded ordnances (UXO) protocol for full transparency, accountability and confidence of adequacy.

### **Mālama `Āina (to care for), requires cleanup and restoration of the land, and therefore means:**

1. Pōhakuloa is to be restored to its natural habitat with healthy ecosystems that Kanaka Maoli can access and utilize as right holders/practitioners of the `āina.
2. The process for clean-up must include restoring the `āina to its original condition and beauty. Pursuant to the Army's lease agreement and legal obligations, the Army must mālama `āina to restore ola (life) and create a safe and healthy environment for the well-being of flora, fauna and all interdependent life forms including the native tenants/hoa `āina/beneficiaries including but not limited to: hunters and gatherers, lā'au lapa'au, cultural and religious/spiritual practitioners and their relationship to the `āina.

### **Invasive Species**

The EIS should fully disclose the extent to which ungulates exist within the area used by the Army and the damage they have caused. In the early 90's enclosures were installed within the training area to identify and protect endemic species within the area from Army training activities. It is imperative that all rare, threatened and or endangered organisms within the area remain protected. The complete inventory of all rare, threatened and/or endangered plant, insect and animal species including those identified as Native Hawaiian `Aumakua and Kinolau (Divine Bodily Manifestations Of Hawaiian Deities) this list should include but not be limited to the following:

**(1) Palila bird, (2) I'iwi bird and all forest birds, (3) Nēnē Geese, (4) Pueo, (5) `Ōpe`ape`a (6) `Ua`u (Petrel), (7) `Iwa Bird and other Manu Kai etc.**

Also the forest flowers and trees including; ancient Lehua, Māmane, `Iliahi (Aoa), Koa, `Akoko trees and all other rare, threatened and endangered species of plants that represent Hawaiian `Aumakua and/or Kinolau (Divine Bodily Manifestations Of Hawaiian Deities).

### **Cultural Sites**

To date, investigations into the number and significance of cultural sites have been superficial. The EIS should include a thorough inventory of the historic sites in the area, discussion of the cultural significance of Pōhakuloa itself, and a discussion as to how the condition of these sites has changed while the Army has used these lands. Native Hawaiians and the general public have limited use only and therefore cannot fully enjoy and/or properly use the land for cultural, religious or gathering practices until the lands are cleaned up and restored.

### **Full Range of Alternatives**

The Army must consider the most important alternative: returning these "ceded lands" back to the People of Hawai'i (via the Department of Land and Natural Resources) after restoring them to the condition that they were in prior to the Army's use of this land.

We hold the Army to their agreements to return Pōhakuloa to the People Of Hawai'i in its original state by 2029.

/s/ Aunty Maxine and Uncle Ku on behalf of the Mauna Kea Moku Nui `Aelike Consensus Building `Ohana

Date: 9.27.2020

"Stop bombing Ko Pae `Āina o Hawai'i (Archipelago of Hawai'i), Stop bombing Moananui (Pacific)"



Date	Name-First	Name-Last	City, Island or State	Email	Primary Message for Pohakuloa	Primary Message for Pohakuloa	Comments
					<p>Primary Message for Pohakuloa</p> <p>The Army is currently seeking public comments for an Environmental Impact Statement (EIS) and an extended lease for Pōhakuloa. The scoping period will be open from September 23rd to October 14th, 2020. Attached are Uncle Ku Ching's and Aunt Maxine Kaha'ulelio's recent statement to the Army Commanders. The Mauna Kea Moku Nui 'Ae'ike Consensus Building 'Ohana supports our kūpuna and their statements with: 1) mālama 'āina: calling for the Army and state to abide by the State of Hawai'i's Supreme court's ruling in Ching vs Case to mālama 'āina and abide by their existing lease agreement to clean up; 2) a request in good faith for a schedule and plan of action for clean up of the Pōhakuloa training area, and 3) no extended leases to continue destroying the 'āina beyond the end of the Army's current lease (2029).</p> <p>Uncle Ku Ching and Aunt Maxine Kaha'ulelio's Recent Statement Submitted to the Army Commanders at Pōhakuloa:</p> <p>Standard of Policy and Behavior at Pohakuloa Training Area</p> <p>WHEREAS, Under the Hawai'i Constitution, all public natural resources are held in trust by the State for the common benefit of Hawai'i's people and the generations to come. Additionally, the Constitution specifies that the public lands "ceded" to the United States by the so-called Republic of Hawai'i following the overthrow of the Hawaiian Monarchy and returned to Hawai'i upon its admission to the Union hold a special status under law. These lands are held by the State IN TRUST for the benefit of Native Hawaiians and the general public. Accordingly, The Hawai'i State Constitution places upon the State duties with respect to these trusts much like those of a common law trustee, including fiscal duties and responsibilities, an obligation to protect and preserve the resources however they are utilized.</p> <p>WHEREAS, Several parcels of ceded land on the island of Hawai'i that are indisputably held in public trust by the State have been leased to the federal government of the United States of America for military training purposes, subject to a number of lease conditions designed to protect the land from long-term damage or contamination. The State must monitor the leased trust land and the United States' compliance with the lease terms to ensure the trust property is ultimately safeguarded for the benefit of Hawai'i's people.</p>	<p>Primary Message for Pohakuloa</p> <p>The Army is currently seeking public comments for an Environmental Impact Statement (EIS) and an extended lease for Pōhakuloa. The scoping period will be open from September 23rd to October 14th, 2020. Attached are Uncle Ku Ching's and Aunt Maxine Kaha'ulelio's recent statement to the Army Commanders. The Mauna Kea Moku Nui 'Ae'ike Consensus Building 'Ohana supports our kūpuna and their statements with: 1) mālama 'āina: calling for the Army and state to abide by the State of Hawai'i's Supreme court's ruling in Ching vs Case to mālama 'āina and abide by their existing lease agreement to clean up; 2) a request in good faith for a schedule and plan of action for clean up of the Pōhakuloa training area, and 3) no extended leases to continue destroying the 'āina beyond the end of the Army's current lease (2029).</p> <p>Uncle Ku Ching and Aunt Maxine Kaha'ulelio's Recent Statement Submitted to the Army Commanders at Pōhakuloa:</p> <p>Standard of Policy and Behavior at Pohakuloa Training Area</p> <p>WHEREAS, Under the Hawai'i Constitution, all public natural resources are held in trust by the State for the common benefit of Hawai'i's people and the generations to come. Additionally, the Constitution specifies that the public lands "ceded" to the United States by the so-called Republic of Hawai'i following the overthrow of the Hawaiian Monarchy and returned to Hawai'i upon its admission to the Union hold a special status under law. These lands are held by the State IN TRUST for the benefit of Native Hawaiians and the general public. Accordingly, The Hawai'i State Constitution places upon the State duties with respect to these trusts much like those of a common law trustee, including fiscal duties and responsibilities, an obligation to protect and preserve the resources however they are utilized.</p> <p>WHEREAS, Several parcels of ceded land on the island of Hawai'i that are indisputably held in public trust by the State have been leased to the federal government of the United States of America for military training purposes, subject to a number of lease conditions designed to protect the land from long-term damage or contamination. The State must monitor the leased trust land and the United States' compliance with the lease terms to ensure the trust property is ultimately safeguarded for the benefit of Hawai'i's people.</p>	
					<p>WHEREAS, The State's duty to protect and preserve trust land is an obligation to reasonably monitor a third party's (the U.S. Army's) use of the property, and that this duty exists. To hold otherwise would permit the State to ignore the risk of impending damage to the land, leaving trust beneficiaries powerless to prevent irreparable harm before it occurs.</p> <p>WHEREAS, On August 17, 1964, the State of Hawai'i Department of Land and Natural Resources (DLNR) entered into a written agreement to lease three tracts of ceded land, Lease No. S-3849, situated at Ka'ohē, Hāmākua and Pu'uānāhulu, North Kona, Hawai'i to the United States for military purposes. The 22,900 acre tract of land, which is contained within the Pōhakuloa Training Area (PTA), was leased to the United States for a term of sixty-five years, to expire on August 16, 2029. In exchange, the United States paid the DLNR one dollar.</p> <p>WHEREAS, The lease gives the United States the right to "have unrestricted control and use of the demised premises." The lease also establishes several duties that the United States is obligated to fulfill during the course of the lease. The lease, among other things, requires that the United States "make every reasonable effort to ... remove and deactivate all live or blank ammunition upon completion of a training exercise or prior to entry by the public, whichever is sooner. In Paragraph 14 of the lease, the United States agrees to "take reasonable action during its use of the premises herein demised to prevent unnecessary damage to or destruction of vegetation, wildlife and forest cover, geological features and related natural resources" and to "avoid pollution or contamination of all ground and surface waters and remove or bury all trash, garbage and other waste materials resulting from [the United States' use of the said premises."</p> <p>WHEREAS, and Furthermore, the United States agrees that, if required by the State upon the surrender of the property at the termination of the lease, it will "remove weapons and shells used in connection with its training activities."</p> <p>WHEREAS, Under article XII, section 4 and article XI, section 1 of the Hawai'i Constitution, the State is the trustee of the public "ceded" lands trust and of public natural resources, and it therefore has a trust duty to "monitor, inspect and investigate to ensure that public trust lands are not being damaged. The State of Hawai'i, as the trustee of such lands, has "the highest (Constitutional and fiduciary) duty to preserve and maintain the trust lands (for the beneficiaries)."</p>	<p>WHEREAS, The State's duty to protect and preserve trust land is an obligation to reasonably monitor a third party's (the U.S. Army's) use of the property, and that this duty exists. To hold otherwise would permit the State to ignore the risk of impending damage to the land, leaving trust beneficiaries powerless to prevent irreparable harm before it occurs.</p> <p>WHEREAS, On August 17, 1964, the State of Hawai'i Department of Land and Natural Resources (DLNR) entered into a written agreement to lease three tracts of ceded land, Lease No. S-3849, situated at Ka'ohē, Hāmākua and Pu'uānāhulu, North Kona, Hawai'i to the United States for military purposes. The 22,900 acre tract of land, which is contained within the Pōhakuloa Training Area (PTA), was leased to the United States for a term of sixty-five years, to expire on August 16, 2029. In exchange, the United States paid the DLNR one dollar.</p> <p>WHEREAS, The lease gives the United States the right to "have unrestricted control and use of the demised premises." The lease also establishes several duties that the United States is obligated to fulfill during the course of the lease. The lease, among other things, requires that the United States "make every reasonable effort to ... remove and deactivate all live or blank ammunition upon completion of a training exercise or prior to entry by the public, whichever is sooner. 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					<p>WHEREAS, and Additionally, The Ka Pa'akai court held that the Hawai'i Constitution places "an affirmative duty on the State and its agencies to preserve and protect traditional and customary native Hawaiian rights."</p> <p>WHEREAS, Acknowledging the intention of the Admission Act and the "Aloha" of the Hawai'i State Constitution,</p> <p>WHEREAS, As a further guideline, the courts (including the Hawai'i Supreme Court), in compliance to its (the State's) duty to comply with its public trust and fiduciary obligations, suggest - that it should "promptly initiate and undertake affirmatively to "Malama 'Aina" the PTA" - to care for the land, and,</p> <p>BE IT RESOLVED, In order to operate at the highest possible standards and good faith, We adopt the principle of "Malama 'Aina" (to care for the land) to accompany and be an integral part of all behavior, policies, rules, regulations and activities taking place at Pohakuloa Training Area.</p> <p>Specific Talking Points for the EIS</p> <p>The Army's lease requires that it "make every reasonable effort to ...remove or deactivate all live or blank ammunition upon completion of a training exercise or prior to entry by the said public, whichever is sooner" and remove "all trash, garbage and other waste materials[.]" Cultural monitors, who spent extensive time on State lands at the PTA, observed military debris, including unexploded ordnance and spent shell casings, scattered across the area leased by the Army. The EIS should fully disclose the extent to which the Army has complied with this lease provision and should include a thorough investigation of the entire area to determine whether there is any military debris (including unexploded ordnance) on the land that the Army has been using.</p> <p>Former Bazooka Range In a draft document entitled "Action Memorandum for the Time Critical Removal Action", that was prepared in March 2015 by the United States Army Garrison at Wheeler Army Airfield on Schofield Barracks in Wahiawa, O'ahu, Hawai'i, it was reported that the former Bazooka Range MRS is located at the Pōhakuloa Training Area.</p>	<p>WHEREAS, and Additionally, The Ka Pa'akai court held that the Hawai'i Constitution places "an affirmative duty on the State and its agencies to preserve and protect traditional and customary native Hawaiian rights."</p> <p>WHEREAS, Acknowledging the intention of the Admission Act and the "Aloha" of the Hawai'i State Constitution,</p> <p>WHEREAS, As a further guideline, the courts (including the Hawai'i Supreme Court), in compliance to its (the State's) duty to comply with its public trust and fiduciary obligations, suggest - that it should "promptly initiate and undertake affirmatively to "Malama 'Aina" the PTA" - to care for the land, and,</p> <p>BE IT RESOLVED, In order to operate at the highest possible standards and good faith, We adopt the principle of "Malama 'Aina" (to care for the land) to accompany and be an integral part of all behavior, policies, rules, regulations and activities taking place at Pohakuloa Training Area.</p> <p>Specific Talking Points for the EIS</p> <p>The Army's lease requires that it "make every reasonable effort to ...remove or deactivate all live or blank ammunition upon completion of a training exercise or prior to entry by the said public, whichever is sooner" and remove "all trash, garbage and other waste materials[.]" Cultural monitors, who spent extensive time on State lands at the PTA, observed military debris, including unexploded ordnance and spent shell casings, scattered across the area leased by the Army. The EIS should fully disclose the extent to which the Army has complied with this lease provision and should include a thorough investigation of the entire area to determine whether there is any military debris (including unexploded ordnance) on the land that the Army has been using.</p> <p>Former Bazooka Range In a draft document entitled "Action Memorandum for the Time Critical Removal Action", that was prepared in March 2015 by the United States Army Garrison at Wheeler Army Airfield on Schofield Barracks in Wahiawa, O'ahu, Hawai'i, it was reported that the former Bazooka Range MRS is located at the Pōhakuloa Training Area.</p>	

				<p>The former Bazooka Range was apparently used as a military maneuver area through the early 2000s. During a site inspection of the Bazooka Range area that was jointly conducted by DLNR and the Army in 2014, the area was found to be "heavily contaminated on the surface with material potentially presenting an explosive hazard (MPPEH)and munition debris (MD)." (Emphasis added.) A subsequent inspection by two military explosive ordnance disposal units found that the following types of ordnance were observed to be present:</p> <ol style="list-style-type: none"> <li>1. M29A2 training rounds with dummy M405 fuse</li> <li>2. Practice 81mm mortars, and</li> <li>3. High explosive anti-tank (HEAT) rifle grenades.</li> </ol> <p>Other suspected fired ordnance at the Bazooka Range area also included:</p> <ol style="list-style-type: none"> <li>1. M28A2 bazooka rounds with M404 fuse, and</li> <li>2. M30 white phosphorus (WP) bazooka rounds.</li> </ol> <p>The Army noted that the sheer densities and quantities of ordnance that are present on the ground at the former Bazooka Range area "coupled with the accessibility to the public make for the potential for significant danger to public health and welfare." The estimated cost of remediating the danger as of March 2015 was \$2,353,000. The Army recommended that the removal of ordnance danger because of the significant possibility that ordnance exists at the former Bazooka Range area that "presents an imminent and substantial endangerment to public health, or welfare, or the environment."</p> <p>Any EIS should disclose the status of the cleanup of the Former Bazooka Range.</p> <ol style="list-style-type: none"> <li>1. Has it been completely cleaned up?</li> <li>2. Is it safe to enter? How much waste was collected?</li> <li>3. What did it comprise of?</li> <li>4. Where was it disposed of?</li> </ol>	<p>The former Bazooka Range was apparently used as a military maneuver area through the early 2000s. During a site inspection of the Bazooka Range area that was jointly conducted by DLNR and the Army in 2014, the area was found to be "heavily contaminated on the surface with material potentially presenting an explosive hazard (MPPEH)and munition debris (MD)." (Emphasis added.) A subsequent inspection by two military explosive ordnance disposal units found that the following types of ordnance were observed to be present:</p> <ol style="list-style-type: none"> <li>1. M29A2 training rounds with dummy M405 fuse</li> <li>2. Practice 81mm mortars, and</li> <li>3. High explosive anti-tank (HEAT) rifle grenades.</li> </ol> <p>Other suspected fired ordnance at the Bazooka Range area also included:</p> <ol style="list-style-type: none"> <li>1. M28A2 bazooka rounds with M404 fuse, and</li> <li>2. M30 white phosphorus (WP) bazooka rounds.</li> </ol> <p>The Army noted that the sheer densities and quantities of ordnance that are present on the ground at the former Bazooka Range area "coupled with the accessibility to the public make for the potential for significant danger to public health and welfare." The estimated cost of remediating the danger as of March 2015 was \$2,353,000. The Army recommended that the removal of ordnance danger because of the significant possibility that ordnance exists at the former Bazooka Range area that "presents an imminent and substantial endangerment to public health, or welfare, or the environment."</p> <p>Any EIS should disclose the status of the cleanup of the Former Bazooka Range.</p> <ol style="list-style-type: none"> <li>1. Has it been completely cleaned up?</li> <li>2. Is it safe to enter? How much waste was collected?</li> <li>3. What did it comprise of?</li> <li>4. Where was it disposed of?</li> </ol>	
			<p>It is important for the Army to acknowledge that Native Hawaiians (Kanaka Maoli) are an embodiment of the 'āina and as a result it is imperative that our lands are returned to their natural state and condition by leaseholders upon expiration of their leases. To fully understand the Native Hawaiian people's political and spiritual relationship to the land, two key facts outlined in the U.S. Apology to the Hawaiian people must be considered; 1) the federal government has recognized the importance of the land to the Hawaiian people, and 2) in order for the Admissions Act to pass, the U.S. Congress required a provision be included clarifying that all the lands of Hawai'i be held by the State for, among other things, "... the betterment of the condition of Native Hawaiians." Public Law 103-150 affirms this stating in relevant part: "Whereas, the indigenous Hawaiian people never directly relinquished their claims to their inherent sovereignty as a people or over their national lands to the United States, either through their monarchy or through a plebiscite or referendum; Whereas, the health and well-being of the Native Hawaiian people is intrinsically tied to their deep feelings and attachment to the land [Please See Public Law 103- 150 the Apology Resolution (November 23, 1993)]."</p> <p>Therefore regarding unexploded munitions, we call upon the Army in good faith to disclose it's unexploded ordnances (UXO) protocol for full transparency, accountability and confidence of adequacy. Mālama 'Āina (to care for), requires cleanup and restoration of the land, and therefore means:</p> <ol style="list-style-type: none"> <li>1. Pōhakuloa is to be restored to its natural habitat with healthy ecosystems that Kanaka Maoli can access and utilize as right holders/practitioners of the 'āina.</li> <li>2. The process for clean-up must include restoring the 'āina to its original condition and beauty.</li> </ol> <p>Pursuant to the Army's lease agreement and legal obligations, the Army must mālama 'āina to restore ola (life) and create a safe and healthy environment for the well-being of flora, fauna and all interdependent life forms including the native tenants/hoa 'āina/beneficiaries including but not limited to: hunters and gatherers, lā'au lapa'au, cultural and religious/spiritual practitioners and their relationship to the 'āina.</p> <p>Invasive Species The EIS should fully disclose the extent to which ungulates exist within the area used by the Army and the damage they have</p>	<p>It is important for the Army to acknowledge that Native Hawaiians (Kanaka Maoli) are an embodiment of the 'āina and as a result it is imperative that our lands are returned to their natural state and condition by leaseholders upon expiration of their leases. 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			<p>caused. In the early 90's enclosures were installed within the training area to identify and protect endemic species within the area from Army training activities. It is imperative that all rare, threatened and or endangered organisms within the area remain protected. The complete inventory of all rare, threatened and/or endangered plant, insect and animal species including those identified as Native Hawaiian 'Aumakua and Kinolau (Divine Bodily Manifestations Of Hawaiian Deities) this list should include but not be limited to the following:</p> <ol style="list-style-type: none"> <li>(1) Palla bird,</li> <li>(2) I'wi bird and all forest birds,</li> <li>(3) Nēnē Geese,</li> <li>(4) Pueo,</li> <li>(5) 'Ōpe'ape'a,</li> <li>(6) 'Ua'u (Petrel),</li> <li>(7) 'Iwa Bird and other Manu Kai etc.</li> </ol> <p>Also the forest flowers and trees including; ancient Lehua, Māmane, 'Iliahi (Aoa), Koa, 'Akoko trees and all other rare, threatened and endangered species of plants that represent Hawaiian 'Aumakua and/or Kinolau (Divine Bodily Manifestations Of Hawaiian Deities).</p> <p>Cultural Sites To date, investigations into the number and significance of cultural sites have been superficial. The EIS should include a thorough inventory of the historic sites in the area, discussion of the cultural significance of Pōhakuloa itself, and a discussion as to how the condition of these sites has changed while the Army has used these lands. Native Hawaiians and the general public have limited use only and therefore cannot fully enjoy and/or properly use the land for cultural, religious or gathering practices until the lands are cleaned up and restored.</p>	<p>caused. In the early 90's enclosures were installed within the training area to identify and protect endemic species within the area from Army training activities. It is imperative that all rare, threatened and or endangered organisms within the area remain protected. The complete inventory of all rare, threatened and/or endangered plant, insect and animal species including those identified as Native Hawaiian 'Aumakua and Kinolau (Divine Bodily Manifestations Of Hawaiian Deities) this list should include but not be limited to the following:</p> <ol style="list-style-type: none"> <li>(1) Palla bird,</li> <li>(2) I'wi bird and all forest birds,</li> <li>(3) Nēnē Geese,</li> <li>(4) Pueo,</li> <li>(5) 'Ōpe'ape'a,</li> <li>(6) 'Ua'u (Petrel),</li> <li>(7) 'Iwa Bird and other Manu Kai etc.</li> </ol> <p>Also the forest flowers and trees including; ancient Lehua, Māmane, 'Iliahi (Aoa), Koa, 'Akoko trees and all other rare, threatened and endangered species of plants that represent Hawaiian 'Aumakua and/or Kinolau (Divine Bodily Manifestations Of Hawaiian Deities).</p> <p>Cultural Sites To date, investigations into the number and significance of cultural sites have been superficial. The EIS should include a thorough inventory of the historic sites in the area, discussion of the cultural significance of Pōhakuloa itself, and a discussion as to how the condition of these sites has changed while the Army has used these lands. Native Hawaiians and the general public have limited use only and therefore cannot fully enjoy and/or properly use the land for cultural, religious or gathering practices until the lands are cleaned up and restored.</p>		
			<p>Full Range of Alternatives The Army must consider the most important alternative: returning these "ceded lands" back to the People Of Hawai'i (via the Department of Land and Natural Resources) after restoring them to the condition that they were in prior to the Army's use of this land. We hold the Army to their agreements to return Pōhakuloa to the People Of Hawai'i in its original state by 2029. /s/ Aunty Maxine and Uncle Ku on behalf of the Mauna Kea Moku Nui 'Aelike Consensus Building 'Ohana Date: 9.27.2020 *Stop bombing Ko Pae 'Āina o Hawai'i (Archipelago of Hawai'i), Stop bombing Moananui (Pacific)-I am adding my name on to this letter (it is also attached as a pdf).</p>	<p>Full Range of Alternatives The Army must consider the most important alternative: returning these "ceded lands" back to the People Of Hawai'i (via the Department of Land and Natural Resources) after restoring them to the condition that they were in prior to the Army's use of this land. We hold the Army to their agreements to return Pōhakuloa to the People Of Hawai'i in its original state by 2029. /s/ Aunty Maxine and Uncle Ku on behalf of the Mauna Kea Moku Nui 'Aelike Consensus Building 'Ohana Date: 9.27.2020 *Stop bombing Ko Pae 'Āina o Hawai'i (Archipelago of Hawai'i), Stop bombing Moananui (Pacific)-I am adding my name on to this letter (it is also attached as a pdf).</p>		

2020-10-14 11:51:24	Milliani	Trask	Hawaii	[REDACTED]	yes	yes	<p>Comments of Milliani B. Trask, Culture Practitioner, Pohakuloa, Hawaii</p> <p>1. The EIS and CIA for the Pohakuloa training Area must follow the Ka Pa'akai Analytical Framework, See Decision in 94 Hawai'i at 52, 7 P.3d at 1089.</p> <p>The fundamental approach to the development of the CMP &amp; EIS must utilize the Hawai'i Supreme Court's analytical framework to ensure that traditional and customary Native Hawaiian rights are preserved and protected. This framework has its foundation in Ka Pa'akai. This includes at a minimum addressing: "(1) the identity and scope of 'valued cultural, historical, or natural resources' in the petition area, including the extent to which traditional and customary native Hawaiian rights are exercised in the PTA area (23,000 acres); (2) the extent to which those resources – including traditional and customary native Hawaiian rights – will be affected or impaired by the proposed action; and (3) the feasible action, if any, to be taken by the [agency] to reasonably protect native Hawaiian rights if they are found to exist." (Ka Pa'akai, 94 Hawai'i at 52, 7 P.3d at 1089. )</p> <p>The CMP &amp; EIS must address these three components to ensure that traditional and customary Native Hawaiian rights and cultural, historical, and natural resources are preserved and protected:</p> <p>1) The identity and scope of valued cultural, historical, or natural resources that are found within the entire DOD/DLNR Pohakuloa Training Area consisting of 23,000 acres. This would include the extent to which traditional and customary Native Hawaiian rights are exercised in the entire area.</p> <p>The identification and scope of the valued cultural resources should be determined by conducting a 106 Federal Consultation, personal interviews and meetings with lineal descendants well as historical documentation about cultural resources and traditional and customary practices that may have been historically and are contemporarily exercised within the PTA. Additional information from past archaeological surveys and existing documentation about historical uses of the PTA and current contemporary uses, including the building of shrines and altars , gathering etc should be researched, mapped (cultural mapping) and included.</p>
2020-10-14 11:24:02	Jeike	Meijer	California	[REDACTED]	yes	no	<p>Valuable natural resources that are also cultural resources need to be identified &amp; include a thorough literature review, reports on past surveys conducted in the PTA.</p> <p>2) The extent to which those resources – including traditional and customary Native Hawaiian rights – will be affected or impaired by the proposed action</p> <p>3) The feasible action, if any, to be taken by the DOD/DLNR to reasonably protect Native Hawaiian rights, natural and cultural resources, as well as procedures for Hawaiian Access to the PTA for the exercise of Hawaiian Federal Constitutional Rights.</p> <p>ccess to engage in traditional and customary rights will not be adversely affected by the CMP. Section 7 is designed specifically to provide a set of management actions with guidelines to manage existing and potential future activities and uses to ensure that the cultural, historical, and natural resources are properly managed and protected not only for this generation but for future generations. In those instances where specific cultural protocols need to be addressed and developed, the CMP recommends that Kahu Kū Mauna or the Mauna Kea Management Board (MKMB) Hawaiian Cultural Committee work in coordination with families with lineal and historic connections to Mauna Kea, kūpuna,</p>
2020-10-14 11:13:25	Emily	Burkhart	Hilo, Hawai'i Island	[REDACTED]	yes	no	<p>I demand that the U.S. Army and state abide by the Hawai'i Supreme Court Ruling in Ching vs Case to mālama 'āina and abide by their existing lease agreement to clean up the 'āina.</p> <p>I request in good faith for a schedule and plan of action for clean up of the Pōhakuloa training area.</p> <p>I demand that no extended leases are issued to the Army to continue destroying the 'āina beyond the end of the Army's current lease (2029).</p>
2020-10-14 11:10:30	Beth	Eisenberg	West Hills	[REDACTED]	yes	yes	<p>We must honor our word and respect native Hawaiians, our citizens and the land.</p>
2020-10-14 11:07:46	Tlaloc	Tokuda	Kailua Kona	[REDACTED]	yes	yes	<p>I agree that the clean up of the Pōhakuloa training area be completed then returned as ceded land to DLNR and the people of Hawaii,</p>
2020-10-14 10:00:03	Nana-Honua	Manuel	Hawaii, Hawaii	[REDACTED]	yes	yes	<p>I would also request Section 106 consultation with lineal &amp; cultural descendants of this area. There should be no extension of the lease or retention of these lands without the Army having complied with the original terms of the existing lease. Please clean up and surrender these "ceded" lands.</p>
2020-10-14 09:50:22	janice	palma-glennie	hawaii, HI	[REDACTED]	no	yes	<p>Aloha, The use of critical habitat by the U.S. Military purposes is unacceptable per the statements and information provided in the message above. Mahalo for stopping this unnecessary, extremely damaging use of the land on our island. Sincerely, janice Palma-Glennie</p>
2020-10-14 08:04:58	Kalamaakaaina	Niheu	Kaaawa	[REDACTED]	yes	no	
2020-10-14 07:56:51	Melissa	Tomlinson	Lafayette, CA	[REDACTED]	yes	yes	<p>I believe an individual would have to be pretty dense in today's world to not only defend these actions, but also to not understand or acknowledge the environmental and all life impact from bombing. It is not the way we evolve, period. Stop bombing the land!!!! Stop bombing land everywhere. Stop bombing period. How about our nation exemplify true leadership and sets the tone by being non-violent. Are U.S. military personnel even capable of that? Or is the complex just a bunch of warmongers because honestly, that is how I view our military and any military. Like a bunch of kids fighting over a toy. It's shameful how the U.S. military perceives protecting and defending and how the top down treats its people who choose to serve. Do better! Stop bombing!</p>
2020-10-14 07:53:58	Jonathan	Davis	CA	[REDACTED]	yes	yes	
2020-10-14 07:14:13	Terri	Eisenberg	California	[REDACTED]	yes	no	
2020-10-14 07:12:39	Sherri	Thal	Kea'au	[REDACTED]	yes	yes	<p>The Kanaka Maoli have spoken their truths and requests in the attached letter. Justice must be served to the Aina and the Native Hawaiians, who are the living embodiment of the land as well as its keeper. Do the right thing: Restore the land, clean up your deadly military trash, return the ceded land to the people. We must learn to live in Peace. Aloha, Malama pono. Sherri Thal, Kea'au, HI 96749</p>
2020-10-14 05:35:15	Ally	Arganbright	Santa Cruz, CA	[REDACTED]	yes	no	<p>Stand up for indigenous moral authority over land!!</p>
2020-10-14 05:33:28	Mary	True	Pepeekeo, 96783	[REDACTED]	yes	yes	<p>Telescopes please, not bombs.</p>
2020-10-14 04:46:31	Laura	Acasio	Hilo, Hawaii	[REDACTED]	yes	no	
2020-10-14 04:40:42	Lisa	Medvene	Lake Forest, CA	[REDACTED]	yes	no	
2020-10-13 22:38:19	Eric	Wada	Honolulu	[REDACTED]	yes	no	
2020-10-13 21:43:07	Tatsuki	Kohatsu	Honolulu	[REDACTED]	yes	yes	
2020-10-13 21:12:15	Jim	Albertini	Ola'a (Kurtistown) Hawaii	[REDACTED]	yes	no	
2020-10-13 21:11:35	Frances	Harold	Maui	[REDACTED]	yes	no	

2020-10-13 20:40:59	Pete	Doktor	Moanalua, O'ahu	[REDACTED]	yes	yes	As a former US Army combat medic, I can personally attest that we would routinely destroy rampantly public lands (e.g., Piñon Canyon, Colorado; Yakima, Washington, Mojave desert, etc.) during war games with our armored vehicles, of which I participated as a teenager recruited during high school. The EPA would often freeze training in areas previously destroyed to permit some time for restoration -- only to be destroyed again. Even IF Armed Forces had proactive policies to protect such natural resources that the community depends like aquifers, as a former soldier I do not believe it is possible to completely reign in every soldier from the top down to prioritize land preservation over its mission of military readiness -- because that endeavor is not mutually compatible -- preparing for war is the act of practicing violent force against imaginary enemies -- with very real consequences against natural and cultural resources. Auntie Maxine and Uncle Ku are doing more for the security of the people of Hawai'i Island than the military which is the actual public health and safety threat to the local community. The Army should withdraw from Pōhākūloa as agreed to by contract before it further embarrasses and discredits itself anymore than it already has, to make way for a community-based stewardship of the land that maintains genuine human security, aloha 'āina and pono.
2020-10-13 19:45:49	Lauren	Nuss	Hilo	[REDACTED]	yes	no	
2020-10-13 18:42:38	Corrina	Gould	Oakland, California	[REDACTED]	yes	no	
2020-10-13 18:20:19	Alisa	Eisenberg	Laguna Beach California	[REDACTED]	yes	no	
2020-10-13 18:00:49	J	Oba	Oahu	[REDACTED]	yes	no	
2020-10-13 15:47:03	Laulani	Teale	Kāne'ohe	[REDACTED]	yes	no	
2020-10-13 15:08:28	Amara	Smith	Oakland, California	[REDACTED]	yes	yes	
2020-10-13 14:43:48	Leimomi	Kalanihūia	Hawaiian Kingdom	[REDACTED]	yes	no	Stop desecrating the sacred land of indigenous people. Just. Stop.
2020-10-13 14:38:10	Tehani	Louis-Perkins	Haleiwa, Oahu	[REDACTED]	yes	no	
2020-10-13 14:15:05	Dr. Chris	Lipat, DC	Honolulu, HI	[REDACTED]	yes	no	
2020-10-13 13:33:02	David	Mulinix	Kaneohe, Oahu, Hawaii	[REDACTED]	yes	yes	
2020-10-13 12:27:37	Tavae	Samuelu	Long Beach, CA	[REDACTED]	yes	no	
2020-10-13 12:23:15	Mark	Kamakea	San Leandro, CA	[REDACTED]	yes	no	
2020-10-13 11:09:26	Teresa	Lau	California	[REDACTED]	yes	no	
2020-10-13 10:58:08	Nadya	Tannous	Berkeley, CA	[REDACTED]	yes	yes	Protect Pōhākūloa!
2020-10-13 10:38:52	Luke	Budjardjo	NY	[REDACTED]	yes	no	
2020-10-13 10:33:46	Sheridan Noelani	Enomoto	Santa Rosa, California	[REDACTED]	yes	no	
2020-10-13 10:09:05	Mina	Hemmy	Oahu	[REDACTED]	yes	yes	
2020-10-13 09:55:49	Kauāakeakua	Segundo	Wailuku, Maui	[REDACTED]	yes	yes	
2020-10-13 09:29:07	Dylan	Kennedy	California	[REDACTED]	yes	no	
2020-10-13 07:42:25	Alliah	Alcain	Maryland	[REDACTED]	yes	yes	Our land should be taken care of and protected, not damaged. Aloha 'āina always
2020-10-13 07:18:22	Talia	Cooper	Oakland, California	[REDACTED]	yes	no	
2020-10-13 06:43:02	Dr Fuituilupe	Niumeitolu	Oakland, California	[REDACTED]	yes	no	
2020-10-13 06:18:40	Erin	Doyle	California	[REDACTED]	yes	no	
2020-10-13 06:01:25	Emma	Kinney	Massachusetts	[REDACTED]	yes	no	
2020-10-13 05:38:30	Kim	Shuck	San Francisco	[REDACTED]	yes	no	
2020-10-13 05:04:09	Barbara	Mumby	California	[REDACTED]	yes	yes	
2020-10-13 03:38:22	Jane	Leitch	FI	[REDACTED]	yes	no	In a world where we are being pushed and pulled, and manipulated on a dail basis, Improud to out my name to something that stands for something important. Protect and support what is important.
2020-10-13 02:56:32	Kallioa	Lee Loy	Hilo, Hawai'i	[REDACTED]	yes	yes	"He alii ka 'āina; he kauwā ke kanaka." "The land is a chief; man is its servant." -Mary Kawena Pukui, 'Ōlelo No'eau
2020-10-13 02:52:25	Carol	McKenzie	London, UK	[REDACTED]	yes	yes	
2020-10-13 02:03:02	Kay	Barrett	Nj.	[REDACTED]	yes	no	Return the ceded lands back to the people of Hawaii! Stop the bombing! The army is devastating and harming the land.n
2020-10-12 23:22:10	Maliuluika P.	Gentry	Kailua-Kona, Hawaii	[REDACTED]	no	yes	Having worked on Pōhākūloa as an Archaeologist in 2011-12, I am aware of the numerous unique Archaeological sites located on Pōhākūloa. I am also aware of the existing cultural resources on Pōhākūloa that, due to access restrictions, many Kānaka Maoli (Native Hawaiians) have never seen.  Issues related to Unexploded Ordinance, and other dangers have currently, and in the past rendered many areas inaccessible without specialized training, military escorts and specialized gear. In the case of Kānaka Maoli, access to Pōhākūloa has been restricted, and customary cultural practices have not been allowed.  As a Kānaka maoli, I have been fortunate to see and experience many of our cultural sites on Pōhākūloa. While working there, I came to realize the cultural significance of Pōhākūloa and the necessity of it's importance to the Hawaiian people. Therefore, I support the clean up and restoration of Pōhākūloa to it's original state, and the cessation of all bombing of the 'āina in the saddle area. Further, I support the ending of the military's lease of Pōhākūloa upon termination of the current lease. A complete documentation of all sites both in and outside of the bombing zone is also warranted.  In conclusion, the uniqueness of the sites on Pōhākūloa not found elsewhere, and the connection of these sites to the surrounding volcanic peaks is important to the Hawaiian people.  Located at the base of what culturally is our piko (belly button) that connects us to the past, present and future, namely Mauna ā Wākea (Maunakea), Pōhākūloa is a significant cultural resource to the Hawaiian people. Bombing of this resource is paramount to desecration In Kānaka maoli eyes, minds, and spirits. I ask for consideration in this matter and a recinding of the military's tequest for lease renewal.  Sincerely, Maliuluika Gentry Retired Archaeologist
2020-10-12 22:29:51	Elizabeth	Bush	KAMUELA	[REDACTED]	yes	no	
2020-10-12 21:20:03	Jack	Leitch	Oakland, California	[REDACTED]	yes	yes	
2020-10-12 21:17:36	Linda	Kraemer	Costa Mesa, CA	[REDACTED]	yes	no	Please preserve this beautiful place we visit!
2020-10-12 21:14:35	Alika Kamanawa	Kinimaka-Mano'i	Kailua-Kona, Hawai'i	[REDACTED]	no	yes	I, Descendant of David Kinimaka.  Demand that the Commander and Chief of the United States Military immediately address our initial council of 'Aelike for the discussions on the process of returning all Hawaiian Lands to the rightful owners the Gods of Hawai'i under the salvation of the most recent addition to the Divine Hawaiian Patheon Iesu Kristo.  Also, Mr. PRESIDENT. I am glad to hear you are rested and returning to health. You have been in my prayers.  Alika Kinimaka Mano'i
2020-10-12 21:06:13	Alexander	Logan	Hawaii	[REDACTED]	no	yes	As an American Citizen the Kanaka Maoli deserve every square foot of their land back immediately. I refuse to lend my family's good name seeded within the Catholic Church towards any further American Voting System until this issue among many others that the Kanaka Maoli must illustrate and present to assist in the process of deoccupation.  Finally God Bless your forces for the continued protection of the planet and beyond. However Hawai'i and it's original boundaries must be restored to the host culture for ecological balance and political renewal.  Mahalo, Mr. Alexander Joshua Logan, Kailua Kona



2020-10-06 16:43:21	Livia	Solari	Oakland, CA (Chochenyo Land)		yes	no	
2020-10-06 15:32:11	Rachel	Huang	California		yes	yes	Please listen to the voices of indigenous folks. Please listen to the climate and environment. Please halt all destructive activities.
2020-10-06 15:17:39	Trevor	Auldridge	Goleta, CA		yes	no	
2020-10-06 15:16:56	Dante	Gonzales	California		yes	yes	
2020-10-06 14:45:25	Mel	Wildman	Honolulu		no	yes	MILITARY OR NOT, BOMBING A PART OF A LAND THAT IS NOT IN WAR AGAINST THE AMERICAN UNITED STATES IS AN ACT OF WAR. LEGAL TERMS ; An act of war is an action by one country against another with an intention to provoke a war or an action that occurs during a declared war or armed conflict between military forces of any origin. The loss or damage caused due to such conflicts are excluded from insurance coverage except for life assurances. 18 U.S. Code § 2331. Definitions (1) the term "international terrorism" means activities that—  (A) involve violent acts or acts dangerous to human life that are a violation of the criminal laws of the United States or of any State, or that would be a criminal violation if committed within the jurisdiction of the United States or of any State; (B) appear to be intended— (i) to intimidate or coerce a civilian population; (ii) to influence the policy of a government by intimidation or coercion; or (iii) to affect the conduct of a government by mass destruction, assassination, or kidnapping; and (C) occur primarily outside the territorial jurisdiction of the United States, or transcend national boundaries in terms of the means by which they are accomplished, the persons they appear intended to intimidate or coerce, or the locale in which their perpetrators operate or seek asylum;  (MY COMMENT) ; When , a preponderance of question arises to declare one persons facts against another persons while engaging in the act of destruction, shall be illegal. Its pure common sense. No one should be allowed to destroy anything while in question of their act. This is where the question for any extended permits shall be halted against the military who vaguely showed any repercussion of any respect towards culture or damage towards nature.  (C) occur primarily outside the territorial jurisdiction of the United States, or - Just that alone is substantial fact.
2020-10-06 11:15:41	Michael	Greenberg	Hopkinton		yes	no	
2020-10-06 11:04:39	danielle	west	Oahu, Hawai'i and Santa Cruz, CA		yes	yes	Protect Pōhaku! End the occupation! Return the lands!
2020-10-06 09:57:28	Alex	Tan	Oakland, CA		yes	yes	
2020-10-06 08:32:56	Ashley	Tyau	Honolulu, Oahu		yes	no	
2020-10-06 08:27:44	Megan	Moniz	Wailuku, Maui		yes	no	
2020-10-06 08:14:22	Kaleo	Elvenia	NV		yes	yes	
2020-10-06 07:54:51	Bobbie	Nava	California		yes	yes	I stand with the people of Hawaii, demanding that the United States surrender the property at the termination of the lease and return this land back to the Native Hawaiians and remove weapons and shells used in connection with its training activities by doing a major cleanup upon expiration of the lease in 2029. Bobbie Nava (808) 720-8200
2020-10-06 06:29:58	Thomas	Belfield	Hilo		yes	yes	Pōhaku! Needs to be closed and cleaned up. It is a travesty on the landscape.
2020-10-06 06:21:48	Ane	Brewster	California		yes	yes	
2020-10-06 06:17:48	Jonathon	Jacobson	Georgia		yes	yes	Stop the destruction of the land and reefs! Stop polluting the water and the land! Stop destroying ancestral burial sites! Give the land back to Hawaiians!
2020-10-06 04:35:49	Owen	Woodcock	Boston		yes	no	
2020-10-06 04:30:48	Nadine K	Robertson	Mountain View, Moku o Keawe, Hawai'i		yes	no	
2020-10-06 04:19:43	Pablo	Beimler	Hawaii Island		yes	yes	
2020-10-06 04:07:45	Robin	Kaowili	94/408Keaolani St		yes	no	
2020-10-06 02:33:54	Edward	Acfalle jr.	Hagatna, GU		yes	yes	
2020-10-06 02:24:48	Victoria	Kaeo	Ocean View, Hawai'i, Hawai'i		yes	no	
2020-10-06 02:03:36	Keoni	DeFranco	Los Angeles		yes	no	
2020-10-06 00:31:14	Kawika Ke Koa	Pegram	Honolulu, O'ahu		yes	no	
2020-10-06 00:21:55	Kalani	Reyes	Northern Mariana Islands		yes	yes	Stop bombing Hawaiian lands! Stop bombing the Marianas! Stop bombing Okinawa! Stop bombing the Pacific!
2020-10-06 00:09:34	Tiarnie	Hay	NSW		yes	no	
2020-10-05 23:47:29	Mike Alapa'i	Linnolt	VOLCANO, Hawaii		yes	yes	This misuse and desecration of our 'aina for purposes of useless WARS around the world is hewa! Please leave Hawaii island in peace. Take your activities to other places were they cannot do any more harm, such as the Nevada testing site (old nuke testing areas) where that land has already been destroyed and contaminated for 70 years, and your actions will be welcomed there. E hele a hoi 'ole!!!
2020-10-05 22:30:13	Sheadon	Freitas	Kailua-Kona, Hawai'i		yes	yes	
2020-10-05 22:26:05	Alyssa	Roman	Papaikou, Hawaii		yes	yes	The EIS must discuss letting what is sacred and natural again take root without any further damage to these lands and waters. It is of critical importance that this scope include matters of environmental sovereignty, intuition, harmony, intelligence, and stewardship. Silence, stillness, and listening with the heart are the truest hope we have. Don't neglect the smallest light and the softest whispers you too must hear.
2020-10-05 22:08:29	Crystal	Dombrow	O'ahu		yes	no	
2020-10-05 21:47:16	Krystal	Zaragoza	New Mexico		yes	yes	Please protect these sacred sites. Science is important, but science can find another way and place. We cannot rebuild these beautiful lands.
2020-10-05 20:07:32	Jim	Albertini	Ola'a (Kurtistown), Hawaii		no	yes	No lease renewal. Clean up the military mess and No more bombing of Pohakuloa. The Kaohē ahupua'a is crown (private) lands. It is part of the "leased" lands and also military lands taken by executive orders --issued by Hawaii Governor King and US President L.B. Johnson. It is illegal for the private lands to have been taken and then via executive order transferred to the military.
2020-10-05 19:05:19	Jai	Jungly	Hilo, BI, Hawaii		yes	no	
2020-10-05 18:33:33	Paul	Cullen	Kaunakakai, Molokai		no	yes	STOP THE BOMBING !
2020-10-05 17:35:12	Harry	Kepaa	Hilo, Hawaii		yes	no	Get off the land. You've done enough damage. It will take eternity to clean up the poison. You can keep your money and jobs.
2020-10-05 17:25:15	Renee	Robinson	Kailua-Kona		yes	no	
2020-10-05 17:12:44	Brooke	Bohnhoff	KAILUA KONA		yes	no	
2020-10-05 17:00:06	Alan	Domingo	Edmond Oklahoma		yes	yes	
2020-10-05 16:58:45	Mikey	Inouye	Honolulu		yes	no	
2020-10-05 16:54:55	Healani	Waia'u	Hilo		yes	no	
2020-10-05 16:30:09	Beth	Leeds	Oahu		yes	no	
2020-10-05 16:23:40	Faith	Chase	Mau		yes	no	Now can you clean up the debris? Mahalo
2020-10-05 16:15:45	Travist thomas	Mokiao	Oahu Hawaii		yes	no	
2020-10-05 15:21:37	Bobbie	Mattoon	Oahu, Hawaii		yes	no	
2020-10-05 15:10:07	Puanani	Brown			yes	yes	
2020-10-05 14:50:50	Katherine	Hoyt	Houston		yes	no	
2020-10-05 13:58:22	Mahinakeakaualani	Matthews	Oahu		yes	no	
2020-10-05 13:43:37	Alissa	Tamayo	OAHU		yes	no	
2020-10-05 13:12:49	fred	hofer	kurtistown		yes	no	
2020-10-05 12:07:31	Jennifer	Mitchell	Kailua Kona, Hawaii		yes	yes	Protect Pohakuloa! We the people of Hawaii wold like land for\$1. Clean up your mess.
2020-10-05 11:27:27	Meaghan	McCraw	North Carolina		yes	yes	

2020-10-05 11:27:18	Kulamanu	Kaneapua	Honokaa, Hawaii	██████████	yes	yes	2020 has been a year of great change, let this be the catalyst for our US military to prioritize. If they start now with a cleanup they may be able to return the parcel of land it was leased by 2029. This will require them to cease all military training exercises and concentrate on the removal of all buildings including landing strips in order to return the land to its prior state. Or at least as close as it can!
2020-10-05 10:55:48	Noble	Kaluhiokalani	Madison, Alabama	██████████	no	yes	Mahalo Nui Loa ~ Kulamanu Was there use of depleted uranium during maneuvers???
2020-10-05 10:28:40	Sharon	Kershner	Waimanalo Oahu	██████████	yes	yes	WHY?! Have you ever asked yourself if there is HUBRIS in your actions and perspective ? WHY?! Is your Heart Pure?
2020-10-05 10:20:36	StormyLee	Swain	Hilo	██████████	yes	yes	
2020-10-05 10:16:59	Kris	Mueller	NH	██████████	yes	no	
2020-10-05 09:58:32	Mokihana	Iida	Waimānalo	██████████	yes	yes	I think it is time for the military to deconstruct start cleaning what can't be replaced by you as the military start repairing.... Move off and out of our islands ,
2020-10-05 09:51:08	Sandra	Stokes	Hilo, Hawaii	██████████	no	yes	As a citizen who cares about the Aina of this island, I respectfully require the US Military command to stop bombing, mutilation and other military action at Pohakuloa on the island of Hawaii.
2020-10-05 09:39:16	Illah	Folsom	Kula, Hawaii	██████████	yes	no	
2020-10-05 09:38:13	Nohealani	Ornellas	Kailua, O'ahu	██████████	yes	no	
2020-10-05 09:25:15	Ann	Saunders	Florida	██████████	yes	yes	
2020-10-05 09:16:47	Alexandra	Trask	The US Occupied Kingdom of Hawai'i	██████████	yes	yes	Clean up and get out. It is ONLY through imperialist violence that the US military occupies territory here. Kānaka Maoli do not welcome your presence here, and they never will.
2020-10-05 09:11:12	Puanani	Rogers	Kapaa Kauai HI	██████████	yes	no	Why should we allow more years of illegal military invasion and occupation of Pohakuloa when they have continually destroyed our peace, 'aina, kai, wai and caused harm to our people! Why?
2020-10-05 09:01:44	Lorraine	Sonoda	Hilo	██████████	yes	no	
2020-10-05 08:33:40	Pedra-Monnic	Reynolds	Washington	██████████	yes	yes	Be cognizant... we are all but ripples in this pond of life. Tread lightly and apply wisdom. Halt what you're doing.
2020-10-05 08:18:43	Ashley	Gutierrez	Kaua'i	██████████	yes	yes	THIS IS CONSERVATION LAND. BY YOUR OWN LAWS, YOU ARE NOT SUPPOSE TO BUILD HERE OR BOMB HERE. RERURN THE LANDS TO THE RIGHTFUL STEWARD OF THE LAND. YOU HAVE DONE ENOUGH DAMAGE TO THE LAND AND ECOSYSTEMS.
2020-10-05 06:43:28	S. Kaniu	Anderson	California	██████████	yes	no	
2020-10-05 06:37:53	Randee	Golden	Hawaii Island ~ North Kohala	██████████	yes	no	
2020-10-05 06:19:33	Mimi	Thayer	New York	██████████	yes	yes	Clean up the land. Do what's pono. Malama 'Aina.
2020-10-05 05:30:52	Amber	Genegabus	Hilo Hawaii	██████████	yes	yes	
2020-10-05 05:21:09	Brian	Ogawa	Keaau, HI 9674	██████████	yes	no	
2020-10-05 04:49:53	Janelle	AhQuin	Mesa, AZ	██████████	yes	yes	
2020-10-05 04:34:14	Kealoha	Ferreira	Saint Paul	██████████	yes	no	
2020-10-05 03:19:43	Kathy	Kaukani	New York	██████████	yes	no	Please return the land to the Native people.
2020-10-05 02:56:35	Anne	Schneider	Maui	██████████	yes	no	
2020-10-05 01:52:59	Mary	Kekalia	Molokai	██████████	yes	yes	It is time to cleanse the land!
2020-10-05 00:49:45	Katy	Benjamin	Hilo, HI	██████████	yes	no	
2020-10-04 23:20:56	Bobbi	Cuttance	Pahoa	██████████	yes	no	
2020-10-04 23:13:40	Barbara	S.Atemus	Honolulu	██████████	yes	no	
2020-10-04 22:58:46	Vince	Saures	Hoolehua Molokai HI	██████████	no	yes	Lawa i keia manawa!
2020-10-04 22:51:34	Marie R.Kaleo	Keawemauhili	Oahu , Hawaiian Kingdom	██████████	yes	no	
2020-10-04 22:51:15	Jonah	Keohokapu	Wahiaiwā	██████████	yes	yes	
2020-10-04 22:42:53	John Kaaeokalani	Keawemauhili Jr.	Oahu , Hawaiian Kingdom	██████████	yes	no	
2020-10-04 22:30:18	Kahaka	Patolo	Honolulu	██████████	yes	yes	Stop desecration! CEASE AND DESIST IMMEDIATELY!! STOP bombing our Islands! Deoccupy The Hawaiian Kingdom!
2020-10-04 22:28:55	Micah Kaimana	Pacatang	Wahiaiwā, O'ahu	██████████	yes	no	
2020-10-04 22:27:15	Ola	Jenkins	Hilo, Hawai'i	██████████	yes	yes	I wholeheartedly stand by the content and message of this letter. I support Malama 'aina and the recommendations aligned with this value.
2020-10-04 22:26:42	Rosa	Notta	Hāmākua, Moku o Keawe	██████████	yes	no	
2020-10-04 22:26:19	Brandy	Kimura	Kaneohe Oahu Hawaii	██████████	yes	no	
2020-10-04 22:22:18	Chloe	Hartwell	Honolulu, Hawai'i	██████████	yes	no	
2020-10-04 22:07:11	Dazdo	Duenas	California	██████████	yes	yes	Please listen to the Native Hawaiian's voices..this is their land that you are a guest on, act accordingly.
2020-10-04 21:51:50	Shannon	Velazquez	Captain Cook	██████████	yes	no	
2020-10-04 21:45:08	Raene	Chong	Hawaii	██████████	yes	no	
2020-10-04 21:37:45	Nohealani	Kaawa	Naalehu Hawaii	██████████	yes	yes	Stop Military and Military practices in Ko Hawai'i Pae 'Aina. Enough desecration on our 'Aina. This is not America and we are not Americans! Hawai'i is illegally occupied by the U.S.
2020-10-04 21:31:10	Walter	Ritte	Hoolehua	██████████	no	yes	The Aina is the chief...we do not harm the chief, we protect the chief!
2020-10-04 21:19:58	Kathryn	Shawhan	Kaneohe, Hawaii	██████████	yes	no	
2020-10-04 21:16:23	Pedro	Maynes	Honolulu, O'ahu, Hawai'i	██████████	yes	yes	Eo! Eal' Ku Kia'i Mauna! Onipa'a! Aloha Aina!
2020-10-04 21:12:25	Lili	Solomon	Island of Hawaii	██████████	yes	yes	Return the sacred land to its rightful owners. Allow peace to reign.
2020-10-04 20:57:49	Lia	Rozmiarek	'Aiea	██████████	yes	no	
2020-10-04 20:56:21	Joanne	Takatsugi	Honolulu	██████████	yes	no	
2020-10-04 20:33:45	Isaiah	Burch	Waianae	██████████	yes	no	
2020-10-04 20:04:29	Brittney	Perez	Kekaha, Kaua'i , Hawai'i	██████████	no	yes	The U.S military is conducting illegal acts of war and has done so for the pass 127 years on Hawaiian kingdom soil. The Kingdom of Hawaii was internationally recognized as a non waring nation. Since the illegal incursion of U.S. troops on August 13, 1898, the United States government was mandated to carry out Hawaiian kingdom Law over the land, not their own, until the troops were withdrawn.
2020-10-04 19:47:51	George	Ka'uhane	Wailuku, H.I.	██████████	yes	yes	
2020-10-04 19:21:42	Shantell	Cruz	Waianae	██████████	yes	no	
2020-10-04 19:12:41	Shannon	Cornwell	Hilo	██████████	yes	no	
2020-10-04 19:07:20	Fabienne	Melchior	Honolulu	██████████	yes	yes	If the French Government managed to dismantle and thoroughly clean close to original state the atoll of Mururoa in the following year of stopping all nuclear testing at the site in January 1996 and continue to attend to the health of all the personnel, I am quite sure that mighty America can do even better... right?
2020-10-04 19:03:35	Kelley	Uyeoka	Hawai'i	██████████	yes	no	
2020-10-04 19:00:14	Ramsey	Calimlim	Kahuku, Oahu, Hawaii	██████████	yes	no	
2020-10-04 18:59:38	Ethan	Porter	Oahu	██████████	yes	no	
2020-10-04 18:39:24	Miles	Matsumura	Hilo	██████████	yes	no	The U.S. military did a poor job at cleaning up Kaho'olawe, leaving it neither cleaned up nor safe as evidenced by removal of all remnant ordnance.
2020-10-04 18:36:10	Yvonne	Kahikina	Hilo, Hawaii	██████████	yes	no	We do not want that experience replicated on the island of Hawai'i.  The U.S. military must cease its activities on this island, move those activities to North America (i.e., in your back yard, not ours), and commence to clean up and restore Pohakuloa to its pre-military use condition.
2020-10-04 18:20:31	Lindsay	Terkelsen	Mountain View, Hawai'i Island	██████████	yes	yes	
2020-10-04 18:19:33	Amy	Marsh	California	██████████	yes	no	
2020-10-04 18:17:29	Christine	Villafior	Ewa Beach	██████████	yes	yes	Stop bombing Hawai'i
2020-10-04 18:16:14	Jacob	Noa	Milliani, O'ahu	██████████	yes	no	
2020-10-04 18:11:44	Gayle	Fung	Oahu	██████████	yes	no	CLEAN UP AND GET OUT OF POHAKULOAAA!!!
2020-10-04 18:10:02	Ku'uleialohalani	Ortiz	Oahu	██████████	yes	no	
2020-10-04 18:03:15	Ericka	Badua	Hāwī, Moku 'o Keawe	██████████	yes	no	Stop the bombing of Ko Pae 'Aina o Hawai'i, stop the bombing of Moananui.

2020-10-04 18:03:09	Patricia	Magoffin	California		yes	yes	
2020-10-04 17:37:24	Kimberly	Usher	Wailuku		yes	yes	
2020-10-04 17:29:11	Angela Noelani	Smith	San Jose, California		yes	no	This area sits on the island's aquifer.
2020-10-04 17:23:15	Michael	Haring	Hilo, Hawaii		yes	no	
2020-10-04 17:10:11	Kah: Richard Maele	DeLeon	Wailuku Maui		no	yes	As a cultural Practitioner of all Sacred places stop bombing paradise and the bones of our ancestors
2020-10-04 16:48:35	Joseph	Simpliciano	Waianae, Hawaii		yes	yes	We also need Makua to be cleaned and swept of UXO's.
2020-10-04 16:44:21	Christine	Ahn	Honolulu		yes	no	
2020-10-04 16:29:35	Kaiea	Medeiros	Maui		yes	yes	Aloha no Pohakuloa.
2020-10-04 16:19:06	Bob	Douglas	HI		yes	no	
2020-10-04 16:17:55	Erik	Ho	Waimanalo, Oahu		yes	yes	
2020-10-04 16:12:10	Cynthia	Massa	Hilo		yes	no	Pohakuloa needs to clean its Military Mess up and NOT get any renewed lease time on the Mountains and lands that make up Pohakuloa Military Camp On Moku O Keawe. No to any more Army lease on Mauna Kea at Pohakuloa or anywhere in Hawaii.. The lessee have destroyed native species, sacred sites, made a mess so ugly they may never get it all cleaned up, and they refuse to be good "stewards" with any of the space they occupy on Moku O Keawe. RETURN THE CEDED LANDS TO the People of Hawaii after restoring them to the condition they were in BEFORRE the US Army began their tenancy there. Signed, Cynthia R Massa, REGISTERED VOTER IN HAWAII since 1981.
2020-10-04 16:05:32	Heather	Long	Honolulu, HI		yes	no	
2020-10-04 16:00:15	Jonna	Ho'opai	Honolulu, Oahu		yes	no	
2020-10-04 15:57:37	Purdyka	Wahilani	Waianae		yes	yes	
2020-10-04 15:57:26	Maria	Walker	Kapaa, Hawaii		yes	no	
2020-10-04 15:54:35	Jacquelyn	Myers	Visalia California moku honu		yes	no	
2020-10-04 15:54:16	Tracie	Muraki	O'AHU		yes	no	
2020-10-04 15:53:17	Doreen	Hobdy	Kokomo, Maui		yes	no	
2020-10-04 15:52:48	Tiare	HewLen	Hawaii		no	yes	
2020-10-04 15:48:21	Eliott	medina	volcano,hi		yes	yes	
2020-10-04 15:47:39	Miki	Lene	Kalihi, O'ahu, Hawai'i		yes	no	
2020-10-04 15:45:31	Tara	Rojas	O'ahu		yes	yes	Hawaiian lands in Hawaiian hands. Period.
2020-10-04 15:44:02	Aleka	Pahinui	Oahu		yes	no	Military, train elsewhere.
2020-10-04 15:05:18	Daniel	Towle	Minnesota		yes	yes	
2020-10-04 14:53:46	Mitchael	Hughes	oHlo		yes	no	
2020-10-04 14:31:48	Ryan	Yamamoto	Waimea, Hawaii Island		yes	no	
2020-10-04 11:42:48	Deborah	Hauanio	Kailua Kona, Hawaii		yes	no	
2020-10-04 10:38:33	Martin	Groark	Kona		yes	no	
2020-10-04 09:56:31	Adam	Dochin	Kāne ohe, O'ahu		yes	no	
2020-10-04 09:21:42	Luana	Jones	Hawaii		no	yes	Hawai'i is still waiting for JUSTICE! The ILLEGAL takeover (research it!) and therefor, CONTINUED UNLAWFUL OCCUPATION of Hawai'i NEEDS TO BE RIGHTED (PONO!) ALOHA 'Aina Mahalo! (Thank you)
2020-10-04 09:16:24	Ellen K	Raiser	Maui		yes	no	
2020-10-04 07:20:24	Ryan	Christopher	Honokaa		yes	yes	
2020-10-04 06:40:50	Megan	Lamson	Hawai'i		yes	no	
2020-10-03 23:45:21	Ashelyn	Valdez	CA		yes	no	
2020-10-03 22:06:03	Dominique	Cordy	Kilauea, Kau'i		yes	yes	Aloha Mai Kakou. I am signing this as an individual, as a community member, as a mother, as a taro farmer, as an archaeologist, as a former employee of the USACE-POH-PPE office who has spent some considerable man hours deep in the field in Pōhakuloa, including the IBC. I believe everything included in this letter to be accurate, including the statement "To date, investigations into the number and significance of cultural sites have been superficial." USAG does not have an inventory of archaeological and or cultural sites. What they have is cursory inventory at best. The use of the word "superficial" is not an exaggeration, it is accurate.
2020-10-03 21:53:04	Evan	Ragland	Hawaii		no	yes	Let Kanaka maui decide
2020-10-03 21:22:28	Douglas	Nabeshima	Kailua-Kona		yes	yes	
2020-10-03 20:17:03	pake	salmon	waiane		yes	yes	"Stop bombing Ko Pae 'Aina o Hawai'i (Archipelago of Hawai'i), Stop bombing Moananui (Pacific)"
2020-10-03 19:24:57	V	Pahia	Hau'ula, Oahu		yes	yes	It is imperative the land be cleaned, preserved and returned to the people in the state it was when taken over. No extension of any agreements after pau in 2029
2020-10-03 18:25:30	Koohan	Paik-Mander	Kukuihaele, Hawaii Island		yes	no	
2020-10-03 17:00:31	Maile	Villablanca	California		yes	no	
2020-10-03 15:38:29	artemis	kim	ca		yes	yes	
2020-10-03 15:28:19	Emily	Kirk	Mooreville, Indiana		yes	yes	The extent in which the Army has damaged Pohakuloa is both deeply harmful to the environment and unfathomably disrespectful to Native Hawaiians. It is the Army's responsibility to honor and comply with the Hawai'i State Supreme Court order. They should not be allowed to exist above the laws of the country that they claim to serve, this includes laws which protect indigenous peoples and their heritage. The Army has a moral and legal obligation to heal the harm that they have inflicted on Pohakuloa.
2020-10-03 14:50:28	N	Chow	BRISTOL		yes	no	
2020-10-03 14:08:25	Sharon	Medeiros	Kamuela Hawaii 96743		yes	yes	(C) Sharon K Medeiros (TM) try that one
2020-10-03 14:05:19	Kelly	Osorio	Hilo		yes	yes	
2020-10-03 13:18:25	Honorable+Tiffany	Snyder+-+Mayor+of+Ward,+Colorado+(Ret.)	Boulder, Colorado		yes	no	
2020-10-03 11:50:05	Shelley	Muneoka	He'eia Uli, O'ahu		yes	no	I would like to reserve the right to submit additional comments, but wanted to be sure to log my dissent for any expansion or extension of the lease at Pōhakuloa. Bombing and other live fire training is simply incompatible with the concept of mālama 'āina. The time has come for this particular use of this land to wind down, clean up and leave.
2020-10-03 11:33:55	William	Kaohu	Kailua-Kona		yes	no	
2020-10-03 10:42:56	MJ	McDonald	Honolulu, Oahu		yes	yes	
2020-10-03 10:15:44	La'akea	Kane	Hawai'i		yes	yes	
2020-10-03 09:23:58	Derek	Lara	Aurora		yes	yes	
2020-10-03 09:19:52	Nakoa	Nelson-Riley	Kailua-Kona		no	yes	
2020-10-03 09:16:19	Laureena	Marston	Seattle, WA		yes	yes	No more Bombing in Hawaii nei. Practice Peace Building!
2020-10-03 09:01:25	Chet	Gardiner	Hawaii Island		yes	no	
2020-10-03 08:42:01	Regina	Gregory	Honolulu		yes	no	



2020-10-02 19:34:59	Kamalupawehi	Abad	Kohala		yes	no	
2020-10-02 19:26:27	johanna	stone	kailua, ko'olaupoko, o'ahu		yes	yes	
2020-10-02 19:21:00	Hideki	Kimukai	Honolulu, Oahu		yes	yes	
2020-10-02 19:00:32	Priscilla	Oili	Hilo		yes	yes	
2020-10-02 18:54:31	Tania	Malven	AZ		yes	yes	
2020-10-02 18:50:54	Belinda	Hosking	Reservoir		yes	no	
2020-10-02 18:41:45	Frank	Colburn	Hilo, Hawaii		yes	no	
2020-10-02 18:27:37	Amy	Nishimura	Honolulu		yes	no	
2020-10-02 18:12:39	Danielle	Martinez	California		yes	no	
2020-10-02 18:10:16	Blake	Watson	Hawaii island		yes	no	
2020-10-02 18:06:10	Briana	Guzman	CA		yes	yes	
2020-10-02 18:04:47	Kaina	Quenga	Hawai'i		yes	yes	Aloha Pōhakuloa
2020-10-02 17:52:16	Catherine	Lee	Oahu		yes	no	
2020-10-02 17:50:38	Marti	Townsend	HI		yes	no	
2020-10-02 17:45:34	Mishka	Sulva	Honolulu, HI		yes	yes	We cannot continue to destroy that which sustains us. Please allow the lease to expire and hold the military to account to clean up Pōhakuloa.
2020-10-02 17:43:07	Kat	Perreira	Honolulu		yes	no	
2020-10-02 17:29:06	Kelsea	Armstrong	Kaua'i		yes	yes	I support and echo the indigenous voices in liberating this land from its post-colonial possession, and returning it to the people who intimately and authentically exhibit mālama 'āina because of their ancestral husbandry to this place. I also want to emphasize that liberation and restoration must be defined by kanaka maoli. Neither the military nor the DLNR alone are to be trusted with self-monitoring, and exclusionary barriers such as quick deadlines, legal jargon, and conventional Western alternatives are equally vehicles towards inaccessibility on the terms of a haole government. I hope that the outcome of this case will set a precedent that moves the state forward in privileging the autonomy of Native Hawaiians. Aunty Maxine and Uncle Ku have my full support in their mission to restore what has been so violently stolen.
2020-10-02 16:00:07	Amy	Perruso	Wahiawa		yes	no	
2020-10-02 15:58:48	Kathleen	Kane	Honolulu		yes	no	
2020-10-02 15:58:30	Bianca	Isaki	Kaneohe		yes	no	
2020-10-02 15:49:56	Maya	Greenhill	Hilo, HI		yes	yes	
2020-10-02 15:48:12	Tehani	Malterre	Honolulu, Hawaii		yes	no	
2020-10-02 15:47:59	Imiloa	Borland	Kaaawa, Oahu		yes	no	
2020-10-02 15:46:54	Karen	Thatcher	Honolulu		yes	yes	
2020-10-02 15:46:44	Andrew	Russell	Oahu		yes	no	
2020-10-02 14:19:41	Lindsay	Roth	Kailua-Kona, Hawaii		yes	yes	
2020-10-02 13:24:16	cindy	schardt	Bellingham		yes	no	
2020-10-02 11:31:40	Dylan	Ramos	Honolulu, HI		yes	no	
2020-10-02 10:15:53	Edward	Flounoy	Far Rockaway		yes	yes	
2020-10-02 07:55:24	Kara	Kelai	Honolulu, HI		yes	yes	
2020-10-02 06:25:16	Sheri	Wahinekapu	Kailua-Kona, Hawaii Island		yes	no	
2020-10-02 05:29:20	Bronson	Barrozo	Oahu		yes	yes	These are Hawaiian Lands that should be given back to the Hawaiian people, And these lands not now or ever should be used by the military or United States Use.
2020-10-02 01:58:20	Anna	Powell	Maine		yes	no	
2020-10-01 22:07:57	Davina	Sanders	Hauula, Oahu		yes	no	
2020-10-01 21:21:35	Shelly	Johnston	Saipan		yes	yes	
2020-10-01 21:09:10	Denise	D'Haenens-Luker	Washington		yes	yes	
2020-10-01 18:32:23	Kris	Larson	Cupertino, California		yes	no	
2020-10-01 17:16:39	Mahealani	Martin	Honolulu		yes	yes	Aloha, I am writing this today to say how extremely saddened by the military's disregard for its privilege to be on such a sacred place as Pōhakuloa and yet destroy everything under the sun. Why are they allowed to desecrate and pollute these lands without proper oversight. The military is allowed to get away with it because our fake State government needs you. War crimes are mounting.
2020-10-01 15:38:01	Joan	Lander	Hawai'i island		yes	no	
2020-10-01 15:30:06	Shantee	Brown	Kona, Hawai'i Island		yes	yes	I was raised in Waikoloa and have family members who continue to live there. I would like to see all hazards removed and the land given back to the public by 2029. The Army should prepare to dismantle or at least greatly reduce the size of the base.
2020-10-01 15:15:34	Amber	Souza	Kohala - Hawai'i Island		yes	yes	
2020-10-01 15:09:09	Kalena	Lee-Agcaolili	Kihei, Maui, HI		yes	yes	
2020-10-01 15:04:59	Jenna Puanani	Horner	Phoenix, AZ		yes	yes	
2020-10-01 14:59:38	Kapua	Keliihoa-Kamai	Waianae		yes	yes	Aloha, I fully support & mahalo nunui Uncle Ku Ching's and Aunty Maxine Kaha'ulelio's efforts and celebrate their 2019 Hawaii Circuit Court success in Ching v. Case (CAAP-18-0000432; CIV. NO. 14-1-1085-04, STATE LEASE NO. S-3849). They succeeded in pointing out the state's negligence and now mandated legal necessity to ensure the military upholds its duties to clean up the range and malama the harmed Hawaiian cultural interests.
2020-10-01 14:45:38	Maggie	Zambolla	Louisiana		yes	no	To this end, my comment only reiterates the U.S. Army's necessity to fulfill its lease agreement to the people and State of Hawaii. They should not be permitted to wait or delay Pōhakuloa's clean-up any further, they must do it now. As lessee's the Army has not exhibited good faith or adequacy in cleaning-up after their training exercises. Yet, they have certainly excelled in keeping the public, Hawaiians exercising their cultural expertise, governmental agencies like the State Historic Preservation Division, and others, out. Well, they can't ignore their kuleana (or only have it their way) anymore. So much undocumented harm and loss has occurred. The time is now, let's help the Army to be good lessees by fulfilling all their obligations.
2020-10-01 14:45:38							Mahalo for this opportunity to share my mana'o.
2020-10-01 14:18:54	Haunani	Hess	1626 Aloha Ave		yes	yes	For \$1 dollar a year, the corrupted DLNR willingly let the military attack sacred Hawaiian homeland as a training exercise for war. How and when did that ever make sense? As tensions grow with China, the US government invest in the push for nuclear war with one of the biggest military forces on the planet. The military defense lie shares the same path with evil desecration of life and goes against the will of the people. All for one dollar a year. Use your brain. No one wins this war. The US government funded the Pentagon with \$738 billion dollars during a pandemic, the investment into the annihilation of life instead of the perpetuation and thriving of life is the enemy of life itself. Stay away, work on peace. Choose life.
2020-10-01 13:44:50	Nana-Honua	Manuel	Hawai'i, Hawaii		yes	yes	In addition to everything mentioned above, I also request a comprehensive hydrology study of Pōhakuloa lands. That the water in the aquifers under Pōhakuloa be tested for contaminations as well as the aquifers fed by this area. The fact Pōhakuloa trucks in water lends to belief that the waters are not fit for consumption. I recall that PTA did dig a well and that it was not used, please address the important issue of contamination of the waters of Pōhakuloa.
2020-10-01 13:19:56	Helen	Jaccard	California		yes	no	
2020-10-01 12:48:50	Malia	Marquez	Honolulu		yes	yes	Mahalo for your time on this very important matter.
2020-10-01 12:25:32	Alisha	Mahne-Brooks	Hawai'i		yes	no	
2020-10-01 12:10:56	Benjamin	Shafer	Kahana Bay, Oahu, Hawaii		yes	yes	Blessings to the Protectors of the land, water, and air we breath, thus protecting it's people, its cultures and traditions. May karma swiftly finds it ways to the de deceivers of the truth.
2020-10-01 11:24:27	Matthew	Villanueva	Nānākūli, O'ahu		yes	no	
2020-10-01 10:44:28	Lanwood	Ap6	Colorado		yes	no	
2020-10-01 10:03:59	Danielle	Beaver	Honolulu		yes	no	
2020-10-01 09:45:05	Claudia	Deley	Phoenix		yes	no	
2020-10-01 09:38:00	Merle	Hayward	Hilo		yes	no	
2020-10-01 09:30:26	Leona	Leialoha	Hilo, island of Hawaii		yes	no	

2020-10-01 09:15:58	Robin	Proctor	Maui		yes	yes	
2020-10-01 09:05:25	Kahelelani	Mahone	LA.		yes	yes	It is time for the our 'aina to rest. Enough damage has been done by the U.S military.
2020-10-01 08:17:59	Crystal	West	Kapaaui		no	yes	It is the responsibility of the state of Hawaii to hold accountable the US Military to cease all training exercises and begin the arduous extensive clean up efforts to remediate the past 56 years of reprehensible damage caused to the ecologically and culturally sensitive lands of Pohakuloa. No lease extension should be granted and all practices should discontinue and be followed by immediate and appropriate clean up and disposal efforts of all munitions and waste.
2020-10-01 08:14:25	Starr	Kalahiki	Oahu		yes	yes	Malama aina
2020-10-01 07:55:46	Jane	Brahm	Hawaii Big Island		yes	yes	
2020-10-01 07:47:14	Aileen Lily	Acain	Kihai, Maui, Hawai		yes	no	
2020-10-01 07:08:56	Renee	Winchester	Honolulu, oahu, hasii		yes	yes	
2020-10-01 07:04:33	Kaylene	Sheldon	Hawaii		yes	yes	Enough desecration and destruction!
2020-10-01 06:39:01	Michelle	Tomas	Kailua Kona		yes	yes	Its unnerving for the bombing to continue. Please stop! No more bombing please. Enough is enough. The bombing creates anxiety for myself.
2020-10-01 06:27:03	Lena	Carver	Hawaii		yes	yes	Stop the desecration of Big Island, Hawaii and throughout our state! Stop leaving your trash of ammunition and clean it up thoroughly!
2020-10-01 06:16:38	Diane	Hanzel	Volcano, Hawaii		yes	no	
2020-10-01 04:58:09	Dominica	Esperas	Montana		yes	no	
2020-10-01 04:48:28	Janet	Mac Neal	Hilo, HI. 96720		yes	yes	(I AGREE to the above mentioned Comments & PETITION & also add my comments here too.) PA'A! A'OLE PILIKIA ALOHA AINA!!! ENOUGH IS TOO MUCH!!! STOP THE CORRUPTION & INVASION TO OUR PRECIOUS & BEAUTIFUL MAUNA!!! DONT REPEAT KAHOOLAWE DEVASTATION HISTORY THAT USA MADE UNINHABITABLE & UNEXPLODED BOMBS THAT IS STILL UNCOVERED UNTIL TODAY!!! HEWA!!!
2020-10-01 04:31:37	Maria	Hicks	Oregon		yes	no	
2020-10-01 04:12:49	Ximena	Balmori	New York City		yes	no	
2020-10-01 02:38:16	Raul Nohea	Goodness	Wailuku, Maui		yes	no	
2020-10-01 00:36:58	Ranette	Robinson	Hilo, hi		yes	no	STOP THE MADNESS
2020-09-30 22:59:15	Mahealani	Ahia	Honolulu, O'ahu		yes	no	
2020-09-30 22:49:44	Leimomi	Wheeler	Kea'au, HI		yes	yes	
2020-09-30 22:21:54	Pinky	Keanu	Waimanalo Oahu		yes	yes	Holomua! Eol EA! Eol Clean it up better than you got it & return it pristine as it was... it's time to return the na Kanaka back to the aina...
2020-09-30 21:53:15	C	A	big island		yes	no	
2020-09-30 21:47:57	Henry	Boothe	Hilo, HI		yes	yes	
2020-09-30 21:36:30	Aleka	Pahinui	Waialua		yes	no	
2020-09-30 21:34:59	Holland	Mulder	Oregon		yes	yes	My son's father side of the family is from the Big Island. This should be not an issue! Protect the land for it is sacred and we have one ONE EARTH! Restore and return Pohakuloa land to the Native Hawaiians.
2020-09-30 21:33:59	Sharla	Au	Honolulu, HI		yes	no	Return these ceded lands back to the Native Hawaiian people. The military has done enough damage to many areas in our small chain of islands.
2020-09-30 21:32:26	Theresa	Kapaku	Hana Maui Hawaii		yes	no	
2020-09-30 21:29:05	Vrvian	Chin	Hawai'i		yes	no	
2020-09-30 21:20:57	Kiana	Otsuka	Honolulu		yes	no	
2020-09-30 21:20:46	kevin	landers	HONOLULU		yes	no	
2020-09-30 21:20:08	Lauren	Stovall	Kamuela, Hawai'i		yes	no	
2020-09-30 21:17:48	Vicky	Robbins	Pahoa, Hawaii		yes	no	
2020-09-30 21:15:56	Titus	Matthews	Maunakea, Hawai'i		yes	yes	I kako'o.
2020-09-30 21:08:51	Laura	Paul	Kaneohe		yes	no	
2020-09-30 20:13:46	Sadie	SARKISSIAN	kailua		yes	yes	Please Stop. Enough is Enough. Stop the Damage Please...
2020-09-30 19:58:30	Bronson	Azamxa	He'eia, O'ahu, Hawai'i		yes	yes	
2020-09-30 19:30:50	Troy	Wong	Kapaa		yes	yes	Enough is enough, Kanaka Maoli need to take control of the aina and stop allowing these people to come here to desecrate, and destroy our home. Need we remind you that Kaho'olawe was also a military training ground and they blew up its water table. This ends now
2020-09-30 19:17:25	Mary Jane	Kahalewai	Kaunakakai, HI 96748		yes	yes	I believe Pohakuloa military training base on Hawaii Island needs to find another area for their military agendas, anywhere but in Hawaii State, for one reason "da AINA is being destroyed, "Hawaii's" AINA is for PLANTING MEA'Ai (Food), thou dere are many other areas to grow our food STILL ALL HAWAII is better off doing what us Hawaiians see as HAPPINESS dat OUR AKUA, our GOD, EVERYONES GOD has da POWER to BLESS HAWAII. What da Military does is da OPPOSITE, bringing SADNESS to those who are CONCERNED dat WAR will Benefit NOONE, People will DIE, I ask WHY? Isn't it enough we have to cope with da VIRUS, I'm TIRED for Cleaning up OUTSIDERS RUBBISH, Please THINK WISELY & KINDLY DEOCCUPY HAWAII, MAHALO!
2020-09-30 19:01:31	Keola	Donaghy	Maui		yes	no	
2020-09-30 19:00:37	Zoe	Beat	Newark		yes	no	
2020-09-30 18:56:04	Krystle	Montgomery	San Diego, CA		yes	no	
2020-09-30 18:44:06	Jeannine	Johnson	Niu Valley, O'ahu, HI		yes	no	
2020-09-30 18:34:25	S. Joe	Estores	North Las Vegas		no	yes	My position in this EIS process is as follows:  1.No EIS was conducted when PTA was established, therefore, an EA should first be done to determine if an EIS needs to happen (my understanding of the process). 2. Hawaii is a sovereign, neutral Nation State. 3.US President stated that the over-throw of the Hawaiian government was an "Act of War" – key statement in International Law. 4.Hawaii has been occupied since 1893. 5.US claimed it was necessary to have Hawaii (Pearl Harbor) in the Spanish-American War – which is over 6.US poured military forces on to the Hawaiian lands prior to WWII, during the war, and it continues extending into the Pacific. 7.US used PTA land to train for the Vietnam War, Iraq War, Afghanistan War, War on Poverty, War on Drugs, War on Terrorism and continues, all in violation of Hawaii's neutral state and treaties 8.US, as occupying force, violates International Law by imposing American Domestic Law in Hawaii as opposed to Hawaiian Kingdom Law 9.US continues to misuse the resources of the Islands by conducting RIMPAC Exercises within our area of the vast Pacific. 10. Hawaii is the playground for the thousands of military troops, crews, their families, and tourists to enjoy the beauty, the sun and the fun, never mind the environmental impact on the land, sea and air. 11.The US has ample space and land on the Continent to conduct all its military maneuvers, exercises, and training. 12.We are in a Nuclear, Missile-Centric military capabilities world and Hawaii is the central strategic target of future belligerents by virtue of its location, strategic value, and the ever-expanding US military build-up in the Pacific.

							<p><b>Continued from above.</b></p> <p>13. To the people of the land, Hawaiians, this location is the flashpoint, the coming co-lateral damage, the sacrificial lamb that will find the United States in the next World War. Hawaii experienced this on December 7, 1941 and, as long as the American armed forces are in Hawaii, it can be the trigger for the next world war, a war of Nuclear giants. That is our History. We the people of a Neutral Hawaiian Kingdom need to remove our Paradise as that target. Go play the war games, the Joint and Combined Exercises away from Hawaii. We want peace and Aloha in our Pacific domain along with our Polynesian-Triangle relatives. Go with kind heart. Let us be what we are, a peace-loving Nation State of Aloha.</p> <p>As stakeholders, we understand that you, as Occupier of our lands, limit access to military reservations, stations, posts, training areas, therefore, we are here to ask specific questions and make comments that relate to the claim that the US Army is a good steward of the land it occupies. During the remainder of the current Lease, here are further questions:</p> <p>a. How much does it cost to operate PTA. As we pay taxes, it is important to us to know how and where our taxes go.</p> <p>b. How many people does it take to operate PTA?</p> <p>c. What are the pay grades of every person on the installation?</p> <p>d. What are the nationalities of the persons in each position?</p> <p>e. How and in what ways are you being a good steward?</p> <p>f. Is there a current map that shows every archaeological, burial, sacred or protected site on PTA? Are any sites marked on the ground? Have any been disturbed, damaged or destroyed?</p> <p>g. How are hazardous materials disposed of?</p> <p>h. Do you have to surge your staff, equipment, supplies, POL or any support services on major exercises? If yes, from where do you get the augmentation staff and your procedures for hiring?</p> <p>i. Is there any time in the year when there is no live firing conducted? If yes, is access allowed for Native ordnance during these down times instead of allowing hazards to accumulate over time? Are heavy metals being located, gathered and removed after each live fire exercise? History, again reminds us of how the US military treated the people of Hawaii when Kahoolawe was released from its terrible abuse and violent destruction.</p> <p>j. Does the lessor, State of Hawaii (DLNR) monitor any activity on the installation such as earth moving, berm repairs, demolition, digging, or major construction involving new target structures and system components? Is there any plan to upgrade the infrastructure?</p> <p>k. When was there a 100% survey of the impact area for depleted uranium? What were the results?</p> <p>l. There is technology available to track each round of artillery and large explosives on impact, thus, confirming detonation. If unexploded, the exact location of the projectile is known for removal or to be detonated in place by your EOD team. If not already available, why are you not developing this capability in order to comply with the Lease specification to clean up after each firing exercise? The excuse that clean-up of any impact and training area after each exercise is not conducted because of UXO is not acceptable.</p> <p>m. Do you keep a record of each instance when foreign troops or weapons are using the training area? The Lease stipulates usage of this land is for US Forces. Who authorized foreign troops and weapons to be used at PTA for training? This is another violation of the lease agreement and along with the other non-compliances constitute grounds to terminate the lease for cause at any time.</p> <p>n. What dust suppression measures have you done to eliminate or minimize the effects of the helicopters and especially the Osprey aircraft? There could be depleted uranium particles in the dust clouds in these flight operations.</p> <p>o. What are your procedures for free access by native Hawaiian practitioners, family member visits to burial sites, hunters, and exercise cleanup monitors into PTA?</p> <p>As an interested participant, I want to have the following:</p> <p>p. Copy of the proposed renewal Lease Document</p> <p>q. Pictures of the entire Pohakuloa training land as it existed at the beginning of the lease</p>
2020-09-30 18:34:25	S. Joe	Estores	North Las Vegas	██████████	no	yes	
2020-09-30 18:34:25	S. Joe	Estores	North Las Vegas	██████████	no	yes	<p><b>Continued from above.</b></p> <p>r. Diagrams of the layout of the original installation-to review the historical progression of construction in the cantonment area</p> <p>s. Additional diagrams of each major modification to the original documents up to the present (the total footprint)</p> <p>t. Location of each bivouac area to include ammunition points, fueling points, motor parks, field latrines, mess areas and trash disposal areas on the map</p> <p>u. For each firing point, the type weapon, caliber, number of weapons, number of shells expended and target impact locations on the map</p> <p>v. Each round fired has a potential for wild fires, what is your wild fire plan?</p> <p>w. I would like to have a document outlining every expenditure where steward of the land is conducted to include the 5 W's, who, what, when, where, why.</p> <p>The intent of these questions are:</p> <p>1. Bring accountability to the people, not to the bureaucracy and leadership on Oahu. It is the people of Hawaii Island who need to be heard pertaining to their kuleana to malama their Aina, hopefully supported by all islands.</p> <p>2. The information that these questions uncover will put a lot of pressure on all those on PTA that the people of Big Island intend to have full transparency and accountability for not only what stewardship has been done, but, more importantly what is not being done both by the user and the Lessors on Oahu.</p> <p>3. Prepare carefully for the eventual release of PTA lands to avoid the mistakes of Kahoolawe. Before an EIS is considered, an environmental assessment EA must be conducted to determine if an environmental impact statement is necessary.</p>
2020-09-30 18:19:50	Lellani	Nussman	Seattle, WA	██████████	yes	no	<p><b>Continued from above.</b></p> <p>Hawaii is in a new environment that was not the case when the original executive order by President Lyndon B Johnson was announced in 1964 and the National Environmental Act (NEPA) was operationalized. Current knowledge of the true history of Hawaii as an independent state among the international community of national states back in 1843 presents information that now questions the presence of United States forces as occupiers of the Kingdom of Hawaii. Additionally, it is a fact that Hawaii was never annexed by the United States. Therefore, the Kingdom of Hawaii as a sovereign state, although not currently governing its own country, continues to exist as equals among all the International States. Given that this truth is now common knowledge among the people of Hawaii it constitutes a different environment as that was when Pohakuloa was established as a United States training area.</p> <p>Hawaii as a sovereign nation, declared its neutrality within the international order of communities. This neutrality does not allow Hawaii to provide any assistance to belligerents in any war. International law prohibits belligerent nations forces engaged in war to enter into a neutral state territory without disarming. The United States has violated international law since the overthrow in 1893.</p> <p>With this current knowledge of the true history of the overthrow, any further action by the United States military forces in Hawaii, if not formally requested and approved by the Kingdom of Hawaii government places the government in complicit with this violation. There has been no formal request or negotiation with the Hawaiian Kingdom to continue having the presence of United States forces in Hawaii which if done would continue violation of international law.</p> <p>It is paramount that the United States military forces as well as the State of Hawaii governing entity understand the full ramifications of this violation. The improving awareness and knowledge of the Hawaiian people are now to be respected so that appropriate de-occupation of the sovereign Kingdom of Hawaii takes place with grace, pono and aloha.</p>
2020-09-30 18:11:33	Bernice	silva	volcano,bigisland, HI	██████████	yes	yes	

2020-09-30 18:10:57	Liho	Hutchinson	Oahu		yes	no	
2020-09-30 18:10:09	Hulu	Hutchinson	Oahu		yes	no	
2020-09-30 18:09:10	Mikey	Hutchinson	Oahu		yes	no	
2020-09-30 18:08:10	Josh	Vincent	Maui		yes	no	
2020-09-30 17:15:20	Hlipo	Perreira	Ka'ūmāna, Hilo, Hawai'i		yes	no	
2020-09-30 17:08:02	Alec	Marentic	Keaau		yes	yes	I support respecting and honoring native hawaiian rights and sovereignty.
2020-09-30 17:07:30	Laurie	Akana	Honolulu, Oahu		yes	no	
2020-09-30 17:05:51	kāwika	hostallero	O'ahu		yes	no	
2020-09-30 17:00:06	Iliana	Isaia	Chua Vista		yes	yes	
2020-09-30 16:59:43	Joel	Fischer	HONOLULU		no	yes	US ARMY OUT OF HAWAII!!  THE MILITARY HAS DONE MORE DAMAGE TO THE PEOPLE AND LAND OF HAWAII THAN ANY OTHER ORGANIZATION. THEY HAVE NOT MADE A SINGLE POSITIVE CONTRIBUTION!  US ARMY OUT OF HAWAII!!  DR. JOEL FISCHER
2020-09-30 16:57:06	Anita	Anderson	Kilauea		yes	no	
2020-09-30 16:42:29	Melanie	Kay	Kailua		yes	no	
2020-09-30 16:26:27	Merle	Pak	Kane'ōhe, Hawai'i		no	yes	Protect Pohakuloa!
2020-09-30 16:01:43	Patricia	Blair	Kailua		yes	yes	Time to stop this desecration of the Aina.
2020-09-30 16:00:41	Summer Kaimalia	Mullins-Ibrahim	O'ahu		yes	no	
2020-09-30 15:59:44	Gary	Pak	Hawai'i		yes	no	
2020-09-30 15:52:22	Melissa	Kaonohi-Carnit	Kahuku, hawaii		yes	no	
2020-09-30 15:42:05	Dee	Green	Honolulu Hawaii		yes	no	
2020-09-30 15:38:07	Gabrielle	Igarta	O'ahu		yes	yes	
2020-09-30 15:36:47	Kyle Kawaimanōokahala	Contrades	Anahola, Kaua'i		yes	yes	
2020-09-30 15:33:44	Cheryl	burghardt	Kou O' ahu		yes	no	I sent my own personal comments in a separate email last week.
2020-09-30 15:28:29	Rain	Wright	Oahu		yes	no	
2020-09-30 15:28:20	Christina	Keophannga	Franklin, Massachusetts		yes	yes	Stop bombing the land! Clean it up and leave it be.
2020-09-30 15:25:48	Candace	Fujikane	Honolulu, HI		yes	no	
2020-09-30 15:25:13	Ursula	Ching	Kamuela		yes	no	
2020-09-30 15:24:19	Teresa	Robertson	Ewa Beach, Oahu Hawaii		yes	yes	
2020-09-30 15:21:39	Charles	Phillips	Lahaina, Maui, Hawaii		yes	yes	The time has come to move on and let our aina heal. Years ago Kahoolawe bombing has stopped and the island still has not been cleaned!
2020-09-30 15:17:14	Kamalani	Kelikuli	Oahu		yes	no	
2020-09-30 15:07:32	Raene	Chong	Big Island		yes	no	
2020-09-30 15:07:12	Grace	Tsunami-Noguchi	Honolulu		yes	no	
2020-09-30 15:07:01	Colonel Ann	Wright, US Army Reserves (Ret)	Honolulu, Oahu, Hawai'i		yes	no	
2020-09-30 15:04:11	Kapua	Medeiros	Waimānalo O'ahu Hawai'i		yes	yes	I Do Not Support an Extension to the Lease for Pohakuloa... Enough is Enough... In a time when our Kanaka Maoli are Faced with Major Restrictions and Mounting Financial Hardships we Need to Regain ALL Hawaiian Lands to Help our People Live and Prosper... As I Have witnessed time and time Again on All Islands of our Pae 'Āina Hawai'i... it seems Govt Corruption would rather Allow Foreigners to Prosper here in Hawai'i at the Expense of All Hawai'i Residents...especially Kanaka Maoli. The Hewa has Continued for far too long! End 127 Years of Injustice as Stated in Public Law 103-150... Hawai'i remains the Only Occupied ( Illegally, at that) Nation whose Occupiers have Never Left... It Needs to End...and Justice needs to Prevail. Mahalo for your time, Kapua Medeiros A Lineal Descendant of the Hawaiian Kingdom and Heir to its Crown Lands
2020-09-30 15:00:27	Keoni	Willis	Aiea Oahu HI		yes	no	
2020-09-30 14:53:59	Shayna Noelani	Dabis-Tom	O'ahu		yes	yes	Enough is enough. Papahānaumoku has endured enough destruction!. People take take take and never give back. Voices of the people cannot be silenced.
2020-09-30 14:46:19	Melanie	Park	Hawaii		yes	yes	
2020-09-30 14:34:00	Emalani	Case	Kamuela, Hawai'i		yes	no	
2020-09-30 14:30:06	Piilani	Akina	Honolulu		yes	no	
2020-09-30 14:10:34	Brandon	Santos	Honolulu		yes	yes	
2020-09-30 14:05:48	Noelani	Ahia	Wailuku Maui		yes	no	
2020-09-30 14:02:56	Rawstina	Leleo	Kapolei		yes	yes	Hewa , enough is enough ...Clean up your mess & don't come back
2020-09-30 13:59:11	atsushi	sawada	kaui		yes	yes	
2020-09-30 13:58:21	Lala	Johnson	Maui		yes	yes	I demand as Kanaka Maoli to stop the bombing and clean up your mess. No leave this a mess like you did at MaunaKea.
2020-09-30 13:42:47	Gpua	Goracomrea	Hawai'i		yes	no	
2020-09-30 13:42:23	Janali	Torres	Captain Cook, HI		yes	no	
2020-09-30 13:40:46	Shannon	Oberle	Punaluu, Oahu		yes	no	
2020-09-30 13:34:33	Tanya	Alana	Oahu		yes	yes	No more unwanted abuse by the United States and it's military! You have occupied our far too long! Time to deoccupy!
2020-09-30 13:31:59	Rebecca	Hogue	California		yes	no	
2020-09-30 13:26:48	Jennifer	Mitchell	Kailua Kona, Hawaii		yes	yes	Clean it up and give it back to the people of Hawaii.
2020-09-30 13:26:32	Debralee	Kailiwal-Ray	Puuanahulu, Hawaii Island		yes	yes	
2020-09-30 13:26:17	Samson	Poomaihealani	Papaaloa, HI. 96780		yes	no	
2020-09-30 13:22:33	Jim	Albertini	Ola'a (Kurtistown), Hawaii 96760		no	yes	Stop Bombing Pohakuloa, Clean up your mess and we will wish you aloha as you leave Hawaii.
2020-09-30 13:12:53	Foley	Pfalzgraf	Oahu		yes	no	
2020-09-30 13:12:02	Ingrid	Larson	Portland, OR		yes	no	
2020-09-30 13:11:22	Tatiana	Young	Oahu		yes	yes	The 'āina of pohakuloa is sacred. Stop the desecration, clean up da mess, and return the land to the people of Hawai'i who will Mālama'āina
2020-09-30 13:10:36	Dryden	Myers	Kailua, HI		yes	yes	In a time of increasing climate emergency as well a military tensions, these two seem to oppose one another. As a Native Hawaiian, I stand firmly behind the protection of our 'Āina and the unburdened access to cultural sites for our living religion. I believe the U.S. military is not a strong candidate to take care of these lands of Pele and could threaten the very life source of Moku o Keawe. I have faith, however, in the military's capacity to be creative and innovative in their training tactics and therefore have no need for an extended land lease and acreage. Because this land is Hawaiian land, it is not in the best interest of Native Hawaiians and all residents of Hawai'i Island for this to procede.  O wu iho nō me ke aloha 'āina, Dryden Kū'ehuikapono Seto Myers
2020-09-30 13:06:52	Earl	DeLeon	Kealakekua Hawaii		yes	no	Stop the Bombing of pohakuloa And RIM Pac!! Now!!
2020-09-30 13:05:26	Kahaka	Patolo	Honolulu		yes	yes	STOP ALL DESECRATION! CEASE AND DESIST IMMEDIATELY
2020-09-30 13:05:12	Mary	Sakamoto	Hawai'i		yes	no	
2020-09-30 13:00:56	Jonathon	Jacobson	Georgia		yes	no	
2020-09-30 12:59:41	Inoa	Teeter	Maui, Hawai'i		yes	no	
2020-09-30 12:58:17	Kamuela	Napoleon	Mililani, Oahu		yes	yes	
2020-09-30 12:56:04	Alexandria	Brewster	California		yes	yes	A HIKI I KE ALOHA AINA HOPE LOA you fucking shiteads
2020-09-30 12:54:33	Gwen	Kim	Ka'a'awa HI		no	yes	Adamantly against further destruction of Moana Nui by military ♡🙏
2020-09-30 12:54:08	Destiny	Lopez	California		yes	yes	

2020-09-30 12:53:52	Jamaica	Osorio	Wahiawa, O'ahu	[REDACTED]	yes	yes	
2020-09-30 12:51:55	Emmaline	Padeken	Hawaii	[REDACTED]	yes	no	
2020-09-30 12:51:46	Nanea	Lo	Kapolei	[REDACTED]	yes	yes	
2020-09-30 12:49:54	Sunaina	Kale	California	[REDACTED]	yes	no	
2020-09-30 12:41:13	Lurlyne	Paleka-Kama	Hawaii	[REDACTED]	yes	no	
2020-09-30 12:35:47	Lawrence	Kidder	Kapolei	[REDACTED]	yes	no	
2020-09-30 12:33:30	Gerry	Condon	Oahu	[REDACTED]	yes	yes	It is high time for the U.S. military to respect the wishes of the Hawaiian people to stop bombing their lands and sacred places. No war preparations = no war.
2020-09-30 12:25:08	Dephlia	Rackley	Kanohi, Big Island Hawaii	[REDACTED]	yes	no	Stop bombing and clean up your Mess. Aloha Aina.
2020-09-30 12:23:32	Pono	Nui	HAWAII	[REDACTED]	yes	yes	It time to give Hawai'i BACK to its people and STOP all desecration by ENDING military presence in the Hawaiian Islands.
2020-09-30 12:22:47	Charmaine	Nee	Hawaii	[REDACTED]	yes	yes	
2020-09-30 12:16:00	Chassidy	Reis-Moniz	Hawai'i	[REDACTED]	yes	yes	
2020-09-30 12:15:36	AnissaMarie	Cummings	Kailua, Oahu, Hawaii	[REDACTED]	yes	no	
2020-09-30 12:12:15	R	Vincent	Oahu	[REDACTED]	yes	no	
2020-09-30 12:09:22	Shannon	Rudolph	Holualoa	[REDACTED]	no	yes	As a Hawai'i Island resident, I have watched the desecration of Pohakuloa for nearly 40 years; the toxic contamination of the land & cultural insult to Hawaiians must end. Shame on us. This 'industry' is robbing US taxpayers.
2020-09-30 12:08:06	Stephen	Loo	Hilo, Hawaii	[REDACTED]	yes	no	
2020-09-30 12:06:51	Kahala	Johnson	Maui	[REDACTED]	yes	yes	
2020-09-30 12:05:57	Margaret	Conner	California	[REDACTED]	yes	yes	Return "ceded lands" back to the people of Hawai'i. Clean up your mess first. It's the only right choice.
2020-09-30 12:04:35	Scott	Williams	Volcano Hawaii	[REDACTED]	yes	yes	Respectfully, Margret Conner
2020-09-30 12:03:44	Norman	Gaspar	Honoka'a	[REDACTED]	yes	yes	Please take it somewhere else
2020-09-30 12:03:08	Cookie	Akau-Gaspar	Honoka'a	[REDACTED]	yes	yes	
2020-09-30 12:01:25	Joy	McLeod	Hilo, Hawaii	[REDACTED]	no	yes	As a kanaka maoli, I am AGAINST extending the Army's lease at Pohakuloa. You cause harm & damage our land. Adverse,irreparable damage. No consent! No!
2020-09-30 12:01:09	Kiara	Donaldson	California	[REDACTED]	yes	yes	
2020-09-30 11:55:16	Sharon	Moraes	Volcano, Hawai'i	[REDACTED]	yes	no	
2020-09-30 11:45:18	TerrillJames Kaneali'i	Williams			yes	no	
2020-09-30 11:44:15	Alicia	Kalahiki-Washington	O'ahu	[REDACTED]	yes	no	
2020-09-30 11:42:47	Keala	Kekaulua	Hilo, Hawaii	[REDACTED]	yes	no	
2020-09-30 11:40:34	Purdyka	Wahiani	Waianae	[REDACTED]	yes	yes	
2020-09-30 11:31:27	Kimberly	Crawford	Kailua Kona, HI 96740	[REDACTED]	yes	no	
2020-09-30 11:21:14	M. Healani	Sonoda-Pale	Honolulu, O'ahu	[REDACTED]	yes	no	
2020-09-30 11:19:21	Warren	Costa	Hilo	[REDACTED]	yes	yes	Stop the bombing! Demilitarize Hawaii!
2020-09-30 11:13:31	Marilyn	Higbee	Hilo, Hawaii	[REDACTED]	yes	yes	How much time will be needed to clean up before the lease is ended?



To: PTA EIS Scoping Project  
From: Maunakea Observatories  
Subj: Testimony Regarding Army Retention of State Land at Pōhakuloa Training Area (PTA) as Part of Environmental Impact Statement (EIS)  
Date: 9 October 2020

Based on years of positive engagement and collaboration between the Maunakea Observatories (MKOs) and PTA, we urge that as part of the EIS scoping process, important factors which have made PTA a valuable “neighbor” to the MKOs be considered including -

1. PTA provides essential fire and medical first responder support for all that visit the summit, including Hawaii residents and visitors in the Maunakea area, staff at the observatories, Halepōhaku and the Visitor Information Station. PTA emergency services cut in half response times compared to County resources given PTA’s proximity to the Maunakea summit. This is extremely important for the health and safety of our staff who work on Maunakea. Furthermore MKO summit staff occasionally need to provide rapid on-site help to summit visitors who become ill and having PTA nearby helps reduce this burden on MKO staff.
2. PTA helps support Maunakea resource management, including Office of Maunakea Management led weed pulls at Halepōhaku and supporting the clearing of debris from the upper slopes of Maunakea via their unique aerial assets.
3. Supporting the MKO’s “dark sky” initiatives through the use of low pressure sodium lamps on PTA land is also important. This is essential given their nearness to the summit since nearby lights can potentially impact the darkness of the night sky more readily than distant lights.
4. PTA has collaborated with the MKOs in community outreach including annual “Earth Day” events at PTA, cosponsoring “Engineering Bashes” with the Thelma Parker Library, and participating in the Waimea Christmas parade planning committee. PTA also engages local schools through their own programs – consistent with the MKO’s emphasis on supporting education and community outreach.
5. PTA has been awarded nationally for their recycling program and has invested significantly in environmental programs including field biologists and extensive game management programs that are popular with the public. These initiatives are broadly consistent with the Maunakea environmental interests of the MKOs.

For these and other reasons the MKOs value our working relationship with PTA, which has advanced over several decades and we hope will continue to do so in the years ahead.

Mahalo,



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Director Doug Simons, Canada-France-Hawaii Telescope



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Director Paul Ho, James Clerk Maxwell Telescope (East Asian Observatory)



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Interim Director Robert McLaren, Institute for Astronomy



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Director Jennifer Lotz, Gemini Observatory



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Director Hilton Lewis, W.M. Keck Observatory (Keck I and Keck II)

## Nā Kuleana o Lele

We, the hoā'āina of Lahaina, absolutely object to Army Training Land Retention at Pōhakuloa Training Area (PTA) on the island of Hawai'i. We are absolutely in opposition.

**From:** Hank Hawaiian <hankhawaiian@yahoo.com>  
**Sent:** Thursday, October 8, 2020 1:53 PM  
**To:** Donnelly, Michael O'Malley CIV USARMY IMCOM PACIFIC (USA); USARMY  
Wheeler AAF ID-Pacific Mailbox NEPA Comments;  
hankhawaiian@yahoo.com  
**Subject:** [Non-DoD Source] EIS Scoping

Hanalei Fergerstrom, spokesperson  
Na Kupuna Moku O. Keawe  
P.O. Box 951  
Kurtistown, Hawaii 96760  
808 938-9994  
[hankhawaiian@yahoo.com](mailto:hankhawaiian@yahoo.com)

October 8, 2020

Sirs,

I am writing humbly asking for an 30 day extension of the comment period for the scoping period connected to the EIS that is being prepared. I ask for this extension in that I've only recently returned home where the information regarding this EIS arrived to me.

As the spokesperson for this large group of elders from around Hawaii Island (Na Kupuna Moku O Keawe) it is my duty to inform them of these actions to gather information that may be useful to this EIS. Many of them live in areas that have no electronic connections and therefore I must travel to these areas to consult with them.

As you are aware the current cut off date is set for OCT. 18, 2020 which is slightly more than. a week. The addition time would be greatly appreciated.

A quick response is requested ...If an extension is not granted...then I would have to submit an incomplete rushed statement to satisfy the date of Oct. 18, 2020.

Thank you very much for all considerations.

// Hanalei Fergerstrom



# Native Hawaiian LEGAL CORPORATION

1164 Bishop Street, Suite 1205 • Honolulu, Hawai'i 96813 • www.nhlchi.org  
Phone (808) 521-2302 • Fax (808) 537-4268



September 29, 2020

ATLR PTA  
EIS Comments  
P.O. Box 3444  
Honolulu, HI 96801-3444  
*usarmy.hawaii.nepa@mail.mil*

Russell Tsuji  
DLNR  
1151 Punchbowl St. Room 220  
*dlnr.land@hawaii.gov*

Army and DLNR officials:

The Native Hawaiian Legal Corporation submits these comments on the Army Training Land Retention at Pōhakuloa Training Area Environmental Impact Statement Preparation Notice (August 2020) on behalf of our clients Clarence Ku Ching and Maxine Kahalelio. While our clients oppose the continued use of these lands by the U.S., the purpose of this letter is to identify the issues that must be fully explored in the environmental impact statement (EIS).

### Debris that Litters the Land

The Army's lease requires that it "make every reasonable effort to . . . remove or deactivate all live or blank ammunition upon completion of a training exercise or prior to entry by the said public, whichever is sooner" and remove "all trash, garbage and other waste materials[.]" Cultural monitors, who spent extensive time on State lands at the Pōhakuloa Training Area, observed military debris, including unexploded ordnance and spent shell casings, scattered across the area leased by the Army. The EIS should fully disclose the extent to which the Army has complied with this lease provision, including a thorough investigation of the entire area to determine whether there is any military debris (including unexploded ordnance) on the land the Army has been using.

In particular, the EIS should disclose the extent to which the Former Bazooka Range MRS has been cleaned up. In 2014, the area was found to be "heavily contaminated on the surface with material potentially presenting an explosive hazard (MPPEH) and munition debris (MD)." The Army noted that the sheer densities and quantities of ordnance that are present on the ground at the former bazooka range area "coupled with the accessibility to the public make for the potential for significant danger to public health and welfare." The estimated cost of remediating

the danger as of March 2015 was \$2,353,000. The Army noted that ordnance “presents an imminent and substantial endangerment to public health, or welfare, or the environment.”

In addition, the EIS should disclose whether debris has been cleaned up from the following areas that have been documented to be littered with debris:

- The area just north of Lava Road and east of Kaua Road. *See* FINAL PHASE II ARCHAEOLOGICAL RESEARCH OF PROPOSED BATTLE AREA COMPLEX (BAX) & ANTI-ARMOR LIVE FIRE AND TRAINING RANGE (AALFTR) TRAINING AREAS FOR STRYKER BRIGADE COMBAT TEAM (SBCT) U.S. ARMY PŌHAKULO A TRAINING AREA, ISLAND OF HAWAI‘I, HAWAI‘I (TMK K 3-4-4-1.6:1) (April 2006) at 21, 25-29; and the testimony of Kealoha Pisciotta at the *Ching v. Case* trial.
- ARCHAEOLOGICAL INVESTIGATIONS OF TWO WORK AREAS FOR THE LEGACY RESOURCE MANAGEMENT PROGRAM AT PŌHAKULO A TRAINING AREA, HAWAI‘I ISLAND, HAWAI‘I (March 1998) at 4, 38, and 47-49.
- PHASE I ARCHAEOLOGICAL RECONNAISSANCE SURVEY FOR SBCT GO/NO GO MANEUVER AREAS AT U.S. ARMY PŌHAKULO A TRAINING AREA, KA‘OHE AHUPUA‘A, HAMĀKUA DISTRICT AND PU‘UANAHULU AHUPUA‘A, NORTH KONA DISTRICT, ISLAND OF HAWAI‘I, HAWAI‘I (TMKs.3-4-4-16:01 and 3-7-1-04:07) (April 2005) at 17, 45 and 47.
- ENVIRONMENTAL BASELINE SURVEY For Return of a Portion of Lands Leased from the State of Hawaii (State Lease #S-3849) Pōhakuloa Training Area, Hawaii (November 2012) at 25 and 39.
- Final First Five-Year Review Pōhakuloa Training Area Landfills 1 and 2 (POTA-03 & 06) ISLAND OF HAWAII (October 2014) at 8.

The Army claims that it recently began preparing semi-annual inspection reports. These reports should be included in the EIS.

### Depleted Uranium

The EIS should disclose where depleted uranium has been found on or near state land. It should also disclose the levels at which it has been found and why the Army believes that these levels are safe. The Army should also address claims that depleted uranium has migrated from radiation controlled areas and assess any associated public and/or environmental health risks.

### Groundwater

The EIS should disclose whether training activities have polluted groundwater. In 2013, the University of Hawai'i, funded by the Army Corps of Engineers, drilled wells in the area. See <https://www.bigislandvideonews.com/2012/07/26/university-plans-to-drill-for-water-beneath-mauna-kea/>. One well found water 700 feet deep within the Pōhakuloa Training Area. Has the groundwater been contaminated by the training activities? Because an EIS must examine cumulative impacts and because historic contamination is evidence that contamination may occur in the future as well, the EIS must fully discuss this issue.

### Invasive species

The EIS should fully disclose the extent to which ungulates exist within the area used by the Army and the damage they have caused. The Army should also evaluate the impacts of other invasives, including fountain grass, fireweed, and Russian thistle.

### Cultural sites

To date, investigations into the existence, number and significance of cultural sites have been superficial, in part, because comprehensive surveys pose a public health and safety risk for surveyors. Nevertheless, the EIS should include a thorough inventory of the historic sites in the area, and the Army should ensure the health and safety of cultural surveyors. The resulting map(s) included in the EIS should disclose where these cultural sites are, particularly in relationship to how these lands have been used and are proposed to be used, and whether those sites are sufficiently protected. The EIS should also include a discussion of the cultural significance of Pōhakuloa itself. And it should include a discussion as to how the condition of these sites has changed while the Army has used these lands.

### Cultural Practices

The EIS should disclose the extent to which cultural practices have been exercised on these lands and the extent to which the Army's use of these lands adversely affects the ability of Hawaiians to exercise traditional and customary cultural practices.

### The Army's "Need" for This Land

The military has repeatedly maintained that certain lands are critical for training purposes. Kaho'olawe was critical. As was Makua. That is what the military claimed. But it has alternatives. Continued use of Pōhakuloa is not a necessity. Certainly, lands owned by the state and filled with culturally and ecologically important sites can be returned to the Department of Land and Natural Resources in its natural condition.

### Cumulative and Secondary Impacts

Cumulative impacts include past, present and future impacts. Secondary impacts include effects that are farther removed in distance, but still reasonably foreseeable. Given that the EIS needs to consider both cumulative and secondary impacts, the Army must complete a thorough inventory of historic and cultural sites on state land **and** on federal land (including the impact area). It must disclose the degree to which historic and cultural sites have been harmed by the Army's activities and the degree to which they may be adversely affected by continued training activities in these areas.

### Trust Purposes

The EIS should fully disclose how the Army's continued use of these lands furthers the state's public trust purposes. "Under the Hawai'i Constitution, all public natural resources are held in trust by the State for the common benefit of Hawai'i's people and the generations to come. Additionally, the constitution specifies that the public lands ceded to the United States following the overthrow of the Hawaiian Monarchy and returned to Hawai'i upon its admission to the Union hold a special status under our law. These lands are held by the State in trust for the benefit of Native Hawaiians and the general public. Accordingly, our constitution places upon the State duties with respect to these trusts much like those of a common law trustee, including an obligation to protect and preserve the resources however they are utilized." *Ching v. Case*, 145 Hawai'i 148, 152, 449 P.3d 1146, 1150 (2019). "The BLNR is constitutionally mandated to conserve and protect Hawai'i's natural resources." *Pila'a 400, LLC v. Bd. of Land & Natural Res.*, 132 Hawai'i 247, 250, 320 P.3d 912, 915 (2014). "The most basic aspect of the State's trust duties is the obligation to protect and maintain the trust property and regulate its use." *Ching*, 145 Hawai'i at 170, 449 P.3d at 1168. "As trustee, the State must take an active role in preserving trust property and may not passively allow it to fall into ruin." *Id.* at 177, 449 P.3d at 1175.

The EIS must also disclose how the Army's continued use of the lands at Pōhakuloa is consistent with the purposes of the Hawaiian Home Lands trust given that a portion of these lands appear to be part of the Hawaiian Home Lands trust. "One specific trust duty is the obligation to administer the trust solely in the interest of the beneficiary." *Ahuna v. Department of Hawaiian Home Lands*, 64 Haw. 327, 340, 640 P.2d 1161, 1169 (1982).

### Lease

Chapter four of the EISPN ignores several important statutory provisions.

HRS § 171-32 requires that the disposition of public lands be issued by lease after public auction. The EIS should disclose the legal basis by which the Department of Land and Natural Resources intends to avoid the public auction requirement.

HRS § 171-36(a)(3) prohibits DLNR from entering into a lease prior to 2027. The EIS should

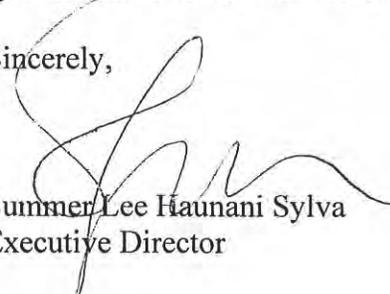
ATLR PTA  
Russell Tsuji  
September 29, 2020  
Page 5

disclose whether DLNR intends to comply with this statutory requirement.

HRS § 171-36(a)(4) forbids granting a lease to anyone in arrears of obligations owed to the

State. Given the Army's failure to comply with the terms of the lease – by cleaning up its mess – the EIS should disclose how DLNR can legally enter into a lease with the U.S.

Sincerely,



Summer Lee Haunani Sylva  
Executive Director

cc: David Kimo Frankel, Esq.,  
Co-Counsel for Clarence Ku Ching  
and Maxine Kahaulelio

# Ola`a First Hawaiian Church

Tuesday, October 13, 2020

Comments on scoping period for the Environmental Impact Statement (EIS) for Army Training Land Retention at Pohakuloa Training Area (PTA) in Hawaii.

My name is Ronald Fujiyoshi. I am the treasurer of Ohana Ho`opakele, a 501c3 not-for-profit corporation registered in the State of Hawaii. I have been recognized as one of the official spokespersons for Ohana Ho`opakele. Ohana Ho`opakele has been recognized as one of the NHO (Native Hawaiian Organizations) by the Pohakuloa Training Area and is listed in their material as such.

Through these many years of association with the PTA, members of our organization have learned much and have become more and more knowledgeable concerning activities and factual knowledge about PTA.

Thank you for this opportunity to comment on this EIS process concerning 'the U.S. Army's Proposed Action, which is retention of up to approximately 23,000 acres of State-owned land at Pohakuloa Training Area, or "PTA."

There are many aspects about which we would like to comment. However, for brevity we will comment on only one aspect.

The words "State-owned land" and "U.S. Government-owned land" is used within the notice and material. We as an organization want to dispute this very point. At the least, neither the State of Hawai`i nor the U.S. Government, owns the Crown Lands of Humuula which are contained within both this leased 23,000-acre parcel under scrutiny and the other Executive Orders related to the other parcels of land mentioned in the notice. If the State of Hawai`i does not own the Crown Lands of Humuula, it cannot lease the lands to the PTA.

The land system which exists in Hawai`i is unique to Hawai`i and different from that found in any of the other states of the United States of America. The system was set-up by the Kingdom of Hawai`i government under the rule of Kamehameha III. This land system, recognized internationally by the other independent nations of the world at the time, is known as the Mahele. Actually, the Mahele are a series of laws that set-up the land system in Hawai`i. I cannot go into detail about all of the laws but to summarize, "An Act to Organize the Executive Department of the Hawaiian Islands" which set-up the "Board of Commissioners to Quiet Land Titles" was passed in April 27, 1846. Related to our contention that the State of Hawai`i nor the U.S. Government owns the Crown Lands of Humuula, is "An Act Relating to the Lands of His Majesty the King and of the Government" signed on June 7, 1848 by King Kamehameha III which named the Ahupuaa of Humuula located in the District of Hilo to be "Crown Lands." This same document describes the Crown Lands as lands reserved "to himself as his own private property." Under international understanding of land, if any government is overthrown or taken-over by a coup, lands that are "private lands" are not affected. Thus, the King's land or the Crown Lands of Kamehameha III were his own private lands and not lands of the Kingdom of Hawai`i. Further, "An Act to relieve the

Royal Domain from encumbrances, and to render the same inalienable" was approved on January 3, 1865 by King Kalakaua. Thus, the Crown Lands of Humuula are still considered "private lands" and cannot be owned by either the State of Hawai`i nor by the U.S. Government. Therefore, the PTA cannot lease this land from the State of Hawai`i.

I have quoted these acts of the Mahele from the original English sources. If there is any dispute, scholars who are recognized for their intellectual expertise can be asked for their expert opinion. I name Mr. Donovan Preza the author of the Master's Thesis, "The Empirical Writes Back: Re-examining Hawaiian Dispossession Resulting from the Mahele of 1848," Dr. Keanu Sai and Dr. Ronald Williams, Jr.

In conclusion, this EIS cannot proceed forward without proof from the State of Hawai`i that they own the Crown Lands of Humuula. There is also dispute whether the State of Hawai`i owns the Government Lands of Kaohe in the District of Honokaa and the Government Lands of Puuanahulu in the District of Kona also included in the Executive Orders that supposedly have given the PTA to the U.S. Army for its use.

Thank you for the opportunity to comment!

Ronald Fujiyoshi, Treasurer  
Ohana Ho`opakele  
1196 W. Kowailani St.  
Hilo, HI 96720  
Telephone: 808-959-9775  
Email: ronsan2224@aol.com

October 13, 2020

ATLR PTA EIS Comments  
P.O. Box 3444  
Honolulu, HI 96801-3444

## RE: Army Training Land Retention at Pohakuloa Training Area—Environmental Impact Statement

Dear Representatives of the United States Army:

Pacific Resource Partnership (PRP) is a non-profit market recovery trust fund which represents approximately 7,000 men and women union carpenters and 240 large and small contractors. With our expertise in research, compliance, marketing, and project advocacy, we are committed to building a stronger, more sustainable Hawaii in a way that promotes a vibrant economy, creates jobs, and enhances the quality of life for all residents of Hawaii.

While PRP supports the United States Army's (Army) continued military training on State-owned land within the Pohakuloa Training Area (PTA), we also want to ensure that the Army gives preference to hiring local contractors and workers who will be paid a "living wage" on future construction projects within the PTA. Hawaii residents, not just the Army, should benefit from these construction projects, and making that happen means guaranteeing the work is done by local contractors and workers.

The State of Hawaii is struggling to retain local jobs that pay middle-class wages, a situation that the pandemic has magnified. According to the latest ALICE data (2018), when combining households living beneath the Federal Poverty Level with ALICE households, an astonishing 42% of the State of Hawaii's population struggles to make ends meet with a budget that does not allow for savings without sacrificing other necessities, such as childcare, food, healthcare, and transportation (See: <https://www.unitedforalice.org/hawaii>). This data describes the economic reality before COVID-19.

In this COVID-19 environment, Hawaii faces an economic crisis without parallel in its history as a state. During the months of April through August 2020, Hawaii's unemployment rate far exceeded the national level. Recent forecasts by the University of Hawaii Economic Research Organization (UHERO) anticipate significant shortfalls in employment numbers versus what it forecast a year ago. The declines will be steepest in 2020 and 2021, with unemployment rates well above the national level. UHERO predicts that Hawaii employment will not return to 2019 levels before 2026.

Employing a local workforce to build projects within the PTA would play a significant role in helping Hawaii overcome the debilitating economic impacts of COVID-19 and beyond—salaries paid to local workers stay in the local economy.



(Continued From Page 1)

Given Hawaii's dire need for good-paying local jobs, we are interested to know whether the Army is committed to ensuring that contractor(s) awarded to build projects within the PTA will employ individuals who are residents of Hawaii. Please confirm whether federal laws and regulations, such as 48 C.F.R. §§ 222.7000—222.7002 relating to construction and service contracts in noncontiguous states or other location-based preferences that are agency specific, require or allow the Army to give residents of Hawaii preference as contractors and/or employees on military construction contracts performed, in whole or in part, within the PTA? Additionally, we would request that the EIS analyze the economic benefits to the State associated with hiring a local workforce to build future construction projects within the PTA.

Thank you for this opportunity to submit written comments.

Sincerely,

*Chris Delaunay*

Christopher Delaunay  
Government Relations Manager

**From:** Cory Harden <333cory@gmail.com>  
**Sent:** Monday, October 12, 2020 6:15 PM  
**To:** USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
**Subject:** [Non-DoD Source] comments  
**Attachments:** temp 2020 10-12 PTA.odt

please acknowledge receipt--thanks!

scoping comments on  
Army Training Land Retention At Pōhakuloa Training Area Environmental Impact Statement  
[http://oeq2.doh.hawaii.gov/Doc\\_Library/2020-09-08-HA-EISPN-Army-Training-Land-Retention-at-Pohakuloa-Training-Area.pdf](http://oeq2.doh.hawaii.gov/Doc_Library/2020-09-08-HA-EISPN-Army-Training-Land-Retention-at-Pohakuloa-Training-Area.pdf)

by Deborah Ward, chair, Sierra Club, Hawai'i Island Group cordylinecolor@gmail.com  
comments due October 14, 2020 to [usarmy.hawaii.nepa@mail.mil](mailto:usarmy.hawaii.nepa@mail.mil)

## CHAPTER 1 INTRODUCTION

### 1.2 Project Background p. 1-2

Loss of this land would substantially impact the ability of USARHAW and other military services and local agencies to meet their training requirements and mission of readiness.

*The Army has known for 65 years that the lease would expire, with no certainty of retaining control of the land after that. They could have planned infrastructure and training so that loss of this land would not seriously impact training. It is disingenuous to claim their mission requires they retain the land, when it is lack of planning that created the problem.*

*The military once claimed it couldn't manage without bombing Kaho'olawe, but it found a way to stop. It claimed it had to continue training at Makua Valley, but found a way to reduce that. It also claimed it absolutely needed 23,000 acres for Strykers, but the Strykers departed after a few years.*

### 1.3 Purpose and Need

The Proposed Action is needed to... allow for future facility and infrastructure modernization... p. 1-2

*This appears to contradict a later statement:*

*"The Proposed Action does not involve new training, construction, or resource management activities at PTA. Instead, it is a real estate action that would enable continued military use of the State-owned land."*  
p. 2-3

*Military EISs have repeatedly used a narrow focus that hides the true impacts of actions. The proposed action will undoubtedly enable huge amounts of training, construction, and environmental impacts in the future. This EIS must analyze those impacts. See also comments re. 1.4.*

### 1.4 NEPA/HEPA Process p. 1-5

Proposed Army retention of State-owned land requires compliance with the National Environmental Policy Act of 1969 (NEPA) (42 United States Code [U.S.C.] Section 4321 et seq.). NEPA directs federal agencies to examine the potential effects of proposed actions on the human environment. NEPA requirements ensure that environmental information is available to public officials and citizens for review before decisions are made and before actions are taken...Public involvement is a key component of the NEPA and HEPA processes

*The military aspires to making PTA a premier training ground for the entire Pacific region, and to that end has continuously been expanding and improving training facilities since 1938 -- over 80 years, including increasing the land area of the base by acquiring land between the main base and Keamuku, and 23,000 acres in Keamuku. Each incremental increase in impacts gets a separate EIS. How will cumulative impacts be evaluated for the final huge base with well water enabling far more personnel, equipment, and environmentally destructive training?*

*Training at Pohakuloa contributes to military action worldwide, with devastating consequences for our planet's living beings, land, water, and atmosphere. If the scope of the EIS will not include all these consequences, cite legal authority for limiting the scope in the manner proposed.*

*The September 23, 2020 scoping meeting was inadequate because there was no way to learn what fellow citizens thought about the action, or to interact with Army staff. The Army should re-do the scoping meeting as an online and phone-in event where people can hear and see others giving testimony, and have some opportunity to interact with staff, Knowing what other citizens think is important information. Body language and tone of voice convey far more than the written word. People may recognize speakers by sight even if they don't*

recognize their written names. It's not enough to simply post scoping comments online. Many residents have poor or nonexistent Internet connections.  
Consultation was inadequate--only done with three immediately adjacent property owners.

## **Chapter 2 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES**

*Specify how long each scenario would be in effect, and analyze impacts in light of these time frames.*

*What steps have already been taken by the Army towards each form of land control?*

*What plans has the Army made at this point for losing control of the land?*

### **2.1 Project Area Description p. 2-1**

Parcels A, B, and 5,357 acres of Parcel C are managed and administered by DLNR. DLNR's Board of Land and Natural Resources is responsible for management and administration of approximately 250 acres of Parcel C on behalf of the Department of Hawaiian Home Lands (DHHL), until expiration of the U.S. Government lease. This 250-acre area is referred to as "DHHL-administered land" in this document. The lease for Parcels A, B, and C excludes approximately 112 acres of the Old Saddle Road right-of-way in Parcels A and C. The State transferred administration of Old Saddle Road to the County of Hawai'i, which grants PTA use of this area (USACE-POH & USAG-HI, 2019). Easements for portions of DK1 Highway that cross State-owned land were given to the State Department of Transportation upon highway completion.

*What benefit does DHHL derive from use of their land?*

### **2.3.4 No Action Alternative**

Under the No Action Alternative, Army would not retain any of the State-owned land at PTA after the current lease expiration. p. 2-9

Lost training would be accommodated in other ways, which is not part of the Proposed Action, will not be analyzed in the EIS, and would require separate NEPA analysis. p. 2-10

*Describe how the lands would be restored, before the lease expires, to be returned to the beneficiaries as spelled out in the lease.*

*Describe how lost training would be accommodated, to give a complete picture of the alternatives.*

### **2.4 Land Retention Methods**

Army Regulation 405-10 authorizes various methods for Army retention of non-federal government owned land including title (full ownership), lease, easement, and license. These land retention methods can be accomplished by a variety of ways, including purchase, negotiation, donation, exchange, and eminent domain. In general, it is assumed that title is the land retention method that would result in the greatest potential impact because the other land retention methods could include restrictions, such as restrictions on the quantity and type of training, and could require mitigation to lessen potential impacts. Therefore, to account for the range of potential impacts that could result from the Proposed Action, the EIS will analyze potential impacts associated with obtaining title. Where impacts would be greater under a different land retention method, the EIS will state which land retention method was analyzed and why the impacts would be greater than those associated with title. p. 2-10

*How does retention, especially by eminent domain, enable the State to fulfill its obligations to its beneficiaries? See also comments re. Chapter 4.*

## **CHAPTER 3 AFFECTED ENVIRONMENT**

### **3.1 Land Use**

The State-owned land at PTA is currently designated as being in the Conservation District (Figure 3-2). Under the Conservation District statute, HRS Chapter 183C, and its implementing rule, HAR Chapter 13-5 (Conservation District), lawful use of lands established prior to October 1, 1964 are considered nonconforming; thus, the State-owned land is not subject to the land use rules in HRS Chapter 183C and HAR Chapter 13-5. The County of Hawai'i zoning for the State owned land is "Open" and "Forest Reserve (FR)" ... p. 3-1

*If there is a new lease, it would be subject to the Conservation District statute. How would the Army conform? See also last comment re. Chapter 4.*

### **3.2 Biological Resources**

*Analyze impacts on 'ua'u.*

*Analyze extent and impacts of invasive species (goats, fountain grass, Russian thistle, fireweed, etc). Describe success of past control methods.*

### **3.3 Archaeological and Cultural Resources**

Approximately 45 percent of the accessible land (approximately 81,000 acres outside of the impact area) at PTA has been surveyed for archaeological sites (USAG-PTA et al., 2018). p. 3-5

*The entire base, including the impact area, needs to be surveyed, before cultural resources are destroyed by training activities. If the Army does not plan to survey, cite legal authority allowing this.*

*Some native Hawaiians report there are numerous undiscovered caves and archaeological sites in the impact area. For environmental, archaeological, and cultural studies the Army often claims it is too dangerous to go there. But they went in to check for depleted uranium, and even did construction in the impact area for a new training range. What criteria are now being used to determine when people can enter?*

#### **3.3.1 History of Land Ownership and Use**

Prior to statehood, land in the Pōhakuoloa area was held by the Kingdom of Hawai'i. The lands were either Crown or Government lands until 1893, when the Hawaiian Kingdom was overthrown. The successor government, the Republic of Hawai'i, assumed ownership and control of these lands and continued public use. When the Republic of Hawai'i was annexed as a territory of the U.S. under the 1898 Joint Resolution of Annexation (30 Stat. 750), the Republic ceded these lands to the U.S. The U.S. accepted ownership of the lands in fee simple (i.e., owned completely without limitations or conditions). These lands are referred to as ceded lands. During the territorial era (1898–1959), additional ceded lands were set aside for U.S. military use and other public purposes under Executive Order by the Governor of the Territory of Hawai'i. On August 21, 1959, Hawai'i was admitted into the Union and ceded lands were transferred to the newly created state, subject to the trust provisions in Section 5 of "the Admission Act" (Pub. L. 86-3, 73 Stat. 4). The U.S. Government retained ownership of the lands it needed for military and other public purposes and conveyed the remaining ceded lands to the State (USACE-POH, 2016; USACE-POH, 2017). There are Hawaiians and non-Hawaiians who strongly maintain that the State ceded lands were taken illegally from the former Kingdom of Hawai'i and should be returned to the Hawaiian people or descendants of Hawaiian nationals. p. 3-7

*Cite laws and court decisions that demonstrate the land was transferred legally from the nation of Hawai'i, and that the Army has a right to lease the land, buy it, or take it by eminent domain.*

#### **3.4 Hazardous and Toxic Materials and Wastes p. 3-9**

*The court ruled that the State of Hawai'i DLNR failed to inspect and monitor the leased land under its jurisdiction, and that the state did not require corrective action or restorative measures to address the damage caused by failure to clean up the lands. The court referred to this duty as malama 'aina, and the Army's activities to date do not reflect responsible actions in this regard. The Army should provide specific details and timeline to clearly insure that clean-up would be complete by the end of the lease.*

*Provide data, including but not limited to Toxic Release Inventory reports, on the amount and type of persistent biological toxins (such as lead) and other pollutants released into the environment by training at Pohakuoloa over the past ten years. Describe cleanup actions and results.*

*Analyze impacts from use of hazardous substances, using new information showing ground water is much nearer the surface than once thought: For years Pohakuoloa EISs have said water is so far down that contaminants may never reach it. It appears this is not correct.*

*"Unexpectedly high water in the Humuula saddle region, between Mauna Kea and Mauna Loa, prompted a University of Hawaii researcher to seek a new site for additional tests.*

*Donald Thomas, director of the university's Center for the Study of Active Volcanoes, in 2012, received permission to drill two bore holes to collect core samples... "They found the first thin band of water about*

500 feet below the surface. A thicker band was present at about 700 feet, and a regional water table was at 1,800 feet, Thomas said. 'That's considerable shallower than we anticipated,' he added."

<https://www.hawaiitribune-herald.com/2014/02/18/hawaii-news/higher-waters-unexpected-discovery-in-humuula-saddle-region-prompts-new-tests/>

*Retention of the land would allow more firing into the impact area. For years, EISs for Pohakuloa have said the impact area will be cleaned up after the base is closed. But we know Kaho'olawe and other former military sites remain in hazardous condition despite similar promises. Will the Army post a bond to ensure cleanup of the impact area?*

### **3.5 Air Quality and Greenhouse Gases**

#### **3.5.1 Air Quality**

During the 1960s, training was conducted on PTA using 20-millimeter spotter rounds containing a depleted uranium [DU] alloy. At the time, use of the alloy was accepted technology and potential health effects were not understood. Fragments of these rounds were documented in the impact area of PTA in 2008. A 1-year airborne uranium monitoring program was undertaken in 2009 to determine if the decay and vaporization of these depleted uranium fragments have impacted air quality. The monitoring program concluded that the depleted uranium had not impacted air quality in the PTA area, and that the uranium levels in the collected particulate matter samples were within the range of naturally occurring uranium in Hawaiian soils and rock (USACE, 2010).  
p. 3-10

*We share many of the concerns raised in comments on this EIS by Mike Reimer, a retired geologist who has been communicating his concerns about DU to the Army and Nuclear Regulatory Commission for years. For example, he states that the one test sample for 133,000 acres is grossly inadequate, and risks from inhaled DU oxides, that lodge in the lungs and emit radiation directly into body tissues for years, are not even being considered.*

#### **3.5.2 Greenhouse Gases p. 3-11**

*Do a full life cycle analysis for greenhouse gases from*

- *manufacturing and shipping equipment to PTA*
- *transporting troops and equipment back and forth to PTA for training*
- *flying aircraft, including bombers from Guam and the states*
- *building facilities to house personnel*
- *building training areas*
- *hauling food, water, and supplies*
- *having staff commute to PTA*

#### **3.6 Noise p. 3-11**

*Analyze impacts from explosions that rattle windows miles away, and aircraft involved in PTA training flying over populated areas.*

### **3.8 Socioeconomics and Environmental Justice**

#### **3.8.1 Socioeconomics p. 3-12**

##### **Military Activity in the State. p. 3-14**

Military activity has been an important contributor to the State's economy for decades.

*Calculate the cost of cleaning up after the base is closed.*

*Calculate the cost of lost opportunities for other uses of the land, such as: a park that preserves cultural resources and educates the public about history and culture; agricultural uses that provide food and building materials locally; raising of livestock., etc.*

#### **3.9 Water Resources**

The depth to basal groundwater at PTA is estimated to be approximately 4,500 feet above sea level in a perched aquifer (USACE-POH & USAG-HI, 2017; USACE-POH & USAG-HI, 2019b). p. 3-15

See comments re. 3.4 re. water depth.

### **3.10 Transportation and Traffic p. 3-15**

State the expected number and size of convoys, and how much traffic delay and disruption they will cause.

How will concussions from weapons firing be prevented from affecting travelers on Saddle Road? A friend told me he almost got blown off his motorcycle by a concussion.

### **3.14 Human Health and Safety p. 3-19**

Describe past emergency incidents from aircraft using the runway, which is aimed at the cantonment area.

**Fires are frequent on the Army leased lands and pose a detriment to public health and safety. Describe the effects of climate change on the rainfall and potential fire regime, and discuss efforts to reduce and quell natural and Army-activity based fires.**

What will done to reduce noise from explosions and aircraft, which adversely affects residents for miles around?

## **CHAPTER 4 RELATIONSHIP TO PLANS, POLICIES AND CONTROLS**

Describe how well the Army has complied with lease requirements to avoid damage and pollution and to clean up waste. Describe steps that have been taken to clean up the area and comply with the 2019 Supreme Court decision, including any formal inspection, monitoring, and reporting process conducted by Department of Land and Natural Resources. Include future plans and timelines. Include a copy of the lease, lease amendment, and court decision, or a link to access them.

**What is the impact of past and proposed Army activities on the public trust obligations of the state? The State of Hawai'i has responsibilities as a Trustee of the lands at issue, including fiduciary responsibilities to the beneficiaries, identified in the law as Native Hawaiians and the General Public.**

Do the environmental impacts of the State of Hawai'i continuing to lease the trust lands to the Army benefit the beneficiaries, or is the documented degradation of the leased lands a violation of the fiduciary responsibilities? (See Ching v Case SCAP-18-0000432)

**Review State law, past DLNR decisions, contested case decisions, and court decisions re. renewal of State leases for lessees who have not fulfilled obligations in their lease agreements, and/or have been bad actors when using non-lease lands.**

**Describe the environmental record of the Army in Hawai'i, including:**

- **All legal actions, with outcomes, that have been taken regarding environmental concerns at Pohakuloa since 1938, including this:**

"In 1993 a report by Army auditors found that while planning the construction of a new training complex at Pohakuloa officials cut corners during the survey, ignoring the recommendations of Army engineers that called for a comprehensive botanical study of the proposed site."

<https://www.civilbeat.org/2020/09/army-state-needs-to-renew-lease-for-big-island-training-area/>

<https://www.environment-hawaii.org/?p=3460> re Multi-Purpose Range Complex

- **Hazardous military debris now present in the impact area and DLNR lease area at Pohakuloa, the old O'okala Mill, in the impact area at Schofield, and at Makua Valley.**
- **The state of cleanup on former military sites statewide, including Kaho'olawe (which was returned to the State in hazardous condition), Waiakea Forest Reserve (where the Army lied about nerve and bacterial agents), and Waikoloa Maneuver Area.**

- ***The date when will all former military sites statewide will be cleaned up.***
- ***The amount of time the Army is spending lobbying for cleanup money, vs. time spent trying to get money for new projects.***

*What is the fair market value of the land the Army is currently using? Has the State of Hawaii carried out its trust obligations to the beneficiaries when the lease fee is \$1 for the entire 65 years? If the land is rendered useless and dangerous as a result of Army activity, does that reduce the fair market value, and is the State of Hawaii complicit in this degradation of the benefits of the trust?*

*The land in question is in a conservation district. The Hawaii Administrative Rules 13-5 list eight criteria which must be used to evaluate the proposed activities or construction in the district. Specify how the bombing, live fire, brigade maneuvers, movement of heavy equipment, and other past and planned actions comply with the eight criteria. See also comment re. 3.1.*

Comments related to scoping of  
Army Training Land Retention At Pōhakuloa Training Area  
Environmental Impact Statement Preparation Notice  
Pōhakuloa Training Area, Island Of Hawai'i, Hawai'i

Submitted by Lanny Sinkin  
For the Temple of Lono

## **The “Proposal”**

U.S. Army Garrison-Hawaii (USAG-HI), the entity responsible for management of PTA [Pōhakuloa Training Area], and U.S. Army Installation Management Command, [hereinafter referred to jointly as “Army”] propose retention of up to approximately 23,000 acres of the State-owned land at PTA in support of continued military training.

USAG-HI published its Notice of Intent to prepare an Environmental Impact Statement (EIS) addressing this proposal. Army Training Land Retention at Pōhakuloa Training Area, Environmental Impact Statement Preparation Notice, Pōhakuloa Training Area, Island Of Hawai'i, Hawai'i (EISPN).

The Notice provides an opportunity for community input as to the scope of the EIS. These comments are submitted in response to that opportunity by the Temple of Lono, a traditional faith of the indigenous Hawaiian people.

The Army states: “The Proposed Action is needed to enable access between major parcels of U.S. Government-owned land in PTA, retain substantial Army infrastructure investments, allow for future facility and infrastructure modernization, preserve limited maneuver area, provide austere environment training, and maximize use of the impact area in support of USARHAW-coordinated training.” EISPN at 1-2.

The Army further states: “Loss of this land would substantially impact the ability of the Army to meet training requirements and mission of readiness. EISPN 1-2.

“The Proposed Action does not involve new training, construction, or resource management activities at PTA. Instead, it is a real estate action that would enable continued military use of the land.” EISPN at 1-2.

The Army submitted its proposal to the State of Hawai'i Board of Land and Natural Resources (BLNR), Trustee of the lands being leased<sup>1</sup> by the Army.

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<sup>1</sup> When extensive search of the Internet could not locate a copy of the Lease, the author sent an inquiry to DLNR requesting assistance in locating the document. The reply received from DLNR said: “The document you requested is not available online. We attach a copy for your reference. Thank you.” With the Lease being at the center of the discussion, it would seem like the Army would make an effort to ensure that a copy of that document is accessible on the Internet and particularly on the website set up for this Proposal.

## The Proposal is Tautological or Premature

There are some contradictions and inconsistencies in the presentation of the Proposal, suggesting that at least part of the Proposal is tautological and the preparation of an EIS is premature.

The Army includes “ **future facility and infrastructure modernization**” as continuing activities. Yet the Proposal also states that it “does not involve new training, **construction**, or resource management.” “Facility infrastructure modernization” certainly sounds like “construction.”

Future use also includes maximizing the use of the impact area, suggesting expansion of such use is being considered.

The proposal is “to retain up to 23,000 acres of State-owned land in support of continued military training.”

Under Alternative 1, “Army would retain all the State-owned land (approximately 23,000 acres) at PTA.” EISPN at 2-3. “Army would continue to manage and use the State-owned land **currently leased.**” *Id.* (emphasis added)

The Proposal seems to be that the Army be allowed to continue using lands that the Army currently leases from the State of Hawai’i. The lease runs until 2029. In that Proposal, there is no discernible change in the *status quo*, let alone some proposal to alter the lease terms or duration. There is, therefore, no permission necessary for such use during the duration of the lease.

HRS Section 343-5(e), enacted by Act 172 (2012), allows **an applicant** to prepare an EIS rather than an environmental assessment if the accepting authority determines, through its judgment and experience, that an EIS is likely to be required. The preparation of such an EIS begins with the preparation of an EISPN, sometimes referred to as an “Act 172 EISPN.”

EISPN at 5-1

The Proposal refers to the Army as the “Applicant” without specifying what the application seeks. The Notice does include the following:

Once the EIS acceptability determination is made and the ROD is issued, the alternative selected in the ROD can be implemented.

Depending on the alternative selected, possible decisions that may need to be made by state agencies, following acceptance of the EIS, include:

- Whether to allow Army retention of the State-owned land.
- What method(s) would be used to allow Army retention of the State-owned land, and what terms would be associated with the selected method(s).
- If presented with a Conservation District Use Application to permit military use of lands in the state’s Conservation District (Resource Subzone), consider allowable uses and management actions to meet the purposes of the Conservation District.

EISPN at 1-6 (emphasis added).

It appears that the submission of a Conservation District Use Application (CDUP) is something that the Army may apply for at some later time. That leaves the question as to what the Army is applying for now that leads to the Army being termed “the applicant.”

Continued use of the lands in question by the Army for the duration of the existing lease does not require the preparation of an Environmental Impact Statement. All of the alternatives include this fact.

For example, under Alternative 2, the Army would terminate use of 3,000 acres and continue to use the rest of the 23,000.

Alternative 2 of the Notice says: “Army would continue to use all the State-owned land until a new real estate agreement is in place or **the current lease expires.**” EISPN at 2-6. (emphasis added).

Under Alternative 3, the permissible activities and land impacts by the Army would be reduced. Under that alternative: “Army would continue to use all the State-owned land until a new real estate agreement is in place or **the current lease expires, whichever occurs first.**” EISPN at 2-7. (emphasis added).

Under the No Action Alternative,: “Army would not retain any of the State-owned land at PTA after the current lease expiration.” EISPN at 2-9 – 10. The No Action Alternative includes the following Army actions and responsibilities: “**Army would continue to use all the State-owned land until the current lease expires.**” EISPN at 2-9

The No Action Alternative makes clear that the Army **can continue to use the lands leased** from the State until the lease expires without any further action by the State or The Trust.

The Army lease is due to expire is 2029.

The alternatives presented appear to address whether the lease will be renewed, modified, or terminated. Yet the Proposal does not overtly seek to renew, modify, or terminate the lease and whether an application for a CDUP will be filed is not yet determined.

Given that the Army already has permission to use the 23,000 acres until the lease expires, the proposal to retain the 23,000 acres appears to be a disguised proposal to renew the existing lease or agree to a new lease without acknowledging what is really being sought.

Addressing the question whether the lease should be allowed to expire or not is not the expressed intent of the Proposal. The Army discussion of the adverse effects on the Army of the various alternatives is not sufficient to implicitly be considered a proposal to change the lease terms.

If the lease were allowed to expire, there would obviously be no need for an EIS to have been prepared.

If the terms of any new lease were negotiated and agreed upon and the Army applied for a CDUP to implement the agreement, that new lease could be the appropriate subject for an EIS process.

### **The Real Issues**

The Army proposal is upside down and backwards. There really is no need for an EIS to determine that the proposed activities, i.e. the continuation of intensive military use, will result in continued degradation of the land. That impact is obvious.

What the Proposal does not discuss is that permitting the degradation is in violation of the State of Hawai'i's responsibilities as Trustee of the lands at issue. ("The Trust") The Trust's fiduciary duties are to the beneficiaries, identified in law as Native Hawaiians and the General Public. The Army is **not** a beneficiary of The Trust.

The obligation of The Trust is to ensure any uses of trust land result in benefits to the beneficiaries and do not degrade the lands under the stewardship of The Trust.

An EIS should be prepared to assess the adverse impacts of continued military use of the lands **and** the benefits to The Trust of allowing the lease to expire. The issue is not the impacts on the Army of terminating that use when the current lease expires. The issue is the impact on The Trust, if the lease is not allowed to expire.

A sub-issue would be whether the BLNR should pursue termination of the lease prior to the expiration date based on the damages inflicted on the leased lands.

From this perspective, the Preparation Notice is fundamentally deficient as targeted on the impacts on the Army, not The Trust. The Army should be grateful for the use of lands belonging to The Trust for decades and respect any desire on the part of The Trust to terminate the destructive uses of The Trust's lands.

The proper framing of the issue should be:

Do the environmental impacts of the State of Hawai'i continuing to lease The Trust's lands to the United States Army for military training purposes benefit the beneficiaries of The Trust's lands or does allowing the Army to continue its activities on The Trust's lands violate the fiduciary duties of the State as Trustee?

That issue would not arise unless the Army sought a new lease or an extension of the existing lease. As the Proposal apparently does not apply for either option, it is not clear why the Army has issued the Notice of its intent to prepare an EIS.

Nor is it clear why the public should be called upon to spend time and money responding to a meaningless Notice.

### **Trust lands**

The Army identifies one of the triggers for preparation of an EIS is a proposal that intends to make use of State Lands. EISPN at 5-1.

The lands in question were designated as held by the State in a trust to benefit Native Hawaiians and the general public. Section 5 of "the Admission Act" (Pub. L. 86-3, 73 Stat. 4)

"The 65-year lease of the 'State-owned land' expires on August 16, 2029." EISPN 1-2. The use of quotation marks around "State-owned land" is an indicator that the Army is well aware of the status of these lands as held in trust by the State, not owned by the State.

The "project" is a proposal to continue allowing the Army to engage in destructive actions impacting the environment of the lands now used by the PTA to the detriment of The Trust's beneficiaries.

The "project" at issue would seem to be the lease. From that perspective, there is no vested interest of any sort to be retained by the Army. The Army and the State signed a lease, that lease is going to expire, the State has no obligation to continue the lease, and the State has very clear trust duties that would bar renewal of the current lease or negotiation of a replacement lease. The decision is to be made by the State of Hawai'i Board of Land and Natural Resources (BLNR). EISPN 1-1.

The military has left the PTA landscape littered with the detritus of their war games. Their failure to show proper and legally-required respect for the land over a lengthy period of time should disqualify the Army from receiving a lease extension or new lease.

The proper project would be requiring the Army to clean up the entire training area and restore the lands as far as reasonably possible to their prior condition prior to the expiration of the lease. BLNR should take whatever action are necessary to compel the Army to fulfil the restoration clauses of the lease and then remove itself from The Trust's lands. The nonfeasance of the Army would be a basis for revoking the lease **now**, based on the breach of the contractual requirements to date. That possibility is not yet an issue.

The uses of PTA lands include intensive training by numerous federal, state, and county agencies. That intensive training includes live fire exercises, bombing, large vehicle maneuvering, and involvement of “larger than company-sized units (i.e., battalion and brigade)”. EISPN page 1-2

These activities have had substantial, significant, and adverse impacts on The Trust’s lands. The Proposal appears to be simply a request to continue such destructive behavior.

“State-owned land” with the quotes appears at the beginning of the notice and then the quotation marks immediately disappear. That rapid transition into an acceptance of the characterization that avoids acknowledging the trust nature of the lands disappears the history of how that land came to be in the hands of the State.

EISPN page 1-2

The Proposed Action does not involve new training, construction, or resource management activities at PTA. Instead, it is a real estate action that would enable continued military use of the State-owned land. EISPN 2-3

To diminish the nature of the Proposal to simply a real estate transaction ignores all the considerations compelled by the history.

“Prior to statehood, land in the Pōhakuloa area was held by the Kingdom of Hawai‘i. The lands were either Crown or Government lands until 1893, when the Hawaiian Kingdom was overthrown.”

EISPN page 3-7.

The EISPN somehow fails to mention that the United States Minister to Hawaii supported and enabled the overthrow of the Kingdom Government, including the landing of troops and weapons to threaten the Queen.

To acknowledge the United States role in that overthrow would be to acknowledge that the United States Government comes to this discussion with unclean hands, requesting permission to use the “fruits of the poisonous tree,” i.e. the stolen Kingdom lands.

“The successor government, the Republic of Hawai‘i, assumed ownership and control of these lands and continued public use.” EISPN 3-7.<sup>2</sup>

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<sup>2</sup> Note: The EISPN omits the formation of the illegitimate Provisional Government after the overthrow of the legitimate Kingdom Government and prior to the creation of the Republic of Hawaii Government.

Whereas, on the afternoon of January 17,1893, a Committee of Safety that represented the American and European sugar planters, descendants of missionaries, and

Whereas, the Republic of Hawaii also ceded 1,800,000 acres [7,280 km<sup>2</sup>] of crown, government and public lands of the Kingdom of Hawaii, **without the consent of or compensation to the Native Hawaiian people of Hawaii or their sovereign government**

Apology Resolution (emphasis added)

The EISPN makes no attempt to reconcile (1) how the illegitimate Republic of Hawaii could assume “ownership and control” of Kingdom lands, supposedly transferred to the Republic by the illegitimate Provisional Government, which then transferred those lands to the United States without permission or compensation with (2) the admission that the Republic was not a legitimate “successor” to the Kingdom Government and lacked the consent of the governed for its very existence.

Whereas, through the Newlands Resolution, the **self-declared** Republic of Hawaii ceded sovereignty over the Hawaiian Islands to the United States.

Apology Resolution (emphasis added).

**Whereas, the indigenous Hawaiian people never directly relinquished their claims to their inherent sovereignty as a people or over their national lands to the United States, either through their monarchy or through a plebiscite or referendum.**

Apology Resolution (emphasis added).

When the Republic of Hawai'i was annexed as a territory of the U.S. under the 1898 **Joint Resolution** of Annexation (30 Stat. 750), the Republic ceded these lands to the U.S. The U.S. accepted ownership of the lands in fee simple (i.e., owned completely without limitations or conditions). These lands are referred to as ceded lands (emphasis added).

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financiers deposed the Hawaiian monarchy and proclaimed the establishment of a Provisional Government;

Whereas, the United States Minister thereupon extended diplomatic recognition to the Provisional Government that was formed by the conspirators **without the consent of the Native Hawaiian people or the lawful Government of Hawaii and in violation of treaties between the two nations and of international law**

Whereas, on July 4, 1894, the Provisional Government **declared itself** to be the Republic of Hawaii

United States Public Law 103-150 (known as The Apology Resolution (emphasis added)).

EISPN at 3-7

The EISPN acknowledges that the “annexation” of the Kingdom took place pursuant to a Joint Resolution of the United States Congress. The Republic of Hawaii had no authority to agree to any such annexation and the United States Senate would not ratify a treaty of annexation with the usurping entities (Provisional Government/Republic of Hawaii). Instead, the United States relied upon the internal joint resolution as the basis for seizing the Kingdom lands. Yet the idea that one country can annex another country by simply passing a resolution is patently absurd.

The bottom line is that the United States facilitated an illegal overthrow of the Kingdom Government, treated those who had engaged in sedition as legitimate “successor” governments to the Kingdom Government, accepted the cession of Kingdom lands from the hands of outlaws with no authority to make such an agreement, and never legitimately annexed the Kingdom.

The lease to the United States Government to further abuse the Kingdom lands would simply be a continuation of the United States injustices inflicted upon the Kingdom.

### **The Trust Relationship**

A recent decision by the Hawai'i Supreme Court illuminates the trust obligations of the State that the Army ignores. *Ching v. Case*, SCAP-18-0000432. Given the importance of this ruling, a copy of that decision accompanies these comments.

The Hawai'i Supreme Court in the *Ching* case ruled that the State has failed to adequately monitor the damage being done to the trust lands by the PTA and documented evidence that supports a finding that the damage to those lands is extensive and has not been corrected, including unexploded ordinance and other environmentally damage.

The previous analysis of the “effects of current training activities at PTA” assumed that the Army would be in full compliance with its obligations under the lease and that the State would be in full compliance with its obligations to ensure that any permitted use of trust lands would benefit the beneficiaries of the 5(f) trust.

Neither condition has been met under the current lease.

These lands are held by the State in trust for the benefit of Native Hawaiians and the general public. Accordingly, our constitution places upon the State duties with respect to these trusts much like those of a common law trustee, including an obligation to protect and preserve the resources however they are utilized.

*Ching* at 2

The Hawai'i Supreme Court ruled that the State of Hawai'i Department of Land and Natural Resources (DLNR) has breached its fiduciary duty to The Trust by failing to even monitor

or inspect the actions of the Army to ensure compliance with lease conditions. *Ching, supra.*

The 22,900 acre tract of land, which is contained within the Pōhakuloa Training Area (PTA),<sup>2</sup> was leased to the United States for a term of sixty-five years, to expire August 16, 2029. *Ibid.* at 2-3.

In exchange, the United States paid the DLNR one dollar as a lease fee for the entire 65 years. *Ibid.* at 3.

For the State to lease out tens of thousand of acres belonging to The Trust for a period of more than six decades without receiving any compensation to The Trust mirrors the original taking of the Kingdom lands by the United States without compensation.

For the Army to subject those lands to extensive and intensive military uses makes the one dollar lease even more ludicrous and offensive.

The Court did not address the actual damage being committed every day by the Army's use of the lands. There are, however, lease obligations to clean up.

And, in Paragraph 29 of the lease, the United States agrees that, if required by the State upon the surrender of the property at the termination of the lease, it will "remove weapons and shells used in connection with its training activities to the extent that a technical and economic capability exists and provided that expenditures for removal of shells will not exceed the fair market value of the land."

*Ching at 5.*

This reference to the fair market value of the land is the only approach to quantifying the lost revenue resulting from the absence of rental fees. Here that value is used only to limit the ultimate liability of the Army for the removal of ordinance at the expiration of the lease.

Additionally, the lease provides in Paragraph 30 that any dispute over a question of fact regarding the lease must be decided by the "Division Engineer, U.S. Army Engineer Division," with a right of appeal to the Secretary of the Army. [footnote omitted] Paragraph 30 further provides that the decision of the Secretary or a duly authorized representative "shall be final and conclusive unless determined by a court of competent jurisdiction to have been fraudulent, or capricious, or arbitrary, or so grossly erroneous as necessarily to imply bad faith, or not supported by substantial evidence." The paragraph clarifies that questions of law may also be considered in connection with a dispute's resolution, but the decision of any administrative party on a question of law shall not be final. It further guarantees the State's right to be heard and to offer evidence in support of the appeal.

*Ching 7-8.*

The duty to monitor and inspect is a minimal requirement. The State abdicated that responsibility altogether. Absent such monitoring or inspection, the State and The Trust had no means of determining how much damage the Army was inflicting on The Trust's lands. Nor did the State or The Trust have a basis for requiring any corrective or restorative measures to be taken in response to such damage. Basically, the State and The Trust failed to perform their fiduciary duties to The Trust beneficiaries.

[T]he Plaintiffs asserted that they would be "deprived of their day in court if th[e] action were dismissed," which would be inconsistent with Hawaii Supreme Court decisions holding that beneficiaries must be able to keep government trustees accountable." Ching at 20. The right for The Trust and/or the beneficiaries to seek judicial remedies for stewardship failure by the Army and/or the State is now confirmed.

The public trust lands are state-owned lands held for the use and benefit of the people of the State of Hawai'i, and the State is the trustee of such lands. Accordingly, the State has "the highest duty to preserve and maintain the trust lands."

*Ching* at 31.

Throughout its findings of fact and conclusions of law, the circuit court referred to this obligation as the duty to *malama 'aina*, which the court translated as "to care for the land."

*Ching* at 31, n. 26

The conducting of intensive military operations on the land can hardly be characterized as "*malama 'aina*." To the contrary, the Army is at war with the *'aina*.

The United States prepared a report on conditions found at PTA.

"This report contained observations from cultural monitors who stated that "[r]emnants of live fire training are present within the BAX, including stationary targets, junk cars, an old tank, crudely built rock shelters, and miscellaneous military rubbish. Spent ammunition is scattered across the landscape." The report noted the cultural monitors feared that if the litter continued to remain on the land, "the land will be rendered **unusable forever**--one eighth of our island will become unavailable for use by any of our future generations."

*Ching* at 33 (emphasis added).

Allowing the Army's training and other activities to adversely affect the lands to the point of making them "unusable forever" is the ultimate failure on the part of the State and the Trust to protect and preserve the Trust's lands. Such malfeasance on the part of the Army should disqualify the Army from continuing to occupy and abuse The Trust's lands.

The State should move aggressively to compel the Army to restore the lands and allow the lease to expire.

## Documented damage

The record of Army disrespect for the lands is ample evidence of a cavalier attitude towards protecting and preserving the lands. The *Ching* litigation unearthed a long history of neglect on the part of the Army and a failure on the part of the State to identify and take measures to correct the Army's failures. Some examples in addition to the report mentioned above expressing concern that the land might be "unusable forever" include:

Remnants of military trash are everywhere. *Ching* at 32

[A] bazooka range contained on the leased PTA land was "heavily contaminated on the surface with material potentially presenting an explosive hazard [] and munition debris []." *Ching* at 33.

A subsequent inspection of the bazooka range by military explosive ordnance disposal units found mortars, bazooka rounds, and white phosphorous on the land. *Ching* at 33.

The Army determined that the debris found at the bazooka range "coupled with the accessibility to the public make for the potential for significant danger to public health and welfare." *Ching* at 33

The Army had allowed the creation of conditions sufficiently hazardous to constitute a "significant danger to public health and welfare." *Ching* at 33.

[A] March 2013 Final EIS stated that "[d]ecades of using PTA as a training area have introduced a significant risk of encountering [munitions]/UXO. *Ching* at 34.

[Munitions]/UXO [are] known to exist in the impact area and [are] expected to be encountered during range construction activities; but there is also a medium risk of finding [munitions]/UXO outside the impact area. *Ching* at 34.

The EIS also stated that "[p]ast and current activities at PTA have resulted in contamination of soil by explosives and other chemicals." *Ching* at 34.

[T]he 2002 Integrated Natural Resources Management Plan noted in a section setting forth the "Adverse Effects" of the "Military Mission on Natural Resources" that 22.9% of the ground cover in the surveyed area consisted of litter and "[t] was virtually no evidence of maintenance activity." *Ching* at 89, n. 55.

The circuit court found that the State breached its trust duties: by failing to conduct regular monitoring and inspections that were reasonable in frequency and scope to examine the condition of the leased PTA land; by failing to ensure that the terms of the lease that impact the condition of the leased PTA land were being followed; and by failing to take prompt and appropriate follow-up steps when it was made aware of evidence that the lease may have been violated with respect to protecting the

condition of the leased PTA land. In light of the foregoing, the circuit court did not err in these findings.

*Ching* at 89

[T]he State was aware that military training activities on the leased PTA land “pose[d] a significant and substantial risk of harm or damage to [the PTA], and persons who may come upon” the land , and “to public health, safety, and welfare, as well as Plaintiffs ‘ cultural interests in the [land]. *Ching* at 34.

There is an “unrebutted presumption that the State had failed to conduct any inspections prior to December 2014 to monitor or confirm the United States’ compliance” with the lease requirements related to preventing waste of the land.” *Ching* 37, n. 31.

The court stated that the State would further breach its trust duties “if they were to execute an extension, renewal, or any other change to the State General Lease No. S-3849, or enter into a new lease of the PTA if they were to execute an extension, renewal, or any other change to the State General Lease No. S-3849, or enter into a new lease of the PTA, without first determining (in writing) that the terms of the existing lease have been satisfactorily fulfilled.

*Ching* at 38.

Because the lower court ordered some remedies not requested by the Plaintiffs, designated those remedies as recommendations, rather than orders.

For the State to consider any extension of the current lease or a new lease for The Trust’s lands prior to a completed cleanup would constitute a further failure on the part of the State to fulfill its fiduciary duties to The Trust.

“[T]he Plaintiffs here are connected to the PTA and the manner in which the State manages it because the PTA is held in trust by the State for the Plaintiffs’ benefit.” *Ching* at 65.

This is to say that the trust duty that the Plaintiffs allege the State has breached is a duty the State owes to the Plaintiffs, and a declaration regarding whether the State has breached that duty would terminate the controversy by clarifying the contours of that duty. *Ching* at 65 (emphasis in original).

Pele Def. Fund, 73 Haw. 578, 605, 837 P.2d 1247, 1264 (1992) (“We find that the actions of state officials, acting in their official capacities, should not be invulnerable to constitutional scrutiny. Article XII, § 4 imposes a fiduciary duty on Hawai‘i’s officials to hold ceded lands in accordance with the § 5(f) trust provisions, and the citizens of the state must have a means to mandate compliance. *Ching* at 71-72

Hopefully the characterization of the Army's request as upside down and backwards is now clear. The party with an interest to be protected in this instance is The Trust. There is no concomitant obligation on the part of The Trust or the State to the Army.

### **Conservation District**

A second relevant trigger for the preparation of an EIS is that the proposed use is within a conservation district.

The lands in question are designated by the State as a conservation district. Overall, "Act 187 defined Conservation as meaning the protection of watersheds and water supplies; preserving scenic areas; providing park lands, wilderness and beach reserves; conserving endemic plants, fish, and wildlife; preventing floods and soil erosion; forestry; and other related activities." <https://dlnr.hawaii.gov/occl/conservation-district>. The central goal of the district is the conservation of natural resources.

In Hawai'i Administrative Rules section 13-5, there are eight criteria the Department of Land and Natural Resources must evaluate before allowing construction in a conservation district, such as Mauna Kea, with each of the eight being independently required.

Those eight criteria are as follows:

1. The proposed land use is consistent with the purpose of land conservation district;
2. The proposed land use is consistent with the objectives of the subzone of the land on which the use will occur;
3. The proposed land use complies with provisions and guidelines contained in Chapter 205A, HRS, entitled "Coastal Zone Management," where applicable;
4. The proposed land use will not cause substantial adverse impact to existing natural resources within the surrounding area, community or region;
5. The proposed land use, including buildings, structures and facilities, shall be compatible with the locality and surrounding areas, appropriate to the physical conditions and capabilities of the specific parcel or parcels;
6. The existing physical and environmental aspects of the land, such as natural beauty and open space characteristics, will be preserved or improved upon, whichever is applicable;
7. Subdivision of land will not be utilized to increase the intensity of land uses in the conservation district; and
8. The proposed land use will not be materially detrimental to the public health, safety and welfare."

There is hardly the need for a detailed examination of whether the Army Proposal complies with the requirements found in the eight criteria because the proposed Army actions are antithetical to the entire purpose of a conservation district. A sampling of the application of the criteria illustrates that conclusion.

As to Criterion 1, obviously, bombing, live fire, brigade size maneuvers, and extensive use of heavy equipment do not fit into the conservation district purposes.

As to Criterion 4, the proposed uses of the land will clearly “cause substantial adverse impact to existing natural resources within the surrounding area, community or region.”

As to Criterion 6, the natural beauty and open space characteristics will not be “preserved or improved upon.”

As to Criterion 8, the proposed land use will “be materially detrimental to the public health, safety and welfare.” The Army had allowed the creation of conditions sufficiently hazardous to constitute a “significant danger to public health and welfare.” *Ching* at 33.

### **Duties to the The Trust**

As the State concedes, our case law and the common law of trusts make the State “subject to certain general trust duties, such as a general duty to preserve trust property.” See, e.g., *Zimring*, 58 Haw. at 121, 566 P.2d at 735 (“Under public trust principles, the State as trustee has the duty to protect and maintain the trust property and regulate its use.”); *Kaho’ohanohano v. State*, 114 Hawai’i 302, 325, 162 P.3d 696, 719 (2007) (“[It] is always the duty of a trustee to protect the trust property . . . .” (quoting *Brenizer v. Supreme Council, Royal Arcanum*, 53 S.E. 835, 838 (N.C. 1906))); *In re Estate of Dwight*, 67 Haw. 139, 146, 681 P.2d 563, 568 (1984) (“A trustee is under a duty to use the care and skill of a [person] of ordinary prudence to preserve the trust property.” (citing *Bishop v. Pittman*, 33 Haw. 647, 654 (Haw. Terr. 1935))); *Restatement (Second) of Trusts* § 176 (“The trustee is under a duty to the beneficiary to use reasonable care and skill to preserve the trust property.”).

*Ching* at 75.

Giving permission for intensive and extensive military operations on The Trust’s lands does not “preserve trust property” or “protect and maintain the trust property.” The agency allowing such destructive use is not fulfilling its duty as trustee.

The State’s duty of care is especially heightened in the context of ceded land held in trust for the benefit of native Hawaiians and the general public under article XII, section 4 [of the Hawaiian Constitution]. This court has approvingly quoted the following in considering the ceded land trust:

The native Hawaiian people continue to be a unique and distinct people with their own language, social system, ancestral and national lands, customs, practices and institutions. The health and well-being of the native Hawaiian people is intrinsically tied to their deep feelings and attachment to the land. ‘Aina, or land, is of crucial importance to the native Hawaiian people--to their culture, their religion, their economic self-sufficiency and their sense of

personal and community well-being. ‘Aina is a living and vital part of the native Hawaiian cosmology, and is irreplaceable. The natural elements—land, air, water, ocean—are interconnected and interdependent. To native Hawaiians, land is not a commodity; it is the foundation of their cultural and spiritual identity as Hawaiians. The ‘aina is part of their ‘ohana, and they care for it as they do for other members of their families. For them, the land and the natural environment is alive, respected, treasured, praised, and even worshiped.

*Ching* at 72, n. 49 citing *Office of Hawaiian Affairs v. Hous. & Cmty. Dev. Corp. of Hawai‘i*, 121 Hawai‘i 324, 333, 219 P.3d 1111, 1120 (2009) (alterations omitted) (quoting *Office of Hawaiian Affairs v. Hous. & Cmty. Dev. Corp. of Hawai‘i*, 117 Hawai‘i 174, 214, 177 P.3d 884, 924 (2008)).

[T]he implied constitutional right of action does not permit a court to “turn back the clock” to grant retrospective relief for “actions already taken by the State.” *Id.* at 601, 837 P.2d at 1262.

*Ching* 62, note 41.

The bar on retrospective relief surely does not bar current decisions based on prior performance. This case has documented some of the many open and obvious instances of damage to The Trust Lands. See *infra* at 10-11. There is no need for the BLNR to seek enforcement action for past actions in order to find sufficient damage to The Trust lands to preclude the Army getting a free pass to continue inflicting such damage. The BLNR can decline to extend the lease based on the **agency’s** failure to adequately protect The Trust’s lands.

Everyone now knows that DLNR simply failed to monitor or inspect the lands to determine if there was remediation needed to respond to Army malfeasance. The appropriate response now would be to conduct a full examination of the PTA and adjacent lands to determine how much cumulative damage the Army has inflicted and adopt the remediation of those damages as required prior to expiration of the lease.

While that approach could produce restoration of the lands, the guiding truth is that the continued use of the land for military purposes will only lead to new damages that will then need to be remediated. Obviously, the only way to truly protect the lands is to seek to invalidate the lease now based on the extensive breaches of the lease terms meant to protect the land with the additional remedy of requiring remediation or allow the lease to expire and insist on a full clean up prior to that expiration.

### **The Lease Requirements**

The Lease does not contain a requirement for a complete restoration of damaged lands.

The lease includes the following paragraphs related to restoration of damaged lands:

Paragraph 9: Army is required to make every reasonable effort to remove or deactivate all live or blank ammunition when a training exercise is completed.

Paragraph 14: Army is required to avoid pollution or contamination of the leased lands and to dispose of trash and other waste materials resulting from Army use of the leased lands.

Paragraphs 18 and 19: Addresses the right of the State to enter upon the lands.

These requirements are far short of requiring the Army to fully restore the leased lands upon termination of the lease.

Given that decades have passed since the signing of the original lease, with the Army essentially operating without State oversight, the circumstances call for a broad reading of the Army's responsibilities now that the expiration date is approaching.

The impacts of discontinuing the Army use of The Trust's lands are **not** a matter that should guide the State's actions. The State signed a lease with the Army that has a termination date agreed to by both parties. Any inconvenience caused to the Army by expiration of the lease is not the concern of the State. To the contrary, the State focus should be on how to prevent any further damage to The Trust's lands and restore what has been damaged.

The Army's nonfeasance as a steward of The Trust lands cannot be ignored.

The obligation of the State is constitutionally required. Haw. Const. art XII §4. The lands granted to the State of Hawaii by Section 5(b) of the Admission Act and pursuant to Article XVI, Section 7, of the State Constitution, excluding therefrom lands defined as "available lands" by Section 203 of the Hawaiian Homes Commission Act, 1920, as amended, shall be held by the State as a public trust for native Hawaiians and the general public

Article XII, §7: The State reaffirms and shall protect all rights, customarily and traditionally exercised for subsistence, cultural and religious purposes and possessed by ahupua'a tenants who are descendants of native Hawaiians who inhabited the Hawaiian Islands prior to 1778, subject to the right of the State to regulate such rights.

While the Court found that the State did not have a duty to determine that the Army was in compliance with the existing lease prior to renewing the lease, the Army does have a duty to be in compliance that the BLNR can enforce. Based on evidence already in the record, there is probable cause for BLNR to initiate an investigation into the extent of Army malfeasance and nonfeasance in violation of the lease terms. Initiating such an investigation would appear to fall within the "nonbinding recommendations" suggested by the Supreme Court. Ching at 99.

Allowing the Army to continue with “business as usual” would be going in the opposite direction from the guidance provided by the Court.

The Army should be considering how to realign its thinking to focus on how to avoid any further damage to The Trust’s lands.

BLNR should realign its thinking to become the trustee required by the Constitution and laws, of the State, rather than making excuses for its failure to conduct adequate oversight of the Army.

## Land Retention

2.4 Land Retention Methods. Army Regulation 405-10 authorizes various methods for Army retention of non-federal government-owned land including title (full ownership), lease, easement, and license. These land retention methods can be accomplished by a variety of ways, In general, it is assumed that title is the land retention method that would result in the greatest potential impact because the other land retention methods could include restrictions, such as restrictions on the quantity and type of training, and could require mitigation to lessen potential impacts. Therefore, to account for the range of potential impacts that could result from the Proposed Action, the EIS will analyze potential impacts associated with obtaining title. Where impacts would be greater under a different land retention method, the EIS will state which land retention method was analyzed and why the impacts would be greater than those associated with title. **If Army decides to proceed with the Proposed Action, then the Army would negotiate the most appropriate land retention method(s) for the selected alternative with the State.** One or multiple land retention methods might be negotiated to achieve the selected alternative. Negotiation options cannot be known prior to initiation of negotiation, and negotiation cannot formally start before the conclusion of the EIS process.

EISPN at 1-2. (emphasis added).

This discussion of land retention methods appears to be based on the assumption that the Army will decide the land retention methods that best meets the Army’s needs without considering the needs and obligations of the State, particularly the State’s obligation to The Trust beneficiaries.

The Army’s negotiation position is that letting the lease expire (No Action Alternative) with be highly detrimental to the military uses of the land, i.e. they would be terminated. EISPN at 2-9 – 10.

Any investments made by the Army into facilities or equipment was done with the full knowledge that the lease expires in 2029.

There is no obligation on the part of the State/The Trust to allow the Army to continue using the land. There is no obligation on the part of the State to consider the impact on the Army of a State decision to allow the lease to expire without a new lease being in place.

The impacts on the State/The Trust are the proper focus. The uncertainties of current conditions of the land, e.g. the location of unexploded ordinance (UXO), makes it unlikely that any entity other than Army will be interested in leasing the land until such time as the United States has completed its clean-up of those lands.

The Army intent to retain the PTA lands contains a veiled threat to the State of Hawai'i Board of Land and Natural Resources, The Trust, and Native Hawaiians. The Army identifies methods by which the Army could achieve its goals as "including purchase, negotiation, donation, exchange, and **eminent domain**." EISPN at 2-10 (emphasis added). The inclusion of "eminent domain" is basically the Army saying that, if the State will not agree with what the Army wants, the Army will simply take the lands.

In a painful irony, the Army may argue that the military uses of the lands have been so extensive and damaging that the fair market value required by eminent domain will be minimal. The more damage the Army does to the land, the lower the fair market value and the lower the expenditure cap on how much the Army is required to spend to remove ordinance.

Another painful irony is that the Kingdom of Hawai'i national policy was to be a neutral nation. The heavy United States investment in militarization of the Islands makes the Islands a more likely point of hostile attack. The continued military use of the Islands makes the beneficiaries a more likely victim of such an attack.

If this inclusion of eminent domain was not made as a threat, then the Army should explicitly state that eminent domain is not an option being considered by the Army.

### **Community Input**

Is the Army really interested in public comment, particularly from community individuals and organizations?

"The Army is seeking public comments during the EIS scoping period from September 4, 2020 – October 14, 2020."

<https://home.army.mil/hawaii/index.php/ptaeis/project-announcements#2>

Providing only six weeks to prepare scoping comments on a 50+ page notice is insufficient time, particularly during this difficult time when people are struggling just to put food on the table and pay the rent.

Were organizations known to be interested in the further use of Mauna Kea for military purposes notified of the Notice that an EIS was going to be prepared for that continued use?

The EISPN states: List of “Community Institutions and Organizations” to be consulted:  
Kamehameha Schools  
Waiki’i Ranch Homeowners Association  
Waikoloa Village Association”  
EISPN at 7-3.

Those to be consulted are thus limited to contiguous land holders. That meager list of those to be consulted fails to include the many individuals and organizations that have been highly visible and vocal in opposing the continued military activities at PTA for many years.

The intent of the scoping process for this EISPN is to reach out early and engage a broad range of stakeholders with the purpose of informing, eliciting input, building relationships, and avoiding misunderstandings. EISPN at 6-1

Those noble goals can hardly be accomplished absent communication with those who have opposed the PTA for years. The Army has hosted or attended innumerable events and meetings at which the issue of Pōhakuloa was part of the agenda. Surely the Army can generate a list of potentially interested parties – either organizations or individuals – who participated in those meetings or other discussions relevant to the continued use of PTA.

## **The Future**

The 65-year lease of the Trust’s lands expires on August 16, 2029.

Where in this process/timeline between now and the expiration date does wind down and clean up occur? As a minimum, the State should have the Army’s plan for clean-up and restoration of all State lands in hand before even entertaining a request for a new lease or extension of the prior lease is considered. The clean-up and restore obligation is fulfillment of the terms of the current lease. That fulfillment must occur prior to the expiration of the lease or BLNR must determine methods available to compel compliance.

Certainly, withholding consideration of any application for a CDUP until such time as a comprehensive clean-up is completed is one point of leverage. Even then, allowing the Army to continue its abuses should be foreclosed to protect The Trust’s lands.

The expiration of the lease for PTA comes at a time when the truth of the past is emerging to challenge the continuation of unacceptable behavior. That truth is immutable. The BLNR is either the Trustee for The Trust **OR** BLNR abandons its fiduciary trust duties to enable the Army to continue its destructive use of The Trust’s assets.

NOTE: These comments are filed on behalf of the Temple of Lono, a traditional Hawaiian faith, and are strictly intended to respond to the Notice of Intent to prepare an EIS. These comments are not to be considered as part of any consultation as required by Section 106 of the National Historic Preservation Act of 1966 (NHPA).

## Post Script

Recently, Hawai'i County Civil Defense alerted the PTA that military ordinance is currently being dumped illegally.

<https://bigislandnow.com/2020/09/15/apparent-illegal-dumping-found-near-ookala/>

<https://www.bigislandvideonews.com/2020/09/16/dump-site-in-ookala-includes-discarded-military-waste/>

The Army apparently failed to select a qualified company to dispose of the military waste or failed to oversee that disposal. The State also failed.

## Conclusion

The time has come for the United States to acknowledge the wrongs of the past, to take action to correct those wrongs, and to avoid committing further injustices against Native Hawaiians. The only honorable path is for the Army to prepare a comprehensive remediation plan and begin to transition off the Mauna as soon as possible, with a goal of completing the transition and remediation prior to the expiration of the lease.

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IN THE SUPREME COURT OF THE STATE OF HAWAII

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CLARENCE CHING and MARY MAXINE KAHAULELIO,  
Plaintiffs-Appellees,

vs.

SUZANNE CASE, in her official capacity as Chairperson  
of the Board of Land and Natural Resources and  
State Historic Preservation Officer, BOARD OF LAND AND NATURAL  
RESOURCES, and DEPARTMENT OF LAND AND NATURAL RESOURCES,  
Defendants-Appellants.

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SCAP-18-0000432

APPEAL FROM THE CIRCUIT COURT OF THE FIRST CIRCUIT  
(CAAP-18-0000432; CIV. NO. 14-1-1085-04)

AUGUST 23, 2019

RECKTENWALD, C.J., NAKAYAMA, McKENNA, POLLACK, AND WILSON, JJ.

OPINION OF THE COURT BY POLLACK, J.

### I. INTRODUCTION

Under the Hawai'i Constitution, all public natural resources are held in trust by the State for the common benefit of Hawai'i's people and the generations to come. Additionally,

the constitution specifies that the public lands ceded to the United States following the overthrow of the Hawaiian Monarchy and returned to Hawai'i upon its admission to the Union hold a special status under our law. These lands are held by the State in trust for the benefit of Native Hawaiians and the general public. Accordingly, our constitution places upon the State duties with respect to these trusts much like those of a common law trustee, including an obligation to protect and preserve the resources however they are utilized.

Several parcels of ceded land on the island of Hawai'i that are indisputably held in public trust by the State have been leased to the federal government of the United States of America for military training purposes, subject to a number of lease conditions designed to protect the land from long-term damage or contamination. This case concerns the degree to which the State must monitor the leased trust land and the United States' compliance with the lease terms to ensure the trust property is ultimately safeguarded for the benefit of Hawai'i's people.

We hold that an essential component of the State's duty to protect and preserve trust land is an obligation to reasonably monitor a third party's use of the property, and that this duty exists independent of whether the third party has in fact violated the terms of any agreement governing its use of

the land. To hold otherwise would permit the State to ignore the risk of impending damage to the land, leaving trust beneficiaries powerless to prevent irreparable harm before it occurs. We therefore affirm the trial court's determination that the State breached its constitutional trust duties by failing to reasonably monitor or inspect the trust land at issue.

## II. BACKGROUND

### A. Lease No. S-3849

On August 17, 1964, the State of Hawai'i Department of Land and Natural Resources (DLNR) entered into a written agreement to lease three tracts of ceded land situated at Ka'ohē, Hāmākua and Pu'uānāhulu, North Kona, Hawai'i to the United States for military purposes.<sup>1</sup> The 22,900 acre tract of land, which is contained within the Pōhakuloa Training Area (PTA),<sup>2</sup> was leased to the United States for a term of sixty-five years, to expire

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<sup>1</sup> Hawaii's ceded lands are lands which were classified as government or crown lands prior to the overthrow of the Hawaiian monarchy in 1893. Upon annexation in 1898, the Republic of Hawaii ceded these lands to the United States. In 1959, when Hawaii was admitted into the Union, the ceded lands were transferred to the newly created state, subject to the trust provisions set forth in § 5(f) of the Admission Act.

Pele Def. Fund v. Paty, 73 Haw. 578, 585, 837 P.2d 1247, 1254 (1992).

<sup>2</sup> The PTA as a whole is approximately 134,000 acres and includes land ceded to the United States military by Presidential and Governor's Executive Orders, land purchased by the United States in fee simple from a private owner, and land that is leased from the State.

on August 16, 2029. In exchange, the United States paid the DLNR one dollar.

The lease gives the United States the right to "have unrestricted control and use of the demised premises." The lease also establishes several duties that the United States is obligated to fulfill during the course of the lease. Most notably for purposes of this appeal, Paragraph 9 of the lease requires that the United States "make every reasonable effort to . . . remove and deactivate all live or blank ammunition upon completion of a training exercise or prior to entry by the [] public, whichever is sooner."<sup>3</sup> In Paragraph 14 of the lease, the United States agrees to "take reasonable action during its use of the premises herein demised to prevent unnecessary damage to or destruction of vegetation, wildlife and forest cover, geological features and related natural resources" and to "avoid pollution or contamination of all ground and surface waters and remove or bury all trash, garbage and other waste materials

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<sup>3</sup> Paragraph 9 of the lease states the following:

In recognition of public use of the demised premises, the Government shall make every reasonable effort to stockpile supplies and equipment in an orderly fashion and away from established road and trails and to remove or deactivate all live or blank ammunition upon completion of a training exercise or prior to entry by the said public, whichever is sooner.

resulting from [the United States'] use of the said premises."<sup>4</sup>  
And, in Paragraph 29 of the lease, the United States agrees that, if required by the State upon the surrender of the property at the termination of the lease, it will "remove weapons and shells used in connection with its training activities to the extent that a technical and economic capability exists and provided that expenditures for removal of shells will not exceed the fair market value of the land."<sup>5</sup>

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<sup>4</sup> Paragraph 14 provides the following:

In recognition of the limited amount of land available for public use, of the importance of forest reserves and watersheds in Hawaii, and of the necessity for preventing or controlling erosion, the Government hereby agrees that, commensurate with training activities, it will take reasonable action during its use of the premises herein demised to prevent unnecessary damage to or destruction of vegetation, wildlife and forest cover, geological features and related natural resources and improvements constructed by the Lessor, help preserve the natural beauty of the premises, avoid pollution or contamination of all ground and surface waters and remove or bury all trash, garbage and other waste materials resulting from Government use of the said premises.

<sup>5</sup> Paragraph 29 provides the following:

The Government shall surrender possession of the premises upon the expiration or sooner termination of this lease and, if required by the Lessor, shall within sixty (60) days thereafter, or within such additional time as may be mutually agreed upon, remove its signs and other structures; provided that in lieu of removal of structures the Government abandon them in place. The Government shall also remove weapons and shells used in connection with its training activities to the extent that a technical and economic capability exists and provided that expenditures for removal of shells will not exceed the fair market value of the land.

The lease also places a number of corresponding rights and duties on the DLNR. The most relevant to the present case is established in Paragraph 18, in which the DLNR agrees to "take reasonable action during the use of the said premises by the general public, to remove or bury trash, garbage and other waste materials resulting from use of the said premises by the general public."<sup>6</sup> In Paragraph 19, the lease also grants the DLNR the "right to enter upon the demised premises at all reasonable times to conduct any operations that will not unduly interfere with activities of the [United States] under the terms of the lease," subject to "obtaining advance clearance" from the United States.<sup>7</sup>

Additionally, the lease provides in Paragraph 30 that any dispute over a question of fact regarding the lease must be

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<sup>6</sup> Paragraph 18 provides the following:

The Lessor hereby agrees that, commensurate with the public use of the premises herein demised, it will take reasonable action during the use of said premises by the general public, to remove or bury trash, garbage and other waste materials resulting from use of the said premises by the general public.

<sup>7</sup> Paragraph 19 provides the following:

Subject to obtaining advance clearance from the plans and training office of the Government's controlling agency, or any other designated Government agency, officials and employees of the Lessor shall have the right to enter upon the demised premises at all reasonable times to conduct any operations that will not unduly interfere with activities of the Government under the terms of this lease; provided however, that such advance clearance shall not be unreasonably held.

decided by the "Division Engineer, U.S. Army Engineer Division," with a right of appeal to the Secretary of the Army.<sup>8</sup> Paragraph 30 further provides that the decision of the Secretary or a duly authorized representative "shall be final and conclusive unless determined by a court of competent jurisdiction to have been fraudulent, or capricious, or arbitrary, or so grossly erroneous as necessarily to imply bad faith, or not supported by substantial evidence." The paragraph clarifies that questions

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<sup>8</sup> Paragraph 30 provides the following:

(a) That, except as otherwise provided in this lease, any dispute concerning a question of fact arising under this lease which is not disposed of by agreement shall be decided by the Division Engineer, U.S. Army Engineer Division, Pacific Ocean, Honolulu, Hawaii, hereinafter referred to as said officer, who shall within a reasonable time reduce his decision and the reasons therefor to writing and mail or otherwise furnish a copy thereof to the Lessor. The decision of the said officer shall be final and conclusive unless, within thirty (30) days from the date of receipt of such copy, the Lessor mails or otherwise furnishes to the said officer a written appeal addressed to the Secretary of the Army. The decision of the Secretary or his duly authorized representative for the determination of such appeals shall be final and conclusive unless determined by a court of competent jurisdiction to have been fraudulent, or capricious, or arbitrary, or so grossly erroneous as necessarily to imply bad faith, or not supported by substantial evidence. In connection with any appeal proceeding under this condition, the Lessor shall be afforded an opportunity to be heard and to offer evidence in support of its appeal.

(b) This Condition does not preclude consideration of law questions in connection with decisions provided for in paragraph (a) above: Provided, that nothing in this Condition shall be construed as making final the decision of any administrative official, representative, or board on a question of law.

(c) That all appeals under this provision shall be processed expeditiously.

of law may also be considered in connection with a dispute's resolution, but the decision of any administrative party on a question of law shall not be final. It further guarantees the State's right to be heard and to offer evidence in support of the appeal.

**B. The Plaintiffs' Request to Access Government Records**

In January 2014, Clarence Ching filed a request with the Chairperson of the Board of Land and Natural Resources (BLNR) to access government records. Ching requested the following government records:

1. Paragraph 9 of State General Lease No. S-3849 (with the U.S. Army relating to Pohakuloa) requires the United States Government to "make every reasonable effort to . . . remove or deactivate all live or blank ammunition upon completion of a training exercise or prior to entry by the said public, whichever is sooner." Please provide all government records that show (a) the U.S. Government's compliance or non-compliance with this lease term and (b) the Department of Land and Natural Resources or Board of Land and Natural Resources efforts at ensuring compliance with this term of the 1964 lease. This would include, but [is] not limited to, correspondence, inspection and monitoring reports, and meeting notes.

2. Paragraph 14 of the same lease requires the U.S. Government to "remove or bury all trash, garbage or other waste materials." Please provide all government records that show (a) the U.S. Government's compliance or non-compliance with this lease term and (b) the Department of Land and Natural Resources or Board of Land and Natural Resources efforts at ensuring compliance with this term of the 1964 lease. This would include, but [is] not limited to, correspondence, inspection and monitoring reports, and meeting notes.

The DLNR responded that the request would be granted in its entirety. The response stated that the DLNR was providing its

entire file on the lease (the lease file), which, based on its review, contained no records responsive to Ching's request.

### **C. The Circuit Court Action**

#### **1. Complaint**

Three months later, Ching and Mary Maxine Kahalelio (collectively, "the Plaintiffs") filed a complaint in the Circuit Court of the First Circuit (circuit court) against the BLNR, DLNR, and William J. Aila, Jr., in his official capacity as Chairperson of the BLNR and State Historic Preservation Officer (collectively, "the State").<sup>9</sup> In their complaint, the Plaintiffs alleged that the State, as trustee of the state's ceded lands, breached its trust duty "to protect and maintain the[] public trust lands" in the PTA. The complaint specified that it was not alleging that the United States had violated the terms of its lease, but rather that the State has reason to believe that the lease terms may have been violated and has a trust duty to investigate and take all necessary steps to ensure compliance with the terms of the lease.

According to the complaint, Ching is a descendant of the aboriginal people of Hawai'i and engages in native Hawaiian

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<sup>9</sup> Under Hawai'i Rules of Appellate Procedure Rule 43(c), a public officer named in a case is automatically substituted by his or her successor when the holder of the office ceases to hold office on appeal. Accordingly, Suzanne Case has been substituted for William J. Aila, Jr., whom she succeeded as Chairperson.

cultural practices, which includes walking in the footsteps of his ancestors on hiking trails located within the PTA. He also participates in other "traditional and customary services" within the PTA, the complaint explained. Kahalelio is also a descendant of the aboriginal people of Hawai'i, the complaint stated. She is at least 50% native Hawaiian and a beneficiary of the Hawaiian Home Lands Trust, the complaint continued, as well as a Hawaiian Home Lands lessee. The complaint further stated that both Ching and Kahalelio are beneficiaries of the ceded trust lands.

Citing a March 2013 letter by a DLNR staff member, the complaint alleged that the State was aware of the possibility that the land leased to the United States was littered with unexploded ordnance (UXO) and "munitions and explosives of concern."<sup>10</sup> The Plaintiffs asserted that the State did not know whether the United States had complied with the lease because they had taken "no concrete steps to investigate, monitor or ensure compliance" with the lease. Because the State was obligated to protect, care for, and maintain trust property by investigating the United States' compliance with the lease and

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<sup>10</sup> The Plaintiffs' First Amended Complaint added four paragraphs citing a state-run website and several federal cases that allegedly demonstrated that the State was aware that the United States' military had failed to clean up ordnance on other land leased to the United States.

failed to do so, the Plaintiffs contended that the State "failed to fulfill [its] trust duties with respect to the ceded land leased" to the United States.

The Plaintiffs requested a declaration that the State breached its trust obligations, an order to require the State to fulfill its trust duties with respect to the leased land, and an injunction to bar the State from negotiating an extension of the lease or from entering into a new lease of the PTA until the State ensures that the terms of the existing lease have been fulfilled.<sup>11</sup>

## **2. Motions for Summary Judgment**

### **a. The Motions**

After the State filed its answer, the Plaintiffs filed a Motion for Summary Judgment. In their motion, the Plaintiffs asserted that under article XII, section 4 and article XI, section 1 of the Hawai'i Constitution, the State is the trustee of the public ceded lands trust and of public natural resources, and it therefore has a trust duty to "monitor, inspect and investigate to ensure that public trust lands are not being

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<sup>11</sup> Approximately one month after the Plaintiffs filed their complaint, the State filed a notice of removal from the circuit court to the United States District Court for the District of Hawai'i. The Plaintiffs subsequently filed a motion to remand the case back to circuit court. The federal district court granted the Plaintiffs' motion, concluding that "at issue is a purely state-law breach of trust claim raising numerous questions of fact and substantial questions of Hawaii law regarding the State's obligations as to ceded lands."

damaged--particularly if [it] has reason to believe that trust property is at risk." Despite the State's awareness of the possibility that the terms of the lease may have been violated, the Plaintiffs argued, the State took no steps to ensure compliance with the lease terms. Its failure to investigate the condition of the land, the Plaintiffs contended, fell well below its standard of care and constituted a breach of its trust duties. The Plaintiffs concluded that the equitable relief requested was warranted because they were entitled to prevail on the merits, there was a grave risk posed to the ceded land, and the public interest weighed in their favor.

In its Memorandum in Opposition, the State argued that the Plaintiffs' Motion for Summary Judgment should be denied because the Plaintiffs did not allege that any provision of the lease had been violated, and it asserted that the United States' obligation to clean the leased property will not arise until 2029. In the absence of an alleged breach, the State maintained that the Plaintiffs' claims amounted to "speculation or predictions about future harm" that did not present an "actual controversy" suitable for judicial resolution.

The State also contended that the Plaintiffs were seeking relief that was unavailable under Hawai'i Revised Statutes (HRS) § 632-1 (1993), as the relief requested would not bring an end to the controversy or resolve the dispute with

finality.<sup>12</sup> The State posited that "even if the injunctive relief sought by Plaintiffs is ordered by the Court, Plaintiffs will still dispute the extent of any cleanup efforts by the United States" because the requested relief would require "the State to engage in some undefined form of oversight of the United States military." Therefore, the State concluded, the Plaintiffs' concerns and the underlying controversy did not meet the statutory requirements for declaratory relief.

Additionally, the State argued that the Plaintiffs were not entitled to declaratory relief because the declaratory judgment statute limits declaratory actions to claims for which no alternative statutory relief is available. Here, the State concluded, HRS § 673-1 (1993) provides a cause of action for native Hawaiians' to bring a claim for breaches of relevant

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<sup>12</sup> HRS § 632-1 provides the following in relevant part:

Relief by declaratory judgment may be granted in civil cases where an actual controversy exists between contending parties, or where the court is satisfied that antagonistic claims are present between the parties involved which indicate imminent and inevitable litigation, or where in any such case the court is satisfied that a party asserts a legal relation, status, right, or privilege in which the party has a concrete interest and that there is a challenge or denial of the asserted relation, status, right, or privilege by an adversary party who also has or asserts a concrete interest therein, and the court is satisfied also that a declaratory judgment will serve to terminate the uncertainty or controversy giving rise to the proceeding. Where, however, a statute provides a special form of remedy for a specific type of case, that statutory remedy shall be followed[.]

constitutional trusts, and the Plaintiffs were thus obligated to proceed under that statutory framework.<sup>13</sup>

In reply, the Plaintiffs contended that the State was incorrect in asserting that the duty of the United States to clean the property did not arise until the lease expired because Paragraph 9 of the lease required the United States to clean the land during the lease--specifically, when it completed a training exercise. The Plaintiffs also argued that injunctive relief is appropriate "in a case involving a traditional equitable claim when a trustee breaches its fiduciary obligations," noting that HRS § 632-3 (1993)<sup>14</sup> empowers courts to grant ancillary equitable relief. (Citing Food Pantry, Ltd. v. Waikiki Bus. Plaza, Inc., 58 Haw. 606, 613-14, 575 P.2d 869, 875-76 (1978); Natatorium Pres. Comm. v. Edelstein, 55 Haw. 55,

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<sup>13</sup> HRS § 673-1 provides in relevant part as follows:

(a) The State waives its immunity for any breach of trust or fiduciary duty resulting from the acts or omissions of its agents, officers and employees in the management and disposition of trust funds and resources of:

. . . .

(2) The native Hawaiian public trust under article XII, sections 4, 5, and 6 of the Constitution of the State of Hawaii implementing section 5(f) of the Admission Act[.]

<sup>14</sup> HRS § 632-3 provides that "[f]urther relief based on a declaratory judgment may be granted whenever necessary or proper, after reasonable notice and hearing, against any adverse party whose rights have been adjudicated by the judgment."

515 P.2d 621 (1973); King v. Oahu Ry. & Land Co., 11 Haw. 717, 738 (Haw. Rep. 1899).)

The State filed its own Motion for Summary Judgment that restated the arguments from the State's Memorandum in Opposition to the Plaintiffs' Motion for Summary Judgment verbatim.<sup>15</sup>

### **b. Supplemental Briefing**

After a hearing,<sup>16</sup> the Plaintiffs submitted a Supplemental Memorandum in Support of their Motion for Summary Judgment, which argued that further discovered evidence demonstrated that the DLNR had not conducted an inspection of the PTA since 1984. For example, between 1984 and the start of the current litigation, there had been no communication between the State and the United States regarding compliance with the lease, the Plaintiffs asserted.<sup>17</sup> This demonstrated that the

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<sup>15</sup> At a hearing regarding the motions, the State also argued that it should prevail on the merits because an internal memorandum attached to its Memorandum in Opposition showed that there were internal discussions at the DLNR regarding the monitoring of the United States' compliance with the lease. This memorandum was sent from the Acting Hawai'i Branch Manager of the Division of Forestry and Wildlife (DOFAW) to the DLNR regarding DOFAW's comments on cancellation and issuance of a new lease with the United States for the PTA. One concern noted by DOFAW was that the United States "should sweep the lands . . . for UXO and remove any UXO found at their expense to make the area safe for the public."

<sup>16</sup> The Honorable Gary W.B. Chang presided.

<sup>17</sup> On November 14, 2014, approximately one month after the hearing and one week before the Plaintiffs filed their supplemental memorandum, the DLNR sent a letter to a United States Army officer requesting the following:

(continued . . .)

State had not made a sufficient effort to protect the trust land, the Plaintiffs contended.

In the State's Supplemental Memorandum, it asserted that several records from the lease file showed that it had actively engaged in monitoring since the execution of the lease, including records of one formal inspection of the PTA, maps indicating locations where UXO may be located, reviews of the United States' compliance done in connection with amendments to the lease, and "informal communications" relating to the lease. The State also pointed to a written request it had sent to the United States for a description of its procedures to comply with the lease provisions at issue. The State asserted that the United States responded to the letter "with detailed information about their clean-up and post-training procedures." Because the letter demonstrated that the State had undertaken monitoring of the PTA, it concluded, there was no longer a justiciable controversy.

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(. . . continued)

[A] description of the procedures utilized to comply with the[] provisions of Lease No. S-3849, including detailed information about any action taken by the United States following training exercises to remove or deactivate ordnance, as well as actions taken to remove trash or garbage resulting from Government use of the lease premises.

In the Plaintiffs' Reply, they contended that even if the 1984 inspection was "complete and thorough," it is not sufficient to show that the State is currently fulfilling its trust duties because there was no evidence of an inspection since 1984. Thus, the State failed to demonstrate that it had fulfilled its trust duties, the Plaintiffs concluded.

### **c. Orders Denying Summary Judgment**

The circuit court denied the Plaintiffs' Motion for Summary Judgment, stating that there were genuine issues of material fact as to whether the State had discharged its trust duties. The court also denied the State's Motion for Summary Judgment because the court found, inter alia, that there was an "actual controversy regarding whether or not the State ha[d] discharged its responsibilities as a trustee of public lands."

### **3. Motions to Join the United States as a Party**

After its Motion for Summary Judgment was denied, the State filed a Motion to Add the United States as a Party or, in the Alternative, for Dismissal in which it argued that under Hawai'i Rules of Civil Procedure (HRCP) Rule 21 (1980), adding the United States was appropriate because, as the lessee of the leased land within the PTA, the United States had a legal and beneficial interest in the subject matter of the Plaintiffs' complaint. The State also contended that the United States was a necessary party under HRCP Rule 19(a) (2000) because complete

relief could not be accorded in its absence. Resolution of the action would necessarily include an interpretation of the lease provisions, the State contended, and the United States would not be able to defend its interests under the lease if it were not added as a party. And, asserted the State, in the context of leases, Hawai'i courts have held that all parties to a lease are necessary parties in any equitable action that interprets or touches upon the lease. (Citing Foster v. Kaneohe Ranch Co., 12 Haw. 363, 365 (Haw. Rep. 1900).)

Finally, the State argued that the United States is an indispensable party under HRCF Rule 19(b) and therefore the suit should be dismissed if it cannot be joined.<sup>18</sup> Under the first factor of HRCF Rule 19(b), a judgment rendered in the absence of the United States would be prejudicial to it because it "would be forced to accept factual findings that directly bear on whether the United States has breached the Lease," the State asserted. Under the rule's second factor, a court could not

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<sup>18</sup> HRCF Rule 19(b) provides that courts should weigh the following factors when determining whether a party is indispensable:

[F]irst, to what extent a judgment rendered in the person's absence might be prejudicial to the person or those already parties; second, the extent to which, by protective provisions in the judgment, by the shaping of relief, or other measures, the prejudice can be lessened or avoided; third, whether a judgment rendered in the person's absence will be adequate; fourth, whether the plaintiff will have an adequate remedy if the action is dismissed for nonjoinder.

shape the relief to ameliorate the prejudicial effect of the judgment because "[n]ew or different monitoring" or limitations on the United States' current use of the land were fundamental to the relief sought by the Plaintiffs, the State argued.

Applying the third factor, the State asserted that a judgment rendered in the absence of the United States would be inadequate because the United States was ultimately the party that the Plaintiffs sought to hold responsible for causing the waste of the trust property. And fourth, the State contended that the Plaintiffs had an alternate remedy for their breach of trust claims: an action in federal court that also names the United States or an action brought in state court pursuant to HRS § 673-1.

The Plaintiffs responded that the circuit court should deny the State's motion because, contrary to the State's argument that the Plaintiffs' complaint was based on a violation of the lease, they were asserting "a basic state-law breach of trust claim." The United States was not a necessary nor indispensable party to the case under HRCF Rule 19(a), the Plaintiffs argued, because any effect on federal interests was "purely speculative," and any relief that would require the State to increase its monitoring would not impinge on the United States' rights under the lease because the State already has a right of entry under the lease. And, even assuming the State

were to eventually take actions that affect the United States' interests as a result of a judicial ruling in this case, the United States was well protected because any dispute between it and the State would be decided by an agent of the United States under the lease, the Plaintiffs contended.

Next, the Plaintiffs contended that even if the United States was a party that should be joined if possible under HRCF Rule 19(a), it was not an indispensable party under HRCF Rule 19(b). The rule's first factor weighed against the State, the Plaintiffs argued, because a "judgment [would] not prejudice the interests of the U.S. whatsoever" as it would "not [be] bound by any findings made to a case in which it is not a party." Second, the Plaintiffs asserted that the court could fashion its relief to ensure that the United States does not suffer any prejudice by, for example, ordering the State to provide a report to the court thirty days prior to an annual evidentiary hearing to ensure the State's compliance with the lease. Third, the Plaintiffs stated that it would be able to obtain adequate relief in the absence of the United States. Fourth, the Plaintiffs asserted that they would be "deprived of their day in court if th[e] action were dismissed," which would be inconsistent with Hawai'i Supreme Court decisions holding that beneficiaries must be able to keep government trustees accountable.

The United States then filed a statement of interest in which it asserted that it "unquestionably has an interest" in the subject matter of the litigation that was "clearly sufficient" for joinder, if it were feasible.<sup>19</sup> But joinder was not feasible, it explained, because "such a state action against the United States is barred by its sovereign immunity" and neither party had identified a congressional waiver of sovereign immunity.<sup>20</sup> The United States asserted that disposition of the action in its absence may impair its ability to protect its interest, making it a necessary party under HRCF Rule 19(a).<sup>21</sup>

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<sup>19</sup> Prior to this filing, the court denied without prejudice the State's Motion to Add the United States as a Party, or in the Alternative, for Dismissal "because of the possibility that the United States will make a determination that it has a sufficient interest to appear in this case." After the United States filed its Statement of Interest, the State filed a Motion to Dismiss for Failure to Join an Indispensable Party, or in the Alternative, for Summary Judgment in which it made substantially similar arguments to those made in its first motion as to why the United States was a necessary and indispensable party under HRCF Rule 19. The latter motion also argued that the action was nonjusticiable because, *inter alia*, it presented a political question falling within the discretion of the executive branch and the court could not resolve an "actual controversy" due to the vagueness of the requested relief. For the sake of clarity, this opinion addresses the two motions together with respect to the necessity and indispensability of the United States as a party.

<sup>20</sup> The United States noted that filing a statement of interest neither constitutes a formal intervention nor makes the United States a party to the proceedings and thus does not amount to a waiver of sovereign immunity. (Citing M.R. v. Dreyfus, 697 F.3d 706, 735 (9th Cir. 2012).)

<sup>21</sup> The United States used the PTA, it stated, for "combined live-fire and maneuver training," which "is critical because military operations require significant coordination." Additionally, the United States explained that the PTA cannot operate as an effective training area without the land leased from the State, because, for safety purposes, the artillery firing ranges contained within the PTA must be situated so that the artillery lands in areas in which soldiers and the general public do not travel. The leased land provides such safety, the United States noted. The leased land was also

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The United States contended that the court could not assess the Plaintiffs' breach of trust claim without "directly or indirectly interpreting the lease and determining factual issues regarding whether the United States has complied with the lease." The Plaintiffs were therefore improperly asking a state court to interpret the United States' obligations under the lease, the United States argued.

The United States also maintained that when a non-party cannot be joined due to sovereign immunity, the first factor--the "extent a judgment rendered in the [party's] absence might be prejudicial to the [party] or those already parties"--takes primary importance and "should weigh heavily in the Rule 19(b) analysis." The Plaintiffs' relief would cause "serious harm" to it, the United States contended, for several reasons. An injunction barring the State from renegotiating the lease would seriously harm the United States because the PTA "is essential for readiness of all the forces" in the Pacific region and there is no other location in the Pacific at which the

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(. . . continued)

crucial to the United States training operations, it explained, because the land contains (1) a "Battle Area Complex," which "allows soldiers to train and test their ability to detect, identify, engage and defeat stationary and moving targets in both open and urban terrain environments," (2) a "Modular Military Operations in Urban Terrain," which "is designed to look like villages/towns and contains different types of buildings to practice military operations," and (3) the Cooper Airstrip, which "is used to practice launches and recovery of Shadow Unmanned Aircraft."

training done at the PTA could be accomplished, the United States asserted. Additionally, if the court instead ordered the State to conduct inspections of the leased land, such inspections could burden the United States, it contended, because it could disrupt critical training and raise safety issues.

As to the second factor in the HRCF Rule 19(b) analysis, the extent that prejudice can be avoided through the shaping of relief, the United States contended that the Plaintiffs' proffered shaping of relief would put the extension of the lease in doubt or disrupt the military's training.<sup>22</sup> And as to the fourth factor in the HRCF Rule 19(b) analysis, the adequacy of available remedies should the suit be dismissed, the United States argued that "[c]ourts have recognized . . . that the lack of an alternative forum does not automatically prevent dismissal of a suit where the inability results from the non-party's sovereign immunity."<sup>23</sup>

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<sup>22</sup> As stated, the Plaintiffs asserted that injunctive relief regarding the lease could be shaped by "enjoin[ing] the defendants from executing an agreement extending the lease or entering into a new lease until the defendants ensure that the terms of the existing lease have been fulfilled." They also contended that the court could shape relief in regards to monitoring by ordering that "the defendants provide a report to [the circuit] court thirty days prior to annual evidentiary hearings on defendants' efforts to ensure compliance with the lease."

<sup>23</sup> The United States did not address the third factor of HRCF Rule 19(b), the adequacy of a judgment rendered in the party's absence.

The United States further stated that, in the event the case were permitted to go forward and "relief were entered that impacted the interests of the United States," the United States "would at that time consider what action to take, including whether to file a motion to intervene as a party for the purpose of removing the case to United States District Court pursuant to 28 U.S.C. § 1442(a)."

The court denied the State's motion without prejudice, determining that "things may unfold as a matter of proof during the trial that may implicate some of the arguments being raised." Based on the pre-trial record, "the Court believe[d] it would be improvident to dismiss any of the claims."

#### **4. Trial**

A bench trial commenced, during which the Plaintiffs presented a series of witnesses who testified regarding the DLNR's management of the leased PTA lands.

The Plaintiffs first called Kevin Moore, the DLNR's custodian of records who responded to the request for government records that Ching filed before the start of litigation. Moore testified that although DLNR's normal practice is to attempt to inspect leased lands at least once every two years, the leased PTA land is more difficult to inspect and therefore inspections are conducted less frequently. Moore stated that the DLNR's lease file contained records of only three inspections of the

leased PTA land: one from 1984 that indicated the inspection lasted "no more than one day," which Moore acknowledged was not enough time for an inspector to inspect the 22,900-acre property on foot;<sup>24</sup> one from 1994 that was not signed and did not have anything written in the spaces denoted for the condition of the land or the findings of the inspection; and one from December 2014 that indicated that the premises were in unsatisfactory condition but did not contain any determination as to whether the United States was in compliance with the lease. Moore also testified that a 2013 memorandum circulated within the DLNR suggested the leased PTA land should be swept for UXO to be removed at the United States' expense, but DLNR did not ask the United States Army (Army) to clean up any ammunition as a result of the memorandum.

Moore related that the State had coordinated with the federal government and its various agencies to undertake a number of projects concerning the condition of the leased PTA land. Archeological surveys were done in 2001 as part of a Natural Resource Management Plan created by the United States, for instance, and a Programmatic Agreement between state and federal agencies permitted "cultural monitors" to be involved

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<sup>24</sup> Moore stated that it would be difficult for an inspector to inspect the leased land in a motor vehicle due to the rugged terrain.

with inspections. According to Moore, these plans and programs ultimately demonstrated that the Army was the agency primarily responsible for environmental cleanup of the PTA leased land, but they also established that the Hawai'i Department of Health shared responsibility by providing support and regulatory oversight.

The Plaintiffs also called Kealoha Pisciotta, a former cultural monitor for the battle area complex (BAX) within the PTA. Pisciotta testified that during her inspections she observed and noted in her reports a range of debris left over from military exercises, including munitions and UXO, stationary targets, junk cars, an old tank, crudely built rock shelters, and other miscellaneous military rubbish. She testified that some of her reports recommended that the debris be cleaned up, but not all of the UXO that she observed was removed.

Next, the Plaintiffs called Suzanne Case, Chair of the BLNR and the Director of the DLNR. Plaintiffs' counsel showed Case a 2014 action memorandum from the Army addressed to the DLNR stating that a bazooka range within the PTA was heavily contaminated with explosive hazards, ammunitions, and debris that posed a significant danger to public health and welfare. Case testified that she did not remember receiving or having been shown the memorandum by DLNR staff and that she was not aware of any lease compliance issues that had been raised to the

BLNR regarding the PTA lease during her tenure as Chair. She also testified that the DLNR did not have a written policy regarding when inspections of leased premises were to be conducted and instead chose which leases to inspect based on available resources, the risks involved, and whether the public had drawn attention to a specific property.

The Plaintiffs then called Deputy Attorney General William Wynhoff, who had previously testified in a pretrial deposition on behalf of the DLNR. Wynhoff testified that to the best of his knowledge, the DLNR did not have a written procedure to ensure compliance with all terms of the PTA lease. DLNR's practice, Wynhoff stated, is to keep all records related to leases in the lease file. Wynhoff acknowledged that prior to the filing of this suit, there were no documents in the PTA lease file indicating that the DLNR had asked for or received assurances from the United States that it was in compliance with the lease.

Ching testified next. Ching, who is part Hawaiian, stated he was a member of the Pōhakuloa Cultural Advisory Committee, which advised the Army of cultural concerns related to its activities within the PTA. Ching testified that, during his bimonthly trips to the PTA as a member of the committee, he witnessed blank ammunition and other trash and military debris

"strewn around" that negatively affected his spiritual and traditional practices.

After Ching's testimony, the Plaintiffs called Kahaulelio. Kahaulelio testified that she was at least fifty percent Hawaiian and that, to her, caring for the land at Pōhakuloa was a cultural practice. She explained that she and other Hawaiian practitioners participate in cultural ceremonies at Pōhakuloa, which she compared to going to church. Kahaulelio testified that, during one such cultural trip to Pōhakuloa in November 2014, she observed debris and blank ammunition on the ground and that this destruction of the land made her feel "angry" and "hurt."

The Plaintiffs' final witness was Russell Tsuji, a former Deputy Attorney General, State Land Administrator at the DLNR, and Deputy Director of the DLNR. Tsuji stated that, while he was employed at the DLNR, he was in charge of managing state-owned lands and was a custodian of records contained in the PTA lease file. None of the files in the PTA lease file, Tsuji testified, mentioned paragraphs 9 and 14 of the lease. He was also unaware of any conversations that occurred during his employment at the DLNR regarding compliance with these lease provisions. Tsuji explained that his goal was to have land agents inspect leases at least once every two years while he was employed at the DLNR, but he stated that this target was

"aspirational" rather than a mandatory rule. Tsuji acknowledged that prior to the initiation of the lawsuit, the leased PTA land had not been inspected during his tenure at the DLNR, which spanned ten years.

Tsuji testified that the DLNR's PTA lease file contained a series of letters and reports from the United States Army that documented a need to clean up the leased PTA land, including a 2006 report indicating that there was debris in the BAX within the PTA; a 2008 report stating that there may have been munitions on PTA land; a 2013 final environmental impact statement (EIS) stating that UXO was "known to exist in impact area" and that "there [was] also a medium risk of finding [UXO] outside [the construction] area"; and a 2014 report stating that "[t]he military need[ed] to implement some kind of clean-up process as part of their training in PTA" because "[r]emnants of military trash [was] everywhere . . . including unexploded ordnance that [was] carelessly discarded." When asked about the DLNR's response to one of the reports, Tsuji testified that he did not know if anyone at the DLNR "actually read" the report and noted that there was no record on file that the DLNR ever responded to the report.

Tsuji testified that, after the lawsuit was filed, he sent a letter to the Army requesting its procedures for cleaning munitions after training exercises. Tsuji indicated that the

Army responded by sending a letter setting forth its cleanup procedures. Tsuji also testified that he conducted an inspection of the leased PTA land in December 2014, approximately one year after receiving the Army's response. One of the reasons for the inspection was the lawsuit, Tsuji acknowledged. During this inspection, he observed trash, "[s]pent shells," "shell debris," and "derelict vehicles" used as target practice at the bazooka range. According to Tsuji, a draft inspection report was created after the inspection, which was revised after he conducted another inspection in January 2015. Tsuji indicated that the final report stated that the land condition was "unsatisfactory," but he testified that the DLNR did not issue a default notice to the Army.<sup>25</sup>

At the conclusion of Tsuji's testimony, the Plaintiffs rested. The State did not call any witnesses.

## **5. The Circuit Court Decision**

On April 3, 2018, the circuit court issued its Findings of Fact, Conclusions of Law and Order.

### **a. Findings of Fact**

The circuit court made the following relevant findings of fact.

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<sup>25</sup> Tsuji testified that the report was written by a land agent and that he had no input in the report's conclusion that the land was "unsatisfactory."

In 1964, the State entered into a sixty-five year lease of three parcels of land in the Pōhakuloa area with the United States for military training purposes. These land parcels are ceded lands owned by the State that are part of the public lands trust. The public trust lands are state-owned lands held for the use and benefit of the people of the State of Hawai'i, and the State is the trustee of such lands. Accordingly, the State has "the highest duty to preserve and maintain the trust lands."<sup>26</sup>

The Plaintiffs had in the past and continued to be actively engaged in cultural practices upon the leased PTA land. These cultural practices included song, dance, and chant about the PTA area, walking upon and celebrating the land and the flora and fauna that grow upon it, and honoring the current and historic cultural significance of the area.

The State was aware of the United States' failure to clean up other sites in the state<sup>27</sup> and of the possibility that

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<sup>26</sup> Throughout its findings of fact and conclusions of law, the circuit court referred to this obligation as the duty to "malama 'aina," which the court translated as "to care for the land."

<sup>27</sup> Specifically, the court found that the previous Chair of the DLNR, William Aila, Jr., was aware of the United States' failure to clean up other sites in the state such as Kaho'olawe, Mākua, and the Waikāne Valley, and the court imputed this knowledge to the State in this case. The court noted that a website maintained by the State contained a history of the island of Kaho'olawe that explained that the United States Navy did not clear all UXO from 25 percent of the surface of the island. Additionally the court found that the United States' failure to properly clean the Mākua area was

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UXO and munitions were present on the leased PTA land. Cultural monitors spent "extensive time" at the leased PTA land and observed military debris on the ground, including UXO and "spent shell casings, scattered across" the land. The concerns of the cultural monitors were documented in a number of federal reports. For example, the United States prepared a November 2010 report entitled "Final Archaeological and Cultural Monitoring of Construction of Battle Area Complex (BAX) for Stryker Brigade Combat Team (SBCT), Pohakuloa Training Area, Hawaii Island, Hawaii" that included a recommendation from cultural monitors that "[t]he Military needs to implement some kind of cleanup process as part of their training in PTA. Remnants of military trash are everywhere." (Emphasis omitted.) The report also stated that the cultural monitors voiced the following: "Another major concern is the military debris that is left behind after training including [UXO] that is carelessly discarded. There is a need to have some type of cleanup plan implemented in the military training process."

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documented in the federal court decisions in Makua v. Rumsfeld, 163 F. Supp. 2d 1202 (D. Haw. 2001), Makua v. Gates, Civ. No. 08-00327 SOM/LEK, 2009 WL 196206 (D. Haw. Jan. 23, 2009), and Makua v. Gates, Civ. No. 00-00813 SOM, 2008 WL 696093 (D. Haw. Mar. 11, 2008).

These concerns were reiterated four years later in a second, similarly titled report. This report contained observations from cultural monitors who stated that "[r]emnants of live fire training are present within the BAX, including stationary targets, junk cars, an old tank, crudely built rock shelters, and miscellaneous military rubbish. Spent ammunition is scattered across the landscape." The report noted the cultural monitors feared that if the litter continued to remain on the land, "the land will be rendered unusable forever--one eighth of our island will become unavailable for use by any of our future generations." The cultural monitors therefore "strongly recommend[ed] the Army begin now to seek funding to initiate a serious cleanup effort throughout the leased training areas." (Emphasis in report.)

Additionally, a March 2015 draft report stated that, based on a 2014 inspection by the DLNR and the Army, a bazooka range contained on the leased PTA land was "heavily contaminated on the surface with material potentially presenting an explosive hazard [] and munition debris []." A subsequent inspection of the bazooka range by military explosive ordnance disposal units found mortars, bazooka rounds, and white phosphorous on the land. The Army determined that the debris found at the bazooka range "coupled with the accessibility to the public make for the potential for significant danger to public health and welfare."

The State's awareness of the potential contamination of the leased PTA land was also demonstrated by a March 2013 letter from the Acting Hawai'i Branch Manager for the DLNR to the State Lands Assistant Administrator. The Branch Manager recommended that "PTA should sweep the lands North of the saddle road for UXO and remove any UXO found at their expense to make the area safe for the public."<sup>28</sup> Additionally, a March 2013 Final EIS stated that "[d]ecades of using PTA as a training area have introduced a significant risk of encountering [munitions]/UXO. [Munitions]/UXO [are] known to exist in the impact area and [are] expected to be encountered during range construction activities; but there is also a medium risk of finding [munitions]/UXO outside the impact area." The EIS also stated that "[p]ast and current activities at PTA have resulted in contamination of soil by explosives and other chemicals." Therefore, the State was aware that military training activities on the leased PTA land "pose[d] a significant and substantial risk of harm or damage to [the PTA], and persons who may come upon" the land, and "to public health, safety, and welfare, as well as to the Plaintiffs' cultural interests in the [land]."

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<sup>28</sup> Although the letter stated, "PTA should sweep," it appears that the Branch Manager was referring to the United States.

Proper stewardship of the leased land includes "periodic and meaningful inspection and monitoring of the military training activities and their aftermath upon the Subject Lands and reasonably accurate documentation of such activities and the effects of such activities to achieve transparency of [the State's] inspection and monitoring actions." Inspections must occur with "a reasonable frequency" for the State to satisfy its duty. The DLNR did not meet its informal goal of inspecting the leased PTA land once every two years, nor did it adequately document its inspection efforts "so as to provide rudimentary transparency into the DLNR's efforts." An inspection of the PTA occurred on December 19, 1984, for which a "sparse" report was generated that stated only the following: "Property being used for Military training purposes per lease terms." Another inspection "appear[ed] to have been conducted" in 1994, although the "findings" and "inspected by" sections of the inspection form were blank.

A third inspection occurred on December 23, 2014, after the litigation in this case had begun, and this inspection resulted in a report that "contained much more information" than those created from the two previous inspections. The 2014 Inspection Report stated that the condition of the land was "not

satisfactory.”<sup>29</sup> The report indicated that debris was “extensive” at the bazooka range, that there were “derelict vehicles” at one of the target ranges, and that an area was used for dumping spent artillery shells.

“The lack of regular, meaningful inspection and monitoring of the” leased PTA land contributed to the breach of the State’s trust duties, which in turn “harmed, impaired, diminished, or otherwise adversely affected Plaintiffs’ cultural interest in the” leased land.

**b. Conclusions of Law**

The circuit court rendered the following relevant conclusions of law.

The Plaintiffs had standing to enforce a breach of trust claim against the State, and the United States was not an indispensable party to the case because the Plaintiffs’ claim concerned only the State’s trust obligations. The State, as trustee of the ceded land, owed a “high standard of care when managing public trust ceded lands.” The State’s trust duties include but are not limited to using “reasonable efforts” to (1) preserve and protect trust property, and (2) take a proactive

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<sup>29</sup> The court found that the Army’s assertion recorded in the report that it “regularly inspected and cleaned up after [an] exercise was complete” was contradicted by evidence that there was a significant amount of debris and ammunition on the land.

role in management and protection of the trust property. The State had a duty to consider the cumulative effects of the United States' use of the land upon the condition of the land and upon "the indigenous plants, animals, and insects, as well as the invasion to Plaintiffs' cultural interests in the Subject Land." Additionally, the State had a duty to determine whether the lessee was in compliance with the terms of the lease. And the Chair of the BLNR specifically had a duty to "[e]nforce contracts respecting . . . leases . . . or other disposition of public lands." (Quoting HRS § 171-7(5).<sup>30</sup>)

As part of its trust duties, the State was required, to enforce paragraphs 9, 14, 18, and 19 of the PTA lease. The State's records regarding its efforts to inspect the leased land and report its findings "were spotty at best" and in some cases "grossly inadequate."<sup>31</sup> Although there were studies and inspections completed regarding "other business" on the leased land, such as the EIS, these were not conducted to fulfill the State's trust duties.

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<sup>30</sup> HRS § 171-7(5) (2011) provides, in relevant part, "Except as provided by law the board of land and natural resources through the chairperson shall: . . . (5) Enforce contracts respecting sales, leases, licenses, permits, or other disposition of public lands[.]"

<sup>31</sup> The court found that, given "the virtual nonexistent nature of the 1994 inspection report" and "the sparse and incomplete nature of the 1984 inspection report," there was an un rebutted presumption that the State had failed to conduct any inspections prior to December 2014 to monitor or confirm the United States' compliance with paragraphs 9, 14, 18, and 19.

The State therefore breached its duties by failing to (1) conduct reasonable (in terms of frequency and scope) inspections of the condition of the leased PTA land or observations of the military training exercises, (2) ensure that the terms of the lease were being followed, (3) take prompt and appropriate follow-up steps with the United States when the State became aware of potential violations of the lease, (4) create detailed reports of the State's efforts to ensure compliance with the lease, and (5) initiate or assist with the appropriation of necessary funding to conduct cleanup or maintenance activities on the land. The court stated that the State would further breach its trust duties "if they were to execute an extension, renewal, or any other change to the State General Lease No. S-3849, or enter into a new lease of the PTA, without first determining (in writing) that the terms of the existing lease have been satisfactorily fulfilled."

**c. Order**

The court explained that because the Plaintiffs prevailed on the merits, the appropriate remedy was for the court to issue an order directing the State to perform its trust duties with respect to the leased PTA land. The court concluded that the balance of harm favored the issuance of a mandatory injunction and that protection of the public trust lands was in the public interest. The court therefore ordered that the State

promptly initiate affirmative activity at the PTA in accordance with its trust duties by developing a written plan to fulfill such duties. The plan was required to include provisions for (1) on-site monitoring and inspections, (2) the creation of written inspection reports with recommendations, (3) a written protocol of appropriate action to be taken if the United States is to be found to be in breach of the lease, (4) a procedure to provide for "reasonable transparency" to the Plaintiffs and the general public with respect to compliance with the injunction, and (5) all steps that the State takes to "secur[e] adequate funding, from any and all appropriate funding sources, to plan, initiate, and conduct all appropriate comprehensive cleanup." The plan was required to be submitted to the court for approval. Additionally, the court ordered the State to create contested case procedures pursuant to HRS Chapter 91, if not already in existence, "for Plaintiffs or any member of the general public with standing to initiate such process in the event that Plaintiffs or other interested party may contest the decisions made by the [State] in the course of discharging" their trust duties.

The circuit court entered Final Judgment on April 24, 2018.

#### D. The Appeal and Motions to Dismiss

The Department of the Attorney General (AG) filed a timely Notice of Appeal. The Plaintiffs filed a Motion to Dismiss the Appeal and argued that the AG did not have the authority to file an appeal "on behalf of BLNR or DLNR without BLNR's consent."<sup>32</sup> (Citing Chun v. Bd. of Trs. of the Emps.' Ret. Sys., 87 Hawai'i 152, 952 P.2d 1215 (1998).) The State replied that the AG was authorized to appeal the decision because the AG "has authority to manage and control all phases of litigation" in suits against state officials. (Citing Island-Gentry Joint Venture v. State, 57 Haw. 259, 554 P.2d 761 (1976).)

The Plaintiffs filed an application for transfer to this court, which the State did not oppose. This court granted the application on December 20, 2018.

#### IV. STANDARD OF REVIEW

Certain decisions regarding the orderly administration of trial and the selection of an appropriate remedy to redress an injury "rest[] with the sound discretion of the trial court[,] and the trial court's decision will be sustained absent

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<sup>32</sup> The Plaintiffs later filed a second motion to dismiss to "follow[] up" on the first, making substantially similar arguments with respect to the AG's authority to appeal on behalf of the Chair of BLNR without her express consent.

a showing of manifest abuse of discretion.” Hawaii Pub. Emp’t Relations Bd. v. United Pub. Workers, Local 646, 66 Haw. 461, 467, 667 P.2d 783, 788 (1983). For instance, this court applies an abuse of discretion standard when it reviews a trial court’s determination as to whether to dismiss a case pursuant to HRCF Rule 19(b) for a party’s failure to join an indispensable party. UFJ Bank Ltd. v. Ieda, 109 Hawai‘i 137, 142, 123 P.3d 1232, 1237 (2005) (citing Takabuki v. Ching, 67 Haw. 515, 529, 695 P.2d 319, 328 (1985)). Similarly, a trial court’s grant of equitable relief, including a declaratory judgment or a mandatory injunction, will be upheld unless an abuse of discretion is demonstrated. Kau v. City & Cty. of Honolulu, 104 Hawai‘i 468, 473, 92 P.3d 477, 482 (2004) (citing Shanghai Inv. Co. v. Alteka Co., 92 Hawai‘i 482, 492, 993 P.2d 516, 526 (2000)); United Pub. Workers, 66 Haw. at 467, 667 P.2d at 788.

By contrast, we review a trial court’s conclusions of law de novo. Narayan v. Ass’n of Apartment Owners of Kapalua Bay Condo., 140 Hawai‘i 75, 83, 398 P.3d 664, 672 (2017) (citing Nordic PCL Constr., Inc. v. LPIHGC, LLC, 136 Hawai‘i 29, 41, 358 P.3d 1, 13 (2015)). Thus, a trial court’s grant or denial of summary judgment is reviewable using our independent judgment under the right/wrong standard, as are the statutory and constitutional interpretations underlying the court’s

determinations. Id.; State v. March, 94 Hawai'i 250, 253, 11 P.3d 1094, 1097 (2000). But this court will uphold the findings of fact to which the trial court applies these interpretations unless they are clearly erroneous. Noel Madamba Contracting LLC v. Romero, 137 Hawai'i 1, 8, 364 P.3d 518, 525 (2015).

## V. DISCUSSION

### A. The Motions to Dismiss

Before addressing the merits of the State's appeal in this case, we must first consider the Plaintiffs' motions to dismiss asserting that the AG lacked authority to bring the appeal without the express authorization of the BLNR and, derivatively, the authorization of the Board's Chairperson and the DLNR, which the Board heads. This court first addressed the allocation of litigation authority between the AG and other government agencies in Island-Gentry Joint Venture v. State, 57 Haw. 259, 264, 554 P.2d 761, 765 (1976). In Island-Gentry, the BLNR agreed to a financial settlement with a landowner after it breached a purchase agreement to acquire the owner's property in order to build a school. Id. at 261, 554 P.2d at 763. Upon discovering that the landowner had thereafter sold the land to a third party for over twice the BLNR's agreed-upon purchase price, the AG declined to pay the agreed-upon settlement, reasoning that the landowner had "suffered no damage resulting from [the] State's failure to honor its agreement to purchase

the land.” Id. at 262, 554 P.2d at 764. The landowner brought suit to enforce the settlement.

This court held that under the general grant of authority contained in HRS § 26-7 (Supp. 1975),<sup>33</sup> the AG “has exclusive authority to control and manage for the State all phases of civil litigation in which the State has an interest, unless authority to do so in specific matters has been expressly or impliedly granted to another department or agency.” Id. at 264-65, 554 P.2d at 765-66. We held that this authority necessarily includes the authority to control the settlement of actions against the State. Id. at 265, 554 P.2d at 766. The same section also grants the AG “exclusive authority to approve as to the legality and form of all documents relating to the

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<sup>33</sup> The portions of HRS § 26-7 cited in Island-Gentry have not been amended since this court’s decision in the case. The statute provides in relevant part as follows:

The department of the attorney general shall be headed by a single executive to be known as the attorney general.

The department shall administer and render state legal services, including furnishing of written legal opinions to the governor, legislature, and such state departments and officers as the governor may direct; represent the State in all civil actions in which the State is a party; approve as to legality and form all documents relating to the acquisition of any land or interest in lands by the State; and, unless otherwise provided by law, prosecute cases involving violations of state laws and cases involving agreements, uniform laws, or other matters which are enforceable in the courts of the State. The attorney general shall be charged with such other duties and have such authority as heretofore provided by common law or statute.

acquisition of any land or interest in land by the State," we noted. Id. This court held that implicit in these express grants of authority was the "sole power to approve or to refuse to approve as to the legality and form of any compromise settlement effectuated by the [BLNR] in regards to the [BLNR]'s breach of a contract to purchase land for the State." Id. Because the record identified that "no other department or agency ha[d] been expressly or impliedly granted the authority to approve or to disapprove as to the legality and form of the settlement in question," we held that the BLNR was without authority to bind the State to the settlement. Id.

Chun v. Board of Trustees of the Employees' Retirement System, 87 Hawai'i 152, 952 P.2d 1215 (1998), on which the Plaintiffs rely, stands in tension with Island-Gentry. In Chun, the circuit court vacated a decision of the Board of Trustees of the Employees Retirement System concerning the retirement benefits of a group of teachers and school administrators, finding that the Board had miscalculated the benefits as a result of its misinterpretation of the applicable statute. Id. at 158, 952 P.2d at 1221. During the pendency of the case, the composition of the Board had changed, and the newly constituted Board deadlocked in a four-to-four vote on a motion to authorize an appeal of the circuit court's decision. Id. at 160, 952 P.2d at 1223. The Chairperson of the Board thus sent a letter

informing the AG that the "motion failed because it did not receive the necessary majority vote." Id. at 161, 952 P.2d at 1224. When the AG nevertheless filed a notice of appeal, the retirees filed a motion to dismiss the appeal, arguing that the AG had no independent authority to pursue it without the Board's consent. Id.

This court held that a distinction exists between, on the one hand, the AG's duty under HRS § 28-1 (1993)<sup>34</sup> and the common law to represent the State in furtherance of the public interest as the AG deems it to be, and on the other hand, the AG's duty under HRS § 26-7 to serve as legal counsel to the public officials and instrumentalities of the State, inter alia, when they are sued in their professional capacity. Id. at 170, 952 P.2d at 1233. Extensively quoting the Supreme Court of West Virginia, we stated,

When the Attorney General appears in a proceeding on behalf of the state in her name, she exercises her discretion as to the course and conduct of the litigation. She assumes the role of a litigant and she is entitled to represent what she perceives to be the interest of the state and the public at large.

. . . .

The Attorney General performs quite a different function when she appears to defend a state officer or

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<sup>34</sup> HRS § 28-1, which has not been amended since this court's decision in Chun, provides as follows: "The attorney general shall appear for the State personally or by deputy, in all the courts of record, in all cases criminal or civil in which the State may be a party, or be interested, and may in like manner appear in the district courts in such cases."

instrumentality sued in their official capacity. In this circumstance the Attorney General does not appear as a party to the action. That role is filled by the state officer or instrumentality against whom the suit is brought. Rather, the Attorney General's function is to act as legal advisor and agent of the litigant and to prosecute or defend, within the bounds of the law, the decision or policy of such officer or instrumentality which is called into question by such lawsuit.

. . . .

The Legislature has designated the Attorney General as the legal representative of state officers and instrumentalities sued in their official capacities. In the absence of other statutory or constitutional provision to the contrary, she is their sole legal representative in the courts and they are her clients. When the Attorney General appears in litigation in this capacity, she does so as a lawyer and an officer of the court. Her primary responsibility is to provide proper representation and competent counsel to the officer or instrumentality on whose behalf she appears. The Attorney General's role in this capacity is not to make public policy in her own right on behalf of the state. It is presumed, in the absence of a contrary showing, that the officer made a party to the suit has, in the performance of his or her official duties, acted in contemplation of the relevant laws and in the best interests of the state. The Attorney General's role and duty is to exercise her skill as the state chief lawyer to zealously advocate and defend the policy position of the officer or agency in the litigation.

The Legislature has thus created a traditional attorney-client relationship between the Attorney General and the state officers or instrumentalities she is required to represent. It is well settled that in the control of litigation, the Attorney General has the duty to conform her conduct to that prescribed by the rules of professional ethics. As a lawyer and an officer of the courts of this State, the Attorney General is subject to the rules of this Court governing the practice of law and the conduct of lawyers, which have the force and effect of law.

Id. at 171-73, 952 P.2d at 1234-36 (quoting Manchin v. Browning, 296 S.E.2d 909, 918-20 (W. Va. 1982)) (alterations omitted) (emphases added). This court thus held that when the AG represents a state official or instrumentality in its official capacity, the official or instrumentality is the AG's client and

the allocation of authority in that relationship is governed by at least some provisions of the Hawai'i Rules of Professional Conduct (HRPC). Id. at 173-74, 952 P.2d at 1236-37.

Applying HRPC Rule 1.7, which governs conflicts, this court held that, once the AG has informed the state official or instrumentality of the different legal strategies and defenses available and provided a professional opinion as to their advisability, the AG "should then stand aside and allow [the] client to exercise [] independent judgment on which course to pursue." Id. at 174, 952 P.2d at 1237 (emphasis and alterations omitted) (quoting Manchin, 296 S.E.2d at 920). Because the AG's position in pursuing the appeal was at odds with the Board's wishes, this court held that the AG "was ethically obligated to recommend the retention of other counsel to represent the Board and to take such other action as, in her opinion, the circumstances required." Id. at 176, 952 P.2d at 1239. The AG lacked authority, however, to pursue the appeal without the Board's consent. Id. at 177, 952 P.2d at 1240.

In a footnote in Chun, the court asserted that its holding was consistent with Island-Gentry, focusing on the Island-Gentry court's statement that the AG has ultimate authority to make litigation decisions "unless authority to do so in specific matters has been expressly or impliedly granted to another department or agency." 87 Hawai'i at 171 n.21, 952

P.2d at 1234 n.21 (emphasis omitted) (quoting Island-Gentry, 57 Haw. at 264-65, 554 P.2d at 765-66). The court stated that, unlike with the BLNR in Island-Gentry, the legislature had enacted a series of laws that conferred upon the Board of Trustees of the Employees Retirement System "the powers and privileges of a corporation," including the powers to "sue or be sued and transact all of its business." Id. (citing HRS §§ 88-22, 88-23, 88-110). These statutes acted to divest the AG of the authority to control litigation with respect to the Board, the court reasoned. Id.

This distinction is problematic, however. Analogous statutes existed conferring substantially the same authority on the BLNR at the time Island-Gentry was decided. See, e.g., HRS § 171-7(8) (1968) ("Except as provided by law the board of land and natural resources through the chairman shall: . . . (8) Bring such actions and proceedings as may be necessary to carry out the powers and duties of the board in the name of the State and to defend such actions brought against the State as may be authorized[.]"). Moreover, the Chun court based its analysis not on the withdrawal of the general authority of the AG under HRS §§ 28-1 and 26-7 by another statute, but rather on the distinction between the different aspects of that authority. See 87 Hawai'i at 169-70, 952 P.2d at 1232-33 ("Thus, by [its] terms, HRS § 26-7 . . . designate[s] the attorney general as

legal counsel for 'public officers' and instrumentalities of the state[.] . . . At the same time, however, HRS § 28-1 mandates that the attorney general 'represent the State in all . . . civil matters where the State . . . may be an interested party.'" (some alterations original)).

The cases can be more logically reconciled in two ways. First, because Island-Gentry concerned the settlement of litigation arising directly from a breach of a contract to acquire public lands, approval of the settlement agreement fell within the AG's "exclusive authority" under HRS § 26-7 "to approve as to the legality and form of all documents relating to the acquisition of any land or interest in land by the State." And second, the settlement agreement essentially "commit[ed] the State to an obligation to pay a sum of money out of State funds"--which was authority that had not been granted to BLNR. Island-Gentry, 57 Haw. at 264, 554 P.2d at 765.

Thus, Chun should be read as limiting Island-Gentry to situations when the AG appears on behalf of the State generally (as opposed to on behalf of a specific State public official or instrumentality), when the action falls within the AG's exclusive statutory authority, or when the result of the action would commit the State to pay public funds that have not been appropriated to the represented State official or instrumentality. By contrast, when the AG appears on behalf of

a specific State official or instrumentality and the above exceptions do not apply, the AG has a duty to comply with the wishes of the represented party that is loosely analogous to the duty a private attorney owes a client under the HRPC and other professional standards.<sup>35</sup> Chun, 87 Hawai'i at 173, 952 P.2d at 1236.

The Plaintiffs argue that, in the absence of an affirmative vote by the BLNR, the AG was not authorized to bring an appeal in the present case. Yet our precedent and legal professional standards more generally permit--and in some cases require--an attorney to take the procedural steps necessary to protect a client's right to appeal. See Maddox v. State, 141 Hawai'i 196, 204, 407 P.3d 152, 160 (2017) ("Defense counsel should take 'whatever steps are necessary' to protect the client's right to appeal . . . ." (quoting ABA Standards for Criminal Justice: Prosecution and Defense Function, Standards 4-8.2(b), 4-8.3(c) (3d ed. 1993))). Unlike in Chun, in which the Chairperson of the Board sent a letter "informing [the AG] of

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<sup>35</sup> By so holding, the autonomy of the various agencies that are headed by boards instead of a single executive is preserved, as the framers intended such boards to maintain a level of independence from the governor and officials like the AG who are directly answerable to the governor. See Stand. Comm. Rep. No. 67 in I Proceedings of the Constitutional Convention of Hawaii of 1950, at 217 (1960) ("Your committee has followed the principle that the Governor should be strong in his branch of the government but that he should be precluded from infringing upon the other branches, for example, the power to remove members of the boards and commissions.").

the Board's refusal to authorize an appeal of [the circuit court's] decisions," there is no indication in the record that the BLNR communicated to the AG a desire not to pursue the present appeal--nor is there any evidence that the appeal is at odds with the BLNR's wishes. 87 Hawai'i at 161, 952 P.2d at 1224 (second alteration original). "[W]here no conflict plainly appears . . . it is generally presumed 'that the actions and determinations of the Attorney General in . . . a lawsuit are made both as a representative of the public interest and as counsel for the state agency or officer.'" Id. at 170, 952 P.2d at 1233 (some alterations in original) (quoting D'Amico v. Bd. of Med. Exam'rs, 11 Cal.3d 1, 112 (1974)). Accordingly, we deny the Plaintiffs' two motions to dismiss the appeal.

#### **B. The State's Appeal**

The State argues that the circuit court erred by failing to dismiss the case or grant summary judgment to the State on the grounds that 1) the United States was a necessary and indispensable party under HRCP Rule 19 whose joinder was not feasible due to its sovereign immunity; 2) the case presented a nonjusticiable political question regarding how the State should manage the leased PTA land; and 3) the case did not present an "actual controversy" in which a declaration could "terminate the

uncertainty or controversy giving rise to the proceeding" as is required for declaratory relief under HRS § 632-1.<sup>36</sup> The State additionally challenges the circuit court's findings and conclusions insofar as the court found that the State breached its trust duties by failing to perform adequate inspections of the leased PTA land and declined to consider the State's cooperative activities with entities other than the State in determining whether the State had violated its trust obligations. Lastly, the State argues that the injunctive relief granted by the circuit court was improper because it was tantamount to an award of damages barred by the State's sovereign immunity and the order granting relief was vague, overbroad, and improperly intruded on legislative prerogatives.

This opinion will address the State's contentions alleging related errors together.

**1. The United States Is Not a "Necessary" Party and Therefore Is Not "Indispensable"**

The State contends that the United States is a necessary and indispensable party to the present case under HRCF Rule 19 and that the circuit court reversibly erred by failing

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<sup>36</sup> Under Hawai'i law, the denial of a summary judgment motion can be appealed following a trial on the merits only if the appeal centers on a question of law rather than the existence of a disputed material fact. See Larsen v. Pacesetter Sys., Inc., 74 Haw. 1, 17-18, 837 P.2d 1273, 1282-83 (1992). Here, the State's contentions are rooted in questions of law, and we accordingly conclude that it is entitled to review of the circuit court's denial of its summary judgment motion on the challenged grounds.

to either join the United States or dismiss the case due to its absence. Under our precedents, an analysis under HRCP Rule 19 follows two steps. Kellberg v. Yuen, 135 Hawai'i 236, 250-51, 349 P.3d 343, 357-58 (2015). First, courts must determine if the party is a "necessary" party under part (a) of the rule, and if so, whether joinder of the party is feasible. Id. If the court finds that a party is necessary and joinder is not feasible, it then proceeds to part (b) of the rule, under which it analyzes whether "in equity and good conscience" the case can continue in the party's absence. Id. at 252, 349 P.3d at 359 (quoting HRCP Rule 19(b)). "If, under this second step, the court dismisses the action rather than moving forward without the absent party, the nonparty is described as 'indispensable.'" Id. (quoting Marvin v. Pflueger, 127 Hawai'i 490, 499, 280 P.3d 88, 97 (2012)).

HRCP Rule 19(a) sets forth a number of factors for courts to consider in evaluating whether an entity is a necessary party who should be joined if feasible. The rule provides, in relevant part, as follows:

(a) Persons to be joined if feasible. A person who is subject to service of process shall be joined as a party in the action if (1) in the person's absence complete relief cannot be accorded among those already parties, or (2) the person claims an interest relating to the subject of the action and is so situated that the disposition of the action in the person's absence may (A) as a practical matter impair or impede the person's ability to protect that interest or (B) leave any of the persons already parties subject to a substantial risk of incurring double,

multiple, or otherwise inconsistent obligations by reason of the claimed interest.

With respect to HRCP Rule 19(a)(2),<sup>37</sup> this court does not need to speculate as to the interest claimed by the United States in the subject matter of this case because the United States filed a statement of interest in the circuit court. Before this court, the State repeats the United States' assertion that "[t]he action here relates to the public land leased by the State to the United States for military purposes and puts directly at issue the United States' compliance with the terms of the lease." The State contends that the United States clearly has an interest in an action "forcing the State to initiate rigorous enforcement action against" the United States.

But determining whether the State fulfilled its duties as trustee in this case does not require determining whether the United States in fact complied with the lease, however, and if a breach of the State's trustee duties is found, the appropriate remedy would not be an order requiring the State to initiate an enforcement action. Article XI, section 1 of the Hawai'i Constitution places upon the State a fiduciary duty analogous to

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<sup>37</sup> Neither the State nor the United States make any arguments with respect to HRCP Rule 19(a)(1), under which the court would consider whether the United States' absence would prevent complete relief from being afforded in this case.

the common law duty of a trustee with respect to lands held in public trust. See In re Conservation Dist. Use Application HA-3568 (In re TMT), 143 Hawai'i 379, 400, 431 P.3d 752, 773 (2018); State ex rel. Kobayashi v. Zimring, 58 Haw. 106, 121, 566 P.2d 725, 735 (1977). Article XII, section 4 imposes a similar duty regarding lands ceded to the State under Section 5(b) of the Admission Act. It is undisputed that the leased PTA land at issue in this case is trust land within the meaning of these constitutional provisions.

The most basic aspect of the State's trust duties is the obligation "to protect and maintain the trust property and regulate its use." Zimring, 58 Haw. at 121, 566 P.2d at 735; accord Restatement (Second) of Trusts § 176 (1959) ("The trustee is under a duty to the beneficiary to use reasonable care and skill to preserve the trust property."). Under the common law, this obligation includes an obligation to reasonably monitor the trust property. See Restatement (Third) of Trusts § 90 cmt. b (2007); Tibble v. Edison Int'l, 135 S.Ct. 1823, 1828 (2015). This duty exists regardless of whether the property is being used by a third party pursuant to a lease.

Reasonable monitoring ensures that a trustee fulfills the mandate of "elementary trust law" that trust property not be permitted to "fall into ruin on [the trustee's] watch." United States v. White Mt. Apache Tribe, 537 U.S. 465, 475 (2003). To

hold that the State does not have an independent trust obligation to reasonably monitor the trust property would be counter to our precedents and would allow the State to turn a blind eye to imminent damage, leaving beneficiaries powerless to prevent damage before it occurs. Cf. Kelly v. 1250 Oceanside Partners, 111 Hawai'i 205, 231, 140 P.3d 985, 1011 (2006) (holding that the Department of Health's article XI, section 1 public trust duty to protect coastal waters required it to "not only issue permits after prescribed measures appear to be in compliance with state regulation, but also to ensure that the prescribed measures are actually being implemented." (emphasis added)).

Thus, the State might breach its fiduciary duty by failing to reasonably monitor public ceded lands, including the public ceded lands within the PTA that the United States utilizes pursuant to its lease with the State. Such a breach would be complete upon the State's failure to reasonably monitor the ceded land--irrespective of whether the United States actually violated the lease. A determination of whether the State breached its duty by failing to monitor the United States' compliance with the lease therefore will not require a subsidiary determination that the United States breached the terms of the lease, and thus it will not impair the United States' ability to defend itself against any such speculative

future claim. And because the court would not be determining whether the United States violated the terms of the lease, the appropriate remedy for the alleged breach of the State's trust duties would be an order requiring the State to initiate appropriate monitoring--and not an order requiring the State to initiate an enforcement action.

The United States further asserted in its statement of interest that an order requiring the State to inspect or monitor the United States' use of the PTA "at specified times" has the potential to disrupt critical training exercises. In a similar vein, the State argues that the disposition of the case could put the State at risk of incurring inconsistent obligations because the United States may deem the required monitoring to be "[un]reasonable" or determine that it "unduly interfere[s]" with training operations, ultimately leading to a separate determination under the lease's dispute resolution mechanism. However, these concerns were speculative. Under paragraph 19 of the lease, the State "shall have the right to enter upon the demised premises at all reasonable times to conduct any operations that will not unduly interfere with activities of the [United States]." And while this right of entry is subject to advance clearance from the United States, the lease specifies "that such advance clearance shall not be unreasonably held." There was no indication at the time the State's motions were

determined that the extent of the monitoring the court might order would necessarily be inconsistent with the State's rights under the lease so as to prejudice the United States' interests or subject the State to conflicting obligations.<sup>38</sup>

The United States also asserted in its statement of interest that courts have recognized that all parties to a contract are necessary parties in any equitable action that requires interpretation of the contract. As an initial matter, a reading of the unambiguous text on the face of the lease does not require "interpretation" of the contract. See Airgo, Inc. v. Horizon Cargo Transp., Inc., 66 Haw. 590, 594, 670 P.2d 1277, 1280 (1983) (stating that a contract is ambiguous "when the terms of the contract are reasonably susceptible to more than one meaning"). Further, the cases cited by the United States are inapposite and do not support its position. Each case involved an action that sought to invalidate, enforce, or

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<sup>38</sup> Even if concerns that the State would be subject to inconsistent obligations resulting from the dispute resolution mechanism were sufficient to make the United States a necessary party, the United States correctly asserts that it is not feasible to join it as a party because Congress has not waived sovereign immunity to allow the United States to be involuntarily made a party to the case in Hawai'i state courts. See Minnesota v. United States, 305 U.S. 382, 388 (1939). In determining whether a case should be dismissed for failure to join an indispensable party under HRCF Rule 19(b), courts must consider "the extent to which, by protective provisions in the judgment, by the shaping of relief, or other measures, the prejudice can be lessened or avoided." In this case, the remedy could be tailored to avoid subjecting the State to inconsistent obligations by simply ordering the State to engage in monitoring consistent with its rights under the lease. Thus, dismissal would not be warranted even if the United States were to be considered a necessary party.

establish a breach of the terms of the contract at issue.<sup>39</sup>

These cases did not hold that parties to a contract must be joined in any action regarding a trustee's duty to reasonably monitor the property that is the subject of the contract.

Unlike the cited cases, this action seeks neither to invalidate the lease nor to directly enforce its terms but rather to require the State to monitor the leased PTA land and the United States' compliance with the lease. The cited cases thus do not apply.<sup>40</sup>

The United States contended and the State similarly argues that an injunction barring the State from renegotiating the lease until any breach of its terms is cured would adversely impact the United States' interests directly by inhibiting its right to renew the lease and indirectly by undermining its ability to make future plans for the PTA. This presumes,

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<sup>39</sup> See Dawavendewa v. Salt River Project Agr. Imp. & Power Dist., 276 F.3d 1150, 1157 (9th Cir. 2002) (holding that a Native American tribe was necessary and indispensable in a suit alleging that hiring preference for Native Americans in contract between the tribe and public power company violated civil rights laws); McClendon v. United States, 885 F.2d 627, 633 (9th Cir. 1989) (holding a Native American tribe indispensable in an action to enforce the terms of a rental lease to which the tribe was a party); Queen's Med. Ctr. v. Kaiser Found. Health Plan, Inc., 948 F.Supp.2d 1131, 1165 (D. Haw. 2013) (holding that a health management network was a necessary party in a suit that required demonstrating it had breached the contract to which it was a party).

<sup>40</sup> To be clear, this opinion does not find or conclude that the United States has breached the lease, nor does it enforce or invalidate any provision of the lease. To the extent any portion of the circuit court's judgment can be interpreted as rendering such a finding, conclusion, or order, we hold that this interpretation is incorrect, and the circuit court's judgment shall be construed consistent with this opinion.

however, that the court was required to provide all of the precise remedies that the Plaintiffs requested. It is well settled that in an equitable action, a court has "broad discretionary power to . . . craft remedies to preserve equity." Ito v. Inv'rs Equity Life Holding Co., 135 Hawai'i 49, 62, 346 P.3d 118, 131 (2015). Courts may use this discretion to devise remedies that avoid prejudicing the rights of an absent party, and this latitude should be considered in determining whether a party is necessary and should be joined if feasible. See Salt Lake Tribune Pub. Co. v. AT&T Corp., 320 F.3d 1081, 1097 (10th Cir. 2003) ("Tribune Publishing mistakenly assumes that the only remedy that will give it complete relief is an order compelling KTLIC to specifically perform under the Option Agreement with respect to every Tribune Asset it owns. An order of complete specific performance is one way in which Tribune Publishing can receive complete relief, but it is not the only way."). Thus, the fact that the Plaintiffs requested a remedy barring the renegotiation of the lease does not alter our determination that the circuit court did not abuse its discretion in concluding that the United States is not a necessary party to the action. (Indeed, the circuit court did not ultimately issue an injunction barring the State from renegotiating the lease until it determines that the United States has complied with its terms, notwithstanding the Plaintiffs' request for such relief.)

Lastly, it is noted that the United States stated in its filing that "if relief were entered that impacted the interests of the United States, the Government would at that time consider what action to take, including whether to file a motion to intervene as a party for the purpose of removing the case to United States District Court pursuant to 28 U.S.C. § 1442(a)." And, in denying the State's motion to add the United States as a party without prejudice, the circuit court stated that the United States would have an "automatic right to intervene" if it chose to. Nevertheless, the United States has not filed a motion to intervene in the present case, nor even requested permission to participate as amicus curiae--which would avoid any waiver of sovereign immunity. See Sch. Dist. of Pontiac v. Sec'y of U.S. Dept. of Educ., 584 F.3d 253, 266 (6th Cir. 2009). In determining whether the circuit court erred in permitting the case to proceed in the United States' absence, it is appropriate for this court to consider that, "even if the [United] States ha[d] a particular interest in this dispute, [it] had the opportunity to intervene to protect that interest but declined to participate." Id. "[I]t would turn Rule 19 analysis on its head to argue that the [United] States' interests are now impaired because [it] declined to participate in this much-publicized case." Id.

Based on the foregoing, we affirm the circuit court's denial of the State's motions to join the United States as a necessary party and to dismiss the case for failure to join an indispensable party.

## 2. The Case Presents a Justiciable Controversy

### a. The Alleged Breach of Trust Is an Actual Controversy for Purposes of HRS § 632-1

The State argues that, because the Plaintiffs have not alleged that the United States actually violated the terms of the lease, there is no controversy between the parties of sufficient immediacy and reality to warrant declaratory judgment.<sup>41</sup> The State relies on Asato v. Procurement Policy

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<sup>41</sup> In response, the Plaintiffs argue that the court's jurisdiction over their claims is not dependent on HRS § 632-1. This court has recognized that the beneficiaries of the article XII, section 4 ceded land trust possess a constitutional cause of action against state officials to prospectively enjoin violations of their trust duties. Pele Def. Fund v. Paty, 73 Haw. 578, 601-06, 837 P.2d 1247, 1261-64 (1992). Thus, the Plaintiffs' request for an order requiring the State to prospectively fulfill its trust duties and enjoining future trust violations is not dependent on HRS § 632-1.

We have clarified, however, that the implied constitutional right of action does not permit a court to "turn back the clock" to grant retrospective relief for "actions already taken by the State." Id. at 601, 837 P.2d at 1262. And we have indicated that suits seeking retrospective declaratory relief based on an alleged constitutional violation that has already occurred are governed by HRS § 632-1. See Nelson v. Hawaiian Homes Comm'n, 127 Hawai'i 185, 205, 277 P.3d 279, 299 (2012) (applying HRS § 632-1 in a suit seeking a declaration that the State had violated its duty to afford "sufficient sums" to the Office of Hawaiian Affairs under article XII, section 1 of the Hawai'i Constitution); Kaho'ohanohano v. State, 114 Hawai'i 302, 332, 162 P.3d 696, 726 (2007) (applying HRS § 632-1 in a suit seeking a declaration that the State had violated the article XVI, section 2 prohibition on the impairment of accrued retirement system benefits). Therefore, to the extent the Plaintiffs are seeking a declaration that the State has already violated its trust duties, this relief is dependent on satisfying the requirements of HRS § 632-1.

Board, 132 Hawai'i 333, 322 P.3d 228 (2014) and Kau v. City and County of Hawai'i, 104 Hawai'i 468, 92 P.3d 477 (2004), which it contends demonstrate that the Plaintiffs' claim is too speculative to qualify for declaratory relief under HRS § 632-1.

Recently, this court considered the requirements that must be met to demonstrate a controversy that is subject to a request for declaratory relief under HRS § 632-1(b). We held that

a party has standing to seek declaratory relief in a civil case brought pursuant to HRS § 632-1 (1) where antagonistic claims exist between the parties (a) that indicate imminent and inevitable litigation, or (b) where the party seeking declaratory relief has a concrete interest in a legal relation, status, right, or privilege that is challenged or denied by the other party, who has or asserts a concrete interest in the same legal relation, status, right, or privilege; and (2) a declaratory judgment will serve to terminate the uncertainty or controversy giving rise to the proceeding.

Tax Found. of Hawai'i v. State, 144 Hawai'i 175, 202, 439 P.3d 127, 154 (2019).<sup>42</sup> It is clear that the Plaintiffs' assertion that the State breached the trust duty that it owes to them as beneficiaries meets these requirements, and additionally, the cases relied upon by the State are inapposite.

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<sup>42</sup> Hawai'i state courts are not subject to a constitutional "case or controversy" jurisdictional limitation. See Haw. Const. art. VI, § 1 ("The several courts shall have original and appellate jurisdiction as provided by law . . . ."); Trs. of Office of Hawaiian Affairs v. Yamasaki, 69 Haw. 154, 170 n.17, 737 P.2d 446, 456 n.17 (1987); Tax Found., 144 Hawai'i at 190, 439 P.3d at 142.

In Asato, the plaintiff brought suit seeking to invalidate an administrative rule relating to the State's contracting policies and to void every contract that the State had entered into under the regulation. 132 Hawai'i at 337, 322 P.3d at 232. Notably, the claim in Asato was brought under HRS § 91-7(a), which allows "any interested person" to challenge an agency rule.<sup>43</sup> Asato did not concern HRS § 632-1, and it thus does not provide guidance herein. See Tax Found., 144 Hawai'i at 194-95, 439 P.3d at 146-47 (discussing the requirements of HRS § 91-7 and HRS § 632-1 separately).

Further, even if Asato had been brought under HRS § 632-1, its holding is not helpful to the State. Although the Asato court invalidated the challenged administrative rule, it declined to declare that the contracts entered into under the regulation were void, noting that no connection had been alleged between the plaintiff and any of the individual contracts. Id. at 355, 322 P.3d at 250. The court determined that, without

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<sup>43</sup> HRS § 91-7(a) provides as follows:

(a) Any interested person may obtain a judicial declaration as to the validity of an agency rule as provided in subsection (b) by bringing an action against the agency in the circuit court or, if applicable, the environmental court, of the county in which the petitioner resides or has its principal place of business. The action may be maintained whether or not the petitioner has first requested the agency to pass upon the validity of the rule in question.

knowing the plaintiff's relation to each contract, it could not identify any controversy that could be ended by a declaration that the contracts were void. Id. ("Absent any rendition of the circumstances surrounding each contract, it cannot be determined from the allegations whether there is a substantial controversy as to a particular contract that is of sufficient immediacy and reality to warrant a declaratory judgment." (internal quotations omitted)).

By contrast, the Plaintiffs here are connected to the PTA and the manner in which the State manages it because the PTA is held in trust by the State for the Plaintiffs' benefit. This is to say that the trust duty that the Plaintiffs allege the State has breached is a duty the State owes to the Plaintiffs, and a declaration regarding whether the State has breached that duty would terminate the controversy by clarifying the contours of that duty.

The State also relies on Kau, in which this court considered a Honolulu ordinance that permitted the lessees of condominium units to purchase fee simple interests through a condemnation proceeding. 104 Hawai'i at 472, 92 P.3d at 481. The case began when the fee simple owners of a condominium project brought an action seeking a declaration that the subdivision of the property into individual units would end upon the expiration of the developer's master lease in 2014, and thus

the sublessees of the individual units would not acquire fee simple interests in their individual units if they were condemned under the ordinance. Id. The Kau court held that, because the fee simple owners were "requesting a judgment based on the expiration of the Master Lease, an event that [would] occur at some time in the future; there [wa]s no actual controversy in existence at th[at] time." Id. at 475, 92 P.3d at 484. Specifically, the court noted that the declaration would require speculation as to the conditions that would exist when the master lease expired. Id. During the interim, the court reasoned, the city could condemn the fee owner's interest or the fee owners could make the appropriate filings to make the subdivision permanent, thereby avoiding the situation that the fee simple owners wished the court to rule on. Id.

Unlike in Kau, the Plaintiffs' breach of trust claim based on a failure to reasonably monitor the United States' compliance with the lease does not require the court to speculate about future conditions--nor even the present likelihood that the United States is currently in breach of the lease.<sup>44</sup> Rather, the Plaintiffs alleged that the State has

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<sup>44</sup> The circuit court additionally determined that the State would further breach [its] trust duties if [it] were to execute an extension, renewal, or any other change to the State General Lease No. S-3849, or enter into a new lease of the

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already breached its duty as a trustee by failing to monitor compliance with the provisions of the lease, irrespective of whether the United States actually complied with the lease terms. This case thus presents the type of controversy that is necessary to qualify for relief under HRS § 632-1(b).

**b. The Alleged Breach of Trust Does Not Present a Political Question**

Under the political question doctrine, courts refrain from deciding certain matters that are committed to the discretion of the other branches of government, reasoning that government action in these areas is properly addressed through democratic processes. See Trs. of Office of Hawaiian Affairs v. Yamasaki, 69 Haw. 154, 171, 737 P.2d 446, 456 (1987). This court has adopted the test for identifying a political question articulated by the United States Supreme Court in Baker v. Carr, 369 U.S. 186, 217 (1962). Under the Carr formulation, a political question may be found when "on the surface of [a] case" there is 1) "a textually demonstrable constitutional

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PTA, without first determining (in writing) that the terms of the existing lease have been satisfactorily fulfilled, particularly with respect to any lease provision that has an impact upon the condition of the [PTA] leased lands.

As discussed in more detail infra, Part V.B.4, any breach of trust claim regarding the State's renewal of the lease is speculative and not ripe for review, and thus this aspect of the Plaintiffs' claim does not present a controversy susceptible to declaratory relief under HRS § 632-1.

commitment of the issue to a coordinate political department;" 2) "a lack of judicially discoverable and manageable standards for resolving it;" 3) "the impossibility of deciding without an initial policy determination of a kind clearly for nonjudicial discretion;" 4) "an unusual need for unquestioning adherence to a political decision already made;" or 5) "the potentiality of embarrassment from multifarious pronouncements by various departments on one question." Yamasaki, 69 Haw. at 169-70, 737 P.2d at 455 (quoting Carr, 369 U.S. at 217).

The State contends that Plaintiffs' claim that it violated its constitutional public trust duties is a nonjusticiable political question under Yamasaki and Nelson v. Hawaiian Homes Commission. In Yamasaki, the Trustees of the Office of Hawaiian Affairs brought suit seeking 20% of the proceeds derived by the State as damages from an illegal sand mining operation taking place on ceded lands. 69 Haw. at 165-67, 737 P.2d at 452-54. Although HRS § 10-13.5 provided that "[t]wenty per cent of all funds derived from the public land trust . . . shall be expended by the [O]ffice of Hawaiian Affairs," the court held that the case presented a political question because no judicially discoverable and manageable standards existed for determining whether the damages amounted to "funds derived from the public land trust." Id. at 174, 737 P.2d at 458. Resolving the case would require an initial policy

determination that was typically reserved for nonjudicial discretion, the court held. Id. at 174-75, 737 P.2d at 458. In Nelson, the court held that determining what constitutes "sufficient funds" for three of the four purposes set forth in article XII, section 1 of the Hawai'i Constitution<sup>45</sup> was a political question not suited for judicial resolution. 127 Hawai'i at 188, 277 P.3d at 282. The court held that, even were it to declare that the amount of funds currently dedicated to three of the four purposes was insufficient, there were no discoverable standards in the text or constitutional history of the provision for a court to affirmatively determine the amount that would be sufficient. Id. at 206, 277 P.3d at 300.

These cited cases are plainly distinguishable. Unlike in Yamasaki and Nelson, this court's precedents interpreting the State's constitutional trust obligations and the widely developed common law of trusts provide many judicially

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<sup>45</sup> Article XII, section 1 of the Hawai'i Constitution provides in relevant part as follows:

The legislature shall make sufficient sums available for the following purposes: (1) development of home, agriculture, farm and ranch lots; (2) home, agriculture, aquaculture, farm and ranch loans; (3) rehabilitation projects to include, but not limited to, educational, economic, political, social and cultural processes by which the general welfare and conditions of native Hawaiians are thereby improved; (4) the administration and operating budget of the department of Hawaiian home lands; in furtherance of (1), (2), (3) and (4) herein, by appropriating the same in the manner provided by law.

discoverable and manageable standards for determining whether the State breached its trust duties. "It is well settled that the determination of whether or not a particular proposed action, by the trustee of a charitable trust, would constitute a breach of that trust, is a matter to be determined by the courts, as a part of their inherent jurisdiction." Kapiolani Park Pres. Soc. v. City & Cty. of Honolulu, 69 Haw. 569, 571, 751 P.2d 1022, 1024 (1988) (citing 15 Am.Jur.2d Charities § 135 (1976); 14 C.J.S. Charities § 49 (1939)).

The State points to the Ninth Circuit decision in Price v. Hawaii, in which the court held that as a matter of federal law, section 5(f) of the Admission Act<sup>46</sup> did not incorporate "all provisions of the common law of trusts" because to do so "would manacle the State as it attempted to deal with the vast quantity of land conveyed to it." 921 F.2d 950, 954-56 (9th Cir. 1990). While this court has approvingly quoted this passage when examining the State's obligations when administering a different, statutorily created trust, see

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<sup>46</sup> "Article XII, § 4 was added to the Hawaii Constitution to expressly recognize the trust purposes and trust beneficiaries of the § 5(f) trust, clarifying that the State's trust obligations extend beyond the Hawaiian Homes Land Trust." Pele Def. Fund, 73 Haw. at 603, 837 P.2d at 1263 (citing Stand. Comm. Rep. No. 59 in I Proceedings of the Constitutional Convention of Hawai'i of 1978, 643-44 (1980)). "In article XVI, [section] 7, referred to by article XII, [section] 4, the State affirmatively assumes the [section] 5(f) trust responsibilities." Id. at 586 n.2, 837 P.2d at 1254 n.2.

Awakuni v. Awana, 115 Hawai'i 126, 133, 165 P.3d 1027, 1034 (2007), this does not establish that the common law of trusts is wholly inapplicable. This is to say that a ruling that not all provisions of the common law apply does not equate to a ruling that none of the provisions of the common law apply. Indeed, the same year that the Ninth Circuit decided Price v. Hawaii, it relied in part on the common law of trusts when it held in a related case that the same plaintiff stated a claim against the Office of Hawaiian Affairs based on an alleged breach of its section 5(f) trust duties. See Price v. Akaka, 928 F.2d 824, 826-27 (9th Cir. 1990) ("In addition, allowing Price to enforce § 5(f) is consistent with the common law of trusts, in which one whose status as a beneficiary depends upon the discretion of the trustee nevertheless may sue to compel the trustee to abide by the terms of the trust." (citing Restatement (Second) of Trusts §§ 214(1) cmt. a, 391)).

Further, this court may draw upon its own case law interpreting the State's constitutional trust obligations for administrable standards, including instances in which we have explicitly stated that beneficiaries of the ceded land trust may bring actions to determine whether executive branch agencies have breached their constitutional trust duties. See, e.g., Pele Def. Fund, 73 Haw. 578, 605, 837 P.2d 1247, 1264 (1992) ("We find that the actions of state officials, acting in their

official capacities, should not be invulnerable to constitutional scrutiny. Article XII, § 4 imposes a fiduciary duty on Hawai'i's officials to hold ceded lands in accordance with the § 5(f) trust provisions, and the citizens of the state must have a means to mandate compliance."). The State's contention that this case presents a nonjusticiable political question is thus without merit.

**3. The Circuit Court Did Not Err in Concluding the State Breached Its Trust Duties**

**a. The Circuit Court Correctly Determined that the State has a Trust Duty To Reasonably Monitor the Trust Property, Including the United States' Compliance with the Terms of the Lease that Protect the Trust Property**

In its conclusions of law, the circuit court determined that the State's trust duties include using "reasonable efforts" to preserve trust property and to take a proactive role in the management and protection of the leased PTA land. The court ruled that one aspect of this duty is an obligation "to use reasonable efforts to ensure that Said Lease provisions that affect or impact the condition of ceded lands and all living things thereon are being followed and discharged." Further, the court concluded that the State has a duty to consider the cumulative effects of the United States' use of the land upon the condition of the land and upon "the indigenous plants, animals, and insects, as well as the invasion to Plaintiffs' cultural interests in the Subject Land."

Although the State blends its arguments regarding the nature of its legal trustee duties with those regarding the underlying justiciability of the case, the State appears to dispute these rulings and to argue that its trustee duties do not include an obligation to reasonably monitor the leased PTA land.

The State's duties with respect to the leased PTA land are derived in part from the properties' status as "ceded land"—which are lands that were held by the civil government or the monarchy of the Hawaiian Kingdom at the time of the 1893 overthrow of the Hawaiian monarchy. See Pele Def. Fund, 73 Haw. at 585, 837 P.2d at 1254. When the United States annexed Hawai'i by a joint resolution of Congress in 1898, real property that had been classified as government lands or crown lands was ceded to the federal government. Id. Recognizing their special character, the Joint Resolution of Annexation exempted these lands from the general laws of the United States that governed federal land. State ex rel. Kobayashi v. Zimring, 58 Haw. 106, 124, 566 P.2d 725, 736 (1977) (citing Joint Resolution of July 7, 1898, 30 Stat. 750). Instead, the resolution specified that these lands should be held in a "special trust" for the benefit of the people of Hawai'i. Id. When Hawai'i was admitted into the Union as a state in 1959, these ceded lands were transferred back to the newly established state, subject to the trust provisions set forth in section 5(f) of the Admission Act. Pele

Def. Fund, 73 Haw. at 585, 837 P.2d at 1254 (citing Hawaii Admission Act, Pub. L. No. 86-3, 73 Stat. 4, 6 (1959)). Article XII, section 4 was later added to the Hawai'i Constitution to formally recognize these responsibilities, specifying that the land "shall be held by the State as a public trust for native Hawaiians and the general public."<sup>47</sup> Id. at 586, 837 P.2d at 1254 (quoting Haw. Const. art. XII, § 4). At that same time, the framers and the people of Hawai'i adopted article XI, section 1, which created a public trust consisting of "all public natural resources" to be administered by the State for the benefit of the people.<sup>48</sup> Haw. Const. art. XI, § 1.

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<sup>47</sup> Article XII, section 4 of the Hawai'i Constitution provides in full as follows:

The lands granted to the State of Hawaii by Section 5(b) of the Admission Act and pursuant to Article XVI, Section 7, of the State Constitution, excluding therefrom lands defined as "available lands" by Section 203 of the Hawaiian Homes Commission Act, 1920, as amended, shall be held by the State as a public trust for native Hawaiians and the general public.

<sup>48</sup> Article XI, section 1 of the Hawai'i Constitution provides in full as follows:

For the benefit of present and future generations, the State and its political subdivisions shall conserve and protect Hawaii's natural beauty and all natural resources, including land, water, air, minerals and energy sources, and shall promote the development and utilization of these resources in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State.

All public natural resources are held in trust by the State for the benefit of the people.

As the State concedes, our case law and the common law of trusts make the State "subject to certain general trust duties, such as a general duty to preserve trust property." See, e.g., Zimring, 58 Haw. at 121, 566 P.2d at 735 ("Under public trust principles, the State as trustee has the duty to protect and maintain the trust property and regulate its use."); Kaho'ohanohano v. State, 114 Hawai'i 302, 325, 162 P.3d 696, 719 (2007) ("[It] is always the duty of a trustee to protect the trust property . . . ." (quoting Brenizer v. Supreme Council, Royal Arcanum, 53 S.E. 835, 838 (N.C. 1906))); In re Estate of Dwight, 67 Haw. 139, 146, 681 P.2d 563, 568 (1984) ("A trustee is under a duty to use the care and skill of a [person] of ordinary prudence to preserve the trust property." (citing Bishop v. Pittman, 33 Haw. 647, 654 (Haw. Terr. 1935))); Restatement (Second) of Trusts § 176 ("The trustee is under a duty to the beneficiary to use reasonable care and skill to preserve the trust property.").<sup>49</sup> As trustee, the State must

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<sup>49</sup> The State's duty of care is especially heightened in the context of ceded land held in trust for the benefit of native Hawaiians and the general public under article XII, section 4. This court has approvingly quoted the following in considering the ceded land trust:

The native Hawaiian people continue to be a unique and distinct people with their own language, social system, ancestral and national lands, customs, practices and institutions. The health and well-being of the native Hawaiian people is intrinsically tied to their deep feelings and attachment to the land. 'Aina, or land, is of crucial importance to the native Hawaiian people--to their

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take an active role in preserving trust property and may not passively allow it to fall into ruin. United States v. White Mt. Apache Tribe, 537 U.S. 465, 475 (2003) ("[E]lementary trust law, after all, confirms the commonsense assumption that a fiduciary actually administering trust property may not allow it to fall into ruin on [the fiduciary's] watch."). It is self-evident that an obligation to reasonably monitor trust property to ensure it is not harmed is a necessary component of this general duty, as is a duty to investigate upon being made aware of evidence of possible damage. This obligation inherently includes a duty to make reasonable efforts to monitor third-parties' compliance with the terms of agreements designed to protect trust property.

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culture, their religion, their economic self-sufficiency and their sense of personal and community well-being. 'Aina is a living and vital part of the native Hawaiian cosmology, and is irreplaceable. The natural elements—land, air, water, ocean—are interconnected and interdependent. To native Hawaiians, land is not a commodity; it is the foundation of their cultural and spiritual identity as Hawaiians. The 'aina is part of their 'ohana, and they care for it as they do for other members of their families. For them, the land and the natural environment is alive, respected, treasured, praised, and even worshiped.

Office of Hawaiian Affairs v. Hous. & Cmty. Dev. Corp. of Hawai'i, 121 Hawai'i 324, 333, 219 P.3d 1111, 1120 (2009) (alterations omitted) (quoting Office of Hawaiian Affairs v. Hous. & Cmty. Dev. Corp. of Hawai'i, 117 Hawai'i 174, 214, 177 P.3d 884, 924 (2008)).

This court held as much in Kelly v. 1250 Oceanside Partners, in which it considered the article XI, section 1 public trust duties of the Hawai'i Department of Health (DOH) with respect to a private development abutting coastal waters that the State had classified as "AA," meaning the waters were legally required to be kept as nearly as possible in their natural, pristine condition. 111 Hawai'i 205, 227-29, 140 P.3d 985, 1007-09 (2006). Although DOH had issued a permit to the developer that included provisions requiring the developer to abide by State regulations prohibiting the pollution of AA waters, this court held that including the provisions in the permit was not the end of DOH's duties as trustee. Id. Under public trust principles, we held, DOH was required to "not only issue permits after prescribed measures appear to be in compliance with state regulation, but also to ensure that the prescribed measures are actually being implemented after a thorough assessment of the possible adverse impacts the development would have on the State's natural resources." Id. at 231, 140 P.3d at 1011 (emphasis added). We thus effectively held that the State had a continuing public trust duty to reasonably monitor the developer to ensure it was complying with the permit. See id.

The present case presents close parallels to Oceanside Partners. As in Oceanside Partners, the State entered into an

agreement to allow a third party to use land for a particular purpose provided the third party complied with certain conditions intended to protect trust property. And as in Oceanside Partners, the State has a continuing trust duty to make reasonable efforts to ensure that the third party actually complies with those conditions. Thus, the State has a constitutional trust obligation to reasonably monitor the United States' compliance with the lease.

The State's attempts to distinguish Oceanside Partners are unavailing. As a threshold matter, the State is incorrect that no statute exists setting forth the State's obligations with respect to ensuring the United States' compliance with the lease; HRS § 171-7(5) provides that, "[e]xcept as provided by law the board of land and natural resources through the chairperson shall: . . . [e]nforce contracts respecting sales, leases, licenses, permits, or other disposition of public lands[.]" Moreover, this court has made clear that while overlap may occur, the State's constitutional public trust obligations exist independent of any statutory mandate and must be fulfilled regardless of whether they coincide with any other legal duty. Kauai Springs, Inc. v. Planning Comm'n of Kauai, 133 Hawai'i 141, 172, 324 P.3d 951, 982 (2014) ("As the public trust arises out of a constitutional mandate, the duty and authority of the state and its subdivisions to weigh competing

public and private uses on a case-by-case basis is independent of statutory duties and authorities created by the legislature.”); see also In re TMT, 143 Hawai‘i 379, 416, 431 P.3d 752, 789 (2018) (Pollack, J., concurring) (“Thus, although some congruence exists, BLNR’s and the University of Hawai‘i at Hilo’s public trust obligations are distinct from their obligations under [Hawai‘i Administrative Rules] § 13-5-30(c).”).

Additionally, the fact that Paragraph 9 of the lease only requires the United States to “make every reasonable effort to . . . remove or deactivate all live or blank ammunition upon completion of a training exercise or prior to entry by the said public, whichever is sooner” does not render the State powerless to respond to a breach of this provision as the State contends. It is well settled that an agreement by one party to use “reasonable” or “best efforts” generally creates an enforceable obligation as a matter of contract law. See, e.g., Sorooof Trading Dev. Co. v. GE Fuel Cell Sys., LLC, 842 F.Supp.2d 502, 511 (S.D.N.Y. 2012) (“New York courts use the term ‘reasonable efforts’ interchangeably with ‘best efforts’ . . . [and] a ‘best efforts’ clause imposes an obligation to act with good faith in light of one’s own capabilities.” (quoting Monex Fin. Serv. Ltd. v. Nova Info.

Sys., Inc., 657 F.Supp.2d 447, 454 (S.D.N.Y. 2009)); Allview Acres, Inc. v. Howard Inv. Corp., 182 A.2d 793, 796 (Md. 1962) ("What will constitute reasonable efforts under a contract expressly or impliedly calling for them is largely a question of fact in each particular case and entails a showing by the party required to make them of 'activity reasonably calculated to obtain the approval by action or expenditure not disproportionate in the circumstances.'" (quoting Stabile v. McCarthy, 145 N.E.2d 821, 824 (Mass. 1957))). And, while the lease may not contain a provision expressly allowing the State to terminate the lease, it does contain a dispute resolution mechanism in Paragraph 30. This mechanism appears to specifically contemplate the possibility of judicial enforcement, setting forth the conditions under which "a court of competent jurisdiction" may set aside the administrative factual findings and specifying that administrative decisions on questions of law shall not be final.

Moreover, the State errs by presuming that initiating a formal action to enforce the lease is the only possible response it could undertake to preserve and protect the PTA land if it discovers the United States is in noncompliance with the relevant provisions of the lease. A range of other options may be available that could satisfy its public trust obligations under the circumstances, including seeking to

obtain the United States' voluntary cooperation. As the Plaintiffs argued during the summary judgment hearing, how the State responds if reasonable monitoring and investigation lead to a discovery that the United States is not in compliance with the lease could potentially be a separate breach of the State's public trust duties, and this court need not speculate about what hypothetical future actions are reasonable in order to resolve this case.

The State is therefore wrong to suggest that reasonably monitoring the United States' compliance with the lease is a futile or pointless endeavor, and Oceanside Partners' holding that the State has an ongoing trust obligation to ensure third-party compliance with provisions designed to protect trust property is dispositive as to the existence of this obligation.

**b. The Circuit Court Did Not Err in Determining that the State Did Not Reasonably Monitor the Trust Property, Including the United States' Compliance with the Lease Terms that Protect Trust Property**

The State appears to argue next that, even if it does have a trust duty to reasonably monitor the United States' compliance with the lease, the circuit court erred in finding that it breached that duty by failing to conduct regular inspections of the PTA and by failing to investigate when it was made aware of evidence that the United States may have violated

provisions of the lease designed to protect the leased PTA land. "Typically, whether a fiduciary acted prudently--or in other words, as a reasonably prudent fiduciary--is a question of fact." Harley v. Minn. Mining & Mfg. Co., 42 F.Supp.2d 898, 907 (D. Minn. 1999); see also Knodle v. Waikiki Gateway Hotel, Inc., 69 Haw. 376, 385, 742 P.2d 377, 383 (1987) ("Whether there was a breach of duty or not, i.e. whether there was a failure on the defendant's part to exercise reasonable care, is a question for the trier of fact."). Accordingly, the circuit court's determination that the State did not reasonably monitor the United States' compliance with the lease terms must be upheld if it is not clearly erroneous.

The circuit court specifically found that the State had breached its trust duties by failing to, inter alia:

- (a) conduct regular reasonable (in terms of frequency and scope), periodic monitoring and inspection of the condition of subject public trust lands . . . ;
- (b) ensure that the terms of the lease that impact the condition of the leased lands or preserving Plaintiffs' cultural interests are being followed;
- (c) take prompt and appropriate follow up steps with military or other federal government officials when [the State] obtain[s] or [is] made aware of evidence or information that the lease may have been violated with respect to protecting the condition of the [PTA] leased lands[.<sup>50</sup>]

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<sup>50</sup> The circuit court additionally found that the State had breached its trust duties by failing to consistently make reasonably detailed and complete records of its actions to ensure compliance with the lease and by failing to initiate or assist with the appropriation of necessary funding to

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(Line breaks added.) In making this determination, the court relied on the fact that “[o]nly three [inspection] reports of any significance, for 1984, 1994, and 2014, were introduced into evidence.” Of these, “[t]he 1984 and 1994 reports were grossly inadequate and, in the case of the 1994 report, virtually nonexistent because of its lack of information pertaining to the 1994 inspection.” The court stated that it was not considering “other studies or site visits in connection with other business regarding the [PTA], such as environmental impact statements, [because] the court did not view these events as being undertaken as part of [the State’s] effort to discharge” its trust duties.

The State argues that the circuit court’s determination was clearly erroneous because it explicitly disregarded the State’s reliance on cooperative agreements, environmental reports, and archeological surveys to supervise

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undertake cleanup of the PTA. And the court held that the State would breach its trust duties if it were to extend or renew the lease “without first determining (in writing) that the terms of the existing lease have been satisfactorily fulfilled, particularly with respect to any lease provision that has an impact upon the condition of the” PTA. The State does not appear to challenge these conclusions on appeal, raising in their point of error regarding the breach only that “[t]he circuit court erred in finding that the State breached its trust duties by failing to perform adequate inspections of the Subject Land.” Nevertheless, as discussed below, the circuit court’s order regarding the securing of funding for cleanup was not suited to remedy the breach alleged by the Plaintiffs, and any holding regarding a future breach of the State’s trust duties is speculative.

the United States' use of the PTA.<sup>51</sup> Under the circumstances, the State contends, it was reasonable for the State to delegate its duties<sup>52</sup> and rely on its review of ancillary documents to monitor the PTA.

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<sup>51</sup> These documents included a copy of the United States training regulations and procedures from 1970, an environmental assessment for a training exercise in 1982, a 1984 archeological survey report, a 2002 Integrated Natural Resources Management Plan, a 2004 environmental impact statement, and a 2004-2010 "Programmatic Agreement" to provide additional protection to cultural sites.

<sup>52</sup> The State cites Restatement (Second) of Trusts § 171 for the proposition that a trustee has authority to cooperate, consult, and delegate to others tasks relating to trust administration when it is reasonable to do so. However, this is not an accurate description of Restatement (Second) of Trusts § 171, which is entitled "Duty Not to Delegate." (Emphasis added.) Under the approach taken by the First and Second Restatement, "[t]he trustee is under a duty to the beneficiary not to delegate to others the doing of acts which the trustee can reasonably be required personally to perform." Id.; Restatement (First) of Trusts § 171. However, "[t]he position of The American Law Institute was fundamentally changed in 1992," and Restatement (Third) of Trusts § 80, "Duty with Respect to Delegation," provides as follows:

(1) A trustee has a duty to perform the responsibilities of the trusteeship personally, except as a prudent person of comparable skill might delegate those responsibilities to others.

(2) In deciding whether, to whom, and in what manner to delegate fiduciary authority in the administration of a trust, and thereafter in supervising or monitoring agents, the trustee has a duty to exercise fiduciary discretion and to act as a prudent person of comparable skill would act in similar circumstances.

Restatement (Third) of Trusts § 80 and Reporter's Notes on § 80. Hawai'i courts have not explicitly adopted either the Restatement's original position or the new position set forth in the Third Restatement, though many older cases make clear that at least some of a trustee's duties are non-delegable. See Hartmann v. Bertelmann, 39 Haw. 619, 627 (Haw. Terr. 1952) ("[T]he primary responsibility of administering the trust is the trustee's, which he cannot delegate . . . ."); In re Banning's Estate, 9 Haw. 453, 463 (Haw. Rep. 1894) ("The duties and powers of trustees cannot be delegated.").

To the extent the State argues that it can delegate its public trust duty to reasonably monitor the PTA to protect and preserve trust property, this contention is squarely counter to our precedent indicating that the State may not delegate its constitutional duties to third-parties. See Ka Pa'akai O Ka'Aina v. Land Use Comm'n, 94 Hawai'i 31, 50-51, 7 P.3d 1068, 1087-88 (2000) (holding that the Land Use Commission improperly delegated its article XII, section 7 "responsibility for the preservation and protection of native Hawaiian rights" by authorizing a land reclassification on the promise that the developer would later create a program to accommodate native practitioners, as the "balancing of the developer's interests with the needs of native Hawaiians should have been performed, in the first instance, by the" State agency). The Ka Pa'akai court held that the Hawai'i Constitution places "an affirmative duty on the State and its agencies to preserve and protect traditional and customary native Hawaiian rights." Id. at 45, 7 P.3d at 1082 (emphasis added). At the core of this affirmative duty, as explained by the Ka Pa'akai court, is the responsibility of the State and its constituent agencies to act only after "independently considering the effect of their actions on Hawaiian traditions and practices." Id. at 46, 7 P.3d at 1083.

An affirmative duty of the State to protect and preserve constitutional rights is by its very nature non-delegable.

Even if such a delegation were not inherently invalid under the Hawai'i Constitution and permitted under our common law of trusts, that delegation would itself have to be reasonable under the prudent person standard, and the State would maintain a trust duty to reasonably supervise the agent in its performance of the monitoring. See supra note 52. It is self-evident that, as a general matter, it is not reasonable for a trustee to delegate the supervision of a lessee's compliance with the terms of a lease of trust property to the lessee. Cf. Halderman v. Pennhurst State Sch. & Hosp., 526 F. Supp. 428, 433 (E.D. Pa. 1981) ("The Commonwealth defendants appear to take the position that they should be able to monitor their own compliance with the Court's Orders. This would be somewhat akin to requesting the fox to guard the henhouse."). This is especially true given the circuit court's findings that the State was aware of the United States' history of failing to prevent environmental damage and clean up the remnants of military exercises on other State-owned land that it leases, including Mākua and the Waikāne Valley.

Nevertheless, it is generally not considered a breach of duty for a fiduciary to rely in part on reports prepared by a person as to matters that the fiduciary reasonably believes to

be within that person's expertise. Cf. HRS § 414D-155(b) (2) (Supp. 2018);<sup>53</sup> HRS § 414D-149(b) (2) (Supp. 2018).<sup>54</sup> Democratic principles and the checks and balances of government may arguably serve to make a governmental entity like the United States more accountable than the average lessee, and some of the documents authored on behalf of the United States included observations by independent third parties. If the State took appropriate action to verify the content, it may have reasonably concluded that the reports were reliable, and it could have validly considered them in the course of fulfilling its non-delegable trust duties. The circuit court therefore appears to have erred in disregarding the State's review of these ancillary documents in assessing whether the State had fulfilled its trust duty to reasonably monitor the PTA solely on the basis that these other reports were not "undertaken as part of [the State's] effort to discharge" its trust duties.

But the State's efforts were clearly inadequate in any event. The ancillary reports occurred very infrequently and in

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<sup>53</sup> HRS § 414D-155(b) (2) provides that, in the course of discharging the officer's duties, an officer of a nonprofit corporation may "rely on information, opinions, reports, or statements, including financial statements and other financial data, if prepared or presented by . . . [l]egal counsel, public accountants, or other persons as to matters the officer reasonably believes are within the person's professional or expert competence."

<sup>54</sup> HRS § 414D-149(b) (2) provides the same right to rely on information from professionals regarding matters within their expertise to directors of a non-profit corporation.

some cases cited evidence of damage and suggested that the United States may not have been in compliance with the lease. Indeed, the circuit court made specific findings regarding adverse environmental information included in two of the United States' reports. It noted that a 2010 archaeological and cultural monitoring report stated,

The Military needs to implement some kind of cleanup process as part of their training in PTA. Remnants of military trash is everywhere.

. . . .

Another major concern is the military debris that is left behind after training including [UXO] that is carelessly discarded. There is a need to have some type of cleanup plan implemented in the military training process.

(Emphasis omitted.) The court also found that a second archaeological and cultural monitoring report made four years later expressed many of the same concerns with specific regard to the United States' obligations under the lease:

Remnants of live fire training are present within the BAX, including stationary targets, junk cars, an old tank, crudely built rock shelters, and miscellaneous military rubbish. Spent ammunition is scattered across the landscape.

. . . .

This lease . . . requires the land to be restored to its original state when returned. This cannot occur if the land remains so littered with UXO that it is unsafe for anyone to go on the land. If this is the case, the land will be rendered unusable forever--one eighth of our island will become unavailable for use by any of our future generations. This is not acceptable nor could it be construed in any way to be in compliance with the Statehood compact.

Therefore, in order for the Army to meet the lease termination deadline, we strongly recommend the Army begin now to seek funding to initiate a serious cleanup effort

throughout the leased training areas bounding the impact areas: that major impact/UXO areas be subjected to thorough cleanup[.]

(Emphasis and some alterations in original.)<sup>55</sup> There was no indication the State ever followed up on these reports.

The circuit court found that the State breached its trust duties: by failing to conduct regular monitoring and inspections that were reasonable in frequency and scope to examine the condition of the leased PTA land; by failing to ensure that the terms of the lease that impact the condition of the leased PTA land were being followed; and by failing to take prompt and appropriate follow-up steps when it was made aware of evidence that the lease may have been violated with respect to protecting the condition of the leased PTA land. In light of the foregoing, the circuit court did not err in these findings.

#### **4. The Injunctive Relief Ordered by the Circuit Court Was Not Entirely Suited To Remedy the Demonstrated Breach**

The circuit court ordered the State to rectify its breach of its constitutional public trust duties by "promptly initiat[ing] and undertak[ing] affirmative activity to malama

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<sup>55</sup> Although the court did not make any specific findings regarding the other reports on which the State claims it relied, several of these also documented substantial environmental problems with the leased PTA land. For example, the 2002 Integrated Natural Resources Management Plan noted in a section setting forth the "Adverse Effects" of the "Military Mission on Natural Resources" that 22.9% of the ground cover in the surveyed area consisted of litter and "[t]here was virtually no evidence of maintenance activity."

'aina the" PTA. According to the court, this includes but is not limited to developing a written plan to care for the land. The court stated that the plan must include the following:

- regular, periodic on-site monitoring and inspection;
- the making of inspection reports that at minimum include a set of specified information, recommendations for appropriate action, and a nonbinding estimated timeline for when such action should be undertaken;
- a protocol of appropriate action that will be undertaken if the State discovers an "actual, apparent, or probable breach of any provision" of the lease by the United States, [UXO] or debris deposited during training exercises, any other foreign or non-natural item or contaminate connected with the lease, or any other condition adversely affecting the PTA;
- a protocol or other assurance to bring any nonconforming condition found that is likely caused by the United States under the lease into pre-lease condition on a reasonable timetable;
- a set of steps the State will take to obtain or assist in securing adequate funding for a comprehensive cleanup of the PTA; and
- a procedure to provide reasonable transparency to the Plaintiffs and the general public with regard to the State's progress in fulfilling the court's order.

The court also ordered the State to initiate HRS Chapter 91 rulemaking to establish a contested case procedure, if not already in existence, through which the Plaintiffs or any member of the general public with standing could challenge the State's decisions in the course of discharging its trust duty to care

for the leased PTA lands. Lastly, the court ordered that the State submit its plan to care for the land to the court for approval prior to executing it.

The form and scope of injunctions issued by Hawai'i courts are governed by HRCF Rule 65(d), which provides as follows:

Every order granting an injunction and every restraining order shall set forth the reasons for its issuance; shall be specific in terms; shall describe in reasonable detail, and not by reference to the complaint or other document, the act or acts sought to be restrained; and is binding only upon the parties to the action, their officers, agents, servants, employees, and attorneys, and upon those persons in active concert or participation with them who receive actual notice of the order by personal service or otherwise.

(Emphases added). We have stated that, when granting an injunction, a court should adopt relief and "mold[] its decree to satisfy the requirement[s] of th[e] particular case and thereby conserve the equities of all of the parties." Fleming v. Napili Kai, Ltd., 50 Haw. 66, 70, 430 P.2d 316, 319 (1967); see also Moffat v. Speidel, 2 Haw. App. 334, 335, 631 P.2d 1205, 1206 (1981) (holding that a court's failure to "mold its decree and the relief granted to satisfy the requirements of the case" violates HRCF Rule 65(d)). In interpreting the substantively identical federal rule, federal courts have consistently held that injunctions must "remedy only the specific harms shown by the plaintiffs." Price v. City of Stockton, 390 F.3d 1105, 1117 (9th Cir. 2004) (internal quotes and citations omitted). An

overbroad injunction is an abuse of discretion. Kohl v. Legoullan, 936 P.2d 514, 519 (Alaska 1997).

As discussed supra, the circuit court correctly determined that the State breached its constitutional trust duties by failing to reasonably monitor the PTA, including by failing to inspect the land to ensure the United States' compliance with the lease terms intended to protect and preserve trust property. Much of the circuit court's order was appropriately tailored to address this breach. By requiring the State to develop and execute a plan to conduct regular, periodic monitoring and inspection, the court's order ensured that the State would fulfill its trust duty to inform itself of the present condition of the leased PTA land and whether the United States was in compliance with the relevant terms of the lease so that it might take further action if needed to protect and preserve trust property.<sup>56</sup> By requiring these inspections to be

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<sup>56</sup> The circuit court's order included several specific details as to how the inspections should be carried out, including that

the monitoring should involve direct (in person) or indirect (via videographic or live remote viewing) observation of actual military training exercises (including live fire exercises of all types using live and/or explosive munitions, as well as the use of heavy vehicles or equipment above and upon the land) so that the monitors and/or inspectors can observe and appreciate the destructive effects, if any, of all such training and use of equipment[.]

While these measures may represent the quality of monitoring that the State should aspire to, we hold that the circuit court's order should be

(continued . . .)

documented in detailed inspection reports, the order assures that the inspections are meaningful and allows trust beneficiaries to evaluate the State's response to what it discovers, enabling the bringing of a future action to enforce the State's trust duties if it fails to fulfill them. And by requiring the State to establish a procedure to ensure reasonable transparency to the Plaintiffs and general public regarding the State's progress with complying with the court's order, the order ensures its own effectiveness through public oversight.

The State contends that because the circuit court's order does not specify how often the periodic inspections must take place, it is impermissibly vague.<sup>57</sup> But it is not uncommon for courts to issue generally-stated orders requiring government agencies to submit plans to remedy constitutional violations and then evaluate the adequacy of the plans prior to their

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(. . . continued)

interpreted to require monitoring to the fullest extent consistent with the State's right of reasonable entry under the lease and no more.

<sup>57</sup> The State argues that this requirement ensures further litigation and indicates the relief does not "terminate the uncertainty or controversy giving rise to the proceeding" as required by HRS § 632-1. As stated, however, the Plaintiffs have a constitutional cause of action for prospective injunctive relief that exists independently of HRS § 632-1. See *supra* note 41.

implementation.<sup>58</sup> And this court has prescribed substantially more intensive monitoring to ensure specific compliance with terms of a broadly phrased order. See Konno v. Cty. of Hawai'i, 85 Hawai'i 61, 79, 937 P.2d 397, 415 (1997) ("We further instruct the circuit court to fashion injunctive relief requiring the landfill to be transferred from private operation to County operation as rapidly as possible but consistent with practical and public interest concerns. The circuit court shall also monitor the transition and may impose sanctions for non-compliance."); see also Tugaeff v. Tugaeff, 42 Haw. 455, 459 (Haw. Terr. 1958) ("A court of equity, having once assumed jurisdiction of a case, will retain the case to afford complete relief.") The State's objections are thus without merit. Under the circumstances of this case, the court did not abuse its discretion in ordering these remedies.

Many other portions of the circuit court's order, however, appear designed to remedy breaches of the State's trust duties that the Plaintiffs did not allege, including some that have not and may not occur. Foremost among these is the circuit

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<sup>58</sup> See, e.g., Sanchez v. McDaniel, 615 F.2d 1023, 1024 (5th Cir. 1980) ("The district court determined that the 1968 Kleberg County, Texas, apportionment plan violated the constitutional principle of one man, one vote. It directed the appellees to submit a proposed reapportionment plan by November 13, 1979."); Bd. of Pub. Instruction of Duval Cty. v. Braxton, 326 F.2d 616, 619-21 (5th Cir. 1964) (affirming court order requiring school board "to submit to the Court for its consideration a detailed and comprehensive plan" for ending school segregation).

court's statement that its order to care for the land "includes, but is not necessarily limited to" the measures specifically described therein. Courts have generally held that injunctions cannot be "so vague that they have no reasonably specific meaning." E. & J. Gallo Winery v. Gallo Cattle Co., 967 F.2d 1280, 1297 (9th Cir. 1992). "The aims of Rule 65(d) are to minimize the occasion for follow-on proceedings to the issuance of an injunction and to protect defendants from being held in contempt for failure to follow a directive that was a trap because of its ambiguity." United States v. Apex Oil Co., 579 F.3d 734, 739 (7th Cir. 2009). The circuit court's order did not give the State any notice of what other, unstated measures the State was required to comply with, and the order thus must be limited to those remedies it expressly described.

Additionally, a number of the remedies ordered by the circuit court were unconnected with the State's breach of its duty to monitor and inspect the leased PTA land. The court ordered the State to develop and potentially execute a protocol to obtain, or assist in securing, adequate funding for a comprehensive cleanup of the leased PTA land. And the circuit court ordered the State to initiate rulemaking to establish a contested case procedure through which the public could challenge the State's decisions in generally caring for the leased PTA land, if such a procedure did not already exist. Yet

the Plaintiffs in this case did not allege that the State had violated its trust duties by allowing or failing to rectify damage to the leased PTA land. Nor did the Plaintiffs contend that the State was constitutionally required to allow the public a voice in its general decisions regarding its care for the leased PTA land. Rather, the Plaintiffs argued only that the State breached its duty to inspect and monitor the leased PTA land. The State may very well have a public trust obligation to rectify damage to the leased PTA land, and the public may have some right to be heard on decisions that implicate the State's trust obligations with respect to the leased PTA land. But these are not the claims that were brought in this case, and the remedies ordered by the circuit court are thus not "tailored to eliminate only the specific harm alleged."<sup>59</sup> Quiksilver, Inc. v. Kymsta Corp., 360 F. App'x 886, 889 (9th Cir. 2009) (quoting E. & J. Gallo, 967 F.2d at 1297).

The circuit court also ordered a range of injunctive relief concerning the State's duties upon discovering damage or noncompliance during its inspections. The court required the State to set forth a binding plan of action that it would

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<sup>59</sup> Because these remedies are not tailored to address the specific breaches identified by the circuit court, we need not address the State's contention that the circuit court's cleanup orders violated sovereign immunity or that the order to initiate rulemaking impinged on the legislatures exclusive authority.

undertake if it were to discover unexploded ordnance, debris, or any other foreign or non-natural item or contaminate connected with the lease, as well as a plan to bring any "nonconforming" condition likely caused by the United States into pre-lease condition. And the circuit court ordered the State to set forth in a binding plan the actions that it would take upon specifically discovering a breach of the lease terms by the United States. However, as stated, the Plaintiffs have not alleged any breach of trustee duties related to the State's allowance or failure to rectify actual damage, and the Plaintiffs have adamantly maintained throughout these proceedings that they are not alleging that the United States has actually breached the lease. Rather, the Plaintiffs argued only that the State had a trust duty to "determine for itself whether the terms of the lease are being fulfilled."

As the Plaintiffs acknowledged during the hearing on their motion for summary judgment, how the State responds if it does later determine that the United States is not in compliance with the lease may result in a separate breach of the State's trust duties. The same holds true for any other damage to the leased PTA land the State may discover during its monitoring and inspections. Evaluating this hypothetical separate breach would require the circuit court to speculate about various questions that it cannot currently resolve, including whether the State's

monitoring will lead to the discovery of damage or noncompliance of lease terms by the United States, whether the United States will cure the damage or noncompliance on its own accord, and whether any further action by the State will be reasonable given the circumstances at that time. As this court has held, courts are not at liberty to grant relief based on "an event that [may] occur at some time in the future" because "there is no actual controversy in existence at this time." Kau v. City & Cty. of Honolulu, 104 Hawai'i 468, 472, 92 P.3d 477, 481 (2004). For the same reason, the circuit court's conclusion that the State would breach its trust duties if it were to renew the lease without first determining that the United States was in compliance with the existing lease was impermissibly speculative.

Thus, to the extent the circuit court made the provisions of its order that were not tailored to address the established breach binding upon the State, it strayed beyond its valid discretion in fashioning the injunction. Nevertheless, given the circumstances, including the length of time during which the State has failed to fulfill its trust duties and the State's claim to having near total discretion in its management of the public ceded land at issue in this case, it was not inappropriate for the circuit court to provide guidance as to how the State may fulfill its trust obligations in the future. See Beneficial Hawaii, Inc. v. Kida, 96 Hawai'i 289, 312, 30 P.3d

895, 918 (2001) ("Equity jurisprudence is not bound by strict rules of law, but can mold its decree 'to do justice[.]'" (quoting Bank of Hawaii v. Davis Radio Sales & Serv., Inc., 6 Haw. App. 469, 481, 727 P.2d 419, 427 (1986))). We therefore hold that the portions of the court's order directing the State to undertake specific actions that were not tailored to remedy the established breach of the State's trust duties are nonbinding recommendations to be considered by the State going forward in its management of the leased PTA lands.

#### VI. CONCLUSION

Based on the foregoing, the Plaintiffs' motions to dismiss the appeal respectively filed on July 27, 2018, and August 10, 2018, are denied. The circuit court's January 14, 2015 Order Denying Defendants' Motion for Judgment on the Pleadings, or in the Alternative, for Summary Judgment, Filed October 7, 2014 is affirmed. The circuit court's April 24, 2015 Order Denying Defendants' Motion to Add United States as a Party, or in the Alternative, for Dismissal Filed February 26, 2015 is also affirmed. This court rules as follows regarding the circuit court's April 3, 2018 Findings of Fact, Conclusion of Law and Order and the circuit court's April 24, 2018 Final Judgment:

- Denial of the State's motion to add the United States as a party: **Affirmed**

- Denial of the State's motion to dismiss the case for failing to join an indispensable party: **Affirmed**
- Denial of the State's motion for summary judgment: **Affirmed**
- Finding that the State had breached its trust duties: **Affirmed**
- Order requiring the State to undertake any activities not expressly stated therein: **Vacated**
- Order requiring the State to submit a plan that must include the following:
  - o Regular, periodic on-site monitoring and inspection of the leased PTA land and the United States' compliance with relevant lease provisions: **Affirmed**
  - o The making of detailed reports for each such monitoring or inspection event: **Affirmed**
  - o A protocol of appropriate action in the event the State discovers an actual or apparent breach of lease terms, any condition or situation adversely affecting the PTA, unexploded ordnance or debris, or any other foreign or non-natural item or contaminant: **Vacated with Instructions to Render as a Non-binding Recommendation**
  - o A plan or other assurance that any nonconforming condition likely caused by the United States be reasonably brought to pre-lease condition: **Vacated with Instructions to Render as a Non-binding Recommendation**
  - o A procedure to provide reasonable transparency to the Plaintiffs and the general public with respect to the requirements of the order: **Affirmed**
  - o If not already in existence, the institution of a contested case procedure adopted pursuant to HRS Chapter 91 for Plaintiffs or other members of the public to contest the State's decisions in

managing the PTA: **Vacated with Instructions to  
Render as a Non-binding Recommendation**

o The steps the State shall take to explore, evaluate, make application for, or secure adequate funding to conduct a comprehensive cleanup of the PTA: **Vacated with Instructions to  
Render as a Non-binding Recommendation**

- Order requiring the State to execute the plan once it is approved by the circuit court: **Affirmed**

This case is accordingly remanded to the circuit court for further proceedings consistent with this opinion.

Ewan C. Rayner  
(Daniel A. Morris, Clyde J.  
Wadsworth, and William J.  
Wynhoff with him on the briefs)  
for appellants

David Kimo Frankel  
(Summer L.H. Sylva with him on  
the briefs)  
for appellees

/s/ Mark E. Recktenwald

/s/ Paula A. Nakayama

/s/ Sabrina S. McKenna

/s/ Richard W. Pollack

/s/ Michael D. Wilson



**From:** Melissa Matsuura <mmatsuur@hawaii.edu>  
**Sent:** Thursday, October 8, 2020 2:49 PM  
**To:** dlnr.land@hawaii.gov  
**Cc:** USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments; ATLR-PTA-EIS@g70.design; Robert McLaren; David Lonborg; Richard Wainscoat  
**Subject:** [Non-DoD Source] Comments on the EISPN for the Army Training Land Retention at Pōhakuloa Training Area  
**Attachments:** 10-08-2020\_BLNR\_Comments on Pohakuloa Training Area EIS.pdf

All active links contained in this email were disabled. Please verify the identity of the sender, and confirm the authenticity of all links contained within the message prior to copying and pasting the address to a Web browser.

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Aloha,

Attached are comments from Robert McLaren, Interim Director of the University of Hawaii Institute for Astronomy regarding the Environmental Impact Statement Preparation Notice (EISPN) for the Army Training Land Retention at Pōhakuloa Training Area; TMK: (3) 4-4-015:008; 4-4-016:005; 7-1-004:007; 3-8-001:013; 3-8-001:022, Hāmākua and North Kona districts, Island of Hawai'i.

*Melissa A. Matsuura*

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October 8, 2020

Via email:

Board of Land and Natural Resources, State of Hawai'i  
1151 Punchbowl Street, Room 220  
Honolulu, HI 96813

Attention: Mr. Russell Tsuji, Administrator, DLNR Land Division (dlnr.land@hawaii.gov)

Re: Environmental Impact Statement Preparation Notice (EISPN)  
Army Training Land Retention at Pōhakuloa Training Area  
TMK: (3) 4-4-015:008; 4-4-016:005; 7-1-004:007; 3-8-001:013; 3-8-001:022, Hāmākua  
and North Kona districts, Island of Hawai'i

Dear Mr. Tsuji:

Thank you for the opportunity to comment on the EISPN for the proposed Army Training land Retention at Pōhakuloa Training Area (PTA) Project referenced above (published September 8, 2020), specifically with respect to issues and concerns regarding light pollution.

The University of Hawai'i Institute for Astronomy (IfA) conducts research in astronomy using telescopes located on Haleakalā and Maunakea and operated by IfA and our partner institutions. Both Haleakalā and Maunakea are among the best sites in the world for astronomical facilities because of their elevation, clear skies, favorable atmospheric conditions, and low levels of light pollution. Hawai'i-based observatories have played major roles in the advancement of astronomy and astrophysics for over 50 years and are well positioned to remain at the forefront of astronomical research for decades to come.

Because of the outstanding quality and productivity of these facilities, IfA is acutely concerned about negative impacts on astronomy from increased light pollution. Our work to combat light pollution has also brought us into contact with others concerned about light pollution for other reasons, including impacts on wildlife (particularly seabirds) and on human health. While IfA's comments focus on the impacts of light pollution on astronomy, appropriate mitigation measures also help to reduce non-astronomy impacts.

With that background, we offer the following comments:

Any new or additional artificial light at night has an adverse effect on astronomical observations by increasing the night sky brightness. Nearly all observations performed by the telescopes on Maunakea are sky-background limited. This means that there is a natural sky brightness coming from airflow and zodiacal light. Artificial light increases the sky brightness, thereby decreasing the sensitivity of the telescopes.

Lights can have an adverse effect on astronomical observations by incrementally increasing the night sky brightness, effectively making the telescope smaller and less sensitive.

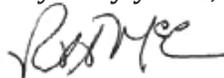
IfA greatly appreciates the longstanding working relationship between PTA and the Maunakea astronomy community, including first responder support for emergencies on the mountain. We also value the opportunity to offer input on minimizing light pollution at PTA, both through the EIS process and on an ongoing, informal basis. Because of the close proximity between PTA and the observatories, lights at PTA have approximately 40 times the impact of equivalent lights in Hilo, and are also less frequently shielded from the observatories by clouds. While this EISPN concerns continuation of existing land uses, not establishment of new uses, we offer the following general comments regarding best practices to minimize lighting impacts on the observatories:

1. Lighting should conform to standards established by the Hawai'i County lighting ordinance (including any future updates). All lighting should be fully shielded. This means that all lighting fixtures must emit zero light above the horizontal plane.
2. The minimum possible amount of outdoor lighting should be used. Motion sensor activated lighting is strongly preferred wherever feasible. Blue light is most harmful to the observatories, so blue-deficient lighting should be exclusively selected. The best choices are filtered LED lights, or amber LED lights. Under no circumstances should high-intensity discharge lamps such as metal halide be used; fluorescent lights also must be avoided. Both of these types of lamps use mercury and emit light at wavelengths that is very damaging to astronomy.
3. White light should be avoided because the blue component of white light is very damaging to astronomy. White light should always have a Correlated Color Temperature of 2700 K or below.

Because of PTA's close proximity to the Maunakea observatories, we would appreciate the opportunity to consult further as the EIS is prepared.

Thank you for your consideration of these comments and attention to IfA's concerns. If you have questions or need further detail regarding these comments, please do not hesitate to contact the undersigned or Richard Wainscoat ([rjw@hawaii.edu](mailto:rjw@hawaii.edu)).

Very truly yours,



Robert McLaren  
Interim Director

cc: Mr. Gregory Wahl, U.S. Army Garrison Hawaii Directorate of Public Works  
([usarmy.hawaii.nepa@mail.mil](mailto:usarmy.hawaii.nepa@mail.mil))  
Mr. Jeff Overton, G70 ([ATLR-PTA-EIS@g70.design](mailto:ATLR-PTA-EIS@g70.design))

## **Individuals**

Contact information was redacted for privacy.



# Individuals

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Shelly Aina.....	I-3	Dizia Crisostomo .....	I-52
Jim Albertini .....	I-4, I-5, I-289	Alexander Cyran.....	I-53
Carol Ann Alina.....	I-7		
Kelsey Amos .....	I-8	Sasha Davis .....	I-54
Deb Anderson .....	I-9	Stella Dee.....	I-55
James Anthony.....	I-10	Kahu: Richard Maele DeLeon .....	I-56
Kelsea Armstrong.....	I-11	Dexter .....	I-290
Andrew Ashburn .....	I-12	Amanda Dillon .....	I-57
Nalu Awai .....	I-13	Stephany Dinnan-Kaolulo .....	I-60
		Alyce Dodge .....	I-61
Brenda Bailey-White .....	I-14	Blake Doll.....	I-63
Carla Baker .....	I-16	Candy Doogle.....	I-64
Christopher Baker .....	I-18	Susan Douglas.....	I-65
Bruce Banick.....	I-19	Robert Duerr.....	I-67
Lorrie Beggs.....	I-20		
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Jared Bernard.....	I-22	Sofronio Estores.....	I-69
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## Kimi ABBOTT-JACKSON

I am a 25 yr resident of Waikoloa. For the past 10 years Ive begun to have severe migraines and neurological problems which I never had before. Doctors are clueless as to the reason. Ive cleaned my diet up to only organic and exercise regularly. I've been told the military has been bombing for years and that all the chemicals blow down on us in the village. If this is true why haven't you stopped? Is it really necessary? These islands are special to me and I plan to live out my life here. I agree with the indigenous people that this is stolen land and the military is here illegally. I hope you will do what is right for the people of Hawaii and vacate immediately.

## Douglass Adams

Thank you for allowing me to comment on the Environmental Impact Statement for Army Training Land Retention at Pohakuloa Training Area. I fully support the retention of the PTA land by the United States Army for the purposes of training American men and women to defend our nation, her people and the ideals that it stands for. In addition, the US Army has been largely responsible for maintaining the cultural and biological attributes of PTA, using federal funds and regulatory guidelines to protect the historical legacy of the PTA lands and the native flora and fauna that populate the lands. In many ways, the actions of the US Army and the US Department of Defense in support of the National Environmental Policy Act (NEPA) throughout the nation's defense properties reflect great support for the priorities of NEPA, both as a matter of national security and as a moral activity. There is every reason to expect that the US Army will continue to properly exercise its responsibilities under NEPA and the Hawaii Environmental Policy Act during its retention of the PTA training lands. From the perspective of providing a place to support training activities for the purposes of developing small-unit cohesion and exercising large-unit coordination and collaboration, whether to serve as a deterrent against adversarial violence against our people, as a vehicle for quick, decisive action in both manmade and natural emergency situations, or as the structure for international cooperation in humanitarian relief operations, PTA is vital to the readiness of the US Indo-Pacific Command's successful fulfillment of its missions of protecting and defending the United States, her people and interests, and of enhancing stability in the Asia-Pacific region.

## Shelly Aina

In the interest of full disclosure, I'm an Army veteran, but also keenly aware of the mistreatment of the native people of Hawai'i. As such, I am in favor of the "No Action Alternative" of the current lease. It should be allowed to expire.

From the 9/6/20 West Hawai'i Today article, "The acreage is 'ceded land,' which are lands that were held by the civil government or the monarchy of the Hawaiian Kingdom at the time of the 1893 overthrow of the Hawaiian monarchy. State laws mandate the lands be held in trust by the state Department of Land and Natural Resources for the benefit of Native Hawaiians and the general public."

The current 65-year lease cost to the Army was \$1. IF the Army wishes to retain these ceded lands, they should negotiate a new lease and pay market value for the leased acreage. They should not be treated as though they are a Hawaiian family seeing homestead land. IF the new lease is fair, it should also include other conditional clauses, like the removal of all UXO and debris from both the state and federal lands. The Army should also be mandated as first responders to fire events within a pre-defined radius of the leased and federal lands. Going a bit further (in the name of community or public benefit), the Army and DoD should work with the State to develop a plan for controlled burns to prevent wildfires on and near the mountain. This could be a "feather in the cap" for the Army. The Army could be the premier training organization for fire management - learning how to prevent fires like those that are engulfing the West Coast.

As a vet, I know that there are large installations on the mainland that could accommodate the training that's being done at PTA. Those mainland installations would also have the infrastructure to recycle many of the materials that cannot be recycled in Hawai'i - leading to additional issues of waste management. Not only can we not recycle much, it seems the Army doesn't take full responsibility for its own waste management. I read that PTA contracted an apparently disreputable hauler to do their recycling and those materials ended up being dumped on the Hamakua Coast. Shameful. The Army agreed to investigate, but that doesn't alleviate the issue. The Army needs to be responsible for the entire lifecycle of its materials, especially since they are brought here from other locations.

The convoys of trucks and heavy equipment that traverse the roads from Kawaihae to PTA are adding to the wear and tear of these roads. Resources also should be included in the new lease to maintain these roads.

In closing, I am 100% against renewing the current lease. I could possibly be persuaded to support a NEW lease, if it's fair and includes measurable and definable benefits to the County and State, like those I've state above.

## Jim Albertini

1. How many live rounds are fired annually at PTA? List all the various kind of rounds fired. List other type of rounds used at PTA besides live rounds. What kind of rounds do the B-2 bombers drop? Is that training for nuclear war? As I recall the last figures released during the Stryker EIS stated 14.8 million live rounds were fired annually at PTA.

2. Besides DU from Davy Crockett spotting rounds fired at PTA, list all other DU rounds used at PTA. In addition, I have received reports that at least 6 Davy Crockett type nuclear weapons were exploded at PTA. Testing needs to be done for Cesium 137, etc. in the soil to confirm or deny such possible exploding of nuclear weapons at PTA.

3. A water well was drilled in the main PTA base area in 2013 by Dr. Don Thomas. Water was hit at a shallow depth of only 700 feet. Yet PTA is not using that water source and PTA continues to spend \$1-2 million /year to haul water. What contaminants are in that water well at PTA? List all test data, especially if perchlorate is present. Perchlorate from munitions and rockets have been found in ground water around a number of military bases in the US where rockets and munitions are used.

4. Testing for DU oxide particles not simply DU metal needs to be done at PTA and at Mauna Kea Park (Gil Kahele Park) across Saddle Rd. from PTA. DU oxide particles can be carried long distances in the wind and can cause cancer and other health problems when inhaled. The internal hazards of DU oxide need to be addressed not simply the external hazard of DU metal.

5. What is the cultural significance of the Pohakuloa general area. Has the area been referred to as "the land of the night of long prayer?"

6. Is the 84,000 acres of land, including the 51,000 acres of the PTA impact area really "owned" by the Federal government or simply seized by Presidential executive order in 1964 by President L. B. Johnson? What compensation was paid for that 84,000 acres of seized lands? My understanding it is ZERO.

## Jim Albertini

These are additional comments to ones I have submitted earlier.

1. The Army, Specifically Pohakuloa Training Area (PTA) has often boasted about its stewardship of the land. This is bogus. There can be no greater desecration of the land than to BOMB it and contaminate it with a wide range of long-lasting military toxins. The scoping EIS document needs to list in detail ALL the various weapons ever used at Pohakuloa, including all the nuclear, chemical, and biological agents. I specifically call for all of the above not simply used on the "leased" lands but all the lands at PTA which are connected. The contamination from one area can be spread by wind, rain, fire, etc. Pohakuloa has been turned into a military toxic waste dump. The lease lands at PTA are downwind of DU spotting round firing and impact ranges. The military needs to "Malama Aina" --take care of the land, not desecrate the land.
2. Why hasn't the military complied with Hawaii County council resolution 639-08 passed in July 2008 by a vote of 8-1 that called for a wide range of actions including stopping all live fire at PTA until a comprehensive, independent assessment of the Depleted Uranium (DU) present at PTA and the clean up of the DU. The numerous other actions called for in this resolution should also be addressed in the EIS Scoping document.
3. The importance of the Hawaiian cultural significance of the land at PTA and the surrounding area needs to be fully researched. To my knowledge only about 1/3 of PTA's 133,000 acres have been researched for cultural sites. I have been told Pohakuloa means "the land of the night of long prayer." Nearby is King Umi's temple and Pu'u Kole.
4. Have the frequent brush fires at PTA spread DU oxide particles and other contaminants including PFAS used in fire fighting foam?
5. The military has a record of walking away from cleaning up its mess. Our Malu Aina organization has documented 57 present or former sites on Hawaii Island totaling hundreds of thousands of acres of land just on Hawaii Island in need of military clean up. The same story over and over -- no funds available. Plenty of money to make mess after mess but too little funds available to clean up after yourself. See attached uploaded file.
6. The cumulative impacts of all the toxins used at PTA needs to be addressed. And how these toxins in air, ground, and water can be spread around all of PTA and off site.
7. Citizens have a right to see a comprehensive view of all the types of specific training done at PTA not just generalizations. All the weapon systems involved, number and content of rounds, etc.
8. And what is all this military training really for? We are told to "defend freedom and democracy" but the reality of US military operations over the last 50 years has been wars of aggression and the attempted overthrow of more than 50 countries for political and economic interests. Please explain how training for nuclear war at PTA is in the interest of "freedom and democracy." There will be no winners in a nuclear war. No freedom and democracy either.

# Sites NOT for Tourists or Locals! Military Hazard Areas on Hawai'i Island



## Military Clean-Up NOT Build-Up!

contact: Malu 'Aina Center For Non-violent Education & Action  
P.O. Box AB Kaitiawa, Hawai'i 96760. Phone (808) 966-7622. email ja@interpac.net  
<http://www.malu-aina.org> <http://maluaina.pitas.com>

## Carol Ann Alina

I believe that the military should give up all rights of usage and occupancy to the Pohakuloa Training area on Hawaii Island. Native Hawaiians deserve to preserve this area for future generations for cultural and historical value. This is the right thing to do:  
"Malama Aina" Protect the Land!

## Kelsey Amos

1. The Army's lease requires that it "make every reasonable effort to . . . remove or deactivate all live or blank ammunition upon completion of a training exercise or prior to entry by the said public, whichever is sooner" and remove "all trash, garbage and other waste materials[.]" The EIS should fully disclose the extent to which the Army has complied with this lease provision and should include a thorough investigation of the entire area to determine whether there is any military debris (including unexploded ordnance) on the land that the Army has been using.
2. The EIS should disclose the status of the cleanup of the Former Bazooka Range. Has it been completely cleaned up? Is it safe to enter? How much waste was collected? What did it comprise of? Where was it disposed?
3. The EIS should fully disclose the extent to which ungulates exist within the area used by the Army and the damage they have caused.
4. The EIS should include a thorough inventory of the historic sites in the area. It should include a discussion of the cultural significance of Pohakuloa itself. And it should include a discussion as to how the condition of these sites has changed while the Army has used these lands.
5. The Army must consider a full range of alternatives, including returning these ceded lands back to the Department of Land and Natural Resources after restoring them to the condition that they were in prior to the Army's use of this land.

Deb Anderson

Please consider downsizing military activity and protect our Mauna better!

## James Anthony

### STATE SHOULD TERMINATE ARMY'S LEASE ON LAND AT POHAKULOA

As a concerned Native Hawaiian, I call on the governor of the state of Hawaii and on the chairperson and board of the state Department of Land and Natural Resources (DLNR) to terminate the lease of 23,000 acres of Hawaii public trust land at Pohakuloa Training Area to the U.S. Army. This land was leased for \$1 to the Army in 1964 for a term of 65-years. In violation of the terms of the lease, the Army has damaged native ecosystems, left unexploded ordnance, depleted uranium and other contaminants, and harmed Native Hawaiian cultural sites.

Although the lease expires in 2029, the U.S. military is seeking to renew the lease as quickly as possible.

The U.S. military wants to extend the lease on the 23,000 acres of state of Hawaii property at Pohakuloa Training Area (PTA) as it provides access to the 110,000 acres of adjacent U.S. federal government-owned land at the largest U.S. military firing range. The Army calls the 132,000-acre range on Hawaii island the "Pacific's premier training area."

PTA, with a 51,000-acre "impact area," is used heavily by Hawaii-based and visiting international military forces. It is the largest live-fire range in Hawaii and supports full-scale combined arms field training from the squad to brigade (approximately 3,500 soldiers) level.

Hawaiian cultural practitioners Clarence Ku Ching and Mary Maxine Kahaulelio filed suit against the state DLNR in 2014, claiming the state breached its trust duties by failing to enforce the lease.

Four years later, state Circuit Judge Gary Chang ruled in 2018 in Ching and Kahaulelio's lawsuit that the DLNR failed to care for the Big Island property, lacking inspections over the first nearly 50 years of the lease. The judge said that the state has a duty to "malama 'aina," called two DLNR inspection reports "grossly inadequate," and ordered the state to develop and potentially execute a plan to obtain adequate funding for a comprehensive cleanup of the land.

After Judge Chang's order, DLNR said that as the landlord of the property, it would work with the Army to develop a formal inspection, monitoring and reporting process, which has been virtually nonexistent. However, the Hawaii Supreme Court later overturned part of the order.

## Kelsea Armstrong

I support and echo the indigenous voices in liberating this land from its post-colonial possession and returning it to the people who intimately and authentically exhibit mālama ‘āina because of their ancestral husbandry to this place. I also want to emphasize that liberation and restoration must be defined by kanaka maoli. Neither the military nor the DLNR alone are to be trusted with self-monitoring, and exclusionary barriers such as quick deadlines, legal jargon, and conventional Western alternatives as they are equally vehicles towards inaccessibility on the terms of a haole government. I hope that the outcome of this case will set a precedent that moves the state forward in privileging the autonomy of Native Hawaiians. Aunty Maxine and Uncle Ku have my full support in their mission to restore what has been so violently stolen.

Further, this has been a crucial time for examining the role of law enforcement in the United States. In the national conversation about defunding the police, we see a desperate call to shift funding to programs related to education, mental health, and housing. In a New York Times article by Dionne Searcey, he describes 'defunding' the police as, "...seeking spending cuts to police forces that have consumed ever larger shares of city budgets in many cities and towns." This concept is relevant and essential to the one at hand because the police, military, I.C.E., and agencies alike are sisters conceptualized on systemic racism and constantly reorganized around white supremacy. Therefore, this case will determine either the proliferation of or resistance to a more sustainable future where indigenous governance, ethic, and voices are put first. Free Pōhakuloa.

## Andrew Ashburn

This land was leased for \$1 to the Army in 1964 for a term of 65-years. In violation of the terms of the lease the Army has damaged native ecosystems and left unexploded ordnance, depleted uranium, and other contaminants; they have also harmed Native Hawaiian cultural sites.

The Hawai'i State Circuit Court has ruled that the Hawai'i State Department of Land and Natural Resources failed to care for the property, lacking inspections over the first nearly 50 years of the lease and called two of their inspection reports "grossly inadequate" and ordered the state to develop and potentially execute a plan to obtain adequate funding for a comprehensive cleanup of the land.

In a time of global catastrophe due to climate change compounded by the Coronavirus it is essential that we preserve and restore all lands with potential for viable ecosystem recovery. The Colonization of Hawai'i and the exploitation of it's peoples and lands has gone unchecked for far too long. The harm the largest U.S. military firing range has caused to the inseparable culture and lands of Hawai'i are clear. Please allow for the remediation of these lands.

# Nalu Awai

Please seize all bombing at Pohakuloa. It's destroying the homes of thousands of pandemic plants and animals. Let's preserve our beautiful home in any way we can.

# BRENDA BAILEY-WHITE

As a former Sandia National Laboratories NEPA Specialist, I have a few questions. I submit the following scoping comments in reference to the proposal to retain up to approximately 23,000 acres of state-owned land at Pōhakuloa Training Area (PTA) to support continued military training.

1. (a) Having used the land since 1943 (77 years), and leased it since 1964 (56 years), what NEPA process and summary NEPA documents regarding federal operations have previously been created by the Army? (b) Has any comprehensive site description, with or without environmental conditions and changes, been made available for public review? (c) As you are aware, any proposed federal action or changes to an existing project are subject to NEPA review. What site changes have occurred on the leased land since the NEPA regulations became applicable, in 1970? With the additional COVID-19 burden inhibiting interactions, please ensure the EIS thoroughly details these documents, individually, and provides them to the public in easily accessible and manageable electronic format. A history of existing NEPA documentation will be crucial for the public in providing comments regarding the proposed action and in ascertaining due diligence by the Army in its stewardship of the leased land. (d) If there are no NEPA documents, what real estate documents that give adequate description of the facilities, their use, and utilities that support them, are available for public release, or redaction and public release? (e) Prior to this EIS, has the Army prepared any description of environmental impacts at this site for public dissemination?

2. (a) The total area of PTA is 132,810 acres (~207 square miles). Please clarify in detail how the Army cannot function in the remaining 109,810 ac (~172 sq mi) without the state-leased area (23,000 ac, or 36 sq mi). Has a matter of convenience become mislabeled as mission critical? (b) I have too often identified further encroachment by the military upon sensitive areas, claiming it was a "life or death" difference for the warfighter, when in fact, it was poor planning, impatience, and disrespect for the NEPA process. The "no action alternative" would be to renew the Army's lease and for operations to continue. What is needed, for transparency and thoroughness, is one or more "reduced action alternatives" that provide the public with the desired information, which is an exhaustive and fact-based analysis of what it would look like for the state not to renew the lease, for the Army to make adjustments to activities without the 36 sq mi of maneuver within the 172 sq mi, and what exactly comprises key training facilities. (c) If the key training facilities can be updated/relocated, or replaced through new construction, what would that entail and cost? If it is a few transportainer offices and jungle gyms, that's one thing. In my experience with reviewing the Kauai Test Facility, many structures were derelict and in need of demolition and decommissioning. Is this an opportunity for the Army to improve the existing configuration and efficiency of its operations at PTA? Are there structures at PTA that await D&D, and, if so, is there potential for the Army to repurpose unusable areas, as an alternative to maintaining the lease? Too often, the funding is easily available for the training and weaponry flavor of the day. However, when it is time to pay the real cost, life-cycle planning and long-term stewardship of responsibilities, particularly regarding environmental cleanup and D&D funding, the military just can't seem to find any money. This is negligence of the worst sort, because the people who have to live in the areas surrounding the site deserve much better, and the federal requirements are there to protect them.

3. Not only do reduced action alternatives need to be developed, but annual environmental monitoring needs to be conducted, and summary results provided to the public in a reliable, timely manner. Funding for contamination (explosives, fuel, sewage, all of it) cleanup and stewardship

needs to be provided in a recurring budget until the work is completed. Unexploded ordnance needs to be identified and removed. D&D assessments, and the planned follow-through, need to be part of the EIS. Public outreach needs to be established or improved.

4. (a) What are the military's and the Army's cumulative impacts to all the islands of Hawai'i, including the Navy's Hawai'i Range Complex activities, the Pacific Missile Range Facility (PMRF) activities on Kauai, the base at Oahu, reserve activities, etc.? (b) What are the Army's connected actions in relation to the leased site and the island as a whole? (c) Is there no potential for incorporating shared use of existing military sites to meet the operational needs of PTA, including, or not including, the leased area? (If not, why not?) (d) The EIS needs to be detailed and thorough in identifying and characterizing cumulative impacts and connected actions.

Thank you for the opportunity to contribute.

Carla Baker

**Copied from PDF**

It is un acceptable to be bombing our mountain. Serves no real,purpose but to scatter the wild life  
and  
disturb our piece of mind and sleep!

Please stop , thank you  
C. Baker

**From:** Carla Baker  
**Sent:** Saturday, September 26, 2020 4:11 PM  
**To:** USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
**Subject:** [Non-DoD Source] Mauna Loa

It is un acceptable to be bombing our mountain. Serves no real,purpose but to scatter the wild life and disturb our piece of mind and sleep!

Please stop , thank you

C. Baker

Sent from my iPad

## Christopher Baker

1. The Army's lease requires that it "make every reasonable effort to . . . remove or deactivate all live or blank ammunition upon completion of a training exercise or prior to entry by the said public, whichever is sooner" and remove "all trash, garbage and other waste materials[.]" The EIS should fully disclose the extent to which the Army has complied with this lease provision and should include a thorough investigation of the entire area to determine whether there is any military debris (including unexploded ordnance) on the land that the Army has been using.
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5. The Army must consider a full range of alternatives, including returning these ceded lands back to the Department of Land and Natural Resources after restoring them to the condition that they were in prior to the Army's use of this land.

Bruce Banick

I have no issues with noise or training on the mountain. Thank you for your service and be safe.

## Lorrie Beggs

What are your plans to clean up ordinances and other dangers such as uranium?

## Jana Bennett

PLEASE STOP.

Our Aina is the source of well being. You messed up Ko'olawe. It may not appear this way to you, but we are on a fragile environment.

You can go back to your home, this is our home.

Again PLEASE STOP.

## Jared Bernard

As a biologist who has studied and worked on various islands of Hawaii since 2003, I would expect the EIS to recommend that the State does not renew the US military's lease on PTA. Quite simply, there are numerous rare and/or endangered species located at PTA. So far the military has permitted conservation action of these species on PTA, but I believe the Endangered Species Act technically does not have jurisdiction on federal property. Therefore, the military is within its rights to allow its missions to take precedence over conservation work on these endangered species, or even destroy said species, if need be. The scope of the EIS, however, is to evaluate the effect PTA may have of the environment; in other words, the EIS is meant to advocate for the environment in spite of the limitations of the Endangered Species Act. That being the case, the EIS must recognize that in order for the protection of these threatened species to take priority, the land cannot remain in the possession of the military.

One of the endangered species on PTA is an endemic mint species called honohono (*Haplostachys haplostachya*), which do not produce mint chemicals. This species was thought to be extinct back in the 1970s, but since then sporadic populations have been found in PTA.

As the PTA sort of bleeds partially up maunas Loa and Kea, there are also more `aheahea, `ohi`a, pukiawe, `a`ali`i, and especially on the higher elevations mamane (*Sophora chrysophylla*) and nai`o (*Myoporum sandwicense*). The mamane habitat here is part of the range of the critically endangered palila honeycreeper (*Loxioides bailleui*). This endemic bird's habitat once extended over to Hualala`i, but is now confined to only the east flank of Mauna Kea between roughly 1830 and 2740 meters elevation where the depleted mamane-nai`o forests are located. Because PTA extends partially over this region in the upper elevations, it contains this critical habitat.

## Alexandra Bernstein

It's been a bad week of bombing. Sometimes my windows shake. And sometimes the helicopters fly quite low, and I wonder if that is really necessary. Why can't they fly low over uninhabited spaces? Does living in Waikoloa Village give tacit permission to be buzzed by military aircraft? If so, we should be informed of this. The bombing at night is quite disturbing. Are the training designers ABSOLUTELY SURE that practicing bombing under peaceful conditions truly prepares bombing personnel for real bombing situations? Wouldn't they learn better doing the bomb training in an apprentice-type situation? It is so wasteful and expensive the way you do it now.

And are you sure that it is necessary to use actual explosives instead of ones that are simulated for the trajectory? Do you really need to destroy whatever it is you are bombing and make a lot of noise?

Unlike at other training areas on the mainland USA, here you need to remember that there is a sensitive volcano underneath the area you are bombing. Since there is no way to anticipate how it will respond to these explosions, you are gambling with the homes and lives of people who reside near the future lava flows.

**From:** someone nice at yhoo  
**Sent:** Thursday, October 8, 2020 10:01 PM  
**To:** USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
**Subject:** [Non-DoD Source] PTA lease extension comment

I am writing as part of community input in the EIS for Pohakuloa Training Area.

The noise at night during trainings is significant, and therefore disturbing. I can only imagine how disturbing it is for veterans and others with PTSD. Have you researched the effectiveness of training in which targets are hit with indicators of success other than explosions? Have you researched what effect the explosions have on the active volcano beneath PTA land? Is it possible to effect trainings that do not blow things up with explosions so strong that my windows shake in Waikoloa Village?

What can you do going forward to ensure that pilots stop flying over inhabited areas? Is there a value to you in flights going over our homes as opposed to over uninhabited areas? If that is not your intent, can you modify your orientation for visiting pilots so that they understand that it is a priority NOT to fly over homes?

Should the lease area be expanded, how can you ensure that explosions will not impact equipment on Mauna Kea, and will not rattle my windows more than they already do?

Should the lease be extended past 2020, are you willing to negotiate compensation to Hawaii County, in addition to payments to the state? The building pf Daniel K Inouye highway was great, but you should be compensating the County on a yearly basis for using this land and disrupting our lives.

Best wishes,  
Alexandra Bernstein,  
Waikoloa, HI

## AziaLynne Bird

As a community member with genealogical ties to Hawai'i island, I am deeply opposed to the Army acquiring a lease extension for the approximately 23,000 acres of land known as Pōhakuloa. The Army is currently nearing the conclusion of a 65-year lease that began in 1964 for these lands. During this period of time, the Army has mismanaged and abused the lands and resources of Pōhakuloa. Exercises including but not limited to bombings, missile tests and live fire artillery trainings have all caused severe damage to the lands and resources. In addition, the presence of depleted uranium ammunition, military debris such as unexploded ordinances and spent shell casings degrade the environment and put the health, safety and wellbeing of the island and her residents in jeopardy. It is known that military exercises lead to the release of harmful and toxic pollutants causing soil contamination and negatively impacting air quality. In 2006, a citizen's group uncovered evidence of the presence of depleted uranium at Pōhakuloa despite the fact that the Army had previously denied the use of such chemicals at the training area. Depleted uranium is a toxic chemical and radiation health hazard. It has no place being in our islands. In 2016, the Army was fined by the Environmental Protection Agency (EPA) for operating illegal cesspools at various facilities around Hawai'i, including 6 at Pōhakuloa Training Area. Such cesspools have been banned under the Federal Safe Drinking Water Act's Underground Injection Control program since 2005. According to the EPA "cesspools collect and discharge untreated raw sewage into the ground, where disease-causing pathogens and harmful chemicals can contaminate groundwater, streams and the ocean." In a 2018 Circuit Court ruling by Judge Gary Chang, the Army was found to have provided inadequate care of the environment of Pōhakuloa. The Hawai'i Department of Land and Natural Resources was found to have breached its trust duty to care for these lands in regards to its lease with the Army. Judge Chang further emphasized that any extension or renewal of the lease without first determining that the existing lease obligations have been satisfactorily fulfilled would continue to breach the trust duties of the Department of Land and Natural Resources. It is my belief that the army has never satisfactorily protected, managed and cared for the lands and resources of Pōhakuloa. The Army instead has used these lands for its personal gains and exploits at the great expense of Hawai'i island and her people. The Army has been dishonest in regards to activities, infrastructure and chemicals being conducted and released at Pōhakuloa. It is therefore my belief that the army is incapable of property stewarding these lands and should not be allowed to extend or renew the existing lease agreement. Instead of applying to renew this lease, the army should invest in community building by removing all harmful debris from the training area and graciously returning these lands to as close a state as possible as to when they were first acquired for use in 1964. Such activities would truly be in the best interest of all.

# Patricia Blair

Shut down military training at Pohakuloa. Enough environmental and cultural damage! It's a crime!

**From:** Jeff Bond  
**Sent:** Monday, September 21, 2020 12:07 PM  
**To:** USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
**Subject:** [Non-DoD Source] PTA EIS

All active links contained in this email were disabled. Please verify the identity of the sender, and confirm the authenticity of all links contained within the message prior to copying and pasting the address to a Web browser.

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Aloha,

Are any of the 23,000 acres of land currently leased to the Army by the state of Hawaii farmable? Does the Army let contracts to farm on any of these lands? Would the Army consider leasing any of these lands for farming purpose?

Jeff

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Jeff Bond

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## Dennis Boyd

Pohakuloa Training Area is a vital component of Hawaii Island's economy and has been a good neighbor to island residents. I strongly support continuing the land lease for PTA. PTA has unfortunately become a lightning rod for activists who are using it as a symbol, much like Mauna Kea, for a history of other discontents of the native Hawaiian community, which extend far beyond a land lease. With TMT development sitting in a precarious place, successful concurrent action to uproot the military from HI Island truly would relegate us, as an economy, to third world status. Keep PTA on HI Island!

## Jody Brissette

As a retiree from the United States Army and current Big Island Resident I would like to add my opinion. I have trained at PTA multiple times throughout my career in order to prepare for multiple deployments. I attribute my training at PTA to my overall ability to be successful during these deployments. Many don't realize that PTA offers and almost identical environment that I encountered on my deployments to Afghanistan. The ability to train in an environment that PTA provides is vital to our military's ability to meet the threats found in this world. Not only does PTA play a vital role with the military but it also plays a large role in the economy and to the natural environment. There are those who say training is detrimental to the land, however PTA protects 27 different endangered species of plants and animals. PTA's recycling program is also a leader in this area on this island and arguably in this state. It is also worthy to note to state officials that in Germany the two largest successful conservation areas are the United States Army bases of Hohenfels which is used for large scale force on force training / maneuver area / airborne operations area and Grafenwoer Training Area which is similar to PTA as a live fire and maneuver area. So both the Army has proven that conservation and military training can and does exist. PTA contributes to the Food Bank, Boys Scouts of America, just a short time ago service members donated time to tear down and reconstruct a playground in Waimea. A simple drive around the island also lends examples on how PTA contributes as the county spends allot of time and resources towing abandoned cars, illegal dump sites and other trash discarded by the residents of the Big Island. At PTA, the military cleans the land at no cost to the county.

As for the economy; as the exact amounts of how much money the military contributes to the local economy on the Big Island is not truly clear, however; the cost of the water used at PTA is somewhere around the \$3 million dollar a year mark. However the economic impact the military in Hawaii is easily found. It has been announced that the Army will spend \$1 billion in infrastructure upgrade over the next 10 yrs. Evidence of this is the ongoing upgrades at PTA. Other notable contributions to the state of Hawaii is the approx. \$1 Billion dollar a year the Peral Harbor Shipyard, the \$75 million dollar, 4 yr contract with University of Hawaii for the Maui High Performance Computing Center, the \$54 million dollar construction contract with Hensel Phelps Construction of Honolulu.

I mentioned all of this as to help support the decision to extend the State Lease Land Agreement with PTA as in the end; the environment benefits, the people of the county and state benefit, and most importantly the service members benefit from the training they are able to conduct "here" that one day could save their life or the lives of others "over there".

## Mark Brouwer

Please do not renew the lease to the army. Unexploded munitions, occupation of historical cultural sites and destruction of the native habitat over the past decades shows the army is not able or willing to protect the land. Please do not renew the lease.

# Maryann Broyles

This is sacred land please stop using it for bombing and military war games

## Cheryl Burghardt

The military has not been cognizant of anyone or anything to this date other than their plans and goals. We have seen the public and even the Hawai'i Supreme Court rulings ignored. This comment is to remind the folks reading this that the land, water and people of Hawai'i are all related. The system of US govt. and military can not and choose not to honor the ways of these islands. Thus this like so many other requests for comment is just a box check off. Our house says no expansion, no new leases and remove all military from Pohakuloa.

## Kesslyn Carlos

To be honest I dont want the army or anyone training. Cause if I remember you they never clean up there mess if you clean up then its fine but other then that I aginst it for the fact its sacred land and we will go and put up a fight.My Uncle faught for his land to be clean with no nuclear weapons or bombs and they never clean up the mess but Ill be fine if its clean up after done training.

**From:** Kinion Carroll  
**Sent:** Saturday, October 3, 2020 3:01 PM  
**To:** USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
**Subject:** [Non-DoD Source] Aloha  
**Attachments:** Dr\_deZayas\_Memo\_2\_25\_2018.pdf; Screen Shot 2020-10-03 at 8.55.45 PM.png; Screen Shot 2020-10-03 at 8.55.45 PM.png; Screen Shot 2020-10-03 at 8.55.38 PM.png; Screen Shot 2020-10-03 at 8.39.29 PM.png; Screen Shot 2020-10-03 at 8.39.13 PM.png

All active links contained in this email were disabled. Please verify the identity of the sender, and confirm the authenticity of all links contained within the message prior to copying and pasting the address to a Web browser.

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Aloha,

I am contacting you to add my voice to what I believe is the right thing to do in regards to Pohakuloa. Pohakuloa can be translated from Hawaiian as “long rock”.

A second interpretation is “night of the long prayer”.

No matter how it is translated, there is a fundamental misunderstanding behind using the area for war training, says Lakea Trask, who identifies as a kiai mauna or mountain guardian.

“The importance of Pohakuloa culturally and ecologically cannot be overstated,” Trask tells Al Jazeera.

This is not just a remote, barren wasteland, he says. This is wao akua (realm of the gods), and the volcanic rock is the vessel that carries and preserves fresh water. In the Hawaiian language, fresh water is “wai” and wealth is “wai wai”.

The watersheds and all the life they sustain – every forest, every stream, and the ‘wao kanaka’ (human communities) below are fed by waters flowing from Pohakuloa, says Trask. “Our kupuna are telling you that’s where the water is being stored and protected.” (Caution-  
<https://www.google.com/amp/s/Caution-www.aljazeera.com/amp/news/2018/04/native-hawaiians-resist-bombing-sacred-lands-180430121142340.html> < Caution-

<https://www.google.com/amp/s/Caution-www.aljazeera.com/amp/news/2018/04/native-hawaiians-resist-bombing-sacred-lands-180430121142340.html> > )

I have also learned that there are many depleted uranium and sarin nerve agents that were tested on Pohakuloa.

Pohakuloa is sacred to Hawai'i and is on Hawaiian Kingdom Crown lands. This is wao akua, realm of the gods in Hawaiian culture. The wao akua is sacred ground bombing sacred ground in any religion or culture is not right. Please stop the continuation of damaging Pohakuloa and this sacred wao akua.

It has been declared by many U.S. presidents such as President Cleveland, U.S. senators, which I have attached their words below, as well by the UN and dozens of international countries that Hawai'i is not and never was a part of the U.S. Hawai'i is an independent country under illegal occupation. This is not a political statement but rather educational as the NEA (National Education Association) has published three articles on the illegal occupation of Hawai'i by the U.S. and is now being taught in over 3,000 U.S. public schools. This is also being taught internationally and countries such as Italy, England, Australia, and many more are teaching this fact of the illegal occupation of Hawai'i. The UN declared this many times such as the International Court of Arbitration Larsen VS. Hawaiian Kingdom (1999) Dr. Alfred DeZayas, UN High Commissioner of Human Rights (25 Feb. 2018), the National Lawyers Guild, and many more. For more information please study [HawaiiKingdom.org](http://HawaiiKingdom.org). Hawai'i is an independent country under illegal occupation. This is the true fact of Hawai'i. In 1893 President Cleveland declared the illegal overthrow of Queen Lili'uokalani by insurgents of America was illegally and not ordered by him as the president. Years later President McKinley attempted to annex Hawai'i twice and both treaties were declined. The U.S. passed a Joint Resolution of Congress in 1898 and claimed they "annexed" Hawai'i by a Joint Resolution. This is not legal and is impossible as only a treaty of Annexation is a legal way to annex a country. A Joint Resolution has no jurisdiction outside of the U.S. and Hawai'i is a foreign country. If this logic were true then the Hawaiian Kingdom could annex the U.S. by their own country's law or England could pass a parliamentary bill to annex France but this is illegal and impossible. So a Congressional Joint Resolution cannot annex another country, this is the claim the U.S. has that they annexed Hawai'i but this has been declared illegal and impossible. This is why Hawai'i was never annexed

into the U.S. and is not the 50th state but is a foreign country, the Hawaiian Kingdom under illegal occupation. I have attached photos below, links, and a pdf of the resources I have learned from Professor, Dr. Keanu Sai, and many more who are now teaching this across the U.S. and the world.

I have recently learned this and would like to share this as educational resources and references. Informed people make informed decisions. Many people still need to be made aware of this and it is my duty as a citizen and a Hawaiian to educate and share information so that people can make right and informed decisions.

Thank you for taking the time to hear and listen to i ko'u ku'e a me mana'o (my protest/objection, thoughts). Ke Akua pū (God bless) mālama pono. (Take good care).

Hawaiiankingdom.org

Caution-<https://www.nea.org/advocating-for-change/new-from-nea/us-occupation-hawaiian-kingdom> < Caution-<https://www.nea.org/advocating-for-change/new-from-nea/us-occupation-hawaiian-kingdom> >

Caution-<https://www.nea.org/advocating-for-change/new-from-nea/illegal-overthrow-hawaiian-kingdom-government> < Caution-<https://www.nea.org/advocating-for-change/new-from-nea/illegal-overthrow-hawaiian-kingdom-government> >

Caution-<https://www.nea.org/advocating-for-change/new-from-nea/impact-us-occupation-hawaiian-people> < Caution-<https://www.nea.org/advocating-for-change/new-from-nea/impact-us-occupation-hawaiian-people> >

Me ke aloha,

Kinion Wahineali'i C.



Office of the High Commissioner for Human Rights  
Palais des Nations, CH-1211 Geneva 10, Switzerland

## MEMORANDUM

Date: 25 February 2018

From: Dr. Alfred M. deZayas  
United Nations Independent Expert  
Office of the High Commissioner for Human Rights

To: Honorable Gary W. B. Chang, and  
Honorable Jeannette H. Castagnetti, and  
Members of the Judiciary for the State of Hawaii

Re: The case of Mme Routh Bolomet

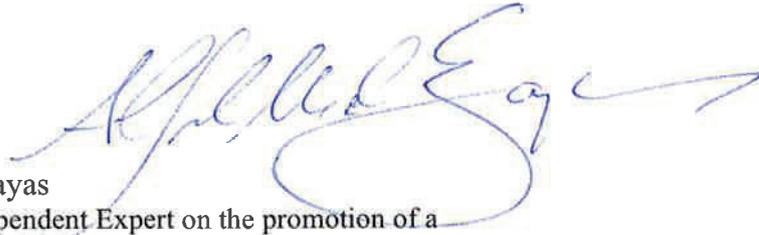
As a professor of international law, the former Secretary of the UN Human Rights Committee, co-author of book, *The United Nations Human Rights Committee Case Law 1977-2008*, and currently serving as the UN Independent Expert on the promotion of a democratic and equitable international order, I have come to understand that the lawful political status of the Hawaiian Islands is that of a sovereign nation-state in continuity; but a nation-state that is under a strange form of occupation by the United States resulting from an illegal military occupation and a fraudulent annexation. As such, international laws (the Hague and Geneva Conventions) require that governance and legal matters within the occupied territory of the Hawaiian Islands must be administered by the application of the laws of the occupied state (in this case, the Hawaiian Kingdom), not the domestic laws of the occupier (the United States).

Based on that understanding, in paragraph 69(n) of my 2013 report (A/68/284) to the United Nations General Assembly I recommended that the people of the Hawaiian Islands — and other peoples and nations in similar situations — be provided access to UN procedures and mechanisms in order to exercise their rights protected under international law. The adjudication of land transactions in the Hawaiian Islands would likewise be a matter of Hawaiian Kingdom law and international law, not domestic U.S. law.

I have reviewed the complaint submitted in 2017 by Mme Routh Bolomet to the United Nations Office of the High Commissioner for Human Rights, pointing out historical and ongoing plundering of the Hawaiians' lands, particularly of those heirs and descendants with land titles that originate from the distributions of lands under the authority of the Hawaiian Kingdom. Pursuant to the U.S. Supreme Court judgment in the *Paquete Habana* Case (1900),

U.S. courts have to take international law and customary international law into account in property disputes. The state of Hawaii courts should not lend themselves to a flagrant violation of the rights of the land title holders and in consequence of pertinent international norms. Therefore, the courts of the State of Hawaii must not enable or collude in the wrongful taking of private lands, bearing in mind that the right to property is recognized not only in U.S. law but also in Article 17 of the Universal Declaration of Human Rights, adopted under the leadership of Eleanor Roosevelt.

Respectfully,

A handwritten signature in blue ink, appearing to read 'Alfred M. deZayas', with a long horizontal flourish extending to the right.

Dr. Alfred M. deZayas  
United Nations Independent Expert on the promotion of a  
democratic and equitable international order  
Office of the High Commissioner for Human Rights  
Palais des Nations, CH-1211 Geneva 10, Switzerland

### A NOTE ON THE SECOND EDITION

I am as pleased as any writer with a second edition and grateful to my new publisher, Arnold Kotler, for his commitment and interest.

I am compelled to add that the continued relevance of this book reflects a far-reaching political, moral and intellectual failure of the United States to recognize and deal with its takeover of Hawai'i.

In the book's subtitle, the word *Annexation* has been replaced by the word *Occupation*, referring to America's occupation of Hawai'i. Where annexation connotes legality by mutual agreement, the act was not mutual and therefore not legal. Since by definition of international law there was no annexation, we are left then with the word *occupation*.

In making this change, I have embraced the logical conclusion of my research into the events of 1893 to 1898 in Honolulu and Washington, D.C. I am prompted to take this step by a growing body of historical work by a new generation of Native Hawaiian scholars. Dr. Keanu Sai writes, "The challenge for ... the fields of political science, history, and law is to distinguish between the rule of law and the politics of power." In the history of Hawai'i, the might of the United States does not make it right.

## DOJ Unclear On Hawai'i Annexation

- Ninety years later in 1988, the U.S. Department of Justice concluded in a legal opinion:
  - “[Despite] constitutional objections, Congress approved the joint resolution and President McKinley signed the measure in 1898”
  - “Nevertheless, whether this action demonstrates the constitutional power of Congress to acquire territory is certainly questionable”
  - “It is therefore unclear which constitutional power Congress exercised when it acquired Hawaii by joint resolution”



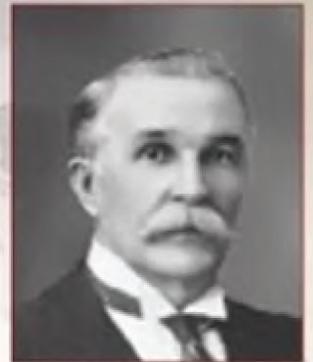
## *State of War*

- On January 17, 1893 the Hawaiian Kingdom came under belligerent occupation
- The law of occupation mandates the occupying State (United States) to administer the laws of the occupied State (Hawaiian Kingdom)
- According to Judge Crawford of the International Court of Justice:
  - “belligerent occupation does not affect the continuity of the State, even where there exists no government claiming to represent the occupied State”



# Congressional Records

- Representative Thomas Ball (Texas): “The annexation of Hawaii by joint resolution is unconstitutional, unnecessary, and unwise... that territory could only be constitutionally acquired by treaty”
- Senator Augustus Bacon (Georgia): “the annexation of foreign territory was necessarily and essentially the subject-matter of a treaty, and that it could not be accomplished legally and constitutionally by a statute or joint resolution”



## Alana Carvalho

Aloha. My name is Alana Carvalho, born and raised here on the Big Island. I live roughly 40 miles from PTA. The bombing needs to stop! My house has been shaking and the rumbles of the bombs exploding is unnerving. Our animals are scared and confused. Having to explain what these sounds are to our keiki, no it's not thunder... the military is bombing our aina. It needs to stop!



## Jared Char

I do not support the renewal of the Pohakuloa Training Area lease to the US Army, for cultural as well as environmental reasons.

## Carl Christensen

Comments regarding EIS for potential lease of public land at Pohakuloa, Island of Hawaii

To ensure that the State of Hawaii, as prospective lessor, will comply with its legal obligations relating to any disposition of public lands the HEPA (Chapter 343, Hawaii Revised Statutes) EIS should address the following items. Any lease agreement must ensure that the State of Hawaii, as landowner and trustee of the public land trusts established under Section 5 of the Hawaii Admission Act and Article XII, Section 4, of the Constitution of the State of Hawaii, can bring suit in an appropriate judicial forum to enforce the terms of the lease and all applicable laws of the State of Hawaii against its lessee to the same extent it could do so against any private lessee, as the State has no power to waive its police powers against any lessee, public or private. The HEPA EIS should fully address these matters, as any failure to provide for such enforcement would have serious environmental implications. There is evidence that the United States has allowed the leased lands to be contaminated with unexploded ordnance and other waste, and the EIS must address methods by which the United States will remove these contaminants. The State, as trustee, has an obligation to prevent waste of trust lands, and it must have the legal means to protect its lands from further deterioration. Furthermore, the HEPA EIS and any other documents relating to a prospective lease must ensure that the State, as landowner and trustee, fully complies with all applicable Federal and State laws, including but not limited to the Hawaii Admission Act, the Hawaiian Homes Commission Act, Article XII, Sections -4 and -7 of the Constitution of the State of Hawaii, and the provisions of Chapter 171, Hawaii Revised Statutes, relating to dispositions of public lands. In particular, compliance with Sections 171-7, -17, 27, -32, -33, -35, -36, and 36.1, Hawaii Revised Statutes, is essential. The United States has had essentially rent-free use of public lands of the State of Hawaii for the term of the present lease, and it is essential that the State be compensated for any continued use of such lands in the same manner and to the same extent that a private landowner would be compensated.

# Aurora Cole

I spent several years working at Pōhakuloa Training Area. Not a single day went by when my heart did not feel heavy for the mistreatment of this land. I explore my greatest points of concern below.

First: Rubbish. Trash exists all throughout the Pōhakuloa region. Some has sat in situ for years, decades even. Some is far more recent. Too often, our team came across MRE packets, Gatorade bottles, pizza boxes, etc shoved into natural overhangs or sitting right on the surface of ridges, ready to blow downwind. We found massive amounts of litter just outside of a known archaeological cave. In another cave, we spotted 20mm shells.

The concept of trash goes well beyond cardboard boxes and plastic wrappers. The hoards of bullet shells that decompose across the landscape all contain lead. No amount of lead is safe in the human body, particularly in developing children. Over time, this lead accumulates in plants, which are eaten and absorbed by animals such as mouflon sheep -- who in turn are hunted and eaten by many of us, myself included. We should not fear consuming locally, sustainably harvested animals, yet this is the grim reality we face. Similarly, lead could pose a threat to native species in the area such as pueo. Residents downwind from Pōhakuloa in communities such as Pu‘u Anahulu and Waikōloa Village are at threat of breathing in contaminated soils.

The Army has not proven itself competent at cleaning up existing rubbish, OR preventing littering by modern-day troops. Why should an organization continue to manage an additional 23,000 acres of land when they appear incapable of managing even the few hundred acres I have had the privilege to explore? Will these leased lands be thoroughly cleaned prior to reallocation to the Army? If the land returns to the State, will the Army clean their mess prior to relinquishment?

Second: Overall environmental stewardship. I have a great amount of respect for the contracted Natural Resources team; I feel they are doing a phenomenal job overall. Yet they cannot fix all the ills inflicted on this land. Several years ago, an accidental but extremely foolish training error resulted in a fire that swallowed nearly 1,000 acres of land between Training Areas 18 and 22. The fact that this fire took place \*within\* a fenced-in endangered plant habitat is an important point. Fences may keep out hungry ungulates, but they do nothing to stymie military incompetence. Huge ‘ōhi‘a trees, countless māmane and naio, thousands of ‘a‘ali‘i, went up in flames, never to regenerate.

In the Infantry Platoon Battle Course (IPBC), I personally observed and documented several dozen ‘ōhi‘a trees that had clearly been purposefully shot by troops. ‘Ōhi‘a are especially threatened right now due to Rapid ‘Ōhi‘a Death, a deadly fungus of the genus *Ceratocystis*. Wounded trees are particularly susceptible to infection. There are zero excuses for troops to be shooting trees. The entire purpose of the multi-million dollar IPBC is to train with provided props. Mistakes like this cannot be seen as “isolated incidents.” All it takes is one time for a tree to be wounded for ROD to become rampant at Pōhakuloa.

Third: Cultural significance of the area. I could write a novel on the historic (and present-day) importance of Pōhakuloa. This land stands as testimony of na po‘e kahiko, the people of old, who relied on riches found only in this unique region. Resources such as ‘ua‘u birds and sturdy basalt; trails necessary for crossing from one moku to another, accessible to all; places of religious import such as Mauna Kea. Memories of the past decorate this landscape in the form of artifacts, structures, and petroglyphs. All of this is threatened by military activity.

The 23,000 acres of state leased land have yet to be thoroughly investigated by archaeologists. Will the Army be capable of funding teams to survey these tracts by 2029? Will the military take into account the fact that cultural significance is not always something we can observe in human-made items, but also a broader concept applied to pu‘u, plants, streams, and so on? Knocking down a rock wall is an obvious

display of disrespect. What about the gradual degradation of places once teeming with endemic species? Are they destined to become nothing more than fables, while the military continues to make uninhabitable these lands that they consider lifeless?

In conclusion: I support the No Action Alternative in regards to the 23,000 acres of land currently leased by the State of Hawai'i to the United States Army. The Army has had over half a century to prove itself a capable tenant on this land, and it has failed. The loss of 23,000 acres would still leave the Army with 109,000 acres of land on which to train troops. I have no doubt that this is more than enough space to conduct routine exercises, especially considering the reality that the current 132,000 acres of land at PTA is not all being utilized consistently or simultaneously. The state-owned land includes tracts of endangered plant and animal habitat which have recently and repeatedly come under threat due to training negligence. It is time for the state to reinvest in protecting these 23,000 acres for the health of our environment and our community.

## Barbara Cooney

Please do not renew the lease. It should be terminated ASAP, and the Army should be responsible for removing all ordinance & restoring all ecosystems and cultural sites. There are only 9 years left in the current lease to accomplish this restoration and abide by the conditions specified in this lease. Let's make the world a better place by ending the destruction of our sacred Mother Earth.  
Thank you.

## Andrew Cooper

As a nearby resident and frequent user of the area immediately adjacent to the Pōhakuloa facility I do have a few observations...

Personally the impact from training operations is minimal to insignificant. From our house in Waikoloa Village we occasionally hear the impact of munitions, a modest rumbling that is noted and forgotten. Local village noise from construction, yard care, barking dogs, kids playing, vehicles, etc., is vastly more intrusive.

When in the immediate area of the facility you can watch the activities from Saddle Road or nearby DLNR lands. There is no impact other than the distraction. If is interesting to stop and watch for a bit, the tracer fire or artillery flares can be quite pretty in the night.

Other than the occasional slow military convoy on local roads there is really no impact on our personal lives.

## Alexis Cox

Please do not use Pohakuloa as a training center anymore. It is not in the best interest of the people or the land and it is a huge waste of money. Please consider the long-term environmental hazards of this and choose not to retain this land. Mahalo

## Dizia Crisostomo

It is in my heart and belief that Pōhakuloa must be protected and respected as it will always be an ancestral site to Kanaka Maoli people. Ancestral land should never be occupied for violence, nor extracted from for the mere practices of militant training. On a global scale, there are already so many lands and waters that the U.S. military continues to occupy, and it saddens me that up until this day, many of our Kanaka brothers and sisters still continue to be at the face of displacement and dispossession due to the violences that militarism continues to push upon their communities—along with many Indigenous communities around the world. Similar to my home island of Guåhan, I see, hear, and experience first hand what it means to have ancestral lands occupied for training—the sounds of bombs, gunfire, and bodies move upon the surface of the island as if people aren't within proximity of military violence.

Therefore, I wholeheartedly believe that enough is enough. No more military build up. No more occupation for the sake of training facilities, and no more violences done to the people of Hawai'i, 'āina, Mauna Kea, and the very relationships that we share with one another as people. This is the home of Kanaka Maoli people, the Indigenous peoples of this very much sovereign land, and it is an absolute right for Pōhakuloa to be protected by the many voices at the forefront of advocating for justice. As a supporter for the protect Pōhakuloa movement, and as a dear friend, youth, and advocate, I stand in solidarity with the Kanaka Maoli community for the betterment of Indigenous health and wellness at the height of military occupation.

## Alexander Cyran

I am strongly in favor of the "No Action Alternative" for Pōhakuloa Military Training Area on Hawai'i Island. There are sites in other states that the military can use for training that would have a much less impact on the endangered species found in the Pōhakuloa training camp area, as well as the native Hawaiian cultural sites there. The aina (land) is sacred to the Hawaiian people and must not be used for training that ruins the land with explosives and dangerous substances that don't show respect an pūlama (caring) for the land.

## Sasha Davis

It is critical that Army return this land to the people of the State of Hawai'i at the termination of the lease in 2029, and that the land be restored to its prior condition. The taking of this state land at a fraction of its actual value – and its use over the past decades for activities that are known to be ecologically damaging – has long been justified because those activities were deemed to be temporary and because promises were made to one day clean it and return it to the people of Hawai'i. Ending training exercises on this land cannot continue to be put off indefinitely to the point where military live fire exercises become a de facto permanent use of this leased land. Any EIS process that follows this Letter of Intent should also clearly state that a valid alternative is the ending the lease, moving training to other sites off-island, and returning the land to the state. Furthermore, the impacts of training on this leased land must be evaluated in the context of the cumulative environmental and cultural impacts of training on adjacent parcels as well as other sites across the archipelago.

## Stella Dee

PLEASE STOP BOMBING OUR BEAUTIFUL ISLAND! STOP ALL THIS UNNESSACESSARY DESTRUCTION OF THE PLANET! START CARING ABOUT YOUR FAMILY, MY FAMILY, ALL THE FAMILIES AND ANIMALS. We all just want to live peacefully on the planet! Stop the BOMBING!

## Kahu: Richard Maele DeLeon

As a Kahu a spiritual leader of Hawaiian cultural practitioner demanding a hāule to the contiune destruction and desecration to a living culture and STOP BOMBING PARADISE

# Amanda Dillon

## Army Training Land Retention at Pōhakuloa Training Area Environmental Impact Statement – Public Comment

I am a resident living in Waimea and I have worked in the fields of environmental science and conservation for the past 12 years.

I am concerned about the environmental impacts of excessive noise pollution, invasive species, unexploded ordnance, and contamination from the Pōhakuloa Training Area on biological and cultural resources, native and endangered wildlife, and our island community.

Our home is 45 miles away from PTA and we can hear live-fire and bombing clearly here and all the way down to the coast. The noise of bombs detonating repeatedly throughout the day and into the night is alarming and distressing.

The EIS should include a survey of residents across the island to collect information on noise pollution and its impact on their lives and families. The EIS should provide information on the extent of the noise pollution from PTA and public health impacts.

The high-elevation, tropical, sub-alpine environment of the Pōhakuloa area, between volcanic mountains, is one of the rarest ecosystems in the world (U.S. Army). This rare ecosystem, with critical habitats and endemic species, that exist nowhere else in the world, is exactly why this land should be protected and preserved—not bombed.

Pōhakuloa provides habitat for rare, native, and endemic plants, insects, and birds including 27 endangered species such as the nēnē (Hawaiian goose) and ‘ōpe‘ape‘a (Hawaiian hoary bat), the only native terrestrial mammal in the state. Military installations in the State of Hawai‘i, including Pōhakuloa Training Area, have the highest number of species listed under the Endangered Species Act in the country (Stein, B.A., Scott, C., Benton, N., 2008. Federal lands and endangered species: the role of military and other federal lands in sustaining biodiversity. *Bioscience* 58 (4), 339–347).

The EIS should provide the current status and a complete inventory for all rare, native, endemic, endangered, and threatened plant, animal, and insect species in the area, along with all efforts to protect, preserve, and restore their habitats. The EIS should also provide an inventory of invasive species and methods used to prevent and control their spread.

There is no evidence that the U.S. military needs the 23,000 acres of leased land or any of the land that comprises the Pōhakuloa Training Area. With modern military and

technological capabilities, military bases abroad, and large installations on the mainland, it is no longer accurate that the state of Hawai'i, or Hawai'i Island specifically, is "strategically vital for national defense as a logistics hub and for rapid troop deployment in response to emergent world events."

The EIS should provide specific evidence and examples of how the leased area and entire PTA is currently "strategically vital for national defense."

The high-elevation, tropical, sub-alpine ecosystems of Pōhakuloa are unlike any other environment, or possible warzone, in the world. It is inaccurate to claim that the unique environment at PTA is "critical to prepare our troops to 'fight as they train' in similar conditions to which they may be deployed."

The EIS should explain why PTA and the leased area are necessary for training when the U.S. military has large installations on the mainland, in remote areas with mountainous and desert conditions.

If the Army insists on listing financial benefits in EIS documentation and lease negotiations, it should be noted that the U.S. military claims to contribute "a significant number of jobs and money" to the County of Hawai'i, but employs only "240 personnel on the Island of Hawai'i." Therefore, the military provides employment for approximately 0.1% of Hawai'i Island residents, yet controls 132,000 acres that is the "largest contiguous live-fire range and maneuver training area in Hawai'i." Per the online documentation, this is also "the only training area in Hawai'i able to support larger unit (i.e., battalion and brigade) collective live-fire and maneuver training." PTA has the largest land area and the greatest environmental impact with smallest economic benefit for the community.

The EIS should explain how PTA, and specifically the leased land, provides economic benefits for residents and provide specific details for the "jobs and money" contributed to Hawai'i County.

If the U.S. military is going to claim financial benefits to the County of Hawai'i as part of lease negotiations, the EIS should include a socioeconomic survey of residents. As part of the EIS, the Army should ask residents if the economic benefits outweigh the cost to the environment, public health impacts, and the importance of biological and cultural resources in the area.

As stated in the EIS Scoping Presentations, "PTA is the only training area in Hawai'i where military units can use weapon systems at **maximum capabilities.**" It is

unacceptable for the military to deploy weapons near our homes, fragile critical habitats, and endangered species—especially at “**maximum capabilities.**”

The EIS should fully disclose the extent to which the U.S. Army has fulfilled lease requirements and legal obligations to remove ammunition and waste materials. The EIS should provide an inventory of the entire lease area to determine if there is ammunition, unexploded ordnance, depleted uranium, lead, toxins, or other military debris.

The U.S. military has not proven that the leased land or entire Pōhakuloa Training Area—a rare, fragile ecosystem with endemic species and cultural resources—is necessary for national defense or the safety of our country.

I fully support the “No Action Alternative” wherein the Army would not retain any of the State-owned land at Pōhakuloa Training Area. The environment should be restored to its natural condition and returned to the Department of Land and Natural Resources when the lease expires in 2029.

**From:** Stephany Dinnan-Kaolulo  
**Sent:** Friday, October 2, 2020 11:31 PM  
**To:** USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
**Subject:** [Non-DoD Source] Regarding the Environmental Impact Statement for U.S. Army's Lease of Pōhakuloa

Aloha,

I am Stephany Dinnan-Kaolulo. I'm 15 from Waimānalo O'ahu. I am here to state my support to the U.S. Army's attempt to seek a continuation of their lease for Pōhakuloa for military use. I support this issue because of the suggestion that was brought up during the opening statements during trial the interagency cooperation. I think it is perfect for both sides getting what they want. I care about this issue because I believe that the U.S. troops deserve a place to train while they fight for our freedom. I also believe that the land should be taken care of. I am asking the U.S. Army to push for interagency cooperation. So that the troops get a place to train and the land is cared for. I appreciate you taking time and reading this.

Mahalo,

Stephany Dinnan-Kaolulo

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**From:** Alyce Dodge  
**Sent:** Wednesday, October 14, 2020 7:20 AM  
**To:** USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
**Subject:** [Non-DoD Source] PUBLIC TESTIMONY RE: Pohakuloa Training Area

## PUBLIC TESTIMONY RE: Pohakuloa Training Area

September 14, 2020

To Whom It May Concern,

I am against the continued lease of state lands for Army Training at Pohakuloa for environmental and moral reasons.

Over the years the Army has used this land, many concerns have risen with the awareness of the presence of Depleted Uranium and other toxic waste left behind from training. These toxins are hazards to all life in the area, and must be cleaned up from the land, ground water and air. We are in the midst of the sixth great extinction due to human caused climate change and loss of wilderness. I believe the bulk of our resources needed to be used to address this existential threat of climate change and species extinction. We cannot afford any more time and energy and land and resources on war and preparing for war.

Furthermore, during this ongoing pandemic our focus needs to be on the wellbeing of those most affected. We simply cannot afford to be deliberately targeting our own precious and limited land. This site has Hawaiian cultural significance. The pono action is to respect the native people and culture and to practice aloha 'aina.

For these reasons I am against the continued lease of state lands for Army Training at Pohakuloa.

Sincerely,

Alyce Dodge

Honolulu, HI. 96839

## Blake Doll

At a time when folks are struggling to make ends meet whether a "mom and pops" store or restaurant we need this Training Area and the dollars it pumps into the "local" economy. For decades we've relied on "tourist" dollars and now with this Covid-19 virus that money is now gone. If the military can't train at PTA then the bases will close and all the jobs it provides and the monies to the local economy will go away too. This Training Area provides a place where our military can hone their skills to better prepare them for battle.

## Candy Doogle

As a member of the Waimea community, I am deeply concerned about the environmental impact on native Hawaiian plants and ceremonial land that are located on Pohakuloa. It has been demonstrated to me in social settings the inappropriate nature of the commander of the base and I believe that he is not knowledgeable about the Hawaiian culture even though he has stated he is on many occasions and has spoken wrong phrases and not pronounced Hawaiian words correctly. It is my hope that this study will shed light on the truth that is behind that gates of Pohakuloa. It is time that a portion of land be given back to the indigenous people of Hawaii. And the word on the street is that the commander will be long gone before this is finalized and I believe that due to that fact that the base will be a better place and maybe the army and the people of Hawaii Island can work side by side and make our island a better place without secrets.

Susan Douglas

**COPIED FROM PDF**

Say NO to Army PTA Lease Extension!

**From:** Susan Douglas  
**Sent:** Wednesday, October 14, 2020 10:15 AM  
**To:** USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
**Subject:** [Non-DoD Source] Say NO to Army PTA Lease Extension!

All active links contained in this email were disabled. Please verify the identity of the sender, and confirm the authenticity of all links contained within the message prior to copying and pasting the address to a Web browser.

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***Warmest Mahalo and Aloha!***

Susan Douglas  
Writer & Healthy Life Coach  
Temple of the Spirit (Our Body Is the Temple of our Spirit)  
Kihei, Maui, HI 96753

(You can call 24/7, if you get my machine leave a long message.  
NO texts please.)

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## Robert Duerr

### CLEAN UP AND PUT UP

Dear PTA US Army, Understanding the need to have a US Military to protect America, two things need to be done at PTA. CLEAN UP. First and foremost is to treat the land respectfully. The contamination by metals and radiation and the inability to return the land to its original condition is a disgrace. PUT UP. Secondly, why hasn't the US Military paid its fair share to Americans? The next time a plane load of US dollars goes to a country that had no good reason to be invaded please divert some cash to Hawaii for schools, food for the hungry, healthcare and prisons that help reform AND VETERANS CARE. I recently loss an Army friend to Agent Orange and his death was a wake up call to CLEAN UP AND PUT UP. Mahalo, Robert Duerr Outdoor Writers Association of America.

## Mahina Embers

STOP BOMBING SACRED LAND. These bombings serve no purpose. They are busy work, just turning the cogs in the Military Industrial Complex. I can feel and hear the explosions all the way on the other side of Mauna Loa! That is not okay!! Stop torturing the land that we all rely on!

# SOFRONIO Estores

My comments in this process is as follows:

1. No EIS was conducted when PTA was established, therefore, an EA must first be done to determine if an EIS needs to happen (my understanding of the process).
2. Hawaii is a sovereign, neutral Nation State in some strange form of military occupation,
3. US President stated that the over-throw of the Hawaiian government was an "Act of War" ❖ key statement in International Law.
4. Hawaii has been occupied since 1893.
5. US claimed it was necessary to have Hawaii (Pearl Harbor) in the Spanish-American War ❖ which is over
6. US poured military forces on to the Hawaiian lands prior to WWII, during the war, and it continues extending into the Pacific.
7. US used PTA land to train for the Vietnam War, Iraq War, Afghanistan War, War on Poverty, War on Drugs, War on Terrorism and continues, all in violation of Hawaii's neutral state and treaties
8. US, as occupying force, violates International Law by imposing American Domestic Law in Hawaii as opposed to Hawaiian Kingdom Law
9. US continues to misuse the resources of the Islands by conducting RIMPAC Exercises within our area of the vast Pacific.
10. Hawaii is the playground for the thousands of military troops, crews, their families, and tourists to enjoy the beauty, the sun and the fun, never mind the environmental impact on the land, sea and air.
11. The US has ample space and land on the Continent to conduct all its military maneuvers, exercises, and training.
12. We are in a Nuclear, Missile-Centric military capabilities world and Hawaii is the central, strategic target of future belligerents by virtue of its location, strategic value, and the ever-expanding US military build-up in the Pacific.
13. To the people of the land, Hawaiians, this location is the flashpoint, the coming co-lateral damage, the sacrificial lamb that will find the United States in the next World War. Hawaii experienced this on December 7, 1941 and, as long as the American Armed Forces are in Hawaii, it can be the trigger for the next world war, a war of Nuclear giants. That is our History. We the people of a Neutral Hawaiian Kingdom need to remove our Paradise as that target. Go exercise the war games, the Joint and Combined Exercises away from Hawaii. We want peace and Aloha in our Pacific domain along with our Polynesian-Triangle relatives. Go with kind heart. Let us be what we are, a peace-loving Nation State of Aloha.

As stakeholders, we understand that you, as Occupier of our lands, limit access to military reservations, stations, posts, training areas, therefore, we are here to ask specific questions and make comments that relate to the claim that the US Army is a good steward of the land it occupies. During the remainder of the current Lease, only up till 2029, here are further questions:

- a. How much does it cost to operate PTA. As we pay taxes, it is important to us to know how and where our taxes go.
- b. How many people does it take to operate PTA?
- c. What are the pay grades of every person on the installation?
- d. What are the nationalities of the persons in each position?
- e. How and in what ways are you being a good steward?

- f. Is there a current map that shows every archaeological, burial, sacred or protected site on PTA? Are any sites marked on the ground? Have any been disturbed, damaged or destroyed?
  - g. How are hazardous materials disposed of?
  - h. Do you have to surge your staff, equipment, supplies, POL or any support services on major exercises that include Allied Forces? If yes, from where do you get the augmentation staff and your procedures for hiring?
  - i. Is there any time in the year when there is no live-firing conducted? If yes, is access allowed for Native Hawaiians to enter the installation to conduct cultural activities? Why are you not removing unexploded ordnance during these down times instead of allowing hazards to accumulate over time? Are heavy metals being located, gathered and removed after each live fire exercise? History, again reminds us of how the US military treated the people of Hawaii when Kahoolawe was released from its terrible abuse and violent destruction.
  - j. Does the lessor, State of Hawaii (DLNR) monitor any activity on the installation such as earth moving, berm repairs, demolition, digging, or major construction involving new target structures and system components? Is there any plan to upgrade the infrastructure?
  - k. When was there a 100% survey of the impact area for depleted uranium? What were the results?
  - l. There is technology available to track each round of artillery and large explosives on impact, thus, confirming detonation. If unexploded, the exact location of the projectile is known for removal or to be detonated in place by your EOD team. If not already available, why are you not developing this capability in order to comply with the Lease specification to clean up after each live-firing training exercise? The excuse that clean-up of any impact and training area after each exercise is not conducted because of UXO is not acceptable.
  - m. Do you keep a record of each instance when foreign troops or weapons are using the training area? The Lease stipulates usage of this land is for US Forces. Who authorized foreign troops and weapons to be used at PTA for training? This is another violation of the lease agreement and along with the other non-compliances constitute grounds to terminate the lease for cause at any time.
  - n. What dust suppression measures have you done to eliminate or minimize the effects of the helicopters and especially the Osprey aircraft? There could be depleted uranium particles in the dust clouds in these flight operations.
  - o. What are your procedures for free access by native Hawaiian practitioners, family member visits to burial sites, hunters, and exercise cleanup monitors into PTA?
- As an interested participant, I want to have the following:
- p. Copy of the proposed renewal Lease Document
  - q. Pictures of the entire Pohakuloa training land as it existed at the beginning of the lease
  - r. Diagrams of the layout of the original installation-to review the historical progression of construction in the cantonment area
  - s. Additional diagrams of each major modification to the original documents up to the present (the total footprint)
  - t. Location of each bivouac area to include ammunition points, fueling points, motor parks, field latrines, mess areas and trash disposal areas on the map
  - u. For each firing point, the type weapon, caliber, number of weapons, number of shells expended and target impact locations on the map
  - v. The same applies to aerial gunnery fires and bombs and missiles impacted on the land
  - w. Each round fired has a potential for wild fires, what is your wild fire plan?
  - x. I would like to have a document outlining every expenditure where steward of the land is conducted to include the 5 W's, who, what, when, where, why.

The intent of these questions are:

1. Bring accountability to the people, not to the bureaucracy and leadership on Oahu. It is the people of Hawaii Island who need to be heard pertaining to their kuleana to malama their Aina, hopefully supported by all Islands.
2. The information that these questions uncover will put a lot of pressure on all those on PTA that the people of Big Island intend to have full transparency and accountability for not only what stewardship has been done, but, more importantly what is not being done both by the user and the Lessors on Oahu.
3. Prepare carefully for the eventual release of PTA lands to avoid the mistakes of Kahoolawe.

Before an EIS is considered, an environmental assessment EA must be conducted to determine if an environmental impact statement is necessary.

Hawaii is in a new environment that was not the case when the original executive order by President Lyndon B Johnson was announced in 1964 and the National Environmental Act (NEPA) was operationalized.

The true history of Hawaii as an independent, neutral state among the international community of Nation States back in 1843 presents information that now questions the presence of United States forces as occupiers of the Kingdom of Hawaii. Additionally, it is a fact that Hawaii was never annexed by the United States. Therefore, the Kingdom of Hawaii, as a sovereign state, although not currently governing its own country, continues to exist as equals among all the International States.

Given that this truth is now common knowledge among the people of Hawaii it constitutes a different environment as that was when Pohakuloa was established as a United States training area.

Hawaii, as a sovereign nation, declared its neutrality within the international order of communities. This neutrality does not allow Hawaii to provide any assistance to belligerents in any war. America is a belligerent in a never-ending war(s) all over this planet and is violating International law which prohibits belligerent nations forces engaged in war to enter into a neutral state territory without disarming. The United States has violated international law since the overthrow in 1893.

With this current knowledge of the true history of the overthrow, any further action by the United States military forces in Hawaii, if not formally requested and approved by the Kingdom of Hawaii government places the current Hawaii State government in complicit with this violation. There has been no formal request nor negotiation with the Hawaiian Kingdom to continue having the presence of United States forces in Hawaii which, if done, would continue violation of international law.

It is paramount that the United States military forces as well as the State of Hawaii governing entity understand the full ramifications of this violation. The improving awareness and knowledge of the Hawaiian people are now to be respected so that appropriate de-occupation of the sovereign Kingdom of Hawaii takes place with grace, pono and aloha.

Given all that is presented above, I respectfully request the following:

1. The lease renewal not be approved beyond 2029.
2. My comments be entered into the public record.
3. The US Army uses the remaining years in the lease to begin preparing the land to be returned to its original state for turnover to the Hawaiian government.
4. The State of Hawaii takes the position not to renew the lease beyond 2029.
5. Acknowledgement to all of the above and a formal response to my requests.

SOFRONIO J. ESTORES  
KUPUNA,  
US Army, Lieutenant Colonel (Retired)

## Jhernie Evangelista

All the way in Waikoloa, the sounds of powerful, asynchronous thunder rocks the earth beneath our feet. What is being done to our sacred earth with these bombs? There is a huge spiritual impact to what is effectively the ownership and manipulation of that land by non local entities. But even beyond that, the disruption is so prevalent for anyone within MILES. It's a stark reminder of injustices around land ownership and the right to self determination. And it's frightening for residents to live through. Something has to be done.

# Piikea Everett

Aloha mai kākou,

I am here to state my opposition in regards to the US Army's seeking an extension to a lease for the lands of Pohakuloa. This is coming from many years of mismanagement of these lands on the part of the State of Hawai'i's Department of Land and Natural Resources and the US Army. For the local community living on this island, there has been a lack of transparency from the US Army regarding their training exercises and its impacts on the surrounding land and people. With a long history of mismanagement and lack of aloha 'āina, it is not in the best interest to continue with military training in this area. And it is painful, that the US Army would consider seeking an extension of this lease knowing the hurt that it is causing the 'āina and also the Kanaka Maoli who view this kulāiwi as theirs to protect and maintain for future generations.

Me ka ha'aha'a,  
Pi'ikea Everett

Hanalei Fergerstrom,  
Authorized Representative of  
Kamahuilani Kawanakoa ;  
Spokesperson for  
Na Kupuna Moku O Keawe

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October 12, 2020

ATLR PTA EIS Comments  
P.O. Box 3444  
Honolulu, Hawaii 96801-3444

**RESPONSE TO SCOPING FOR THE EIS PREPARATION RE:  
POHAKULOA MILITARY TRAINING AREA**

***DISCLAIMER: THIS RESPONSE IS A MATTER OF NECESSITY, SELF DEFENSE, SELF PRESERVATION, BUT IS NOT INTENDED TO RELINQUISH/DIMINISH ANY RIGHTS, CLAIMS OF THE HAWAIIAN KINGDOM.***

**Regarding the Misinformation of the Historic Background**

- 1) The United States does not have any lawful authority to assert its jurisdiction in the Archipelagic Nation State of the Hawaiian Kingdom.
- 2) The Hawaiian Kingdom is a “**neutral**” Nation State in continuity.

The sources of the international law of neutrality are customary international law and, for certain questions, international treaties, in particular the Paris Declaration of 1856, the 1907 Hague Convention No. V respecting the Rights and Duties of Neutral Powers and Persons in Case of War on Land, the 1907 Hague Convention No. XIII concerning the Rights and Duties of Neutral Powers in Naval War, the four 1949 Geneva Conventions and Additional Protocol I of 1977.

- 3) There is no Treaty of Annexation between the Hawaiian Kingdom and the United States.
- 4) Lawful Land Title belongs to the Hawaiian Kingdom and is registered with the Bureau of Conveyances. See: Mahele
- 5) The State of Hawaii is a civilian arm of a illegal military occupation and acts in collusion with the United States in the theft, pillaging and engagement of fraudulent conversion of lands belonging to the Hawaiian Kingdom.
- 6) United States Public Law 103-150 also known as the Apology Bill acknowledges the role of the United States in the illegal overthrow of the Hawaiian Kingdom. There are several key “whereas” clauses that directly reflect.

Whereas, the indigenous Hawaiian people never directly relinquished their claims to their inherent [sovereignty](#) as a people or over their national lands to the United States, either through their monarchy or through a plebiscite or referendum.

Whereas, the health and well-being of the Native Hawaiian people is intrinsically tied to their deep feelings and attachment to the land;

Whereas, the Native Hawaiian people are determined to preserve, develop and transmit to future generations their ancestral territory, and their cultural identity in accordance with their own spiritual and traditional beliefs, customs, practices, language, and social institutions;

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**History of Land Ownership and Use sec. 3.3.1**

**Note: my comments are identified by using brackets and italics, the rest is as written in your document.**

Prior to Statehood, land in the Pohakuloa area was held by the Kingdom of Hawaii. The lands were either Crown or Government lands until 1893, when the Hawaiian Kingdom was overthrown. The successor government [ *de facto* ], the Republic of Hawaii **ASSUMED OWNERSHIP AND CONTROL OF THESE LANDS.**, When the Republic of Hawaii was annexed as a territory of the U.S. under the joint resolution of annexation, the Republic ceded these lands to the US. [ *annexation is accomplished by way of a Treaty of Annexation not by Joint Resolution which is a internal aspiration. For example: the government of another country cannot simply annex a foreign county by an resolution...for that to be true... than any country could simply by resolution annex the United States*] The U.S. **accepted ownership** of the lands in fee simple. [ *this acceptance of ownership of the land is tantamount to the acceptance of stolen property*] These lands are referred to as ceded lands.

...On August 21, 1959, Hawaii was admitted into the union and ceded lands were transferred to the newly created state, subject to the **TRUST** provisions in section 5 of the “Admissions Act”

## **REGARDING THE CEDED LANDS TRUST PROVISIONS OF THE ADMISSION ACT**

Under the trust provisions of the Ceded Lands (5f), there are five identified beneficiaries. 1) Support of Public Schools and Institutions 2) betterment of conditions of Native Hawaiians 3) Development of farm and home ownership 4) making of public improvements 5) Provisions of land for public use

There are two fundamentals of a trust. 1) Protection of the trust corpus 2) The trustee cannot become the beneficiary.

So when discussing the properties of Pohakuloa it is clear that those lands are part of the ceded lands so they are not the property of the State of Hawaii, but rather they are properties held in trust by the State of Hawaii. It is important to make the distinction between what is 'STATE OWNED" lands and CEDED Lands held in Trust by the State as ceded lands come with Trust provisions. There is no provision that allows for Military Use and the destruction of lands held in Trust.

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## **REGARDING THE ENVIRONMENTAL IMPACT STATEMENT**

As the Hawaiians are intrinsically tied to the land (Apology Bill PL 103-150) it is reasonable to equate Hawaiians to the natural world, i.e. the environment. Therefore the impact on the Hawaiian people should be an integral part of this and every Environmental Impact Statement.

There are many obstructions/obstacles to the ability to do a complete Environmental Impact Statement. The Pohakuloa area is completely controlled by the US military. As such, the public does not have open access to these areas to even do a complete survey of the lands. Having contacted the Counsel of Historic Preservation to question our ability to survey these lands, we were told that a

complete survey may in fact not be able to be completed because the Military has said that there were too many potential hazards like unexploded ordnance and residue from previously used weapons and munitions like Depleted Uranium used in the Davy Crockett spotting rounds. Bazooka firing ranges, canon firing ranges.

Problematic to this is the fact that the Army has not complied with some of the provisions of their lease that have not been adhered to like the cleanups after every major exercise. This problem of non adherence has recently led to a suit against the STATE DLNR for not tending to the lease agreement between the State and the ARMY. The Plaintiff's prevailed, with the court stating that DLNR was in Breach of Trust citing the failure of the DLNR to adhere to the principles of "Malama Aina" when it came to insuring that the ARMY was in compliance with the provisions of the lease regarding clean-up's after every training exercise.

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This intended complete Environmental Impact Statement is centered around the Leased Lands at Pohakuloa containing approximately 23,000 acres of land. Yet the entire PTA acreage is approximately 132,000 acres. With even the 23,000 acres of the leased lands not fully accessible, there is this overlying picture of US Military Control of the entire basin between the Volcanic mountains of Mauna Kea, Mauna Loa and Hualalai. Outside of the 23,000 acres under this lease are lands claimed to be US Government owned. By doing research on those properties claimed to be owned by the US Government, we find that most of those lands were attained through Presidential and Gubernatorial executive orders, but all those executive orders are predicated upon the illegal annexation of Hawaii and subsequent Statehood Act.

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## **Religious and Cultural Attributes**

The entire area referred to as the basin, or the saddle. The lands between the Volcanic Mountains of Mauna Kea, Mauna Loa, and Hualalai, is of extraordinary importance to the Culture and Religion. To help in understanding we must begin with the location: The AHUPUAA of KAOHE is the largest Ahupuaa in Hawaii. It begins in the District of Hamakua, stretches across Mauna Kea and encumbers all of the lands between Mauna Kea, Mauna Loa and Hualalai. KAOHE refers to the Bamboo but has the kauna of the ability to hold water. Kaohe connects to the upper watershed areas of Kona, Kau, Puu Anahulu, South Kohala, Hamakua, and Hilo.

From the area between Mauna Loa and Hualalai is the very sacred trail of our legendary warrior known as UMI A LILOA. This trail comes up from Kona thru the pass between Mauna Loa and Hualalai goes across Pohakuloa then up Mauna Kea over to Hamakua.

From my own eye, I view Mauna Kea as the Male and Mauna Loa as the female. The area between the mountains to be the birthing channel. It is very sacred to me.

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## **FACTORS OF CONCLUSIONS**

THE UNITED STATES HAS NO LAWFUL AUTHORITY TO ASSERT ITS JURISDICTION IN THE HAWAIIAN KINGDOM.

THE UNITED STATES GAVE MILITARY AND DIPLOMATIC SUPPORT TO THOSE ENGAGED IN THE ILLEGAL OVERTHROW OF THE HAWAIIAN KINGDOM

THE LANDS OF THE HAWAIIAN KINGDOM GOVERNMENT AND CROWN WERE ASSUMED BY THE REPUBLIC OF HAWAII, WHILE THE TITLE TO THOSE LANDS REMAIN IN THE HAWAIIAN KINGDOM AND ARE REGISTERED IN THE BUREAU OF CONVEYANCES.

THERE WAS AN ILLEGAL ANNEXATION OF THE REPUBLIC OF HAWAII WHOM WERE NOT THE TITLE HOLDERS OF THE LANDS

THE ANNEXATION WAS DONE BY JOINT RESOLUTION AND WAS MADE WITH THE REPUBLIC OF HAWAII.

THERE IS NO TREATY OF ANNEXATION BETWEEN THE HAWAIIAN KINGDOM OR EVEN THE REPUBLIC OF HAWAII

THE LANDS CEDED TO THE UNITED STATE BY THE REPUBLIC OF HAWAII WERE THE SEIZED PROPERTY OF THE HAWAIIAN KINGDOM GOVERNMENT AND CROWN.

THROUGH THE ADMISSION ACT, THE CEDED LANDS WERE TO BE HELD IN TRUST BY THE STATE OF HAWAII

THE LEASED LANDS OF POHAKULOA ARE PART OF THE CEDED LANDS UNDER TRUST PROVISIONS AND NOT STATE OWNED LANDS

THE LAND CLASSIFICATION OF POHAKULOA IS CLASSIFIED AS CONSERVATION LAND

**THE VERY PRESENCE OF THE US MILITARY IN HAWAII IS A VIOLATION OF INTERNATIONAL LAWS REGARDING "NEUTRALITY"**

DATED THIS DAY: OCTOBER 14, 2020

// HANALEI FERGERSTROM

4 classifications are urban, rural, agricultural and conservation. That land leased to the army are designated to be conservation land by the state. How can you designate it conservation land if you are going up and destroying it?

Keaaumoku recently purchased, Pohakuloa is leased land.

Govt owned impact zone by executive orders obtained land based on a treaty of annexation. You can't make something right if it starts off wrong.

Pg 3-7 History of land ownership and use – acknowledges “prior to statehood...1893 when the Hawaiian. Overthrown....1898 annexed...referred to as the ceded lands.

There are many misstatements here...3.3.1 history of land ownership and use  
The republic of Hawaii assumed ownership and control of these lands (pg 3-7)

Hazardous toxic materials and waste – it is hard to address this eis when all your documentation refers to acts that were already internationally illegal yet you continued to

In investigating how these other so-called US govt properties surrounding the pohakuloa area came into the hands of the US we find that these lands were attributed to presidential and gubernatorial executive orders. These executive

orders all established their authority and presence relating to the treaty of annexation that never happened. Therefore, all executive actions and orders have been are continue to be based on the fact that there was a legal annexation of Hawaii or a treaty of annexation but rather is was through a republic of Hawaii who did no town the land and the U.S. which again is part of the violations of international laws according to the laws of nations.

The very presence of military in the Hawaiian kingdom is in violation of international laws regarding nations in neutrality.

With all this continuous mention of “state owned lands” of which the state does NOT own the lands, the lands are

Act of necessity – self defense and self preservation

UMI A LILOA trail declaration of sacredness

Rico Ferrari

NO TO ANYMORE UNITED STATES OF AMERICA OCCUPATION OR USE OF HAWAIIAN  
HOME LANDS. MAHALO

## Joe Ferraro

Our family lives within Manoa Valley on the the Island of Oahu. We have been experiencing low flying helicopter flights during the pre-dawn hours, daytime and also as late as 9:00 PM. The flights are not only disturbing our peaceful hours but are a potential threat to our population should there be an unfortunate accident. Some of us have contacted the FAA to complain but they responded they have no authority in directing DOD flights. As a former private pilot, I find that hard to believe. I request that the DOD and the FAA coordinate all of these flights at the perimeter of the island over the water similar to Private and Commercial airline traffic.

Thank you

## Kristen Ferrer

The fact that the United States military illegally overthrew the Hawaiian Kingdom in 1893, has continued their illegal presence on these lands that are not theirs to this day, and in addition to that have the audacity to conduct trainings on sacred land is insane. I am not Native Hawaiian and I feel very strongly that the military presence on sacred land, and Hawai'i in general, should not be here. How could you ever argue that war games, bombing live ammo, and war trainings are beneficial to sacred land? The land should be cared for and stewarded by Native Hawaiians and have absolutely no ties to the army. Please do what is right and remove your presence from at least Pōhakuloa. That is the very least you as the United States Army can do for these islands.

## John Ferry

I'm a veteran of the regular Army (580th Signal 1967-70, Long Binh 1968-69) and two of my sons went career; one was stationed on Oahu and, due to his MOS, was a part of the annual ordinance clean-up on Hawaii. Although I readily acknowledge the history and the use of this land, I join many who are calling for the sunset of this operation; this area should be retired and restored, like the crater and the island off Maui. While it may be helpful to have an area like this in the state, it's really neither necessary nor a proper use of those lands anymore, especially given the history of Hawaii and the need to lessen the environmental impact on places that are also sacred to indigenous and other concerned citizens.

**From:** Kevin Fray  
**Sent:** Wednesday, October 14, 2020 8:34 PM  
**To:** USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
**Subject:** [Non-DoD Source] lease renewal

I live near Hilo. I don't want the army to renew their lease. Sure, lease renewal could make the army more powerful; though I doubt it'd make the world more resilient. Trying to force control over things is no longer improving modern civilization. Power corrupts. People behave as reasonably as they're allowed to. I hope we can all encourage people to plant food trees and hunt animals on the land, to live with the land, rather than exploit the land and use it to control other land.

[CharlesEisenstein.org](http://CharlesEisenstein.org)

## Antoinette Freitas

The following are my comments on the EIS.

1. The Army's lease requires that it "make every reasonable effort to . . . remove or deactivate all live or blank ammunition upon completion of a training exercise or prior to entry by the said public, whichever is sooner" and remove "all trash, garbage and other waste materials[.]" The EIS should fully report on the extent to which 1) the Army has complied with this lease provision, 2) include a thorough investigation of the entire area and 3) determine any environmental impacts or potential impacts of any military debris including unexploded ordnances on the land that the Army has been using.
2. The EIS must address the following cleanup activities at the former bazooka range; 1) report on the status of the cleanup, 2) examine and report on the level of cleanup, 3) address the if it is safe to enter; and 4) report on the amount and composition of waste collected and where was it disposed.
3. The EIS should fully disclose the extent to which ungulates exist within the area used by the Army and the damage they have caused.
4. The EIS must inventory of the historic sites in the area, including the cultural significance of Pohakuloa, and determine the degree of damage or salvage among sites while the Army has used these lands.
5. The Army must report on the full range of alternatives available to these lands including the restoration of these lands to the condition that they were in prior to the Army's use as well as a full discussion of the process by which these ceded lands can be returned to Department of Land and Natural Resources or any other appropriate state or local agency for proper care and management.

Sincerely,  
Antoinette Freitas, PhD

## David Fuertes

Constant Training Is a must to keep our homeland secured. Can you imagine a person not driving a vehicle for 10 years , then have him drive in a city . His spacial concept need reconfiguration and adjustment . Now picture and enemy missile attacking Hawaii? Without training , our chances of protection is slim. We need PTA.

# Don Fujimoto

I fully support the lease renewal.

Our military services absolutely need this training area to maintain their level of readiness. It is perfectly located, far from residential neighborhoods so the noise, dust and smoke are isolated from residents.

The military has worked hard to be a good citizen:

- Military personnel and equipment help fight the wildfires that plague our area.
- Public service announcements let us know when convoys and exercises are planned.
- Allowing hunters to harvest birds and mammals when the lands are not being used for training provides recreation and a subsistence food resource for our community.

## Jhonele Gambill

Born and raised in Hawaii and currently living in Waikoloa Village I am appalled by the current bombing going on which seems to be right outside my door. As stated above "born and raised in Hawaii" I have never experienced this sort of bombing!! It sounds like people are running in my roof and shaking the entirety of my cement slab home. Not only the continuous bombing all week, but the hours ... 10pm and we're still feeling it? 8am on a Sunday and we're awoken by bombs again?? I understand that it's training going on that's necessary but the impact that the island is feeling? Do they need to have such force with practice bombs? Also a helicopter flying so late at night and so close to our homes? What's the purpose of that? We live in paradise and pay a pretty price for it too but this current session of bombing is very disturbing to my home and I can only imagine what it's doing to the land!! How can that be right? I hope this doesn't fall upon deaf ears and something can be done about this in the future that benefits everyone!!

# Antonio Gaspar

Allow unlimited users.

# Michael Gast

Please ensure...

1. The Army's lease requires that it "make every reasonable effort to . . . remove or deactivate all live or blank ammunition upon completion of a training exercise or prior to entry by the said public, whichever is sooner" and remove "all trash, garbage and other waste materials[.]" The EIS should fully disclose the extent to which the Army has complied with this lease provision and should include a thorough investigation of the entire area to determine whether there is any military debris (including unexploded ordnance) on the land that the Army has been using.
2. The EIS should disclose the status of the cleanup of the former bazooka range. Has it been completely cleaned up? Is it safe to enter? How much waste was collected? What did it comprise of? Where was it disposed?
3. The EIS should fully disclose the extent to which ungulates exist within the area used by the Army and the damage they have caused.
4. The EIS should include a thorough inventory of the historic sites in the area. It should include a discussion of the cultural significance of Pōhakuloa itself. And it should include a discussion as to how the condition of these sites has changed while the Army has used these lands.
5. The Army must consider a full range of alternatives, including returning these ceded lands back to the Department of Land and Natural Resources after restoring them to the condition that they were in prior to the Army's use of this land.

## Carl Geise

I would like to comment that the Pohakuloa training area lease should not be renewed and shut down for military use. The military has been ordered for years to clean up all of their rubbish of bombs and casings and they have never done it. The fallout from what they do at Pohakuloa can be measured as far as Kona, which is poison. Toxic for our watershed, plants, animals and people. Sometimes I stay in Puna near volcano and can hear the sound of bombs. If it is frightening for me I can only imagine how it affects native birds. In addition, the reality is it is seceded lands and does not belong to the State, it belongs to the kanaka maoli, the the Hawaiians.

## Robert Gerard

In my latest email notification of ongoing training at PTA, it states "On behalf of Lieutenant Colonel JR Borce, Commander of Pohakuloa Training Area, and Command Sergeant Major Will Gray, along with the entire PTA staff, thank you again, for your continued support, patience and understanding." Frankly, my continued support, patience and understanding of the use of live ordinance that can be heard in Waikoloa Village at 11:30pm and 5:30am are at an end! I can't think of any real justification for this at those hours of the day. Try being considerate neighbors.

**From:** Ezekiel Giddens  
**Sent:** Friday, September 25, 2020 10:35 AM  
**To:** USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
**Cc:** Piikea Everett  
**Subject:** [Non-DoD Source] Pōhakuloa lease

Aloha,

I am Ezekiel Giddens, a Hawaiian that wants to speak about your lease at Pōhakuloa and my stance on it. I am here to state my opposition to the U.S. Army's attempt to seek a continuation of their lease for Pōhakuloa for military use. I oppose your guy's extension of this lease because you broke your promises and words. You are not taking care of the Hawaiian land you guys are working on. There are unexplained ordinances on the campsite, broken cars, and an unexplained amount of trash on the land the army promised to take care of and clean. I care about this issue because not only are you breaking your promises that you made on the lease papers and hurting the land but because you guys have done this with many of your other bases and camps on the Hawaiian islands it's becoming notorious for the military bases to neglect the land they are given. I just want the Army to keep their promises, I am fine with them using this land to the full extent just if they clean up and take care of the land. I just want the land to come first on their priorities because it is always the priority for the Hawaiian people. I do not oppose the military using our land, I just oppose what they are doing to it. Leaving rubbish around the camps, oil spills into our oceans, and gas leaks. These are all things that should not be happening. I just would like the army to keep their promises and Malama the 'āina.

Mahalo,

Ezekiel Giddens

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## Marcia Goldman-Manker

I am the Big Island staff person for Girl Scouts of Hawaii. Our Camp Kilohana abuts the Pohakuloa Training Area. As you know, this is a remote area subject to weather events, brush fires and occasionally vagrants that trespass. The team stationed at PTA has been an enormous help to the Girl Scout organization on this island. They have volunteered to help keep our property maintained by keeping grass and other materials that pose a risk of fire cleared and under control. They have further kept an eye on the property and let us know if they see or suspect suspicious activity. They were an enormous help in replacing a section of cabin roof that was destroyed when a branch blew down and fell through the roof, as well as assisting in the removal of a large tree that was blown over and obstructed the entry to our camp. But beyond that, having them as neighbors provides a sense of security when troops, girls and other groups stay at the camp. Service to community is one of the lessons that we try to instill in Girl Scouts and seeing the example set by the people at PTA puts a face to the concept of community service.

## David B. Gomes

As a Retired Navy Veteran SPCO (Korea and VietNam eras), I do not wish to see the Military pushed out of Pohakuloa.

1. Pohakuloa is now at a relatively isolated location miles from the nearest city. It is ideal for training in the manner that it is being used, especially since most locations on Oahu and other islands have encroaching housing and subdivisions. I do however agree with the activists that DU (deteriorated uranium) ammunitions should not be used. In the event of future wars (which I pray never happen) this isolated forward area will be desperately needed for troop training.

2. During WWII the area between Waimea and Waikoloa was used as a training ground for US troops. The clean up of ordnance from these areas have cost billions of dollars as expanding subdivisions have encroached on them.

3. The military has in numerous situations been pushed out of areas which were once isolated locations. I was stationed at Moffett Field near San Jose when a jet plane crashed into a apartment building that had been built under the glide path of the airstrip. All jet training squadrons were immediately banned from the base.

4. The Chinese CCP (Chinese Communist Party) is becoming aggressive, verbally attacking its neighbors on all sides including Russia by claiming areas of the South China Sea which have historically belonged to VietNam, the Philippines, Indonesia, and Japan including threats to forcibly take over Taiwan which was NEVER a part of Communist China. I was aboard the USS Lexington in 1956 when China shelled Taiwan and we put a stop to it. Later in the late '60s my XO suggested that we all start learning Mandarin because China would be the new world power.

5. The CCP has over the past 20 years constructed numerous islands in the South China Sea on what were only reefs in order to solidify their claims and while they originally said that they were for commercial use, they have turned them into essentially forward military air bases.

6. The CCP is using the excuse that thousands of years ago all these areas were owned by the Chinese dynasties. However the CCP fails to note that the CCP is NOT China. They have only been the rulers of the country since their takeover in 1949 by murdering millions of Chinese citizens that disagreed with their theology. Yes, CCP Communism is a theology, in that they demand that only their leaders can be worshiped and are persecuting and eliminating all other religious beliefs

6. Previous US administrations have assisted the CCP in joining the UN, the World Trade Organization and the World Health Organizations. Since then, the CCP with the help of Russia and other Communist run countries have subverted these organizations into virtual mouth pieces on their behalf.

7. President Trump is the first US President in more than 40 years that has recognized that China has been stealing our technology and subverting our students in schools and universities. The Corona Virus outbreak has awakened many in Congress and the World of the danger of the CCP

aggression.

8. As a result the Navy has moved up to 60% of its ships into the Pacific and the US has joined a agreement with the Philippines, Australia, India, and Taiwan to push back against this aggression. Indonesia is considering joining this alliance because they too are realizing that China has essentially invaded their islands and other Island Nations using their One Belt, One Road Initiative and their Debt Trap diplomacy.

Sincerely,

David B. Gomes SCPO Retired

## D.A. Haliimaile Goo

Is it any wonder that Native Hawaiians and others who have aloha for these islands, are angry and frustrated at actions taken by the State and agencies such as DLNR? You are negligent in managing and enforcing agreements that are clearly disrespectful of Hawaii and her people.

Do not extend the ridiculous \$1 Lease at Pohakuloa and do your job to manage and enforce the lease you already have. I have absolutely no faith in the State and DLNR to manage our Public Trust Lands with the respect and care it deserves. Auwe!

## Brian Goodyear

I am writing to express my opposition to any move to extend the lease at the Pohakuloa Training Area. The State of Hawaii basically gave this land away for a period of 65 years. The use of the land as a military training area has resulted in significant damage to the natural environment and Hawaiian cultural sites, while the community has received no benefits from the use of the land. It is time to return this land to the people of Hawaii.

# Mark Gordon

Aloha

Just wanted to share some comments for the need for allowing the military to continue training at US Army Garrison, Pohakuloa (PTA), Hawaii Island:

- PTA is the only training area in the Pacific region where the Marines and Army can complete all mission essential tasks. Although the military does train on installations on Oahu and some other Islands, the only installation in Hawaii that can accommodate larger than company-sized units (i.e., battalion and brigade) for live-fire and maneuver exercises is PTA. This type of large-scale training ultimately prevents injuries and saves soldiers' lives when they are deployed to the battlefield.
- PTA is critical to ensure that our military is trained prior to deployment to other areas worldwide
- PTA has also been used in military training exercises with other ally countries
- PTA is the only such military training area in the Pacific Region
- As a regular volunteer of the USO-PTA, I many times visit with the soldiers. They are a very committed group and appreciate the area to train prior to deployment
- PTA is geographically in the center of Hawaii Island with little negative effect on the public, other than convoys. However, convoy times on public roads are coordinated to reduce, as much as possible negative effects on traffic
- The project to expand Saddle Road to Queen Ka'ahumanu Highway will allow military vehicles to utilize Saddle versus Waikoloa road, which is currently being done
- Since the military vehicles do utilize Saddle Road often, some Federal funds can be utilized in the expansion.
- Having lived in Waikoloa Village on Hawaii Island for over 6 years, we have not noticed any noise issues when soldiers are training the area
- Military aircraft avoids as much as possible flying over residential areas
- During military deployment to PTA, soldiers have assisted the community in helping build a new park in Kamuela; helped with food drives, etc.
- As a safety engineer and being on PTA as a USO volunteer, I feel that training exercises are done in areas that are not harmful to humans, plants or animals. In addition, training is done in areas of the facility with very low probability of fires occurring. The military work jointly during training exercises with the onsite PTA Fire Department.
- Staff from PTA has been helpful in emergency rescues around Saddle Road and other areas
- Waikoloa Village had the great assistance of PTA requesting and obtaining fire fighting aircraft and other equipment in the recent wildfire which almost approached Waikoloa Village properties, homes and other areas
- As former chair of the Waikoloa Village Firewise Committee, we have had many public information forums where the Lt Colonel of PTA, the PTA Fire Chief, along with HFD and other agencies have actively participated.

Thank you for allowing me to share my comments and observations of why continuing the lease with PTA is necessary

Mark Gordon,  
Waikoloa HI.

**From:** Donna Grabow  
**Sent:** Wednesday, September 16, 2020 9:12 AM  
**To:** USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
**Subject:** [Non-DoD Source] Pohakuloa Training Area, lease expires 2029

All active links contained in this email were disabled. Please verify the identity of the sender, and confirm the authenticity of all links contained within the message prior to copying and pasting the address to a Web browser.

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Aloha

I am one of thousands of citizens who lives near the huge section of land leased by Pohakuloa Training Area.

It is had to imagine how the toxins in the land can be 'cleaned up', while PTA continues to test new weaponry of the Military Indu\$trial Complex.

RIMPAC must end also. It allows for foreign and domestic weaponry to be tested in the oceans and lands of Hawai'i.

For the sake of humanity and for all life on earth, these endless wars and war-profiteering must come to an end.

We all know that the decisions to wage endless wars, comes from order from the high above: from infiltration of personel within the Pentagon (Cabal, Shadow Government, Deep State, whatever).

~~~~~

As you know, a movement of young Hawaiians started 1970s, 1980s and 1990. They never gave up fights in

environmental courts, until they were able to stop the bombing of Kaho'olawe island.

All the lands at Pohakuloa should be cleaned up by the US military and returned to the Hawaiian people.

An important step in this process of de-militarizing Pohakuloa and Hawaii is to stop the PTA lease extension. These lands by executive order were turned over to the US military without any compensation. More recently, in the early 2000s, an additional 23,000 acres of land near Waiki'i Ranch was purchased by the military from Parker Ranch.

Pohakuloa: Now that you know. Do you care? Take action at [kamakakoi.com](http://kamakakoi.com) < Caution-  
<https://vimeo.com/63867248> >



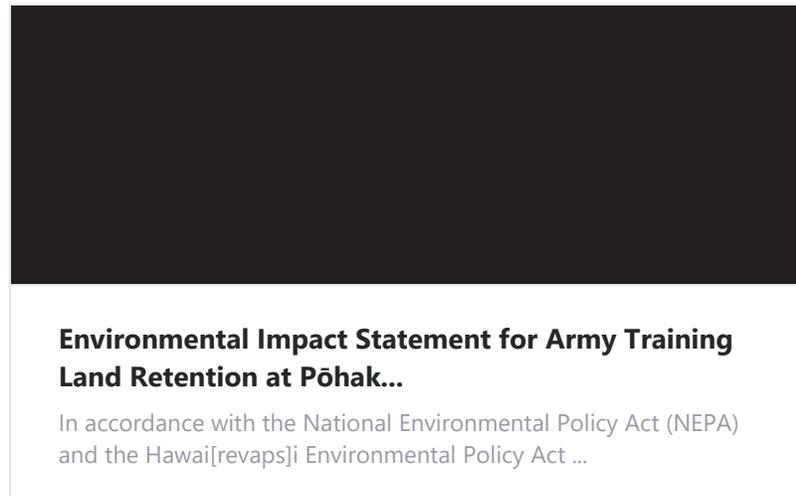
< Caution-<https://vimeo.com/63867248> >  
Mahalo for listening.

Sincerely,  
Donna Grabow  
Hilo, Hawai'i

. Caution-<https://home.army.mil/hawaii/index.php/ptaeis/project-home> < Caution-  
<https://home.army.mil/hawaii/index.php/ptaeis/project-home> >

: Environmental Impact Statement for Army Training Land Retention at Pōhakuloa Training Area in Hawai'i < Caution-  
<https://www.federalregister.gov/documents/2020/09/04/2020-19620/environmental-impact-statement-for-army-training-land-retention-at-phakuloa-training-area-in-hawaii> >

## The Military Needs to Malama Aina – clean up it's mess!



< Caution-<https://www.federalregister.gov/documents/2020/09/04/2020-19620/environmental-impact-statement-for-army-training-land-retention-at-phakuloa-training-area-in-hawaii> >

## Linda Green

No renewal of the lease of Hawai'i land to the military. This land is ours and it is being desecrated by the maneuvers that the military is using it for. Sacred sites are being destroyed. No renewal of the lease.

## Patricia Greene

As the daughter of an Army man whom was Stationed in Hawaii during PEARL HARBOR, but I know of Truths that went on at POHAKULOA first hand. He Served and Stayed at Not only Schofield but Pohakuloa, and Green Valley- Punalu'u where he was the Last Man Out. He was Under the Command of Colonel KUPAU.

I Know of TOO MANY BAD ACTS OF LONG ONGOING DESTRUCTION AND DANGERS FROM POHAKULOA. He Still Lives and is Very Competent in FACTS OF THOSE AWFUL THINGS THAT HAPPENED THERE & ELSEWHERE.

## William Greentree

I would speak against the renewal of any lease or otherwise authorizing the continued use of what has become known as the Pohakuloa Training Area. As a resident of a nearby portion of this training not subject to the lease of state land, I can testify to the continued abuse of its neighbors and the military's inability to act as a good neighbor.

The Waiki`i Ranch a residential community area bordering on the Keamuku tract is subject to overflights below FAA mandated minimum safe altitudes, including flights along our roads by Blackhawk helicopters at less than Eucalyptus tree top elevation, overflight by C-17 and V-22 aircraft and have been subjected to routine shaking of our houses, loud explosion, as well as door and window rattling when the nearby areas are conducting live fire exercises. This occurs well after 10 o'clock at night and before 7 in the morning.

In addition, the military has been negligent in maintaining the area bordering Waiki`i Ranch so as to help minimize wildfire threats.

If this is what they do in an area where they can be monitored, what are they doing in fragile lands far from anyone's eyes?

Do not accept the continual assault on Hawaii's land and its residents.

## Renate Gregory

Extension of the Army's lease at Pohakuloa should not be considered, since it facilitates extreme environmental harm by occupying forces.

## Kaiki Gunderson-Cook

Aloha,

I am a resident of Waimea, writing because I'm disturbed by the amount of loud "booms" I've been hearing and feeling this past week coming from Pohakuloa. Not only does it bother me but my animals as well. To hear and feel the bombing both day and night is ridiculous. Please stop.

Mahalo,  
Kaiki Gunderson-Cook

## Richard Hamasaki

I fully agree with U.S. Army Colonel Amy Wright (retired) that the State should terminate the U.S. Army's lease on land at Pōhakuloa. In Colonel Wright's own words, the U.S. Army ". . . has damaged native ecosystems, left unexploded ordinance, depleted uranium and other contaminants, and harmed Native Hawaiian cultural sites" (10/12/20). Ongoing destruction in the name of "training" needs to end now, and the U.S. Army must actively and responsibly rethink its 21st Century obligations to the environment, its indigenous and local communities, and the future of your own military dependents in this rapidly changing world. Preparedness is essential, but training in such a destructive manner and presence is and will always be unacceptable. Now is the time to mindfully and graciously prepare to be evicted, or, even better, to remove yourselves sagaciously from this sacred and precious 'Āina.

**From:** Gary Harrold  
**Sent:** Tuesday, September 22, 2020 8:41 AM  
**To:** USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
**Subject:** [Non-DoD Source] NO Army lease extension

**NO to Army PTA Lease Extension!**

Your live fire and bombing is destroying our sacred land. Violence, wars, bombs, tanks – none as ever resulted in peace, more ethical, moral governments, native people, the economy, human health and a more humane education for children. As a 75 y o retired CA teacher I know: the US military never promotes well being for both the environment and people of all ages. Just think of all the oceans and lands of the world you have helped contaminate with toxics. By products from RIMPAC have depleted and rendered unclean our once pristine marine life, both near Hawaii and beyond. Kindly reply.

**G a r y   H A R R O L D**



**From:** Kimo Po’o  
**Sent:** Tuesday, October 13, 2020 4:04 PM  
**To:** USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
**Subject:** [Non-DoD Source] Army Training Land Retention at Pôhakuloa Training Area Environmental Impact Statement (EIS)

All active links contained in this email were disabled. Please verify the identity of the sender, and confirm the authenticity of all links contained within the message prior to copying and pasting the address to a Web browser.

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I tried to submit the following on the USAGHI Project Home Website, but the link appeared broken. I am sending both my comments along with my contact information.

\*\*\*\*\*

I wish to comment on the Army Training Land Retention for the Pôhakuloa Training Area (PTA) Environmental Impact Statement.

I have lived and worked in Hawai‘i since 1990. During that time, I inventoried and mitigated impacts at prehistoric and historic cultural resources on O‘ahu, Maui, Moloka‘i, Hawai‘i Island, Kaho‘olawe, and Pôhakuloa Training Area. From 2003 until retirement in 2018, I worked at PTA.

The military began using the area for live fire exercises in 1943 during World War II. Parker Ranch leased thousands of acres for training of troops billeted at Camp Tarawa near Waimea. PTA began with barracks construction of prefabricated buildings in April 1955 (*Wikipedia* “Pohakuloa Training Area,” last modified July 7, 2020). This reference indicates training activities at PTA may have begun as early as the 1940s, but assuredly by the late 1950s.

At PTA, we began an inventory to locate short-term recent military features (RMF) within the training areas. These small ephemeral features often consisted of rifle or shotgun cartridges, military food debris, communication wires, and other materials found in association with stacked rock walls and other defensive positions like foxholes. Dates on early rifle cartridges support training activities from the 1950s.

Inventory of these locations typically consisted of a short description, measurements taken on compass directions, and geographical positioning system (GPS) points. These data were utilized to construct a map showing the distribution of the military features across PTA.

It is recommended this, or similar methodology be incorporated into the Archaeological Inventory Survey (AIS) for this project. Given the parcel’s location on the southern slopes of Mauna Kea, recent military training features (including those from the 1940s and 1950s) are probable. The locations require documentation to determine age and number of historic and recent features. These data could quantify military impacts, facilitate inspections, and provide a baseline for future monitoring. It is likely that some features represent older prehistoric or ranching construction re-used by military training activities. Each feature should be examined for materials suggesting cultural affiliation. Marine shell or basalt tools could be found at older sites,

with dated rifle cartridges and other later materials present at military features. Features used by both groups should exhibit a range of materials.

If military features are not located, examined, and recorded, the archaeological survey will not be complete.

**Reference Cited:**

Wikipedia contributors, "Pohakuloa Training Area," *Wikipedia, The Free Encyclopedia*.  
Caution-[https://en.wikipedia.org/wiki/Pohakuloa\\_Training\\_Area#See\\_also](https://en.wikipedia.org/wiki/Pohakuloa_Training_Area#See_also) < Caution-  
[https://en.wikipedia.org/wiki/Pohakuloa\\_Training\\_Area%23See\\_also](https://en.wikipedia.org/wiki/Pohakuloa_Training_Area%23See_also) > (accessed October 13, 2020).

\*\*\*\*\*

\*

Name: James Head

Organization: Individual

City: Volcano

State: Hawaii

Zip: 96785

Country: USA

## Brittney Hedlund

I would like to submit testimony in opposition of the continued use of Pohakuloa by the United States American Military based on the following: The improper use of this sacred land has been a tiresome and destructive act. The improper disposal of depleted uranium has disrupted access to fresh water aquifers beneath Mauna Kea. It defies logic that a multi-billion dollar federally funded military industrial complex has only spent \$1 a year for the past 50 years to the "state" of Hawai'i in order to destroy almost all natural flora and fauna (native and endemic), introduce invasive species, and disrupt iwi kkpuna has been devastating. In addition to the horror of having to drive through the land and hear live ammunition rounds as routine in our daily lives is not okay and should never have been deemed as acceptable. I would further assert that the use of this land has only emboldened the implementation of the U.S. government through militarization on other sovereign lands. As a kanaka who is living under the oppression of American imperialism I wholly detest these sort of actions by a government and would like to see the demilitarization of Hawaii by the U.S. government.

**From:** USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
<usarmy.wheeler.id-pacific.mbx.nepa-comments1@mail.mil>  
**Sent:** Thursday, September 17, 2020 10:29 AM  
**To:** Wahl, Gregory T CIV USARMY USAG (USA)  
**Subject:** FW: [Non-DoD Source] Public Comment (UNCLASSIFIED)

CLASSIFICATION: UNCLASSIFIED

Is this one early?

-----Original Message-----

From: Joan Heller [joan.heller@army.mil](mailto:joan.heller@army.mil)  
Sent: Wednesday, September 16, 2020 4:57 PM  
To: USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
<[usarmy.wheeler.id-pacific.mbx.nepa-comments1@mail.mil](mailto:usarmy.wheeler.id-pacific.mbx.nepa-comments1@mail.mil)>  
Subject: [Non-DoD Source] Public Comment

To Army Staff,

From a Hawaii resident, a NO to Army PTA Lease Extension!

Redirect federal tax dollars for COVID-19 funding, or Veterans assistance or  
to worker unemployment budgets,

NOT FOR THE WAR-FARE INDUSTRY!!!

STOP ALL FUNDING FOR BOMB TESTING, TRAINING OR APPLICATIONS NOW!!!!

Try to temper your egos and bring down the excessive costs of military  
spending.help build communities not destroy them!!!

Joan Heller

CLASSIFICATION: UNCLASSIFIED

# Linnea Heu

To Whom It May Concern:

My name is Linnea Heu. I am native Hawaiian, my family has been in Hawai'i for generations, I have been born and raised here and currently reside in Hilo. I have a vested interest in the findings of this EIS as it directly impacts myself and my community.

Thank you for the opportunity (afforded by law) to provide comments during this scoping period. When looking at "impact," I highly urge you to consider that this area of Pohakuloa is fairly young (in geologic time) and still in the process of natural succession. This means that while the area can be characterized as "barren," that is a function of the successional age of this landscape and current land use. To be clear, further use and development of this area is a detriment to the environment, as it is preventing the succession of what should be native shrubland and forest. Subsequently, the ecosystem services of said future native landscape will be lost if this lease is extended.

Additionally, extensive research of existing literature on Hawaiian ecosystems will reveal their highly interconnected nature. This is a result of the unique evolutionary history of our islands and native species. I ask that, in your analysis of potential impacts to Pohakuloa, you not compartmentalize the aspects of this impact and rather that you consider the effect that harming or eliminating one of these interconnected pieces can have on the ecosystem as a whole. Furthermore, effects of the activities within the State-owned portion of Pohakuloa Training Area are not confined to PTA, and may have far-reaching impacts (both geographically and temporally) on both State and Federal lands held in public trust.

The following are issues of particular concern:

- 1) impacts to endangered Hawaiian species, including the palila (*Loxioides bailleui*), a species whose historical range is bisected by PTA
- 2) how continued live fire training, enabled by lease of State lands, will impact the aquifer and existing groundwater resources
- 3) the poor track record of U.S. military use and destruction of land in Hawai'i (reference Kaho'olawe and Makua Valley and the recent Hawai'i Supreme Court ruling in Clarence Ching and Mary Maxine Kahaulelio, vs. Suzanne Case (DLNR)) and failure to properly steward and restore said lands

Thank you for your time and consideration.

Sincerely,  
Linnea Heu

## Rebecca Hightower

I'm strongly opposed to the continued use of this area for a military training ground. Please cease and desist any further exercises. Do not renew the lease. Enough of the war games. Time to think about humanity, environment and ecological impact. And clean up your mess

**From:** Jennifer Ho  
**Sent:** Wednesday, October 14, 2020 10:18 AM  
**To:** USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
**Subject:** [Non-DoD Source] no extension of a lease at Pohakuloa

I appreciate that you are studying the impact of extending your lease on Pohakuloa. The consequence of preparing for war or practicing for military engagement anywhere on Earth seems obvious. There is no rehearsal for war that doesn't make war on the environment. The side effects of preparing for war, the extractive industry involved and the production of weapons means civilians have to deal with the remains. Whether downstream of a river, downwind from a factory or after combat, picking up pieces in a foreign field where death waits for the innocent. War is criminal and is not the way to solve human problems. Military solutions, including the mindset that ignores rape, accidental or intentional civilian casualties are problems, so I can in no way endorse that the lease continue for our military at Pohakuloa.

However there is a place for the military because of the good things that being in the military accomplishes: Working together as a team and becoming physically stronger. Creating bonds of belonging, a membership in something greater than oneself, believing that one's actions are for an ideal. Those are powerful, important achievements. Not to mention punctuality and grooming which is seen in most of your past members.

Our military can redefine its purpose. Use your teamwork skills against real enemies such as invasive plants, animals or insects that harm ecosystems and food resources. You would be the heros that effectively improve forest health, decreasing fire risk. Choose something that you would do for love without pay because you believe in it, even if you are paid. Don't rehearse for war which we then take to foreign soil, often to prop up a rejaim, against the citizenry of that nation. Following the money we discover it was at the behest of an industry with leverage in our politics. That can't be what you thought risking your life and if you believe we have one, your soul was worth.

Most sincerely, Jennifer Ho

--

## Tamlyn Hunt

Many, including myself, a former Army 13B who used to train at PTA in the early 1990s, are opposed to the Army's extension of this lease because of the vast and unmitigated environmental and social impacts that PTA causes for the Big Island and native Hawaiians more generally. The Kia'i Aina (Protectors) movement has rightly been extending its vision beyond the TMT struggle on top of Mauna Kea to the substantially more damaging impacts from the U.S. military's activities at PTA. It is time for Uncle Sam to look elsewhere to play its war games. They're not welcomed any more on the Big Island.

I recommend the no action alternative and that the U.S. military willingly relinquish its activities at PTA once the current lease ends in 2029.

<https://www.civilbeat.org/2019/12/mauna-kea-protectors-please-turn-your-gaze-to-pohakuloa/>

# Charley Ice

Please see attachment

## **Pohakuloa EIS Scoping**

### *Cultural impact statement*

Cultural impact is not merely protection of artifacts. That perspective belongs to a culture limited to “object consciousness”, incapable of awareness beyond ego. It is unable to grasp why objects are part of living cultural consciousness beyond ego. Cultural sites are a reservoir of cultural significance to living culture, wherever people live, and should be accessible for the proper functioning of the living culture. Denying access is either an ignorant or a deliberate attempt to weaken a culture.

Many cultural sites have been identified outside the impact area, with the implication that many more would be found within the impact area. The proposed Environmental Impact Statement must do a thorough survey of the impact area to identify all cultural sites and mark them for avoidance of further disturbance, the survey to be preferably performed by or at least provided to the State Historic Sites Division. An analysis must be done to identify sites already disturbed, the requirements for and an implementation plan schedule for restoration or repatriation. Those that cannot be repatriated must be marked for avoidance of further disturbance.

In the alternative, the Army should identify a like number of USA cultural sites (not native sites) that can be used for target practice.

### *Water resource impacts*

The Army has expressed interest in using locally-found water resources to replace its trucking in of necessary water. Unfortunately, local resources within the Saddle Area are probably fossil water – not sustainable for ongoing use. The EIS should conduct scientific studies of water recharge in the areas that contribute to ground water supplies in the Saddle, and conduct studies to determine the volumes of water present, such as pumping tests. If water resources are present that can be sustainably used, the EIS should point out that the Department of Hawaiian Home Lands has a prior right to use these resources, and provide an estimate of those foreseeable needs. In the alternative, water might be piped in from the Waiki'i area, whose plentiful water resources are sustainable. Full estimates of those impacts should be evaluated.

### *Noise Pollution*

Even at some distance, local communities suffer from the noise during military activities at Pōhakuloa. Those impacts should be studied, and mitigating practices implemented for further study.

### *Alternatives*

The null alternative is to stop conducting these exercise here. But the idea of moving it to other places in the Pacific is a similar outrage to the people and cultures living there. If Americans think the Army's Pōhakuloa activities are acceptable, Americans should shoulder this experience – plenty of space in Texas, Florida, or Kansas.

# BIANCA ISAKI

To whom it may concern,

The proposed EIS should be rejected and further alternatives be reviewed and discussed in a resubmitted EIS.

The Army's lease requires that it "make every reasonable effort to . . . remove or deactivate all live or blank ammunition upon completion of a training exercise or prior to entry by the said public, whichever is sooner" and remove "all trash, garbage and other waste materials[.]" Cultural monitors, who spent extensive time on State lands at the PTA, observed military debris, including unexploded ordnance and spent shell casings, scattered across the area leased by the Army. The EIS should fully disclose the extent to which the Army has complied with this lease provision and should include a thorough investigation of the entire area to determine whether there is any military debris (including unexploded ordnance) on the land that the Army has been using.

## Former Bazooka Range

In a draft document entitled "Action Memorandum for the Time Critical Removal Action," that was prepared in March 2015 by the United States Army Garrison at Wheeler Army Airfield on Schofield Barracks in Wahiawa, Oahu, Hawaii, it was reported that the Former Bazooka Range MRS is located at the Pohakuloa Training Area. The bazooka range was apparently used as a military maneuver area through the early 2000s. During a site inspection of the bazooka range area that was jointly conducted by DLNR and the Army in 2014, the area was found to be "heavily contaminated on the surface with material potentially presenting an explosive hazard (MPPEH) and munition debris (MD)." (Emphasis added.) A subsequent inspection by two military explosive ordnance disposal units found that the following types of ordnance were observed to be present:

- 1.M29A2 training rounds with dummy M405 fuse,
2. Practice 81mm mortars, and
3. High explosive anti-tank (HEAT) rifle grenades.

Other suspected fired ordnance at the bazooka range area also included:

- 1.M28A2 bazooka rounds with M404 fuse, and
- 2.M30 white phosphorus (WP) bazooka rounds.

The Army noted that the sheer densities and quantities of ordnance that are present on the ground at the former bazooka range area "coupled with the accessibility to the public make for the potential for significant danger to public health and welfare." The estimated cost of remediating the danger as of March 2015 was \$2,353,000. The Army recommended that the removal of ordnance danger because of the significant possibility that ordnance exists at the former bazooka range area that "presents an imminent and substantial endangerment to public health, or welfare, or the environment."

Any EIS should disclose the status of the cleanup of the Former Bazooka Range. Has it been completely cleaned up? Is it safe to enter? How much waste was collected? What did it comprise of? Where was it disposed?

#### Invasive species

The EIS should fully disclose the extent to which ungulates exist within the area used by the Army and the damage they have caused.

#### Cultural sites

To date, investigations into the the number and significance of cultural sites have been superficial. The EIS should include a thorough inventory of the historic sites in the area. It should include a discussion of the cultural significance of Pohakuloa itself. And it should include a discussion as to how the condition of these sites has changed while the Army has used these lands.

#### Full range of alternatives

The Army must consider the most important alternative: Returning these ceded lands back to the Department of Land and Natural Resources after restoring them to the condition that they were in prior to the Army's use of this land. The military has repeatedly lied about how critical certain lands are for its training purposes. Kaho'olawe was critical. As was Makua. That is what the military claimed. But it was not true. Nor is continued use of Pohakuloa. Certainly, the land owned by the state can be returned in its natural condition back to the Department of Land and Natural Resources. It is particularly important that the Army evaluate this alternative because it has no legal authority to continue using these lands after 2029 and the State has the unfettered discretion to deny the Army's use of these ceded lands.

- Bianca Isaki

## Marco Jablonowitz

Aloha, I would like the EIS for the leased lands to review, analyze or otherwise study the impact of the community outreach that PTA has with Hawaii Island in so much as the troops who train on these leased lands are the ones who do the outreach and connect with the residents here. So, if the leased land is not retained, the troops cannot train here, and the community is left high and dry. See the pictures from the PTA FB Page. Thanks!











# Helen Jaccard

Comments by Helen Jaccard about Pohakuloa lease extension are below and attached as a document (which is easier to read).

1. "Open House" not open - There was no public participation in the scoping process during the Open House - we could not openly ask questions and listen to each other's questions and the answers. This alone should re-start the clock and make it mandatory to have a webinar-style question and answer about the scoping documents. Also, the scoping documents were not widely available much before the open house, so please give at least a month for people to digest and formulate comments AFTER a valid Open House by webinar.

2. Decision-making process - Who decides what comments are "substantive", and therefore included in the Draft EIS? What effect can our comments have on the outcome / decision? How will you make the Draft EIS public and notify people that it is now available? And if it is the Army issuing it's own Record of Decision, what effect do the public comments have on the Decision? What effect does the "State" of Hawaii have on the decision, since they are the trust holders? It should not be up to the Army, but rather the "State" on behalf of the Native Hawaiians, to decide if the Army can continue to lease this land. So shouldn't the "State" be issuing the Record of Decision?

In the Text of Poster 3, EIS Process - "The seventh milestone is the State's HEPA Final EIS Acceptability Determination." Who in the State decides that this is or is not Acceptable? Nowhere in this process does it say that the "State" has a say about NEPA - who decides on the NEPA side that this is or is not an acceptable EIS? And what happens after the EIS? Does the lease automatically get renewed?

3. Land retention - How to "retain the land?" "The ninth milestone is to implement the action selected in the Record of Decision." This is the part that's really frightening - "implement the action" - If the "State" and the Hawaiian people cannot select the action, then the Army should not have authority to implement it.

Poster 6: Overview of the Proposed Action

Retain the land - "Multiple land retention methods could be used" This an implied threat to take the land in a coup completely outside of the current lease process. Occupation for 65 years is not an automatic permission to continue this destruction despite the will of the people.

4. Lease terms - \$1/year or \$1 for 65 more years? If that land were developed for hotels and tourists, how much revenue would come in (NOT that I'm suggesting that tourism is what should be done with the land - but what is the maximum value of the land if it were given back to the Hawaiian people?) It's actual value has to do with how Hawaiians would use the land - cultural practices and perhaps growing food - what else?

5. Land cleanup / HI Supreme Court ruling - Is the Army now cleaning up Pohakuloa after every use? If not, the lease should not be renewed and the Army should commence to either clean up the land to the satisfaction of Native Hawaiians or hire and train Native Hawaiians to do so.

6. HEPA - ALL Alternatives - In the text of Poster 2, it says, "Third, a HEPA Cultural Impact Assessment, or CIA, which is being conducted to evaluate the potential impacts of the Proposed Action on cultural resources and traditional practices within a defined area." But shouldn't HEPA evaluate ALL of the Alternatives AND any alternate alternatives that Native Hawaiian People propose.

7. Only military-friendly practitioners (biased)? - "The CIA process includes public notice, literature reviews, and consultation with practitioners, Native Hawaiian Organizations, stakeholders, and other individuals." Who gets to decide which practitioners to consult with? Can practitioners offer to be consulted and give their opinions that have equal weight to those practitioners that the Army chooses to consult with?

8. PTA is not necessary to protect the United States and is a huge waste of taxpayer money. Poster 4: Military in Hawaii and PTA, "Hawaii provides a range of training environments that cannot be replicated in other states..." This is a lie. Pohakuloa is not unique - the military has 800 bases to use outside of the United States and many large bases within the US. They have other places where they can practice amphibious landings and work in deserts, forests and next to oceans. Even islands such as Sardegna (Italy), Guam, Okinawa and Puerto Rico have huge US bases. The leaders of Palau have invited the US military to bomb their island nation. The military could live with ONE instead of AT LEAST six! Not to imply that this destruction is needed ANYWHERE, but certainly should not be in multiple places all over the world.

"As of March 2020, the military employed 71,955 personnel in the state." But what do they bring? Sexual abuse, overpopulation / over-use of the land and water, destructive roads and structures, loss of fish ponds and agricultural lands, contamination of the land, water and air. The "State" of Hawaii would be much better off without the military. The \$7.2 billion spent in the state in FY2018 and \$21.8 million on personnel payroll in the County of Hawaii would be better spent on health care, schools, food, transportation, housing and other vital needs. Not to mention cleanup of military-abused land.

"PTA is the only area in Hawaii that supports larger unit collective live-fire and maneuver training in Hawaii." Well, so what? These huge training scenarios are simply not needed and are very damaging to the environment and culture. So far, I see no PROOF that they are necessary for defending the US.

"PTA is the primary tactical training area for units conducting military "mission essential tasks and training requirements". NO PROOF that these are ESSENTIAL or REQUIREMENTS, and as stated earlier, is not a unique environment.

"PTA supports joint and multinational exercises critical to ensure that the US military and allied nations know how to cooperatively work together" Exactly how does the 23,000 acres owned by the PEOPLE of Hawaii (out of the much larger US government acreage) do this? How many people will be in the state-controlled area? How many facilities are there? What terrible impact does this have?

"PTA is the only training area in Hawaii where military units can use weapons systems at maximum capabilities to complete training requirements." This does not at all have to happen in Hawaii! And maximum capabilities means maximum destruction of land owned by the people.

This should not be allowed anywhere. Is it done in a way that the Army can someday restore this land and return it to the people after the 65-year-lease expires in 2029?

"PTA is used by the US Army, US Marine Corps, US Air Force, US Army Reserve, Hawaii Army National Guard, Hawaii Air National Guard, Hawaii Police Department, and others" So what? Pohakuloa is the playground for all destructive enterprises? That's not an argument for continuing this destruction.

Poster 5: Why Retain State-owned Land at PTA? The lease is expiring - 23,000 acres used for 6 decades

\* What is on state-controlled land?

Urban terrain facility (practice invading a city)

Gives access between the two federally-owned pieces of land at PTA

Keep a road between federal properties if you must.

"Training at PTA saves lives" because personnel are "prepared for their mission". Given the mass destruction and murder worldwide in cities, especially recently in Syria, Iraq and Afghanistan, there has been plenty of practice. Where did all of those "personnel" train? How do we avoid all of the civilian casualties? Is that part of the planning and practice?

"Some examples of training facilities on the State-owned land include the photographs on the right of this poster. The top picture is of the Military Operation in Urban Terrain Facility, which allows personnel to train in an urban setting that is similar to real-world conditions. The middle picture shows a firing point that is used for training and firing indirect fire weapons such as artillery and mortars. 95% of the PTA firing points are on Hawaiian-owned land." WHAT???? There are 132,000 acres of PTA, only 23,000 are on State-owned land, but 95% of the firing points are on it? WOW! Talk about abuse of Hawaiian-owned land. Again, where is the cleanup effort as required by the Hawaii Supreme Court?

"The bottom picture shows the Battle Area Complex, which is a live-fire training area that allows military personnel to test and hone their ability to detect, identify, and engage stationary and moving targets. " On the maps, it looks like the impact area is on federal, not state land. So what's a live-fire training area doing on the Hawaiian-owned land?

"Purpose of the Proposed Action: To enable the US Army Hawaii to continue to conduct military training on the State-owned land within PTA to meet its current AND FUTURE training requirements." This amounts to a blank check to do whatever the military wants in the future. This is completely contrary to the HI Supreme Court decision.

9.Future use - a blank check is not acceptable - "After retention..., the Army would continue to current levels and types of military training, facility and infrastructure maintenance, natural and cultural resources stewardship, and to manage use of the State-owned land by other organizations". Note "current levels" is used here, but elsewhere you talk about future development. According to the HI State Supreme court, their current levels of natural and cultural resource stewardship is completely inadequate. And isn't it up to the State to manage the Hawaiian-owned land use by the military and other organizations, not for the military to manage those lands?

"Need for the Proposed Action: To enable access between major parcels of US government owned

land in PTA, retain substantial Army infrastructure investments, allow for FUTURE FACILITY AND INFRASTRUCTURE MODERNIZATION, preserve limited maneuver area, provide austere environment training, and maximize use of the impact area in support of US Army-coordinated training." Access could simply be a road. No need for 23,000 acres. What infrastructure is there now? Maybe the Army needs to practice maintaining infrastructure by moving it to the US government-owned land. The blank check is used again.

10. Inadequate alternatives - Poster 7: Alternatives 1 and 2 are not very different  
The army would retain 20,000 acres and Army-owned utilities, firebreaks / fuel breaks, and fire access roads in state land that is not retained. This is too similar to Alternative 1. There seems to be no middle ground. Option 2 should be to retain less than half of the land.

Alternative 3: Minimum Retention and Access - The Army would retain - "vital training and support facilities and associated maneuver land not able to be relocated within US-government-owned land at PTA; select roads and training trails; all Army-owned utilities; fire breaks / fuel breaks and fire access roads; tactical vehicle wash facility; and land use rights to enable of indirect fire weapons (eg artillery, mortars) from US government owned portions of PTA northwest of the State-owned land into the impact area (specific retention area to be refined in the EIS)."

The fact that the Army isn't specifying the area for Alternate 3 is a problem. They have not done their homework and are not giving a reasonable idea of what Alternate 3 would be. And to fire from one US-gov area to the other endangers all of the Hawaiian-owned land. It simply isn't necessary to do that.

No Action Alternative: The Army would not retain any part of the State-owned land at PTA.

This is a troublesome set of alternatives - basically the Army wants it all and is not willing to settle for simple access between their two sections of land. It should vacate the land and clean up its "investments" in the Hawaiian-owned land and build more modern versions on federal land.

In the "No Action" alternative, it should specify that the returned land will be cleaned to the same condition as when it was leased 65 years ago - see the Hawaii Supreme Court decision.

A missing alternative - clean and release to the Hawaiian people ALL of PTA - both state- and federally-controlled land.

11. Poster 9: Environmental Topics to be Analyzed - This is VERY comprehensive and good - if the Army really used all of these factors, given that they will one day no longer use this land for war training, then there would be no choice but to clean up the land and give it back.

Comments by Helen Jaccard about Pohakuloa lease extension

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5. **Land cleanup / HI Supreme Court ruling** - Is the Army now cleaning up Pohakuloa after every use? If not, the lease should not be renewed and the Army should commence to either clean up the land to the satisfaction of Native Hawaiians or hire and train Native Hawaiians to do so.

6. **HEPA - ALL Alternatives** - In the text of Poster 2, it says, “Third, a HEPA Cultural Impact Assessment, or CIA, which is being conducted to evaluate the potential impacts of the Proposed Action on cultural resources and traditional practices within a defined area.” But shouldn’t HEPA evaluate ALL of the Alternatives AND any alternate alternatives that Native Hawaiian People propose.

7. **Only military-friendly practitioners (biased)?** - “The CIA process includes public notice, literature reviews, and consultation with practitioners, Native Hawaiian Organizations, stakeholders, and other individuals.” Who gets to decide which practitioners to consult with? Can practitioners offer to be consulted and give their opinions that have equal weight to those practitioners that the Army chooses to consult with?

**8. PTA is not necessary to protect the United States and is a huge waste of taxpayer money.** Poster 4: Military in Hawaii and PTA, “Hawaii provides a range of training environments that cannot be replicated in other states...” This is a lie. Pohakuloa is not unique - the military has 800 bases to use outside of the United States and many large bases within the US. They have other places where they can practice amphibious landings and work in deserts, forests and next to oceans. Even islands such as Sardegna (Italy), Guam, Okinawa and Puerto Rico have huge US bases. The leaders of Palau have invited the US military to bomb their island nation. The military could live with ONE instead of AT LEAST six! Not to imply that this destruction is needed ANYWHERE, but certainly should not be in multiple places all over the world.

“As of March 2020, the military employed 71,955 personnel in the state.” But what do they bring? Sexual abuse, overpopulation / over-use of the land and water, destructive roads and structures, loss of fish ponds and agricultural lands, contamination of the land, water and air. The “State” of Hawaii would be much better off without the military. The \$7.2 billion spent in the state in FY2018 and \$21.8 million on personnel payroll in the County of Hawaii would be better spent on health care, schools, food, transportation, housing and other vital needs. Not to mention cleanup of military-abused land.

“PTA is the only area in Hawaii that supports larger unit collective live-fire and maneuver training in Hawaii.” Well, so what? These huge training scenarios are simply not needed and are very damaging to the environment and culture. So far, I see no PROOF that they are necessary for defending the US.

“PTA is the primary tactical training area for units conducting military “mission essential tasks and training requirements”. NO PROOF that these are ESSENTIAL or REQUIREMENTS, and as stated earlier, is not a unique environment.

“PTA supports joint and multinational exercises critical to ensure that the US military and allied nations know how to cooperatively work together” Exactly how does the 23,000 acres owned by the PEOPLE of Hawaii (out of the much larger US government acreage) do this? How many people will be in the state-controlled area? How many facilities are there? What terrible impact does this have?

“PTA is the only training area in Hawaii where military units can use weapons systems at maximum capabilities to complete training requirements.” This does not at all have to happen in Hawaii! And maximum capabilities means maximum destruction of land owned by the people. This should not be allowed anywhere. Is it done in a way that the Army can someday restore this land and return it to the people after the 65-year-lease expires in 2029?

“PTA is used by the US Army, US Marine Corps, US Air Force, US Army Reserve, Hawaii Army National Guard, Hawaii Air National Guard, Hawaii Police Department, and others” So what? Pohakuloa is the playground for all destructive enterprises? That’s not an argument for continuing this destruction.

Poster 5: Why Retain State-owned Land at PTA? The lease is expiring - 23,000 acres used for 6 decades  
\* What is on state-controlled land?

Urban terrain facility (practice invading a city)

Gives access between the two federally-owned pieces of land at PTA

**Keep a road between federal properties if you must.**

“Training at PTA saves lives” because personnel are “prepared for their mission”. Given the mass destruction and murder worldwide in cities, especially recently in Syria, Iraq and Afghanistan, there has been plenty of practice. Where did all of those “personnel” train? How do we avoid all of the civilian casualties? Is that part of the planning and practice?

“Some examples of training facilities on the State-owned land include the photographs on the right of this poster. The top picture is of the Military Operation in Urban Terrain Facility, which allows personnel to

train in an urban setting that is similar to real-world conditions. The middle picture shows a firing point that is used for training and firing indirect fire weapons such as artillery and mortars. **95% of the PTA firing points are on Hawaiian-owned land.” WHAT???? There are 132,000 acres of PTA, only 23,000 are on State-owned land, but 95% of the firing points are on it? WOW! Talk about abuse of Hawaiian-owned land. Again, where is the cleanup effort as required by the Hawaii Supreme Court?**

“The bottom picture shows the Battle Area Complex, which is a live-fire training area that allows military personnel to test and hone their ability to detect, identify, and engage stationary and moving targets. ” On the maps, it looks like the impact area is on federal, not state land. So what’s a live-fire training area doing on the Hawaiian-owned land?

“Purpose of the Proposed Action: To enable the US Army Hawaii to continue to conduct military training on the State-owned land within PTA to meet its current AND FUTURE training requirements.” This amounts to a blank check to do whatever the military wants in the future. This is completely contrary to the HI Supreme Court decision.

**9. Future use - a blank check is not acceptable** - “After retention..., the Army would continue to current levels and types of military training, facility and infrastructure maintenance, natural and cultural resources stewardship, and to manage use of the State-owned land by other organizations”. Note “current levels” is used here, but elsewhere you talk about **future** development. According to the HI State Supreme court, their current levels of natural and cultural resource stewardship is completely inadequate. And isn’t it up to the State to manage the Hawaiian-owned land use by the military and other organizations, not for the military to manage those lands?

“Need for the Proposed Action: To enable access between major parcels of US government owned land in PTA, retain substantial Army infrastructure investments, allow for FUTURE FACILITY AND INFRASTRUCTURE MODERNIZATION, preserve limited maneuver area, provide austere environment training, and maximize use of the impact area in support of US Army-coordinated training.” **Access could simply be a road. No need for 23,000 acres. What infrastructure is there now?** Maybe the Army needs to practice maintaining infrastructure by moving it to the US government-owned land. The blank check is used again.

**10. Inadequate alternatives** - Poster 7: Alternatives 1 and 2 are not very different  
The army would retain 20,000 acres and Army-owned utilities, firebreaks / fuel breaks, and fire access roads in state land that is not retained. This is too similar to Alternative 1. There seems to be no middle ground. Option 2 should be to retain less than half of the land.

Alternative 3: Minimum Retention and Access - The Army would retain - “vital training and support facilities and associated maneuver land not able to be relocated within US-government-owned land at PTA; select roads and training trails; all Army-owned utilities; fire breaks / fuel breaks and fire access roads; tactical vehicle wash facility; and land use rights to enable of indirect fire weapons (eg artillery, mortars) from US government owned portions of PTA northwest of the State-owned land into the impact area (specific retention area to be refined in the EIS).”

The fact that the Army isn’t specifying the area for Alternate 3 is a problem. They have not done their homework and are not giving a reasonable idea of what Alternate 3 would be. And to fire from one US-gov area to the other endangers all of the Hawaiian-owned land. It simply isn’t necessary to do that.

No Action Alternative: The Army would not retain any part of the State-owned land at PTA.

**This is a troublesome set of alternatives - basically the Army wants it all and is not willing to settle for simple access between their two sections of land. It should vacate the land and clean up its “investments” in the Hawaiian-owned land and build more modern versions on federal land.**

**In the “No Action” alternative, it should specify that the returned land will be cleaned to the same condition as when it was leased 65 years ago - see the Hawaii Supreme Court decision.**

**A missing alternative - clean and release to the Hawaiian people ALL of PTA - both state- and federally-controlled land.**

**11. Poster 9: Environmental Topics to be Analyzed - This is VERY comprehensive and good - if the Army really used all of these factors, given that they will one day no longer use this land for war training, then there would be no choice but to clean up the land and give it back.**

## Sam Jacobs

The Army has not been a responsible steaard of this land. The Army must consider a full range of alternatives, including returning these ceded lands back to the Department of Land and Natural Resources after restoring them to the condition that they were in prior to the Army's use of this land.

# JERARD JARDIN

My comment is that, in light of the fact that the land has been used and modified, the return of the land to a safe, natural state is nearly impossible as exemplified by Kaho'olawe, the USA military values greatly the strategic placement of the Hawai'ian Islands as key for the defence of it's continental shores against threats from the Indo-Pacific Theatre, The USA military should now start to pay rent to continue to lease the land at the standard market rate for the land that it uses.

In light of the new attempt to basance the economic future of Hawai'i, the only resource we have is land and culture. The Pohakuloa training site is land and it depreciates the culture. In this sense, the USA military needs to pay for (1) the use of the natural resourse of land, and (2) the depreciation of the natural resourse of Culture.

It has been deemed, according to International Law, that the annexation of Hawai'i by the USA was not legal. Due to this fact, any US Government Law that prevents the US Military from paying rent is not applicable in Hawai'i. In is the in Hawai'i good faith that Hawai'i will continue to allow the USA to utilize the strategic geographic positin of the Hawai'ian Islands as a defence post and training area in the the Indo-Pacific Theatre at the fair market value of the land that the USA Military occupies. In addition, there will be requirements for systematic accounting of ordinance usage and removal from the past. Environmental standards will need to be met to insure that the islands water supply will not be tainted with toxins due to the USA Military activities.

This is fair and would allow for undisturbed use of the training area. The alternative would be to eliminate the USA Military occupation of the Hawai'ian Islands completely. The USA Military should consider that the contribution to the rent of the natural resourse of land is in fact paying their fair share and contributing to Hawai'i ability to sustain itself through the future. It helps to diversify the economy in Hawai'i beyond tourism and serves as means to make the disadvantage of Hawai'i remote location an advantage as it should be.

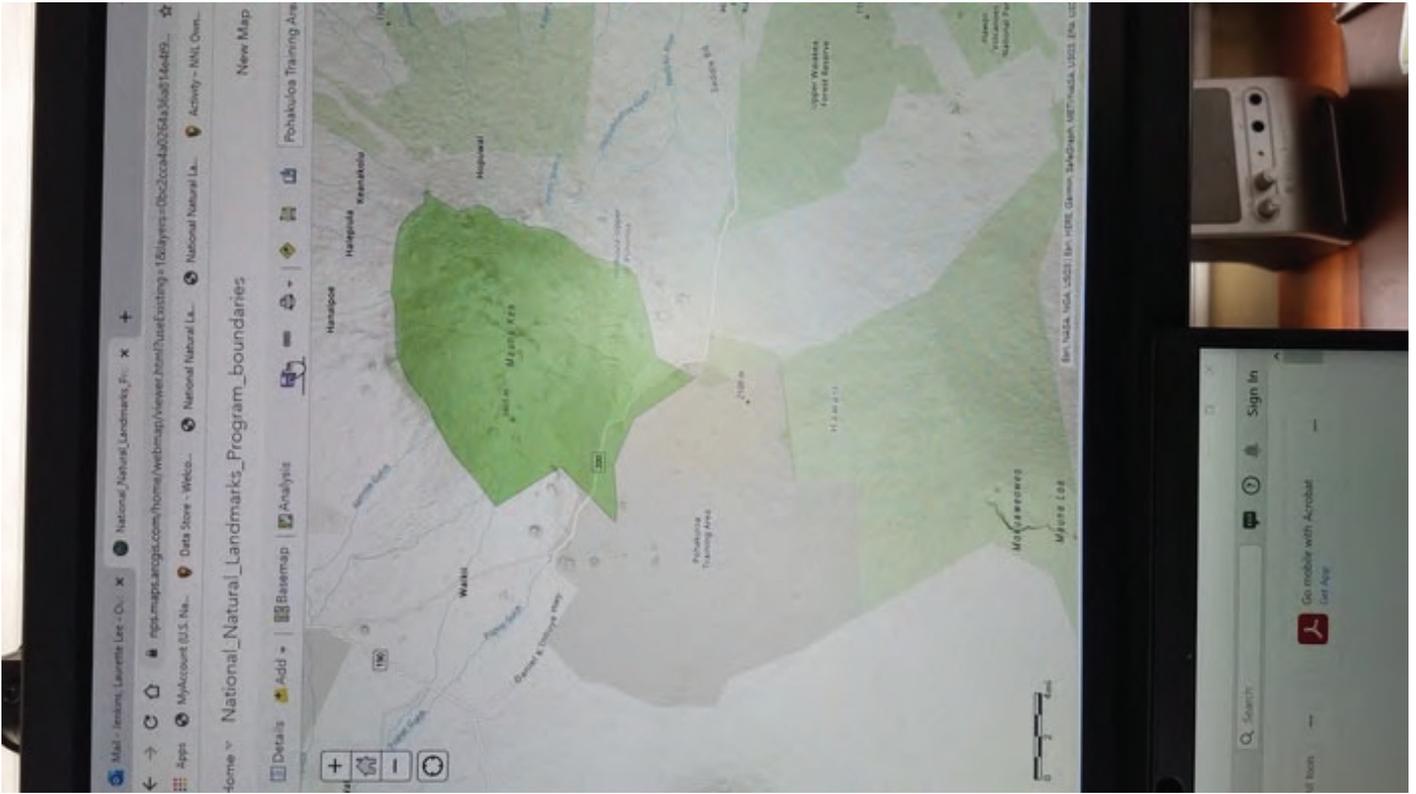
# Laurie Jenkins

Pohakuloa Training Area has a minimal overlap with the Mauna Kea National Natural Landmark on the Island of Hawaii.

I wanted to bring to your attention that ER-20/0375 Land Retention at Pohakuloa Training Area, HI has a slight overlap with the Mauna Kea National Natural Landmark (NNL) <https://www.nps.gov/subjects/nnlandmarks/index.htm>. This has always been the case. I am reaching out to make you aware of this connection. A National Natural Landmark designation is honorific only. Natural sites possessing outstanding geologic or biologic values from across the country can be designated NNLs. At present they are just under 600 nationwide. Mauna Kea is one of seven NNLs on the Hawaiian Islands.

I am attaching the Mauna Kea landmark brief and the boundary map for your reference. As I was looking at this project I did a simple map showing the overlap area between the Mauna Kea NNL and the Pohakuloa Training Area (also attached).

My comments are meant to be informational only and create awareness about the proximity of the Mauna Kea NNL to the above mentioned project. The National Park Service does not have any formal comments for this project. If you have questions or would like additional information, please feel free to reach out to me.



U.S. Department of the Interior  
National Park Service  
National Natural Landmarks Program



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**Name:** Mauna Kea

**Location:** Island of Hawaii

**Description:**

Mauna Kea, rising to an elevation of 13,784 feet above sea level, is the highest insular volcano in the world. Lake Waiau is located below the summit at an elevation of 13,020 feet above sea level making it the highest lake in the United States. A remarkable cluster of cinder and spatter cones fan outward and down slope from the summit. During the Pleistocene Epoch an ice cap covered Mauna Kea summit above the 11,200-foot level. Evidence of glaciations abounds on the set slopes in the form of glacial striae, boulders, polish and grooves. The boundary of the 83,900-acre landmark site is the striae as the boundary of the Mauna Kea Forest Reserve located 25 miles west-northwest of the city of Hilo.

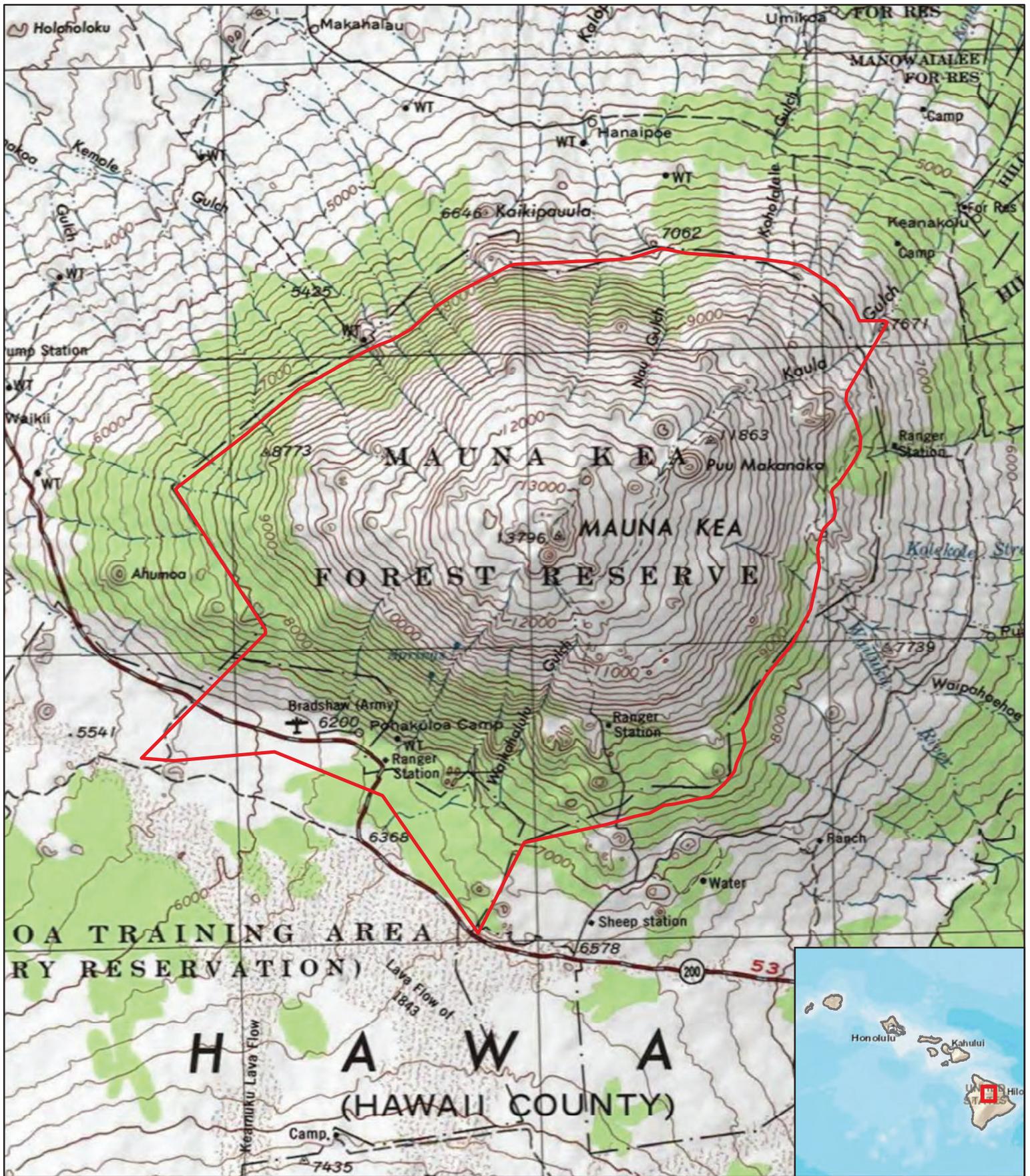
**Significance:**

Few sites possess better credentials to justify their national significance than does Mauna Kea. First, it is the exposed portion of the highest insular mountain in the United States, standing more than 30,000 feet above its submerged base at the bottom of the Pacific. Second, on its summit slopes is found the highest lake in the United States. Thirdly, though located in the tropics, indisputable evidence of glaciations is present above the 11,000-foot level. Additionally, and possibly transcending all of these qualifications, is the fact that Mauna Kea is the most majestic expression of shield volcanism in the Hawaiian Archipelago, if not the world.

**Ownership:** Federal, State

**Designation:** November 1972

**Evaluation:** Robert H. Rose, National Park Service, 1972



**MAUNA KEA  
NATIONAL NATURAL LANDMARK**  
Hawaii County, Hawaii

Calculated Acreage: 86,190.9



 NNL Boundary

Data Source:  
NPS NNL Data, ESRI Roads  
Map Produced June 2012  
by National Park Service  
I-146 Intermountain Region  
Geographic Resources Program

## Henrietta Jeremiah

I do not support a renewal of a lease for active military training use on Pohakuloa because it is ridiculous to know that the military of Divided States of America is charged \$1 to lease Hawaiian Homes Lands. These lands are specifically designated for native Hawaiians. The active use of these lands are a health and safety concern. A good example of misuse of land base is Kaho'olawe which was used for live fire training and practice leaving behind a mess of live admonition thus an unsafe unhealthy environment which is currently being cleaned by the people of Hawaii. No to renewing lease for military use.

## Sydney Ji

I wanted to urge you to consider the following:

1. The Army's lease requires that it "make every reasonable effort to . . . remove or deactivate all live or blank ammunition upon completion of a training exercise or prior to entry by the said public, whichever is sooner" and remove "all trash, garbage and other waste materials[.]" The EIS should fully disclose the extent to which the Army has complied with this lease provision and should include a thorough investigation of the entire area to determine whether there is any military debris (including unexploded ordnance) on the land that the Army has been using.
2. The EIS should disclose the status of the cleanup of the former bazooka range. Has it been completely cleaned up? Is it safe to enter? How much waste was collected? What did it comprise of? Where was it disposed?
3. The EIS should fully disclose the extent to which ungulates exist within the area used by the Army and the damage they have caused.
4. The EIS should include a thorough inventory of the historic sites in the area. It should include a discussion of the cultural significance of Pōhakuloa itself. And it should include a discussion as to how the condition of these sites has changed while the Army has used these lands.
5. The Army must consider a full range of alternatives, including returning these ceded lands back to the Department of Land and Natural Resources after restoring them to the condition that they were in prior to the Army's use of this land.

Thank you for your time.

## Lanie Johnson

I was born and raised on the Big Island, served in the Air Force and currently work for the Army. I have always told my brothers and sisters in arms that there is no need for the military on the Big Island or the bombings conducted on our lands. Pohakuloa is an area we would frequent for school trips and other Hawaiian activities. We are as you know people of the aina (land) and we value our Hawaiian ancestors. The military use of Pohakuloa needs to stop. Our mountains are getting tired, the land is getting tired and the people are getting tired. Tired of the bombing, tired of the noise and disruption. Nothing positive is coming from these military trainings on our island. It doesn't bring us anything of value. WHEN the lease is up, pack up and move out because the military doesn't belong there.

**From:** Michael Jones  
**Sent:** Sunday, October 11, 2020 10:34 AM  
**To:** USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
**Subject:** [Non-DoD Source] scoping comments and questions for the PTA EIS

All active links contained in this email were disabled. Please verify the identity of the sender, and confirm the authenticity of all links contained within the message prior to copying and pasting the address to a Web browser.

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scoping comments for the Pohakuloa Training Area (PTA) EIS submitted by email to : [usarmy.hawaii.nepa@mail.mil](mailto:usarmy.hawaii.nepa@mail.mil) on 11 Oct. 2020 from : Michael Jones

Comments about depleted uranium (DU)

1) The website

Caution-<https://home.army.mil/hawaii/index.php/garrison/dpw/du>  
has a section titled Should I Be Concerned? which contains the following:

"The Army's two-month survey at Schofield Barracks and PTA covered more than 425 acres. More than 1,400 air, vegetation, and soil samples were collected and sent to independent labs on the mainland for testing and analysis. The results of the Schofield Barracks Human Health Risk Assessment are available here. The results of the PTA Human Health Risk Assessment are available here."

\*What was the size and location of the area at PTA included in this survey?\*

2) The link for the 2010 PTA Baseline Human Health Risk Assessment follows:

Caution-

[https://home.army.mil/hawaii/application/files/6515/5961/1869/PTA\\_BHHRA\\_Report\\_Rev\\_2.pdf](https://home.army.mil/hawaii/application/files/6515/5961/1869/PTA_BHHRA_Report_Rev_2.pdf)  
The Executive Summary has a focus on DU from Davy Crockett spotter round bodies (SRB). It contains the following characterization of the limited data available:

"The BHHRA for the PTA Firing Range represents a unique challenge as only limited site-specific data are available from which to make a determination of an exposure point concentration (EPC) of uranium activity in surface soil. Since the appropriate information regarding the number of DU projectiles fired at the range and/or the exact footprint of the area of affected soil could not be reliably ascertained, the approach described by the St. Louis District of the USACE, in Draft Final Range Operations Report No. 9 (RO-9) (2005) was used to derive a site-specific EPC (source term) for uranium."

\*Has more information become available since 2010?\*

3) The Summary of Existing Site Data in section 3.0 lists potential Davy Crockett ranges as 10, 11T, 14 and 17 with 11T most likely to have SRB.

\*The EIS should indicate where are these ranges located.\*

4) The following text from the BHHRA indicates limitations of existing data on DU and recommends a survey of range 11T.

"The visual and scanning surveys did identify non-oxidized metal fragments, partial spotter round bodies, and Davy Crockett system components on Range 11T consistent with DU and the Davy Crockett weapons."

"While the soil samples collected around the perimeter and impacted areas of the range did not indicate the presence of DU, these data do not represent a statistically significant data set. A statistical field sampling design focused on the suspect Davy Crockett impact areas would hopefully yield more representative results. However, due to the general lack of the presence of traditional well developed soil, slightly weathered or unweathered volcanic rock predominates in some locales; thus, obtaining traditional soil samples typically used for risk assessment purposes will be problematic. CABRERA recommends that the Army attempt to conduct a characterization survey of the most impacted range (11T), with an emphasis on statistical sampling, defining the environmental characteristics of the impacted area, eliminating pathways, where possible, from further evaluation, and developing better statistically based data."

\*Has the recommended survey been done?\*

5) BHHRA Section 5 assumes that all 714 SRBs shipped to Oahu in April 1962 were used at PTA.

\*Could there have been other shipments of SRBs?\* \*Were other weapons systems using DU tested at PTA?\*

#### General comments

\*The EIS should describe in detail how the modified retention, minimum retention, and no action alternatives would affect training at PTA.\*

\*Poster 7 in the Scoping Documents section of the PTA EIS website indicates that the specific area to be retained in the minimum retention alternative is "to be refined in the EIS." How can one evaluate if the proposed alternatives are sufficient while the minimum retention alternative is ill-defined?\*

Dexter Ka`iama

My wife (Manu) and I are in complete opposition to the Army's request for lease extension of Pōhakuloa. Our complete written opposition is attached.

Name: Dexter and Manu Ka`iama

Address:

Email: \_\_\_\_\_

**Re: Pōhakuloa Training Area EIS: Complete Opposition to Army Lease Extension**

My wife (Manu) and I are lifelong members of our Hawaiian community with genealogical ties to Hawai'i island. We are deeply and in complete opposition to the Army acquiring a lease extension for the approximately 23,000 acres of land known as Pōhakuloa.

**I. The Hawaiian Kingdom Continues to Exist as a Subject of International Law and Endures an Illegal Prolonged Occupation by the United States.**

Army officials at Pōhakuloa and the U.S. Military Pacific Command have been given notice and are aware of the U.S.'s prolonged illegal occupation of the Hawaiian Kingdom and its territories, in violation of International, U.S. and Hawaiian Kingdom law. Army officials are aware its lease with the State of Hawaii, for lands at Pōhakuloa, is extra-territorial and without valid authority. Army officials have been given further notice and are aware that it has (and continues to) committed extensive destruction and appropriation of property at Pōhakuloa, not justified by military necessity, unlawfully and wantonly in grave breach of International law.

We respectfully demand the Army immediately cease and desist its unlawful and destructive presence at Pōhakuloa and, in beginning its compliance with the rules and laws of occupation, withdraw its request for extension of its lease of Pōhakuloa and direct all further efforts and resources to remove all harmful debris and return Pōhakuloa to the condition it was in prior to beginning of the lease in 1964.

**II. The Army's Failures at Pōhakuloa Demands a Rejection of Lease Extension.**

The prolonged illegal occupation and the administration of U.S. law presently continues over the territories of the Hawaiian Kingdom, in violation of International, Hawaiian Kingdom and U.S. law. It is in this context, and under the doctrine of necessity, we are compelled to address the Army's request for lease extension of Pōhakuloa.

The Army is currently nearing the conclusion of a 65-year lease that began in 1964 for these lands. Throughout the period of its lease, the Army has mismanaged, destroyed, and abused the lands and resources of Pōhakuloa. Exercises including, but not limited to, bombings, missile tests and live fire artillery trainings have all caused severe and lasting damage to the lands and resources. In addition, the presence of depleted uranium ammunition, military debris such as unexploded ordinances and spend shell casings results in permanent degradation of the environment, putting the health, safety and wellbeing of the island and her residents in jeopardy.

It is undisputed that military exercises at Pōhakuloa have led to the release of harmful and toxic pollutants causing soil contamination and negatively impacting air quality. In 2006, a citizen's group uncovered evidence of the presence of depleted uranium at Pōhakuloa contrary to the Army's denial it had previously used such chemicals at the training area. Depleted uranium is a toxic chemical and radiation health hazard. It has no place being in our islands.

In 2016, the Army was fined by the Environmental Protection Agency (EPA) for operating illegal cesspools at various facilities around Hawai'i, including 6 at Pōhakuloa Training Area. Such cesspools have been banned under the Federal Safe Drinking Water Act's Underground Injection Control program since 2005. According to the EPA "cesspools collect and discharge untreated raw sewage into the ground, where disease-causing pathogens and harmful chemicals can contaminate groundwater, streams and the ocean."

In a 2018 Circuit Court ruling by Judge Gary Chang, the Army was found to have provided inadequate care of the environment of Pōhakuloa. The Hawai'i Department of Land and Natural Resources was found, by the Court, to have breached its trust duty to care for these lands regarding its lease of Pōhakuloa to the Army. Judge Chang further emphasized that any extension or renewal of the lease without first determining that the existing lease obligations have been satisfactorily fulfilled would continue to breach the trust duties of the Department of Land and Natural Resources.

The army has deliberately failed to protect, manage, and care for the lands and resources of Pōhakuloa. Recent court rulings and EPA findings establish a complete lack of care, transparency, and responsibility under its current lease of Pōhakuloa. We submit the Army's failures began from the inception of its 1964 lease. We further submit that all evidence to date leads to clear and compelling conclusion that the Army will continue its pattern of mismanagement, destruction, degradation and abuse of the land and resources at Pōhakuloa greatly detrimental to the health, safety and welfare of Hawai'i island and her people.

The army is incapable of property stewarding these lands and should not be allowed to extend or renew the existing lease agreement. Instead of applying to renew this lease, we recommend the army invest in community building by removing all harmful debris from the training area and graciously returning these lands to as close a state as possible as to when they were first acquired for use in 1964.

## Na'e Kaiama

I strongly oppose the continuation of leasing Pohakuloa as army retention land. I strongly oppose any degradation to aina and kai. The army needs to be held accountable for the irresponsible acts they inflict upon the environment and all our natural resources. We must uphold our integrity and be stewards of this land! I oppose the continuation of leasing Pohakuloa army retention land because of ALL the harmful impacts it causes to our ecosystems. Do what's right and discontinue leasing state land at Pohakuloa!

## Pearl Kaiama

On the bid for lease renewal of 23,000 acres of land to the Army by the state of Hawaii, as an informed native of Hawaii, I implore the No Action Alternative or No retention of state-owned land after 2029.

A key issue of concern that must be addressed is the mismanagement of land resources and the unlawful restriction of access to land.

There are several crimes against 'Āina taking place at the training area mentioned here. Military exercises themselves leave unexploded ordinances, release harmful toxins and pollutants into the environment and breed pathogens.

By renewing the lease, there is no room for proper stewardship of this precious land and its varying ecosystems that it supports and upholds.

Again, I am Calling for the No Action Alternative with proper steps in place with consultation of community members and Hawaiian stakeholders to restore the land to health.

## Trevor Kaiama

As a community member with genealogical ties to Hawai'i island, I am deeply opposed to the Army acquiring a lease extension for the approximately 23,000 acres of land known as Pōhakuloa. The army has proven they are incapable of proper due diligence to conserve and maintain the land.

**From:** Kyle Kajihiro  
**Sent:** Tuesday, October 13, 2020 10:36 AM  
**To:** Donnelly, Michael O'Malley CIV USARMY IMCOM PACIFIC (USA)  
**Cc:** USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
**Subject:** [Non-DoD Source] Pohakuloa Real Property Master Plan

All active links contained in this email were disabled. Please verify the identity of the sender, and confirm the authenticity of all links contained within the message prior to copying and pasting the address to a Web browser.

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Hello Mr. Donnelly

I am writing with questions relevant to the preparation of my scoping comments on the Pohakuloa EIS. I had hoped to ask questions during the scoping virtual open house, but there was not an opportunity to ask questions of experts at that time.

I understand that the "Real Property Master Plan Pohakuloa Training Area, Hawai'i Island - Final" was recently released. I have only been able to find the digest version online. I would like to examine the full master plan. Can you please send me a copy of this document electronically through a file-sharing software or direct me to a website where I can download the full PTA master plan? Thank you.

Also, the references in the digest of the Master Plan listed several documents that are relevant to my scoping comments. Would you please send me these documents as well?

- U.S. Department of Defense, Assistant Secretary of Defense. 2018. "Approval of Major Land Acquisition Waiver Request - US Army Hawaii Training Sites, Hawaii." June 4.
- U.S. Army Region Hawaii. 2015. "Memo for Commander, USARHAW, Approach to Training in Hawaii: A 13 Strategy for PTA." October 25.
- U.S. Army Garrison Hawaii. 2020. Integration Natural Resources Management Plan.
- U.S. Army Engineering and Support Center Huntsville, Alabama. 2009. "Enhanced Area Development Plan, Pohakuloa Training Area, Hawai'i." Final Submittal.
- PTA Area Development Plan (ADP). 2015.

The full master plan document and the first item in this list —"Approval of Major Land Acquisition Waiver Request - US Army Hawaii Training Sites, Hawaii" —are the most urgent as it relates to the proposed action under review by the present NEPA process.

Thank you for your urgent attention to my inquiry. This information is important to preparing my comments for scoping.

All the best,

Kyle Kajihiro

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Kyle Kajihiro, Ph.D.  
Instructor, Department of Geography and Environment  
Instructor, Department of Ethnic Studies  
University of Hawai'i at Mānoa

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## Dana Keawe

I am in **STRONG OPPOSITION** to the Army Training Land Retention at Pōhakuloa Training Area (PTA) on the island of Hawai'i.

For decades now, the military at Pōhakuloa training area have been and continue to be, til present day, in gross negligence of their sworn responsibilities to maintain and follow rules/laws on their leased lands at Pōhakuloa.

The military is required By law in their lease to clean up and properly dispose of All spent ammunition used in their toxic war games.

To this day, and for decades now, there are countless numbers of toxic spent ammunition littered across 100's of acres of lands military leases at Pōhakuloa.

This alone is legal grounds for not renewing their lease, let alone granting military expansion of their lease.

Military/army at Pōhakuloa have been irreversibly polluting and damaging the lands, air and aquifers with toxic nuclear waste. As well as putting the general population of Hawai'i nei at high health risks from these toxic health hazards.

And just recently this year, 2020, the military stationed at Pōhakuloa was called out for illegally dumping their toxic waste in Hamakua through a contractor they hired to dispose of their toxic spent ammunition. While the military claimed they were not aware of the huge dump site with their toxic nuclear waste in Hamakua. Really??? Which has been leaking nuclear toxic waste into the land, aquifer, air, and ocean in Hamakua for what looks like decades now. AUWE!!!

No treaty. No annexation. No U.S. title. PERIOD!

The military/army needs to vacate Pōhakuloa NOW!!! No renewal or expansion of lease should be granted to military. ARMY'S PRESENT LEASE AT Pōhakuloa NEEDS TO BE REVOKED IMMEDIATELY!!! NOT INCURRING A EIS FOR EXPANDING LEASE!!!

**SOLUTION:** Instead of the army planning on renewing lease, acquiring new lease and desecrating more of these sacred lands. Military needs to clean up All of their toxic waste, sites/dumps on Pōhakuloa and throughout the island of Hawai'i. Then restore these areas as closely to their original state before they started leasing these lands and dumping their toxic waste everywhere.

During this time of global pandemic, expanding military on Hawai'i island is a frivolous and unnecessary waste of precious time, energy and funds. Which should/NEEDS to be redirected into restoring food security on Hawai'i island and throughout Hawai'i nei.

Before the pandemic 1 out of 3 families suffered from food insecurity on Hawai'i island. Now, it's even worse.

Military NEEDS to be farming and restoring lands they polluted. Actually taking care of our citizens and keeping them safe and healthy. NOT putting our lives in danger while polluting the lands, waters, air and oceans of our beloved homelands practicing wasteful war games!!!

I am in **STRONG OPPOSITION** to the Army Training Land Retention at Pōhakuloa Training Area (PTA) on the island of Hawai'i.

Sincerely,

Dana Keawe  
Hawai'i island resident

Matilda Keith

Please stop your bombing by 6 pm your continuous bombing throughout the night is unacceptable.  
Do you know the cause you are doing to us and our animals? Can I send you our vet bills to pay?

## Nikki Kepano

Although I appreciate all who serves us, I would love for the bombing at Pohakuloa to stop. This past week they have been shaking and rattling the ground late at night. I live on a ranch up Pu'ukapu (along side Mauna Kea). My animals along with the rest of the neighborhood kept going off all night.

## Cindy Kester

The Waikoloa Village area is a desert. The fountain grass burns readily when there is a wildfire and the fire can move quickly especially if there is wind. Our residents, homes, wildlife and other assets are at risk and we need help when there is a fire nearby. PTA is a critical and necessary force to help contain and extinguish the fires and keep us safe. Thank you to PTA for being on Hawaii Island and being an integral part of our communities. Mahalo

# Mary Klauder

Please do not bomb the mountain. !!!

## CHARLES KUAHINE, III

For the sake of brevity: clean it up, begin restorative efforts and decommission PTA indefinitely.

In other words: pau already.

Mahalo.

## Kyle Lanclos

Please do not renew this lease. Think globally-- we need to reduce our military expenditures worldwide, reduce our carbon footprint, and focus our limited resources on acts of restoration rather than destruction-- and act locally, by not encouraging or permitting any of these activities in our own backyard.

## Arlene Larrua

Please do not bomb after 9pm. The sound can be heard all the way down to my house in the Waikoloa Village. The bombing sounds are disturbing and unnerving to My Two dogs. Also, the leaving behind of I exploded ordinances after many years will affect our children's children. Can you practice bombo g in New Mexico, Wyoming, North Dakota, where no population lives. We only have this one piece of land in the middle of the pacific for generations to come that cannot be duplicated anywhere else in the world. Please refer to the STOP BOMBING KAHOOLAWA.

Mahalo,  
A. Larrua

## Erika Leaf

In considering the renewal of the lease to use these lands for military purposes, I implore you to make the Environmental Impact Statement a thorough and honest review of the impact that this use has already had on this land and the extent to which the Army has complied with the terms of the previous lease. This thorough and exhaustive inquiry is both legally required and the right thing to do. So please carry out this duty to your best ability and with the highest integrity. This land is very important to many people. We do not want a rubber stamp renewal.

The Army's lease requires that it "make every reasonable effort to . . . remove or deactivate all live or blank ammunition upon completion of a training exercise or prior to entry by the said public, whichever is sooner" and remove "all trash, garbage and other waste materials[.]" The EIS should fully disclose the extent to which the Army has complied with this lease provision by conducting the following specific surveys and disclosures:

1. A comprehensive investigation of the entire area to determine whether there is any military debris (including unexploded ordnance) on the land that the Army has been using.
2. The EIS should disclose the status of the cleanup of the former bazooka range. Has it been completely cleaned up? Is it safe to enter? How much waste was collected? What did it comprise of? Where was it disposed?
3. The EIS should fully disclose the extent to which ungulates exist within the area used by the Army and the damage they have caused.
4. The EIS should include a thorough inventory of the historic sites in the area. It should include a discussion of the cultural significance of Pōhakuoloa itself. And it should include a discussion as to how the condition of these sites has changed while the Army has used these lands.
5. The Army must consider a full range of alternatives, including returning these ceded lands back to the Department of Land and Natural Resources after restoring them to the condition that they were in prior to the Army's use of this land.

I implore you to honor the reason that an EIS is required and take a true and honest assessment of the impact this military use has had and will have if allowed to go forward. Our integrity requires this level of honesty.

## J Lemus

Based on recent information, it appears that the Army is neither capable of, nor has an interest in, protecting the environmental and cultural integrity of the Pohakuloa site.

**From:** Thomas Lenchanko  
**Sent:** Monday, September 7, 2020 9:20 PM  
**To:** USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
**Cc:**

**Subject:** [Non-DoD Source] pohakuloa

All active links contained in this email were disabled. Please verify the identity of the sender, and confirm the authenticity of all links contained within the message prior to copying and pasting the address to a Web browser.

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September 7, 2020

United States Army-Hawaii  
National Environmental Policy Act

Regarding: **Kanawai, the rule of law** Hawaiian Kingdom property; NOTICE TO CEASE AND DESIST, Department of Defense, United States Army-Hawaii violating international and federal law throughout the Hawaiian Archipelago; October 18, 1893 President Grover Cleveland's presidential investigation of the illegal overthrow of the Hawaiian Kingdom government, January 17, 1893; United States Code Title 18 Sub Section 2441; Protected Person status; Treaty of Peace...

aloha no na kau A pauole ke kuamoo o na kupuna ma

We, Aha Kukaniloko Koa Mana mea ola kanaka maui hoalii iku pau direct descendants and the living evidence of those whom are buried within our Hawaiian Kingdom property, OBJECT to all unlawful military presence and their careering use of Hawaiian Kingdom property throughout the Hawaiian Archipelago. We hereby notice the Department of Defense, United States Army-Hawaii to CEASE AND DESIST so dated September 7, 2020. We must protect our iwi kupuna for the immediate, and for the long term, We must affirm **Kanawai the rule of law** is right and just and reaffirm Kaananiau timeout during occupation, for education.

We are aware of Hawaii's status as an independent nation-state under international law that has been under and illegal occupation by the United States since its illegal overthrow of the Hawaiian Kingdom government on January 17, 1893. We have done our due diligence to become educated on this subject and we have reached out to experts in this field. We have learned that after a presidential investigation was completed on October 18, 1893, President Grover Cleveland notified the United States Congress two months later stating that "an act of war, committed with the participation of a diplomatic representative of the United States and without the authority of Congress, the Government of a feeble but friendly and confiding people has been overthrown. A substantial wrong has thus been done which a due regard for our national character as well as the rights of the **injured** people requires we should endeavor to repair..." Though acts of war that initiated a state of war between itself and the Hawaiian Kingdom, under international law, the United States was bound by the international laws of occupation which were later codified under the 1907 Hague Convention IV ("HCIV"), and the 1940 Geneva Convention IV ("GCIV"). The United States Senate ratified both the HCIV and GCIV and their provisions are, thus, United States federal law. Violations of these conventions are war crimes as that term defined by the United States Code Title 18 Sub Section 2441. Note: Article 154 of the GCIV clearly states that the

convention is supplemental to the HCIV. According to Amnesty International, war crimes are “crimes that violate the laws and customs defined by the Hague and Geneva Conventions.”

We exercised self-determination in 1843 and note the violation of our Protected Person status under Article 4 of the Geneva Convention IV “...defines protected persons as civilians who find themselves in the hands of a party to the conflict of which they are not nationals. Using this definition, Protected Persons would appear to be nationals of the Hawaiian Kingdom along with all nationals of foreign States, who find themselves under the control of the United States in Hawaii.”

We hereby notice the Department of Defense, United States Army-Hawaii to CEASE AND DESIST and we OBJECT to all unlawful military presence and their careering use of Hawaiian Kingdom property throughout the Hawaiian Archipelago, so dated September 7, 2020.

Protect us from further wrongdoing and injury, deliver to us a treaty of peace, a legal mechanism today to transform history, of an armed invasion and destruction of property within our Hawaiian Kingdom...

e kukaawe i na kapu o kukaniloko no ka mea aloha no hoi kakou ia lakou i na kau a kau

Thomas Joseph Lenchanko

Aha Ula Puuhonua Kukaniloko, Hawaiian National and Protected Person

kahuakaiola ko laila waha olelo aha kukaniloko koa mana mea ola kanaka mauili hoalii iku pau

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# Luwella Leonardi

Agreement State, warrants clean up at Pohakuloa. 6 CCR 1007-1 Part 03 Dec 16, 2015

## Debora Letelier

I understand certain things have to be done, and PTA was there before we bought the house. It has always bothered us and our dogs. We pay a lot of money to live here. I don't see why they have to fly directly above us making everything shake, don't know if they fly too low, that could be a change to consider. The bombing on Friday, September 25, is really inconsiderate, I believe it went past 11pm. Some of us work, still have jobs fortunately, and want to come home to rest. Saturday maybe? It seems that we are trying to cohabitate in a world where there is no communication and understanding, and it goes both ways because in understanding it is a training area which is pretty far although sound travels, there are measures that could benefit both if we communicated and understood both sides.

## Selah Levine

I would like to comment that the Pohakuloa training area lease should not be renewed and shut down for military use. The military has been ordered for years to clean up all of their rubbish of bombs and casings and they've never done it. The fallout from what they do at Pohakuloa can be measured as far as Kona, which is poison. Toxic for our watershed, plants, animals and people. I live in Puna near volcano and can hear the sound of bombs. If it is frightening for me I can only imagine how it affects native birds. In addition, the reality is it's seceded lands and doesn't belong to the State, it belongs to the kanaka maoli, the the Hawaiian's.

**From:**  
**Sent:** Wednesday, October 14, 2020 11:08 PM  
**To:** USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
**Cc:**

**Subject:** [Non-DoD Source] PTA Lease extension

Aloha,

The U.S.Army does not deserve to renew the lease on PTA(Pohakuloa Training Area) from State of Hawai'i.

In previous literature to the Public, the Army has repeatedly stated the training at PTA is crucial to its "expeditionary" missions. By definition, expeditionary missions are not defensive actions and do not contribute to the defense of the people of Hawai'i. Why should the people of Hawai'i allow the U.S. Army to continue preparations for offensive missions overseas, while despoiling our lands and waters (after decades of dumping toxic munitions and chemicals, without independent and objective monitoring or cleanups)?

As a concerned citizen and a long time Peace activist, I say NO to any lease renewal, especially because war preparation is opposite of Hawai'i's true Spirit of Aloha.

Danny H. C. Like(Kea'au, Hawai'i)

## Anna Lindsey-Robles

Last night Friday, September 25 at 10:50pm was the most excessive bombing/training I've ever heard in all my life born and raised here in Hawaii. Hearing the training of the artillery bombs up At Pohakuloa is normal for me all these years. But last night was excessive one after the other after the other and so late at night when everyone is in bed.

There was also helicopters over the Waikoloa village as this training was taking place. Thought we had a war going on!!!

What are the repercussions of such excessive bombing on our land, the mountains and its impact.

# MICHAEL LINNOLT

I am strongly opposed to continuation of the lease of the PTA to the US military for their exercises. The Hawaii Supreme Court ruled in SCAP-18-432, Aug 23, 2019, that there must be "Regular, periodic on-site monitoring and inspection of the leased PTA land and the US compliance with the lease provisions". However, there have been practically no inspections since 1984, and the few superficial inspections the State has done, found numerous lease violations. There was substantial UXO, white phosphorus pollutants, and various amounts of junk and debris strewn all over the lands. These findings were verified by inspection by Native Hawaiians who have a Constitutional right to use these ceded lands for their traditional purposes.

The PTA lease (S-3849, 1964) requires in paragraph 9: that the United States "make every reasonable effort to remove and deactivate all live or blank ammunition upon completion of a training exercise or prior to entry by the public, whichever is sooner", and in paragraph 14: "to take reasonable action during its use of the premises herein demised to prevent unnecessary damage to or destruction of vegetation, wildlife and forest cover, geological features and related natural resources and to avoid pollution or contamination of all ground and surface waters and remove or bury all trash, garbage and other waste materials".

Based on the limited State inspections, and detailed observations by numerous Native Hawaiian practitioners, the US military has utterly failed in their obligations to protect and preserve these lands, as required by the lease. Given this extremely poor respect for our lands that the US military has shown over many decades of use, it is clear that the military has no intention of changing their methods of operation, and will certainly continue the pollution, destruction and desecration of these Hawaiian public lands, regardless of the terms of the lease.

Therefore, I strongly oppose any continuation of the lease of the PTA to the US military, and feel that their training must leave Hawaii and go to other more suitable locations where they can pollute, desecrate and destroy with impunity - such as the deserts of Nevada, for example.

Aloha, a mai ho‘i hou (>

## Sandra Linskey

I am strongly against the Army's intention to extend its lease of Pohakuloa.

I cannot believe in this day and age of Native Hawaiian awakening and activism that the Army and all its supporters think they are justified in continuing to desecrate lands at the foot of Maunakea.

It is mind-boggling that the U.S. military and the State of Hawaii have learned NO LESSONS from the bombing of Kahoolawe and the subsequent decades it has taken to clean up that island, which is still on-going. That island is uninhabitable due to the wanton destruction done to it by the military. The same will be the case for Pohakuloa. There is no intention by the U.S. military to EVER return Pohakuloa back to the people of Hawaii, to whom the lands were meant for.

The 23,000 acres in question have been blatantly abused since the original lease was granted in 1964 for \$1. As lands from the public lands trust, it was supposed to be used for Native Hawaiians and the general public. It is such an insult to all Native Hawaiians that these Crown lands have been used in such a violent and destructive way for all these decades. It is time to end the destruction now. It is time for the Army and the State of Hawaii to take responsibility to end live-fire training in Pohakuloa and begin to clean it up and give it back to Hawaii's people.

## Sheena Lopes

Per the 1893 ILLEGAL overthrow of the Hawaiian Kingdom, the current status of the Hawaiian Kingdom is ILLEGALLY OCCUPIED by US MILITARY FORCES. The military has prolonged their stay in Hawai'i, destroying our Cultural resources, and taking away access to ancestral and significantly sacred land. As a Kanaka Maoli, grounded in her Hawaiian History and Culture, I am fully AGAINST this action and heavily believe that the Military should pack it up and LEAVE HAWAII ALONE. Mahalo, but your presence is not beneficial to Hawai'i and Hawaiian lands when the well-being of our Indigenous are on the chopping board. How comforting is it for you to witness the bombings that happen from your "important" training? Because to Hawaiians that witness it everyday, their heart continues to break with the destruction of our lands. Your map as far as "ownership" is heavily flawed, as stated at the beginning of my comment, the HAWAIIAN KINGDOM is ILLEGALLY OCCUPIED by THESE EXACT FORCES and THEREFORE HAVE NO RIGHT BEING HERE.

## Brenda Lucas

I just want to say that the land should go back to the state holders. If the Hawaiian group interested wants to give limited access it should be up to them. Native Hawaiians should have the say in this.

## Mary Macmillan

Webster defines contract as a BINDING AGREEMENT between two or more parties. The lease should end on the day agreed to in the 65 year contract. The time remaining, roughly ten years, should be used to return the aina to as close as possible to its original condition. Live fire use should end NOW. If the US Army wishes to continue using the land, it should renegotiate a new contract with the state of Hawaii at 2060 projected value of land if as for residential use, to include costs of clearing unexploded ordnance.

## Mana Maglinti

I strongly oppose the continuation of leasing Pohakuloa as army retention land. I strongly oppose any degradation to aina and kai. The army needs to be held accountable for the irresponsible acts they inflict upon the environment and all our natural resources. We must uphold our integrity and be stewards of this land! I oppose the continuation of leasing Pohakuloa army retention land because of ALL the harmful impacts it causes to our ecosystems. Do what's right and discontinue leasing state land at Pohakuloa!

scott mahoney

stop the senseless bombing of Pohakuloa, the desecration of our lands and the disrespect of our culture. you have 9 years of your ridiculous lease left. Use it to clean up all of the enviromental destruction and chemicals and ordnances that are strewn all over the land to exactly what it was before, pristine and safe. Kahoolawe is still dangerous and polluted with military garbage and ordnances. then the army should talk about negotiating a new lease which is should be billions more than the 2 cents a year they paid on this last lease.

## Elisabeth Mehana Makainai

As a community member with genealogical ties to Hawai'i island, I am deeply opposed to the Army acquiring a lease extension for the approximately 23,000 acres of land known as Pōhakuloa. The Army is currently nearing the conclusion of a 65-year lease that began in 1964 for these lands. During this period of time, the Army has mismanaged and abused the lands and resources of Pōhakuloa. Exercises including but not limited to bombings, missile tests and live fire artillery trainings have all caused severe damage to the lands and resources. In addition, the presence of depleted uranium ammunition, military debris such as unexploded ordinances and spend shell casings degrade the environment and put the health, safety and wellbeing of the island and her residents in jeopardy. It is known that military exercises lead to the release of harmful and toxic pollutants causing soil contamination and negatively impacting air quality. In 2006, a citizen's group uncovered evidence of the presence of depleted uranium at Pōhakuloa despite the fact that the Army had previously denied the use of such chemicals at the training area. Depleted uranium is a toxic chemical and radiation health hazard. It has no place being in our islands. In 2016, the Army was fined by the Environmental Protection Agency (EPA) for operating illegal cesspools at various facilities around Hawai'i, including 6 at Pōhakuloa Training Area. Such cesspools have been banned under the Federal Safe Drinking Water Act's Underground Injection Control program since 2005. According to the EPA "cesspools collect and discharge untreated raw sewage into the ground, where disease-causing pathogens and harmful chemicals can contaminate groundwater, streams and the ocean." In a 2018 Circuit Court ruling by Judge Gary Chang, the Army was found to have provided inadequate care of the environment of Pōhakuloa. The Hawai'i Department of Land and Natural Resources was found to have breached its trust duty to care for these lands in regards to its lease with the Army. Judge Chang further emphasized that any extension or renewal of the lease without first determining that the existing lease obligations have been satisfactorily fulfilled would continue to breach the trust duties of the Department of Land and Natural Resources. It is my belief that the army has never satisfactorily protected, managed and cared for the lands and resources of Pōhakuloa. The Army instead has used these lands for its personal gains and exploits at the great expense of Hawai'i island and her people. The Army has been dishonest in regards to activities, infrastructure and chemicals being conducted and released at Pōhakuloa. It is therefore my belief that the army is incapable of property stewarding these lands and should not be allowed to extend or renew the existing lease agreement. Instead of applying to renew this lease, the army should invest in community building by removing all harmful debris from the training area and graciously returning these lands to as close a state as possible as to when they were first acquired for use in 1964. Such activities would truly be in the best interest of all.

# Mailani Makainai

I am against the military using Pōhakuloa for its training grounds. Please leave.

# Mailani Makainai

Pohakuloa:

As a community member with genealogical ties to Hawai'i Island, I am deeply opposed to the Army acquiring a lease extension for the approximately 23,000 acres of land known as Pōhakuloa. The Army is currently nearing the conclusion of a 65-year lease that began in 1964 for these lands. During this duration, the Army has mismanaged and abused these lands and resources of Pōhakuloa. Bombings, missile tests, live fire artillery, and other exercises have severely damaged these lands and resources. The presence of depleted uranium ammunition, military debris, unexploded ordnance and spent shell casings negatively impact the environment and put the health, safety, and well being of the island and its residents at great risk. Toxic and harmful pollutants, soil contamination, poor air quality are enough to deny this lease extension. This is without question. In 2006, a citizen's group uncovered evidence of the presence of depleted uranium at Pōhakuloa despite the Army denied previously using such chemicals in the training area. They LIED. Which is evidence enough as to how they treated the lease at the time of which it was held. Depleted uranium is a toxic chemical and radiation health hazard. It does not belong on the planet no less our islands. In 2016, the Army was fined by the Environmental Protection Agency (EPA) for operating illegal cesspools at various facilities around Hawai'i, including 6 at Pōhakuloa Training area. The Federal Safe Drinking Water Act's Underground Injection Control program in 2005 banned these kinds of cesspools. According to the EPA, "cesspools collect and discharge untreated raw sewage into the ground, where disease-causing pathogens and harmful chemicals can contaminate ground water, streams, and oceans".

In 2018 the Circuit Court ruled by the Honorable Judge Gary Chang, the Army was found to have provided inadequate care of the environment of Pōhakuloa. The Hawai'i Department of Land and Natural Resources was found to have breached its trust duty to care for these lands in regards to its lease with the Army. The Honorable Judge Chang further emphasized that any extension or renewal of the lease without first determining that the existing lease obligations have been satisfactorily fulfilled would continue to breach the trust duties of the Department of Land and Natural Resources. I believe that the Army has never satisfactorily protected, properly managed, and cared for the lands and resources of Pōhakuloa. The Army, however, continues to use these lands for its personal gains and exploits our lands at the great expense of the people Hawai'i and Hawai'i itself.

The Army continues to be dishonest and there is much misgiving of proper information, care, and maintenance. Therefore, the Army has FAILED to be a proper steward of these lands and should NOT be allowed to extend or renew their existing lease agreement. The Army should invest in community building by removing all harmful debris from the training area and graciously return these lands to as close a state as possible as to when they first acquired their lease in 1964. They have had ample time to "train" and dispose of their wasteful and harmful impacts. I, Mailani Maka'īna'i say 'A'OLE NŌ!!!!

# Sylvia Makainai

'A'ole to lease extension !!!

The past mismanagement of natural resources is unacceptable

## John Makoff

I can't stress enough how important PTA is to our local economy. I work for a general contractor that has employed between 5 and 25 local craftsman on PTA over the last 5 years. The loss of these construction jobs would be devastating to these families.

## Gordon Malakaua, Mann

The US military has been illegally occupying, desecrating, polluting, all of the lands illegally lease and, fresh, pot waters and, the oceans surrounding all the Hawaiian Islands since their illegal overthrow of the Hawaiian Monarchy. The military possess all the prime real estate for their own purpose of war in the name of God so they write, with no land left for Native Hawaiian homestead who are now the majority of homeless and subjected to gentrification, backed by the federal government all in the name of their God. Every thing I mentioned is all documented in every island. When will it end, Hawaiians want restitution and all our lands back from the US government

## Scott Malis

Please, please, please DO NOT renew this terrible lease with the Army. Not only is \$1 to destroy part of our island unacceptable and does nothing to improve upon on lives. Not only is that land already ruined forever, but it is threatening to ruin our water table as well, with bombing on an active volcano and also disrupts many people with booming noises, killing wildlife and destroying endemic plants, birds and insects. The military is hard on our roads, causes traffic jams, no other thing on our island represents the occupation to the Native Hawaiians like this military base.

In 2018, just days after loosing my home to the Kīlauea volcano, i was driving over the saddle rd at night and off towards Mauna Loa i saw huge explosions of in the distance. At first i thought Mauna Loa was erupting until i figured out my PTSD moment was not a volcano, but the military blowing up stuff which scared the heck out of me. It's bad enough what the military did on kaho'olawe island, where they ruined that entire island making it uninhabitable. We can't let the military to this to the big island as well.

Please do not renew their lease, and force them to clean up their mess and damage. It is one thing to have a military base for protection, it's another to have a training center where the goal is explode ordinances all over the land at the base of our two largest mountains. These types of locations for live fire exercises should be on the mainland in isolated areas like Nevada, Alaska or Montana far from civilization, not an small island surround population. It's disrespectful to the people, the land (aina) and at \$1 a year it does nothing to help our people, infrastructure and environment. It also makes us a target for incoming attacks like in 2018 when we had a false threat of incoming missiles coming from NKorea and my first thought is they nuke the center of island to get the military base and much of the rest of the island would be collateral damage and loss of life. We are a peaceful culture where aloha rules the way we try and live, and this military base is in direct conflict with the culture and ways of life of Hawaii and the especially the Big Island...it's a big NO from me on renewing the lease.

## Linda Manabe

The use of 23,000 acres in Pohakuloa on Hawai'i Island by the US Army must be terminated immediately. For the past 56 years, those precious acres of land has been riddled with ordinance that will probably take that long to clear the land of anything dangerous. How long before the native Hawaiian people would be able to walk that land? How long before they can plant food crops in the contaminated soil? Will it need another 56 years to heal and cleanse before anyone would be able to step foot on that land?

This is ridiculous! All that land could house and feed thousands of Native Hawaiians. We are all caretakers of the land, we have to ensure that future generations are able to enjoy. The land should be respected and NOT desecrated.

**DO NOT RENEW THE LEASE OF POHAKULOA TO THE US ARMY. A'OLE!**

## Snow Marks

Stop using this island as your testing sight. Stop. The damage you are doing to this fragile environment. Stop destroying the earth

## Keith Marrack

I am a huge supporter of the military in Hawaii and Pohakuloa is the premier training area in the Pacific. It helps get our soldiers ready to face real-world situations so they can do a better job protecting the United States. PTA is a good steward of the land protecting endangered species; supports the local community through 1st responder services in the saddle area; provides opportunities for fire, police, and national guard training; and performs community outreach through donations of manpower and food. It is extremely important that the State land lease is renewed to keep the Army in Hawaii. They are a huge benefit to our community and economy.

## Nancy Martin

It is 9/25/2020 at 11 p.m. The Pohakuloa bombing is loud. There is a psychological stress to our community. What are the health effects for our community?

# Titus Matthews

The US military has overstayed their welcome at Pōhakuloa.

What was once a sacred site for Kanaka Maoli has become a playground for the US.

Where there were once marshes and water pits is now a barren and dry area littered with live ammunition, trash and radiation- radiation that will never fully clear itself as it can only decrease in half lives.

"Virtually" harmless is still harmful.

The militarization of Hawaii is colonization in its worst form.

Colonization is the leading cause of indigenous communities gentrification as well as their extinction.

Please consider terminating the lease for the US and return the 'āina to it's stewards.

## Dangelo McIntyre

Yo! Those bombs were mad loud the other night. On or about September 25 at 10:45 pm a series of ground shaking booms rocked Waikoloa village. Not cool. The loudest they have ever been and the latest y'all have ever detonated them. Have some respect

## Carol MCMILLAN

Last week there were land-shaking booms through the night and into the day. I'm around 40 miles away and it woke me up at night. This is an assault on the peace and beauty of our island home. As an anthropologist, I am appalled that there has been no survey of the land for cultural sites, which is against the Antiquities Act, and is not legal. Heavy metal contaminates are leaking into an aquifer that feeds my children and grandchildren in Kona. The permanent damage to archeological and spiritual sites is unacceptable, as well as the noise and physical pollution to the land and water. I believe that the kind of warfare being prepared for is useful mainly for arms sales, not for defending our country. Cyber attacks are the warfare of the present and future. I am strongly against renewing the military lease on 1/5 of our island, or any portion thereof.

## Randall Medeiros

As a veteran, lifelong resident and as part of a family that came to the island in the 19th century, I fully support extension of the lease of the Pohakuloa Training Area. My father, brother and I all trained on those grounds. It is part of our history and a valuable asset to our country's defense.

## Lillian Merle

My family has been dealing with listening to bombing of Mauna Kea for days and nights. My dogs are scared and bark at every bomb going off through the night. My whole family has suffered with lack of sleep because it continues through the night. I feel sad that our Mountain is being used so carelessly for testing in a time we need to help preserve this island. Please stop



Jeffrey Mermel  
To: USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
Cc: Jeffrey Mermel

Reply Reply All Forward \*\*\*

Tue 9/15/2020 9:45 PM

Sept. 16, 2020

Dear Sir or Madam,

I am a 44 year resident of Hawaii Island, a home owner and retired businessman..I do not deny the need for the Army to have SOME field training area at PTA. But come on! Tens of thousands of acres for it??

For the US to be involved with troops-on-the-ground land wars is really less likely these days.

The nature of US warfare in 2020 has changed. Is there really a need for heavy artillery training in this new age of electronic & drone warfare??

Much of this acreage is "ceded"/seized land from the time of the Hawaiian kingdom at the time of the 1893 overthrow of the Hawaiian monarchy.

Thus I would urge the EIS to encourage immediate negotiations between the Army, the DLNR, and leaders from the Hawaiian community.

After all, don't we need to find a way to get along and live with each other?

PS:

I can only hope that the EIS will take a serious look at two related matters:

1: It is known that Depleted Uranium is in the ground at PTA. When hit by high explosives, that metal turns to toxic DU oxide whose small particles are carried in the wind for us all to breathe..I hope that the EIS will call for DU OXIDE levels to be checked.

2: Why is PTA hauling in drinking water and NOT using the well that was drilled on site about 7 years ago? The EIS needs to have the test data released on the quality of that water.

Thank you for considering my comments..

Jeffrey Mermel

**From:** Zach Mermel  
**Sent:** Sunday, October 11, 2020 10:54 PM  
**To:** USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
**Subject:** [Non-DoD Source] Emailing -- PTA EIS Comments

To whom it may concern,

Thank you for offering the community the opportunity to comment on the draft EIS for Pohakuloa Training Area (PTA).

It is very important to the long term health of the land within and surrounding Pohakuloa to begin the process of Unexploded Ordinance (UXO) cleanup, as well as to discontinue (and hopefully somehow remediate) the Depleted Uranium across the Pohakuloa landscape.

The location of Pohakuloa has tremendous cultural significance for the Hawaiian people. Relatedly, the Pohakuloa area contains a large number of pre-contact archaeological sites. The aforementioned actions of environmental remediation (coupled with removal of non-native species and outplanting of native plants) will help to make this unique wahipana ("sacred place") a safe and significant place for future generations of Hawaii's people.

Respectfully submitted,

Zach Mermel

## Meleanna MEYER

Regarding granting and continuing plans for and EIS on Pōhakuloa Training area-- I reject use of Hawaiian lands being used for Military training of any kind, and unequivocally want Hawaiian lands to be returned to the owners of these lands. Pohakuloa should not ever be used for live fire training, or anything else having to do with the US military, who, as occupiers have no business on these or any other lands in Hawai‘i.

**From:** William W. Milks  
**Sent:** Wednesday, October 14, 2020 9:18 AM  
**To:** USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
**Subject:** [Non-DoD Source] Comment about Pohakuloa

All active links contained in this email were disabled. Please verify the identity of the sender, and confirm the authenticity of all links contained within the message prior to copying and pasting the address to a Web browser.

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To whom it may concern,

It has come to my attention that the government has under consideration an extension to its facilities located at Pohakuloa on the Big Island of Hawaii. Over several decades, the undersigned has been involved in either undertaking or reviewing environmental impact statements for various public and private projects. While some may consider such statements to be time-consuming and unduly costly — some of which unquestionably are — the vast majority of work done for EIS is valuable, and sometimes invaluable.

It is respectfully suggested that the government agencies responsible for having an EIS prepared for the planned extension of the Pohakuloa leases take the additional time necessary to thoroughly review all types of issues required by federal and state laws.

William W. Milks

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## Mariana Monasi

The US military doesn't have any right to continue bombing and desecrating sacred land which they have been abusing for years. Surrounding residents develop asthma, illnesses and even cancer because of the winds when the land is bombed. The community doesn't want this military presence and abuse, and it's physically and culturally hurting them. Get out of Pōhakuloa.

# Maimoa Moses

PISS OFF BACK TO THE MAINLAND WHITIES. Hawai'i is not your playground

**From:** Joel Nakamoto  
**Sent:** Wednesday, October 14, 2020 4:03 PM  
**To:** USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
**Subject:** [Non-DoD Source] PTA EIS Scoping Comments

10/13/2020

To Whom It May Concern,

My name is Joel Nakamoto and I would like to provide testimony regarding the future of hunting opportunities at the Pohakuloa Training Area (PTA) as part of the scoping effort for the proposed PTA lease extension Environmental Impact Statement (EIS). For background, I was born and raised on the Big Island, am a licensed Civil Engineer, and since the late 1970's have spent time afield at PTA hunting for game mammals and birds.

First of all, if the powers that be determine that the United States must send our military personnel into harms way, I believe that our country has an obligation to provide the best training possible to allow for their safety and success. Thank you to all military personnel for your service. At the same time, I believe that it is the responsibility of military leadership to facilitate the environment conducive for such training to occur and, in the case of PTA, that means being a good neighbor in the community and maintaining positive relationships with stakeholders. While I do not expect hunting opportunities to take precedence over necessary training, I would like to see studies performed as part of this EIS which may assist the military leadership in making decisions that could possibly increase hunting opportunities, thereby creating some goodwill and possibly more community support from local hunters.

Over the 30-plus years that I have been hunting at PTA, I have observed that hunting opportunities are limited by the following:

- Military training schedule
- Closed environmentally sensitive areas (due to endangered species protection)
- Restrictions on game mammal population enhancement (due to endangered species protection)
- Limited staff to administer/police the hunting activities

While the first bullet point is understood to be out of our control, my comments below pertain to the latter three and are intended to utilize the EIS process to gather data to help Army leadership: (a) assess the effectiveness of the current endangered species protection strategies and, (b) consider an alternate strategy which may allow for increased hunting opportunities while offering more targeted protection of endangered species:

1. Over the past 30 years I have witnessed large portions of the leased lands fenced off, all game mammals eradicated, and public access prohibited for the purposes of endangered plant protection. Specifically these areas are TA 17, 19, 20, and 22. **Please provide a "status report" in the EIS for each of these areas to include the following data:**

- a. Size of area (acres)
- b. Year fencing completed/game mammals eradicated
- c. The endangered species recovery plan for this area at the time of fencing, including target species; desired goals and associated timelines; most significant threats and associated mitigation measures; population/habitat enhancement measures to be implemented; annual budget for recovery efforts; and other relevant information that would establish the baseline for measuring the success of the program.
- d. Number of game mammals eradicated by species since fencing erected (annual basis if available) and how many were salvaged for their meat.
- e. List of endangered species known to exist in the fenced unit and tabulated associated annual population/community counts for each year since fencing was erected, including a current count for this EIS.
- f. Annual average rainfall since fencing erected (and for the years prior to fencing if available).
- g. List of all invasive plant species present in the fenced area (fountain grass, fireweed, etc) and quantitative assessment of prevalence over the fenced time period. Also include a discussion of impacts to the survival of the endangered species.
- h. List of any insect species present in the fenced areas which are detrimental to the endangered plants. Assess prevalence and mitigation measures as applicable.
- i. Listing of any other animals/rodents/birds/etc killed in the fencing units for the purposes of endangered plant restoration. Provide detailed descriptions of all occurrences.
- j. Listing of all habitat enhancement efforts (project description, manhours spent, etc) over the fenced time period and their associated costs.
- k. Wildfire history over the fenced time period and assessment of current fuel load and potential fire risk.
- l. Summary graphs of endangered plant population/community by species for the years fenced and evaluation of trends.

m. Analysis of the effects of climate change on endangered plants in the fenced units, prediction of survival probability of each species at the end of the new lease period without active human intervention, and any specific recommendations to mitigate negative effects.

n. Prioritized ranked list of all risks to the survival of endangered plants in the fenced areas (with number one being the most critical) along with proposed mitigation measures, urgency that mitigation needs to be implemented, and associated approximate costs.

**2. I would strongly support a Habitat Conservation Plan (HCP) for Game Management at PTA (similar to the “Habitat Conservation Plan for Game Management at Puu Waa Waa and Puu Anahulu, Napuu Conservation Project” by the Hawaii Department of Land and Natural Resources) and recommend that it be included in the EIS as both a targeted endangered species protection strategy and a way to promote recreational hunting.** Instead of fencing large parcels of land, the idea behind the HCP is to fence smaller areas (exclosures) around a target number of endangered plant populations/communities and actively provide irrigation while controlling invasive weed growth. This results in high quality habitat while allowing for game mammal populations to exist outside of the fenced exclosures. While not intended to create a bare earth “firebreak”, the mammals outside the fenced units will lessen the fireload, as compared to having no mammals at all, for some positive benefit. This is allowed under the Endangered Species Act if an Incidental Take License is approved. The Puu Waa Waa/Puu Anahulu area is adjacent to PTA’s western boundary and as such shares similar terrain and habitat and makes it’s HCP a good starting model for PTA (however it should be noted that the Puu Waa Waa/Puu Anahulu HCP has yet to be approved).

**3. As part of the HCP alternative, please look into the feasibility of utilizing hunters as volunteers to offset the labor costs of managing the fenced exclosures.** In 2015, I attended a field review of the endangered plant recovery efforts at Puu Waa Waa and was surprised to see the variety of species thriving within the fenced unit, but also the tremendous poisoning/weedwhacking effort necessary to keep them fountain grass free. My takeaway was that, while the situation seemed to be very favorable to the endangered plants, it did not look cheap. However, if a written commitment is made by PTA (via the HCP) to provide a sustainable and managed mammal hunting program, hunters may be willing to volunteer their manpower to support the hunting opportunities, which could reduce operational costs. This could be a win-win if achieved, however due to an unfortunate past history of broken promises, PTA should be aware of, and may need to address, skepticism and a lingering negative stigma hunters may still harbor from past experiences.

**4. Please retain a committee consisting of the following expertise areas to review and analyze the reports, plans and data from items 1-3 above and make a recommendation for the most effective course of action to ensure endangered species protection in the new lease:**

**a. Botanist (specializing in Hawaiian Endangered plants)**

**b. PTA Game Manager**

**c. Meteorologist/Climate Change Scientist (with experience in the Mauna Kea/Mauna Loa region)**

**d. Registered Professional Engineer (with experience in cost/benefit analyses and feasibility studies)**

5. It is my opinion that the current Game Manager and Game Warden are doing an outstanding job in facilitating available hunting opportunities and also maintaining a positive relationship with the hunting community. It is my understanding that they are shorthanded given the high public demand for hunting opportunities at PTA and I thank them for their service. **Please include in the EIS possible funding alternatives for additional staff positions to allow for more and/or fairer distribution of hunting opportunities.**

6. Finally, when the draft EIS is published, please reach out to the County and State Game Management Commissions to arrange to make presentations to both bodies summarizing the Endangered species and game management recommendations for the PTA lease extension and to solicit comments and feedback.

Thank you very much for your consideration and for the opportunity to provide testimony.

Sincerely,

Joel Nakamoto

# Suzanne Nicoll

Give the land back to the island.

## Joseph Nobriga

My personal feelings are that when the time comes for the military to give back the training area, the military will not clean up all unexploded ordnance. Just like how the sham of a clean up happened on Kahoolawe. It's too costly, it's unfeasible, etc. I can just see it now - military will renege on the cleanup agreement.

There are other options besides bombing, live fire training in Hawaii. Bomb and shoot your artillery on the US mainland. Your military was directly involved with the overthrow of the Hawaiian kingdom. And by the way, we are a military family. We are just fed up with the way the US military keeps crapping on Hawaii and its citizens.

## A'ohe 'Oihana

The Programmatic Agreement between the U.S. Army Garrison, Pōhakuloa Training Area (USAG-Pōhakuloa and The Hawaii State Historic Preservation Officer (i.e. The State of Hawaii) clearly lays out an agreement where the Army is responsible for major environmental disposal operations

on leased State lands. The lease agreement of August 1964 requires that the Army "remove or deactivate" training ammunition before public access and to "remove or bury all trash, garbage or other waste materials". Since Ching and Kahaulelio had presented the case of scattered ordinance throughout PTA in 2018, it is evident that there has been little, or no action to meet this requirement.

On September 15, 2020 Hawaii News Now reported that military trash had been found illegally dumped in an area of Okala'a on the island of Hawaii, and in April 5, 2018 an Army Times article reported that Oahu 9th circuit judge, Gary Chang found that the Army was negligent in its hazardous waste removal duties. Judge Chang prohibited the Board of Land and Natural Resources (BLNR) from entering a new lease until the BLNR issued a written determination that the Army is complying with this existing lease. The scoping material provided during the September 23, 2020 "Open House" failed to share an existing BLNR written determination, therefore it seems inappropriate for the Army to push forward with new lease agreement negotiations. The USAG-Pōhakuloa has proven to be a poor tenant to the community of Hawaii. There have been continuous examples of the Army lying, and covering up their knowledge of waste being illegally dumped such as the case in Okala'a , and they are continually lying about the condition of Hawaii State lease lands under their control. The approximately 23, 000 acres of State land should be retained by the State of Hawaii for the betterment of Hawaii residents. Therefore, the best Alternative Plan would be Action plan #3, minimum retention and access until it can be show that the lease agreement is honored, and the safety and health of the community is held as the first priority of these proposed actions.

It has become evident that the Army has continually neglected their responsibilities and obligations to clean the Hawaii State lease lands for the safety of the community, and the natural environment. These lands have been left as undesirable and dangerous environments. It has also become increasingly evident that the Army does not intend to remedy these issues, instead focusing on "best training practices" and "becoming the number one training facility in the Nation", the Army really does not care about the community. These sacred lands of Pōhakuloa are in a sad, disastrous state, one that is unhealthy, non-productive, and aesthetically and culturally unpleasing for the community of Hawaii Island, and the Great State of Hawaii as a whole (NEPA, Sec. 101 [42 USC § 4331]). Things have changed considerably since 1946 and it is now time to sincerely take this period of reflection to really consider the consequences of our actions, and what those consequences might mean for future generations.

## Keith Okamoto

I'm okay with the continued use as long as the proper respect for the community and land is a priority and committed for continual improvement. Also, access for local hunters needs to be improved. There are many times that the land appears unused for training and could be opened for hunting.

## Cat Orland

The State of Hawaii & DLNR do not have any ownership of these ceded Hawaiian Kingdom lands. It is completely illegal for them to be extending an already illegal lease to the army. Our Hawaiian lands should be meant to better the life and health of the people of the Kingdom of Hawaii which in International courts still recognize as an illegally overthrown kingdom nation. There are currently no international treaties to prove any differently. Please do not look to extend the lease and continue poisoning the lands for our future generations and the land of our ancestors that are buried all over Hawai'i Island.

## Jonathan & Jamaica Osorio

Comments on scoping period for the Environmental Impact Statement (EIS) for Army Training Land Retention at Pohakuloa Training Area (PTA) in Hawaii.

Greetings

My name is Jonathan Kay Kamakawiwo'ole Osorio, PhD. I am a Professor of Hawaiian Studies and dean of the Hawai'inuiākea School of Hawaiian Knowledge at the University of Hawai'i Mānoa. I am also a kama'āina to the Island of Hawai'i having been born and reared in Hilo. I am a scholar and author of 19th and 20th century Hawaiian history.

My name is Jamaica Heolimeleikalani Osorio, PhD. I am an Assistant Professor of Political Science at the University of Hawai'i Mānoa and a scholar of traditional mo'olelo and literature of Pele and Hi'iaka as well as contemporary Indigenous and Native Hawaiian politics. We are both Kānaka Maoli and reside in Wahiawā, O'ahu.

We have been copied with the testimony of several other individuals who have pointed out the illegality of America's taking of Hawai'i's sovereignty and control over the lands of the Kingdom government and of the Crown. Indeed the conflating of those distinct land categories by the "Republic of Hawai'i" between 1895 and 1897 was done principally to allow already wealthy sugar and pineapple companies access to large scale leases of the best agricultural lands in Hawai'i and to offer small farm leaseholds to American families in the hopes of encouraging a Caucasian immigration to Hawai'i that would replace Native people and the tens of thousands of Asian men and women who had been brought to Hawai'i by contract in the last half of the 19th century.

There was nothing legal about the "Republic's" possession of the Crown and Government lands and nothing either legal or moral about the "Republic's" very existence as it consisted of barely 4,000 mostly white men women and children within a nation of nearly 40,000 Kānaka Maoli and about 80,000 Chinese and Japanese inhabitants. What the "Republic" possessed was a friend in the White House from 1897 to 1901, and in this period was able to engineer a cession of the Hawai'i's sovereignty, which it did not possess, and about 2.1 million acres of Kingdom and Crown lands, to which it was not entitled. Under the terms of the 1898 Newlands Resolution, the United States reserved rights to those lands which they labled "Public Lands" while administration of those lands were generally left to the government of the Territory of Hawai'i.

The United States territorialized Hawai'i in May of 1900 and in the following two decades several presidents withdrew thousands of acres of lands from Territorial control through Presidential executive orders that created military bases like Forts Shafter, Ruger, Schofield Barracks, and Wheeler. Those withdrawals continued into the pre-Pacific War years to create bases at Bellows, Barbers Point, and the Naval ammunition depot at Lualualei. The most spectacular taking was still to come however, with an executive order that turned over the Island of Kaho'olawe to the Department of the the Navy in 1954 and the establishment of the Pohakuloa Training Area at the time that Congress voted to confer statehood on what had been an independent nation state.

We agree with testimonies like Ron Fujioshi's that the United States has no legal claim to any of the lands of the Hawaiian Archipelago, but are going to make a different point here. The armed forces

of the United States have never had any difficulties obtaining Hawaiian national and Crown lands for forts, airfields, naval ports, and training areas. In general American military use of our lands has been marked by environmental recklessness and a total lack of respect for the histories and cultural connections those places have had for the Hawaiian people. By the 1980s for instance, Pearl Harbor was listed as a Superfund contamination site along with Schofield Barracks. As for Kaho‘olawe, when your armed forces were forced to cease using live ordnance on the island in 1981, archaeologists discovered so many historic sites on Kaho‘olawe that the entire island was listed on the National Historic Record.

Environmental degradation poses a harm to Hawai‘i's citizens. Nothing illustrates the willingness of the US armed forces in Hawai‘i to disregard the public welfare as the dilatory response to the leaking fuel tank on Red Hill that sits over O‘ahu's largest fresh water aquifer. In public discourse, the Navy makes it clear that its priorities outweigh the concerns of the civilian population in Honolulu.

Pōhakuloa, actually the lands of Humu‘ula, Pu‘uanahulu and Kaohe, have been damaged under your supervision while its use and care is denied to the general public and to Native Hawaiians who have the clearest moral and legal claim to this land. It is an extravagant lack of graciousness that you ask for another lease of the 23,000 acres of land controlled by the State of Hawai‘i without actually asking for public comment on your administration of the rest of the lands of Pōhakuloa Training Area.

We testify that the Kānaka Maoli people whose nation is occupied and oppressed by the United States of America have shouldered your country's military needs long enough and that your response should be a grateful withdrawal from our lands beginning with those most damaged and least useful to you.

Jonathan K Osorio, PhD

Jamaica Heolimeleikalan Osorio, PhD

# CHARLES OTA

I submit testimony in support of the U.S. Army's request to extend its lease with the State to conduct live-fire combat training at PTA.

As I understand it, the military's presence in Hawaii is an essential component of U.S strategy to forward deploy combat ready U.S. military forces in the Indo-Pacific. This strategy has been effective in maintaining peace and security throughout the Indo-Pacific and enabling world commerce and trade to flourish. For Hawaii, it means that the continued military presence would avoid the loss of more than \$7.2 billion in defense spending in the state's economy..

While I am in support of extending the lease of state lands, I am concerned about the apparent lack of state oversight in the military's use of PTA as live-fire training to include heavy artillery and brigade sized training causes heavy (and likely permanent) damage to Hawaii's precious environment. This has been a recent subject of concern to the public and Hawaii's State Supreme Court. This requirement is to ensure that the use of PTA is in compliance with state and federal laws in protecting Hawaii's precious environment.

Therefore, I submit the following concerns for inclusion in a renegotiated lease for PTA.

1. The lease include a provision that the Army submit each scheduled training exercise in advance to the state Board and Department of Land Natural Resources for discussion and prior approval. This is to ensure that the planned exercise does not result in excessive damage to the environment and is in compliance with the approved lease.
2. That the state will monitor each training exercise by having a team of state officials led by DLNR to attend in person to ensure that the exercise was conducted as approved. A DLNR report for each exercise, to include concerns and recommended actions to be taken by the Army, be discussed with the Board and submitted to the Governor as necessary.

Mahalo.

Charles Ota  
Aiea, HI 96701

**From:** DLNR.LD.Land <dlnr.land@hawaii.gov>  
**Sent:** Wednesday, October 14, 2020 11:24 AM  
**To:** G70 - ATR PTA EIS  
**Subject:** RE: Thank you for your submission: Contact the Governor

Please see message below received at DLNR regarding PTA lease.

Land Division  
Department of Land and Natural Resources

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**From:** Charels Ota \_\_\_\_\_  
**Sent:** Tuesday, October 13, 2020 5:24 PM  
**To:** DLNR.CO.PublicDLNR <[dlnr@hawaii.gov](mailto:dlnr@hawaii.gov)>  
**Subject:** [EXTERNAL] Fw: Thank you for your submission: Contact the Governor

To Ms Case, Director of DLNR.

This is to inform you that I am very much concerned about the U.S. Army's continued use of PTA for live-fire military training. While I am in support of renewing the state lease allowing the Army continued use PTA, I am concerned that the state must provide improved regulatory oversight to ensure that this use meets all state and federal environmental laws. Hawaii's previous but limited environment deserves no less.

Charles Ota  
Aiea, HI

----- Forwarded Message -----

**From:** [no-reply@hawaii.gov](mailto:no-reply@hawaii.gov) <[no-reply@hawaii.gov](mailto:no-reply@hawaii.gov)>  
**To:** \_\_\_\_\_  
**Sent:** Tuesday, October 13, 2020, 05:10:59 PM HST  
**Subject:** Thank you for your submission: Contact the Governor

Thank you for your message!

Your Name: Mr. Charles Ota

Your Title: Hawaii Resident

Organization: Retired

Phone:

Your Email Address: \_\_\_\_\_

Your Location: O'ahu

Your Address:  
Aiea, HI 96701-3068

Message Type: Other

Your Message: This is to inform you that I submitted written comments to the U.S. Army's environmental impact statement (EIS) regarding its request to renew the state lease expiring in 2029 to continue its use state lands at the Pohakuloa Training Area (PTA), Hawaii Island for live-fire military training. A copy of my testimony will be included in the Army's EIS currently being processed. As a Hawaii resident, I ask that the state review and address my comments to the Army and take steps necessary to ensure that these lands are properly protected in accordance with state and federal environmental laws.

## Brandie Oye

Please please stop bombing our precious lands. This is happening right next to our sacred mountains and I can hear and feel the trembling of our island down at the sea. Stop and train elsewhere. The entire United States is so large with many states of open empty land that the training could occur, why do it here on a little sacred island? Stop!

## Stephen Paulmier

The history of the military use of Hawaiian lands to train for armed conflict is filled with examples of misuse, neglect, coverup and willful mendacity. The record of the military organization claiming responsibility for the training proposed is well known throughout the world for its lack of concern for the safety and a callous disregard for the preciousness of human life. Yet in the statement of intent it claims the training it has used these lands for is needed to prevent injury and the loss of life. This double-speak, for it also admits its goal of producing a lethal collection of humans and machines designed to destroy or wound so badly as to be unable to resist is of itself reason enough to disqualify the renewal of the lease.

Combined with this collection of indictable facts the promise to leave the area responsibly is broken before the audacity to apply for an extension is presented. In fact no definitive assessment of the clean up necessary to leave the land responsibly exists.

For these reasons and others to be articulated further in another forum this lease extension request deserves to be denied and the clean up and exit of the military personal and equipment from Hawai'i island be commenced immediately.

# Cameo Perrells

Take your bombs and go practice in your own backyard!

# Amy Perruso

To whom it may concern,

An Environmental Impact Statement development process is one of the few ways in which our local community members, across the islands can share our concerns about land use by the U.S. military that affects all of us. It is of vital importance that the final EIS in this case answer some very basic questions and speak to some very basic concerns that have emerged from longstanding community conversations:

1. The Army's lease requires that it "make every reasonable effort to . . . remove or deactivate all live or blank ammunition upon completion of a training exercise or prior to entry by the said public, whichever is sooner" and remove "all trash, garbage and other waste materials[.]" The EIS should fully disclose the extent to which the Army has complied with this lease provision and should include a thorough investigation of the entire area to determine whether there is any military debris (including unexploded ordnance) on the land that the Army has been using.
2. The EIS should disclose the status of the cleanup of the Former Bazooka Range. Has it been completely cleaned up? Is it safe to enter? How much waste was collected? What did it comprise of? Where was it disposed?
3. The EIS should fully disclose the extent to which ungulates exist within the area used by the Army and the damage they have caused.
4. The EIS should include a thorough inventory of the historic sites in the area. It should include a discussion of the cultural significance of Pohakuloa itself. And it should include a discussion as to how the condition of these sites has changed while the Army has used these lands.
5. The Army must consider a full range of alternatives, including returning these ceded lands back to the Department of Land and Natural Resources after restoring them to the condition that they were in prior to the Army's use of this land.

Mahalo,

Representative Amy Perruso  
Hawaii State House  
District 46

## Seanna Pieper-Jordan

Pōhakuloa is a sacred place that deserves recognition for its importance to Native Hawaiian people. Destruction and disregard of the land violates the worldview of Native Hawaiian people. Below are a few points and questions I hope the Army will answer in the EIS process. My intent is to ask the Army for a thoughtful, equitable and progressive EIS process. Do more than what is required.

The Army cannot by nature be environmentally friendly. War games destroyed Kahoolawe and PTA is more of the same. How can we trust the U.S. military to cleanup all it has destroyed? Will the Army commit a monetary amount for cleanup? Will you go beyond what is already obligated by law for cultural and historical preservation, and for protection of endangered species?

There is a water reserve in the area and an article stated that the Army hopes to tap into the reserve. However, will the Army also provide public access to the water, because droughts are expected in the next half century because of climate change?

Consider an end date to military occupation to allow the land to heal. How long does the Army intend to remain in the area? Should there not be an end date to war games in the area? Could the Army commit to ending PTA when the U.S. is not fighting a war for a decade?

Granting access to cultural sites. Please pause the Army's war games to complete a third party, comprehensive survey of all cultural and historical sites in the area. Once a historical site is destroyed, it cannot be restored.

Be an ally. Will the Army invest in cultural/historical education in the area? Education that includes information on how to maintain national security through non-violence, peace time efforts.

I hope the Army will aim to respect, protect, restore, and mitigate, and will look to a future of peace with the land. I have a few positive steps that the Army could take that will show its commitment to going above and beyond what's legally required. Please allow more than 40 days for comments, and publish announcements in news outlets online, in print, and on TV. Also, consider a social media site that is open for ongoing public comments. My suggestion if you constantly keep a transparent process, which is easiest on social media. I also think others would appreciate a signup for news alerts and news letters. Transparency, care, openness, and willing to integrate public comments/ideas. Also, include a Race Equity and Inclusion specialist and framework.

## Megan Ploski

I've lived in Waikoloa Village all of my life and I am well aware of the training that happens at Pokakuloa training area(along with the noise that comes with it). However, recently there has been much more community disruption happening with the training. Such as low flying helicopters at late hours of the night which wake me from my sleep and also shake the house as if there was an earthquake; the bombing training has also been taking place far too late into the night also causing sleep disruption. My opinion is there are plenty hours of daylight when training both fly over and bombing training would be much more appropriate and considerate of the neighboring communities. Mahalo.

## Valerie Poag

I was shocked to discover recently that the deep booming, ground vibrations and rumbling I experienced at my place of residence in Waimea recently, was from live fire artillery from military maneuvers at PTA, approximately 25 miles away. I could hear & feel the regular explosions at various times both throughout the day and night. It was unsettling & eerie from 25 miles distant, and I can only imagine what it must have felt like from communities closer to PTA (such as Waikii). I am also very concerned about the damage such live fire artillery practice does to the land & environment. I am very much AGAINST continuation of such live fire artillery practice of any sort at this site.

## Jim Popper

No. There is no longer a real threat where this site would be of use. Besides. You've betrayed your trust and promises. Clean up and leave.

**From:** Kalai Posiulai  
**Sent:** Friday, October 2, 2020 12:04 PM  
**To:** USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
**Subject:** [Non-DoD Source] Regarding the Environmental Statement for U.S. Army's Lease of Pohakuloa

My name is Kalai Steve Posiulai. I am 15 years old and a proud son of an Air Force veteran. I am here to state my support for the U.S. Army's attempt to seek a continuation of their lease for Pōhakuloa for military use.

I support their issue because they are here to protect us. The Army is here so that I, a civilian, can sleep soundly and enjoy day-to-day life. I thank you for this and will always be grateful for you.

I care about this issue because I think that they should train here. They're protecting the State of Hawai'i so I think that the Army should have a training ground here always available to them. I don't agree with what others are saying about the lease and how the Army should have the lease taken away from them. I care because the Army cares for me and if something has the possibility of being taken away from the Army, then I'll stand and care for them.

I am asking that the U.S. Army continue to ask for the lease and I also have a suggestion for them. I suggest that the Army clean up after they are done training. It's just like cleaning up after yourself when you're done working out at the gym, but on a much larger scale. The Army have heard what the people are saying. They don't want the government to continue their lease because they're not taking care of the land.

I thank the Army for protecting us and being there for the State of Hawai'i. I often see Army vehicles on highways and the backroads because I live near the backroad that goes toward Schofield Army Base. I always look to the side when these vehicles pass me and smile because I know that I'm being protected by God and them.

Mahalo and God Bless,

Kalai S. Posiulai

# Tanya Power

I am full support of maintaining the PTA leased lands in its entirety for a plethora of reasons including:

- 1) Macro picture - keeping our warriors battle ready without being far from the Asia-Pacific region. Additionally our own National Guard has a better quality of life training at PTA rather than traveling to another destination. PTA keeps our military relevant!
- 2) Micro picture for the Big Island - the economic impact is huge with wages for civilian employees and the sub-contracted employees, the PTA first responders help everyone on the Island - not just the military personnel, PTA were instrumental in being good stewards of our taxpayer dollars by assisting in the building of the Daniel K Inouye Highway, and we could learn a lot about recycling on the Island from PTA.

I feel safe at night when I hear the aircraft training at high levels (it's not disturbing because they are really high) in the dark of night. Thank you all for your service! I whole-heartedly support PTA retaining the leased land.

\* FALSE AND MISLEADING POSTURE OF JURISDICTION  
CLAIM  
THE GREAT DECEPTION  
"De fact"  
PURIFY YOUR HISTORY

Honolulu STAR ADVERTISER SUNDAY 9-20-20  
Public notice page 8 TITLE 28 U.S.C. § 91  
THE US ARMY fraudulent CLAIM STATEMENT "ISAIA  
without pure evidence of geographic land  
claim by unauthorized Agent and officer  
of the U.S union "STATE OF HAWAII" - "corporate  
THE STATE OF HAWAII DOES NOT OWN "Jes soli" LI  
THE STATE OF HAWAII Agents and officers "Forei  
need to provide evidence "PROFF" of ownership  
Pseudonym. Implied contracts land claim.  
All LAND IN THE HAWAII ARCHIPELAGO (PTA)  
geographic LATITUDE + LONGITUDE + MIT + BOV  
Leap + Bound are in a geographical JURISDIC  
OF THE HAWAIIAN ARCHIPELAGO - (PRIVATE PROPER  
INTERNATIONAL LAW RECOGNIZES THE Pure living  
BONA FIDE probate trust + ALLODIAL pure title owners  
Document. KA HOPII OHANA ARE DIRECT DECENDENT  
OF LYDIA PAKI Living land TRUST 1,000,000 ACRES.  
and lawfully reserve the rights to ASSERT  
their rightful LAND CLAIM. International LAW,  
prohibits the COERCIVE ASSIGNMENT OR ALTERATION  
of a people NATIONALITY and CITIZENSHIP.  
THE ALLODIAL TITLE PROTECTS THE HEIR, SUCCESSOR, DNI,  
Beneficiary and subject. Our NATIONAL  
Boundries protect an geographic Peafoll Ind-  
Indigenous people, living and practicing  
a culture + Heritage + mosaic law ON  
THEIR "Jes soli". International law confirms  
Sovereignty never RELINQUISHED OR EXTINGUISHED  
AUTHENTIC HEIRS ON Pure JURISDICTION.  
Pure mineral LAND, AIR, AND SEA rights.  
AS REQUIRED AND DESIGNATED BY PURE TRUST Docum

HAWAIIAN CULTURAL PRESERVATION COUNCIL  
KAHUNA  
KALAI WA'A  
KUA MO'O O KEHAU - MU LINE 24,000 B.C.  
LAU LAPA AU  
Lomi Lomi  
Hoo Kele -  
MAHI'AI KALO

Article - ART 43 - TERMS 1893 Iliiokalani Assignment  
"CONSTRUCTIVE FRAUD" Identity THEFT. AGREEMENT

Pure geographic Authority + Jurisdiction  
Physical boundaries - HAWAII NATIONAL SOIL.  
Public Law 103-150 - admission to unlawful  
THERE IS NO CONTRACT BETWEEN HEIRS, + "STATE  
OF HAWAII - FEDERAL U.S. GOV'T. FOREIGN JURISDIC  
QUASI AUTHORIZATION BY A FOREIGN GOV'T  
and its Agents and Officers - opperating  
unlawfull with fraudulent authoritative  
CLAIMS of mineral Rights. Act of War <sup>FRIE</sup> ON <sup>NA</sup>  
Blatant violation of international LAW -  
Who is fraudulently AUTHORIZING contracts  
with out consent OF Heir + the pure  
Living will - + Probate trust.

APRIL 21-2005  
Filing

NO. MC 05 00109 - US court FOR HAWAII DISTRICT  
ARTICLE 7 THE HAQUE CONVENTION  
HIST Sec 106 - US. military LAW (JAG)  
JOHN 14:26 ALDHA

INDIGENOUS PRIVATE CITIZEN KAHUMU RASI  
Ke Aupuni O Hawaii nei O NA Koolaupoko ANA

## Hawaiian Cultural Preservation Council

P.O. Box 23258, Honolulu, Hawaii 96823, (808) 235-4958

Honorable Ban Ki-Moon  
Secretary General, United Nations  
1<sup>st</sup> Avenue and 46<sup>th</sup> Street  
New York, NY 10017, USA

September 16, 2016

Re: The Issue of President Barack Hussein Obama's Birth

1. **Fact:** Barack H. Obama is a Christian member of the United Church of Christ (UCC): **TRUE**
2. **Fact:** Barack H. Obama was born at Kapiolani Maternity Hospital, Honolulu, Hawaii: **TRUE**
3. **Fact:** Barack H. Obama was born in the United States of America: **FALSE**

### Hawaiian Kingdom Political Historic Facts

1. **Fact:** Our Hawaiian Kingdom continues to exist as an internationally recognized sovereign independent state by other sovereign nations, despite continuous illegal U.S. occupation of our country for over 123 years. However, on *January 17, 1893*, our internationally recognized sovereign independent Hawaiian Kingdom was illegally overthrown by a U.S. waged and undeclared "*Act of War*" in violation of international law, and their own U.S. Constitutional laws, against our peaceful and friendly nation, of whom the U.S. had eight (8) treaties, and without a majority "*Declaration of War*" by U.S. Congress, nor signed by U.S. President Grover Cleveland, who later, addressing U.S. Congress, *18 Dec 1893, Withdraws the Illegal Annexation of our Hawaiian Kingdom*.
2. **Fact:** A covert conspiracy and acts of treason was plotted by greed of the big-5 sugar planters; 1) Alexander & Baldwin, 2) C. Brewer, 3) American Factors, 4) Castle & Cooke, 5) Theo. H. Davis; joined by the United Church of Christ (UCC) missionary descendents; aided and abetted with active participation of co-conspirators and U.S. Minister Plenipotentiary John L. Stevens, who, by unwarranted and under false pretenses, deployed U.S. navy and marine armed military forces to invade our national shores with their "Weapons of Mass Destruction", to then overthrow our undisputed de jure government, depose our legitimate queen, seize jurisdiction over our national territories, dominion, domains, seas, airspaces and zones, belligerent occupation of our country with their puppet civil administration, later an illegal domestic congressional annexation of our nation [*Newlands Joint Resolution, SJR, PL 55 (30 Stat 750), 7 July 1898, President William McKinley*], ill imposed U.S. citizenship upon us without naturalization, claim our national lands as new U.S. territories [*Organic Act, 30 April 1900, President William McKinley*], forced an unlawful referendum voted by U.S. citizens, military and foreigners, to claim our Hawaiian Kingdom their 50<sup>th</sup> State [*Hawaii Statehood Admissions Act, PL 86-3 (73 Stat 4), 18 March 1959, President Dwight Eisenhower*], in yet another covert conspiracy, to undermine and forestall *United Nations Resolution 1514*, declaring our Hawaiian Kingdom, illegally occupied by the United States of America.
3. **Fact:** Our Hawaiian Kingdom was extended full and equal diplomatic relationships and bilateral international treaties with 65 foreign nations, and 91 of their colonies, including 8 treaties with the U.S., totaling 156 Treaties between 1826 and 1893; ensuring perpetual diplomatic peace, friendship and amity with all our allied nations; and was extended a bilateral *Anglo-Franco Proclamation, 28 Nov 1843*, recognizing our Sandwich Islands (Hawaii) as a sovereign independent state with full and complete diplomatic relations, as an equal member in the World Family of Nations, never to take possession of any part of its territory; further, the acknowledgement of our *16 May 1854, Proclamation of Neutrality*, to be respected by all occupying military belligerents. Further, our Hawaiian Kingdom commissioned consulates and ministers abroad in 28 foreign nations, and in 59 of their colonies, including 10 of our Hawaiian Kingdom Consulates in the U.S., totaling 87 Consulates; including our agent commissioned to the *Swiss Confederation of the 1864 Geneva Congress*, for the Geneva Convention in Switzerland. Likewise, we also accredited 25 foreign consulates and ministers stationed in our Hawaiian Kingdom, including 5 from the U.S.A.

4. **Fact:** The U.S. Congress passed, and U.S. President signed the [*Apology Law, PL 103-150 (107 Stat 1510), 23 Nov 1993, President William Clinton*], openly admitting to the U.S. role, involvement, wrong doings and of its active participation in the illegal U.S. military invasion, overthrow, seizure and occupation of our sovereign Hawaiian Kingdom. Moreover, it recognized neither our Queen Lili'uokalani, nor our de jure government, nor our citizen nationals ever relinquished our legal claims, nor authority to our de jure government, nor jurisdiction over our national territories, nor our inherent rights to our sovereign independence, over to the U.S.; and declaring the U.S. legal obligation to full and complete reparations, restitutions and restorations of our Hawaiian Kingdom. Needless to say, "*Apology*" without return of stolen goods, is absolutely dishonest, disingenuous and worthless.

5. **Fact:** Therefore, Barrack H. Obama was born in a "*Foreign Country*", our Hawaiian Kingdom, well over 2,400 miles from America's 12-mile territorial seas, and its 200 mile exclusive economic zone, and by its very own U.S. Constitution, was never eligible to be President of the United States of America. Therefore, every executive order, acts, bills, laws, statutes, budgets, treaties, trades, transactions, agreements, contracts, compacts, programs and all legal documents signed and enforced by President Obama over the past 7 ½ years in office, are all unlawful, illegal and against U.S. Constitutional laws, statutes, codes; therefore, unconstitutional, unenforceable, completely null and void, and must all be repealed and revoked, by whomever the new U.S. administration is elected 8 Nov 2016.

#### Hawaiian Kingdom Conclusion

No...the issue of Barrack Hussein Obama's birth is NOT over. Just ask the many loyal citizen nationals of our Hawaiian Kingdom. By illegal and unwarranted U.S. military aggression, occupation and "*Regime Change*", Hawaiian Kingdom citizen nationals were compelled to live under forced duress for over 123 years. We can hardly defend against a dominant U.S. military world power with its stockpile of biological, chemical and nuclear warfare "*Weapons of Mass Extinction*", with our spears; but, power does not erase wrongs, no matter the time passing.

World U.N. government leaders, investigative journalists of all national and international media, must exercise earnest and due diligence, to investigate and research documented records of U.S. Congress, State Departments, Supreme Courts and White House archive and administrative records; and of past Presidents Grover Cleveland, Benjamin Harrison and William McKinley from 1885 to 1901 to find documented historic data, material facts, evidence and correspondence. Ignorance (or cover-up) of historic facts is unacceptable and inexcusable, for the hidden records speak for itself. Just be completely trustworthy and honest in revealing the historic truths.

We must restore our sovereign independent Hawaiian Kingdom, and continue alliances of peace, friendship, amity, bilateral treaties, diplomatic relations and embassy's with all our allied nations, that prior existed in peace. We are not anti-American, but a peaceful people, loyal to our Country...no different than you are loyal to your Country.

In the end, under U.S. Constitutional laws and international law of nations, United Nations Peacekeeping Forces must monitor and enforce a peaceful non-violent "*U.S. Withdrawal*" from our sovereign country. Time does not erase "*War Crimes*"; justice must ultimately prevail under the "*Rule of Law*"; even against nuclear powerful U.S. Mr. Trump was right, for the wrong reasons. With peace, friendship, amity and kindly regards, I patiently remain.

Dr. Solomon D.K. Nalua'I, M.D., Ph.D., Vet., (Retired)  
Chairman, Hawaiian Cultural Preservation Council (HCPC)

cc, attention: U.S. White House, Congress, Supreme Court and Pentagon  
United Nations General Assembly and Security Council  
All National Media, International Media and Social Media  
All real live natural persons, fiction corporations and governments

**From:** Nancy Redfeather  
**Sent:** Tuesday, October 13, 2020 3:48 PM  
**To:** USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
**Cc:** Nancy Redfeather  
**Subject:** [Non-DoD Source] Public Input on the Scope of Analysis for EIS - Pohakuloa

All active links contained in this email were disabled. Please verify the identity of the sender, and confirm the authenticity of all links contained within the message prior to copying and pasting the address to a Web browser.

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Nancy Redfeather

Kealakekua, Hawaii 96750  
Attention: Public Input on the Scope of analysis for EIS Pohakuloa

October 12, 2020

To whom it may concern,

As the U.S. Army plans to prepare an environmental impact statement to analyze its proposal to retain up to approximately 23,000 acres of state-owned land at Pohakuloa Training Area (PTA) for military training, the public has been invited to comment on the Scope of Analysis for the EIS. I would like to submit this statement for my Testimony.

It is my understanding that The area has been used for military training since 1943, and the state-owned land has been leased by the Army since 1964. PTA is the largest contiguous live-fire range and maneuver training area in the state and is located between Mauna Loa, Mauna Kea, and Hualalai on the island of Hawai'i. Of the 132,810 acres at PTA, approximately 23,000 are leased from the state. The current 65-year lease is set to expire in August 2029.

**I am opposed to the continued occupation of State lands on Hawaii Island for military training exercises and I would like to briefly identify points that the EIS should seriously consider in detail.**

1. I know in the Army's lease you are required to "make every reasonable effort to remove or deactivate all live or blank ammunition upon completion of a training exercise or prior to entry by the said public, whichever is sooner." Has the Army complied with this lease provision and what were the steps taken and when to fulfill this promise?

2. A thorough investigation of the entire area should be undertaken to determine whether there is any military debris remaining and that would also include unexploded ordnance on any lands that have been used for training/exercises over the historical time period of your occupation. I know that over many years, there have been many Cultural Monitors who spent extensive time on the Pohakuloa lands and have observed firsthand military debris, including unexploded ordnance and spent shell casings on the grounds of the lands leased by the Army.

3. There was a draft document titled: "Action Memorandum for the Time Critical Removal Action" prepared in 3/2015 by the US Army Garrison at Wheeler Army airfield on Schofield Barricks in Wahiawa, Oahu, Hawaii. This bazooka range was used as a military maneuver area through the early 2000s. During the joint DLNR/Army inspection in 2014, the area was found to be "heavily contaminated on the surface with potentially explosive materials and munition debris. 4 different types of ordinance were observed to be present.

- 1.) M29A2 training rounds with dummy M405 fuses
- 2.) Practice 81mm mortars
- 3.) Other high explosive anti-tank rifle grenades
- 4.) M28A2 bazooka rounds with M404 fuse
- 5.) M30 white phosphorus bazooka rounds

At that time the Army noted the number of ordinance present on the ground "coupled with the accessibility to the public make for the potential for significant danger to public health and welfare." Estimated cost of clean-up in 2015 was \$2,353,000.00. The reason the Army recommended this clean-up was that it "presents an imminent and substantial endangerment to public health, or welfare, or the environment."

Any EIS should summarize the details and the status of that clean-up effort. Was it accomplished, is it now safe for the public and the environment, what and how much waste was collected from the area, where was it disposed?

4. This upcoming EIS should fully and transparently disclose the extent to which the ungulates exist in the area used by the Army for training exercises and the damage they have caused to date.

5. To my knowledge, from reading reports of the number and significance of cultural sites the investigation into this aspect of land use has been superficial. This EIS should include a thorough inventory of all historic sites in the area with photos and GPS location. It should also include a thorough discussion of the history and the cultural significance of Pohakuloa through historical time to the present. The EIS should also include a detailed discussion as to the current condition of each of these sites and how they have changed while the Army has been using these lands.

## **Concerns still Linger from the 8/2018 EA Finding of No Significant Impact**

1. I can see that a thorough evaluation of the potential ancient and historical sites has not been completed. There have been identified 1,198 sites, 822 have not been evaluated, and 364 are traditional Hawaiian sites, and that only 20% of the high impact zone has been evaluated. That no sacred sites were identified seems highly unlikely. This information should have affected the final determination of No Significant Impact.

2. While I understand that there has been numerous lava flows as well as 100 years of ranching in the zone, and that a collection of physical artifacts exists that was recovered through surveys, it seems that there very well could be long term impacts to the Island of Hawai'i through continued use of the area as a training area for the use and training of various weapon systems. These impacts would include, contamination of the ground water serving communities at lower elevations, contamination of soils from depleted uranium pieces and dust kicked up in the impact zone unknowingly (because you really don't know where all the DU lies) impacting both the soldiers and communities down wind, and the potential for ancient sites which have not yet been surveyed to be destroyed.

3. The Hawai'i County Council has passed various Resolutions that are also concerned about these potential impacts. Resolution 639-88 urges the military to address the potential hazards of DU at the Pohakuloa Training Area. This Resolution has 8 action areas including ceasing of live fire and clean up of DU that have not been adequately addressed in the past 9 years.

4. The State of Hawai'i land lease does not allow for storage of nuclear storage on site, even though the NRC has given Pokahuloa permit to possess DU on site. The Army has not been transparent with the public about the use of DU coated weapons being used currently on site. If the Army is not using DU coated weapons and firing them at the Pohakuloa Training Site, you should tell the public. That would make a huge difference in many people's minds of how they view your continued presence here

**Personal Observations:**

I live in the Kawanui Ahupua'a of Kona at the 1,500 ft. elevation and many times over the past 20 years my house has shook from the ordnance that has been used at Pokaukoa. I have also been out on my farm and literally felt the earth shake under my feet. Can this possibly trigger earthquakes or shift movements of magma beneath the surface? Please include such seismic and geological information in the EIS.

Thank you for taking all these concerns under consideration when laying out your plan for the EIS. I will look for updates on this process in our local news, unless you of course wish to update the stakeholders in a timely manner. Mahalo.

Sincerely,

Nancy Redfeather  
Kona, Hawai'i

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**From:** Michael Reimer  
**Sent:** Wednesday, October 7, 2020 9:23 AM  
**To:** USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
**Subject:** [Non-DoD Source] Comment on EIS for lease at Pohakuloa Training Area

All active links contained in this email were disabled. Please verify the identity of the sender, and confirm the authenticity of all links contained within the message prior to copying and pasting the address to a Web browser.

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October 7, 2020

To : US Army, Hawaii  
[USArmy.hawaii.nepa@mail.mil](mailto:USArmy.hawaii.nepa@mail.mil)

From: Michael Reimer, Ph.D.

---

Subject: Comments on EIS for Pohakuloa Training Area, Hawaii

I append here my comments for the Environmental Impact Statement being developed for the renegotiation for use of leased lands at Pohakuloa Training Area, Hawaii.

Please acknowledge receipt.

**COMMENT ON EIS CONSIDERATION FOR EXTENSION OF LEASE AT POHAKULOA TRAINING AREA (PTA), HAWAII**

By Michael Reimer, Ph. D.  
October 7, 2020

Submitted to: US Army, Hawaii-NEPA

Submitted by: Michael Reimer, Ph.D.

The Environmental Impact Statement (EIS) for this lease renegotiation will be fatally flawed if it does not comprehensively discuss the need, methodologies and schedule for cleanup of the toxic and waste materials put in place by the training activities. Even if there is an attempt to eliminate the cleanup requirements as exist in the current lease, this is an issue that cannot be avoided in the content of this EIS as it has tremendous human impact.

The U.S. Army has often boasted that it is a great steward of the `aina at PTA but has repeatedly failed to adequately demonstrate that claim on its own volition. That, of course, applies not only to maintaining stewardship of the physical lands but the requirement for respecting the social, cultural, and spiritual use of the lands. While this EIS is stated to primarily focus on the leased lands, those lands cannot be so easily separated from the entire PTA complex. Most importantly, it is known that environmental degradation of the leased area is further caused by any and all toxic materials grossly contaminating the natural environmental conditions present anywhere at PTA as those toxins are actively transferred either from or to those leased lands. This fact was noted in the judicial ruling (ROA Vol. 6 ICA 47:229-73) regarding failure to clean up the leased lands as required by the existing lease.

While the need for military training facilities is recognized, there is no reason that a harmonious use cannot be achieved without leaving behind a wasteland never again to be used for any cultural or community purpose. It is possible to negate any and all risks to the public, the soldiers, and the employees of PTA from contamination caused by the training activities. The face of military engagement is changing and that must be acknowledged. It is becoming less an engagement of bombs and bullets and more an economic and social battle especially among superpowers as we have clear evidence today of hacking computer systems to destroy infrastructure and hence, freedoms and liberties.

Human health and lives should not be cavalierly and unwittingly considered as acceptable collateral damage from the training activities. A discussion must be included to consider that if a lease renewal is to be granted, an environmental bond must be required to fully cover cleanup costs to return the `aina to its original condition. Simply stated, the `aina must be returned to its original useful condition before any lease extension is granted. This is a crucial point. If the U.S. Army claims that the land cannot be cleaned and restored to usable conditions for the public free of hazards and risks, then the environmental damage must be acknowledged as permanent and that must be clearly stated in the EIS. In other words, continued use of the leased lands would ensure permanent irreversible damage to the environment and this condition then singularly supports what must be the final conclusion of the EIS - that the lease continuation is not advised. It would be contrary to claimed stewardship that these lands shall exist only as a military toxic-waste dump with continuing and lasting health and safety risks to the public.

Waiting until such future time that the military abandon the PTA training site and expecting complete restoration or mitigation would be delusional. Requirement for cleanup now exists and has been largely ignored. There is no trust fund established to cover the costs of such cleanup that will undoubtedly fall to the State or County. To reiterate, the failure of the U.S. Army to abide by the original lease agreement clearly demonstrates that the Army's claim of good stewardship is a hollow claim and without substance. Part of the EIS discussion must include the good faith requirement that the Army will return the `aina to its original condition prior to termination of the existing lease and before a lease renewal can be considered.

The failure to reclaim land from unexploded ordinance (UXO) and other residual military toxins is not unusual on the Big Island or elsewhere in Hawaii for that matter. Note the repeated required cleanup of UXO at Waikoloa Village from remaining World War II training activities associated with the Waikoloa Maneuver Area. Cleanup is required of UXO on Department of Hawaiian Home Lands in Waimea (Kamuela 96743) inhabited by native Hawaiians. Further lack of complete and dedicated cleanup in Hawaii is evidenced by Kaho`olawe, where only partial effort was implemented, and ground-water contamination on Oahu from leaking underground fuel storage facilities threatening the drinking water source of the primary population center of Hawaii is known and must be immediately mitigated. These are just a few examples of poor military stewardship in Hawaii.

The need for proper cleanup at PTA has been expressed previously by the Hawaii County Council (Resolution 639-08) and in the Hawaii Courts (449 P.3d 1146 (2019)) but seemingly ignored by the U.S. Army. The EIS must address all efforts to clean up existing contamination and address how it will be ameliorated after each training session.

The use of highly toxic depleted uranium (DU) in the 1960s is a prime example of toxic and contaminated conditions already existing at PTA. There are several areas known as radiation controlled areas (RCAs) now sequestered with highly restricted entry that are known to contain depleted uranium. It must be noted that these areas are only approximations of where training with DU may have occurred and may actually include a portion of leased lands if a fuller determination under the principle of an abundance of caution had been conducted. In any event, the RCA areas have also been used for high-explosive weapon detonation, thus distributing the depleted uranium particulates over much larger areas outside the RCAs, including the leased lands. The total uranium content of soils several miles distant from the RCAs has been analyzed and shown to be composed of up to 30 percent depleted uranium (Nuclear Regulatory Commission on-line Adams public library, ML 120138S110). A plan to clean up and remove the DU likely exists to support the U.S. Army submission of a clean-up budget to the U.S. Nuclear Regulatory Commission (NRC) several years ago. The NRC can be contacted for that estimate and perhaps the clean-up plan as well. As I recall, the cost was insignificant at about \$60 million, small especially compared to the \$12 billion the U.S. Military says it invests yearly into Hawaii's economy. It is reasonable to presume that during the DU clean-up operations, other toxins and UXO could be removed at little additional cost.

The EIS must provide full disclosure, discuss adequate monitoring of all potential contaminated sites involving earth, air, and water, and exhibit absolute transparency. Again, the issue concerning DU comes to the forefront. Currently, the NRC has accepted a woefully inadequate monitoring program generated and based on numerous statements of misinformation by the U.S. Army. The primary distribution of DU particulates causing the greatest risk to the soldiers, and employees of the garrison at PTA and the public is by air. The current monitoring program ignores air transport but the distribution is so pronounced that even the evasive monitoring program currently applied has shown the aforementioned DU contamination. It becomes easy for the military to claim that the NRC has approved their program and to conveniently hide behind that mantle when it is clear that the program was established to minimize the chances of finding DU distribution outside of the RCAs. In effect, it adheres to the adage of "do not seek and ye shall not find." Then the claim of no required action is assured. I am sure that any reviewer of my comment will see the similarity of this logic of using defective testing to that used by current Administrative demands to stop testing for Corona Virus.

In sum, it is imperative for this EIS to fully discuss a requirement to clean the land at PTA of military toxins and hazards and to monitor that progress after every exercise. If the land is not cleaned up and restored to its primal state, fully usable for public purposes including spiritual and cultural activities, then the EIS must conclude that the lease shall not be continued.

# Rose Riedesel

please do not renew the lease to the military. clean up the toxic wastes and leave Big Island Hawaii.  
these are sacred lands. thank you for your consideration aloha



**From:** Renee Riley  
**Sent:** Wednesday, October 14, 2020 5:57 PM  
**To:** USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
**Cc:** Maui Peace Action  
**Subject:** [Non-DoD Source] No - for the PTA lease extension of Pohakuloa

Please - Stop the Bombing of Pohakuloa, land taken from the Hawaiian people. This land needs to be cleaned up of toxic waste, unexploded ordinances, and all remnants of the military practices for war and returned to the Hawaiian people. An important step in this process of de-militarizing Pohakuloa and Hawaii is to stop the PTA lease extension.

Instead of practices for war, Hawaii could be promoting peace by rejecting war as a solution and giving the original 23,000 acres of Pohakuloa to Hawaiians to build homes and grow sustainable crops. The military could be practicing for peace in Hawaii. Instead of target practicing, the military could be facilitating health clinics and shelters for the most vulnerable in our communities. Let the U.S. Military become a model of peaceful justice throughout the world.

A first stop would be to stop the PTA lease extension.

Aloha, Renee Riley (Kihei, HI resident & voter)

## Elene Rizzo-Kuhn

PMhakuloa Training Area (PTA) is vital to the community of Hawaii. They are there to support us in times of need and they always willing to give to the local community. Plus this area is a prominent area for our troops to practice military maneuvers, there is no place like this in the state of Hawaii. Without this training area how good would our troops be? Keep PTA open and lease the land back to them for another 20 years!

# Tara Rojas

Injustice and Militarization of Hawai'i must end now. No, no renewal nor retention of any land here by the military, period. Fifty years and counting of being negligent and atrocious stewards of precious Hawai'i land is unexcusable and ridiculous. FIFTY-PLUS YEARS of destruction, HEWA.

A lengthy Environmental Impact Statement is not needed to assess what has already been stated: military use and occupation wreaked and continues to wreak havoc on this environment - cease and desist NOW. LEAVE THE 'ĀINA ALONE AND STOP THIS HEWA. MILITARY - LEAVE HAWAI'I. Once the lease is up, leave. It is time to go. Long overstayed and unwelcomed.

All Hawai'i lands are NOT military-training grounds as all Hawai'i lands are SACRED SPACE AND PLACE.

RETURN THE LAND TO ITS RIGHTFUL OWNERS, THE NATIVE HAWAIIANS WHO ARE THE CARETAKERS OF THIS BOUNTIFUL AND LIFE-GIVING 'ĀINA.

Time to make things pono, reestablish justice and return Hawaiian lands into Hawaiian hands. Hawai'i is Hawai'i because of and for Hawaiians.

## Dale Ross

PTA is located in a highly sensitive and sacred place. I would not want the activities at PTA to impact sights and sounds of people enjoying the area, to include the park, Mauna Kea, Mauna Loa, as well as the science being conducted on both mountains. I understand also that the location has indigenous plants and creatures which should be protected from the activities at PTA.

## Jon Sabati

The military needs a place to train to become an efficient force to protect our nation and the citizens of the United States. I feel that the military also needs to address the needs of the local residents by meeting with people of our communities on the issues of gathering and hunting. PTA has been one sided on the endangered species in regards to native plants. Many areas have been fenced and now had become a wasteland of Fountain grass which is a dangerous wildfire fuel. I would like to see improvements in these fenced areas to where the habitat is cared for. If you truly care for the endangered plants in the fenced areas than the habitat improvement should be a priority. Public hunting opportunities should be offered more to the community as hunting is a good inexpensive way to manage animal numbers and with the constant increases in Hawaii's cost of living hunting has become a valuable resource for many families.

# Ellen Schomer

## Copied from PDF

To whom it may concern

I oppose the continued lease Of lands on Hawaii Island to the United States military. I'm deeply concerned about military expansion on the island as it is viewed as A very strategic location and very

useful for military exercises. These islands were united under one king in order to end warfare between

the islands and the various chiefs over 300 years ago. The military presence at Pohakuloa stands for some thing very different, sustaining and perfecting warfare. This does not Honor The legacy of the Hawaiian ancestors efforts to end warfare . These lands from the Hawaiian kingdom are to be in trust

for the benefit of native Hawaiians and the general public. The legality of how these lands were acquired

and the economic pressures that caused other entities to lease lands or sell lands to the military is both

questionable and tragic. We live in one of the most precious places in the world with unique ecosystems

that we cherish, Just as we cherish all human life. We do not need To become a huge military base for

eternity. As a Hawaiian island, the Aloha state , and as human beings we can do better than that. Ua Mau ke Ea o ka Aina i ka Pono .

Thank you, Ellen Schomer

**From:** Ellen Schomer  
**Sent:** Tuesday, September 29, 2020 1:00 PM  
**To:** USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
**Subject:** [Non-DoD Source] Pohakuloa Continued lease

To whom it may concern

I oppose the continued lease Of lands on Hawaii Island to the United States military. I'm deeply concerned about military expansion on the island as it is viewed as A very strategic location and very useful for military exercises. These islands were united under one king in order to end warfare between the islands and the various chiefs over 300 years ago. The military presence at Pohakuloa stands for some thing very different, sustaining and perfecting warfare. This does not Honor The legacy of the Hawaiian ancestors efforts to end warfare . These lands from the Hawaiian kingdom are to be in trust for the benefit of native Hawaiians and the general public. The legality of how these lands were acquired and the economic pressures that caused other entities to lease lands or sell lands to the military is both questionable and tragic. We live in one of the most precious places in the world with unique ecosystems that we cherish, Just as we cherish all human life. We do not need To become a huge military base for eternity. As a Hawaiian island, the Aloha state , and as human beings we can do better than that. Ua Mau ke Ea o ka Aina i ka Pono . Thank you, Ellen Schomer

Sent from my iPad

## Richard Schulherr

Could the Ospreys PLEASE avoid Waikoloa Village, especially at night, I am pretty tired of the Ospreys altogether; the damn things are so loud and flying SO LOW that you cannot continue a conversation, or watch a film, until they lumber on by. 138,000 acres for a dollar a year, and you have to screw with us? You are supposed to AVOID the village, not torture the people who live there by destroying their sleep. If you cannot manage to avoid a brightly lit village, go fly the damn things wherever they make them, the army has a LOT of land on Hawaii to make noise over where people don't live, they've shit lead all over the island, stop the insanity. Hot dogs need to be barbecued, not given airplanes that cost \$11,600 an hour to fly so they can annoy the populace. You aren't protecting us from a damned thing, except a decent nights sleep. This was supposed to be solved YEARS ago when the Village was reclassified; get with the program or find a CO who can. Whoever is in charge has risen to the level of their incompetence, prove me wrong by FIXING THIS FOOLISHNESS.

## Kathleen Slaughter

I am aware that the military are an important financial supporter of the Big Island. However, the bombing during evening hours and sundays are in violation of the states noise laws of my HOA as well as the state of hawaii and make it impossible to enjoy my home. Also, the military aircraft fly directly over my Waikoloa village home at very low altitudes, which recreational or tour aircraft are not allowed to do and are extremely loud, causing my windows to shake at times. I believe that the military need to follow noise and FAA rules to coexist peacefully with the residents of the island.

## Amy Smith

Bombing occurred at 11 pm at night. This is not okay. Outside of the hours, it's unclear to me why virtual training isn't similarly beneficial and would save the land from needless destruction. It would be preferable to not bomb land that is near volcanos and in an area that really is not at all desolate. Big Island may be less populated but it is still populated.

## Katrina Souza

I am strongly against the Army's intention to extend its lease of Pohakuloa.

I cannot believe in this day and age of Native Hawaiian awakening and activism that the Army and all its supporters think they are justified in continuing to desecrate lands at the foot of Maunakea.

It is mind-boggling that the U.S. military and the State of Hawaii have learned NO LESSONS from the bombing of Kahoolawe and the subsequent decades it has taken to clean up that island, which is still on-going. That island is uninhabitable due to the wonton destruction done to it by the military. The same will be the case for Pohakuloa. There is no intention by the U.S. military to EVER return Pohakuloa back to the people of Hawaii, to whom the lands were meant for.

The 23,000 acres in question have been blatantly abused since the original lease was granted in 1964 for \$1. As lands from the public lands trust, it was supposed to be used for Native Hawaiians and the general public. It is such an insult to all Native Hawaiians that these Crown lands have been used in such a violent and destructive way for all these decades. It is time to end the destruction now. It is time for the Army and the State of Hawaii to take responsibility to end live-fire training in Pohakuloa and begin to clean it up and give it back to Hawaii's people.

## M. Kalani Souza

I am in opposition to the continued military occupation of Hawaiian lands. I am opposed to the claim these are in fact "state lands". I believe identified Hawaiian community members should be allowed to be a greater part of the process for recovering the land, the community, and the long held relationship with America. I believe additional "illegal" land acquisitions, at this moment in history are not in the best interest of the United States, Other means must be found to negotiate a solution to the US presence in the Pacific theater, this needs not become a global conflict point.

**From:** Aaron Stene  
**Sent:** Sunday, September 6, 2020 12:02 PM  
**To:** USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
**Cc:** Donnelly, Michael O'Malley CIV USARMY IMCOM PACIFIC (USA)  
**Subject:** [Non-DoD Source] Pohakuloa Training Area NEPA/HEPA EIS Comments

**Importance:** High

Aloha,

I firmly support the lease extension to the U.S Army for 23,000 acres of state land up in Pohakuloa. The military has provided many benefits to the Big Island, such as being first/secondary responders to car accidents, brush fires, emergency incidents on Maunakea. In addition, it was military funding through the Defense Access Road program that spearheaded the improvements to Saddle Road (DKI Highway) to modern standards.

The military has brought many positive benefits to this island, but there has been concerns raised by the community about the cleanup of onsite residual depleted uranium, and the failure by the military, and the DLNR, to follow the conditions of the existing lease.

The new lease needs to address these community concerns going forward.

PTA is

crown jewel for military training in the Pacific rim. It would be jeopardize our national security if the lease for 23,000 acres is not renewed.

Sincerely,  
Aaron Stene

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Aaron Stene

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## Robert H Stiver

I have read with great interest Colonel Ann Wright's scintillating op-ed in the Honolulu Star-Advertiser of Monday, 10-12-2020. I support unequivocally and passionately Colonel Wright's principled position: "It is time for the state of Hawaii to get its 23,000 (Pohakuloa) acres back from the federal government."

anna sumida

THE STATE SHOULD TERMINATE ARMY'S LEASE ON LAND AT POHAKULOA

- Damage to native ecosystem
- Unexploded ordinances everywhere
- Damage to Native Hawaiian cultural sites
- Uranium and other harmful contaminants in the area

**From:** Jojo Tanimoto  
**Sent:** Thursday, October 8, 2020 1:54 PM  
**To:** dlnr.land@hawaii.gov; ATLR-PTA-EIS@g70.design; USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
**Subject:** [Non-DoD Source] PTA-1  
**Attachments:** PTA-1.pdf

Aloha  
Attached are my comments. Please confirm you have received.  
Mahalo Ms Jojo Tanimoto

Sent from my iPad

Ms. Jojo Tanimoto

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October 8, 2020

Mr. Russell Tsugi  
[dlnr.land@hawaii.gov](mailto:dlnr.land@hawaii.gov)

Dear Sir:

Re: Army Training at Pōhakuloa Training Area (PTA) EIS

Mahalo for the opportunity to comment regarding the Army's request to retain State lands for PTA Mission of readiness. My family and I live in Kawaihae, on Hawaiian Homelands. Over the years, we continually complain about impacts from military arrivals by land, sea and air. We have mentioned our complaints to the Waimea Military Liaison, but his authority does not include any support or mitigations for our community in Kawaihae. So, we have no Liaison since Stephen Troute passed away a few years now. My first comment, we have no communication with all the branches that train at PTA, and we wonder-why not? (Chaper 3.8-2 Environmental Justice).

#### BACKGROUND

This document says PTA and the lands for retention, are in the Hamakua Ahupua'a. According to Senate Bill 3052, HD2-ACT 288 (7/9/2012), Traditionally, there are 6 Moku (Districts), Kohala, Kona, Ka'u, Puna, Hilo and Hamakua. Today there are 9 County Districts. There are many Ahupua'a in each Moku and the boundaries change; but PTA is in the Kohala Moku.

#### Chapter 3.6 NOISE and VIBRATION

On the island of Hawaii map, Kawaihae is tucked away (almost like a neck on a body). It is sheltered by the Kohala Mountains on one side and the Pacific Ocean on the other. This unique feature creates an "echo" effect.

There are two concerns:

- a). Low flying aircraft over our homes, put our homes and foundation at risk. Low flying to me, is I can see the pilot from my dinner table. I live about 600 feet elevation.
- b) the alignment of flight over our homes at low level altitude, includes flying over the National Historic Pu'ukohola Heiau, in the Kawaihae National Park.

This impact needs to be included, included liability costs for replacement.

There was an incident that happened not too long ago that needs to be included in the EIS. The helicopters were practicing at very low altitudes (like in the movies). The blades of the aircraft

were churning waves, they were so low. Problem was, this affected the fish spawning activities that year.

### TRANSPORTATION ISSUES

Kawaihae features a two-lane highway system that services the resident population from Kohala to the Queen Ka'ahumanu Highway intersection at Kawaihae Road.

- 1) It needs to be noted that the Army Transport ship arrives and departs from the Kawaihae Harbor. Therefore, all the equipment, ammunition, etc. to PTA must utilize the same road infrastructure. It will be immensely appreciated that movement from the Harbor is publicized-by digital Highways signage at least a week in advance. That way, all the communities affected can plan to make adjustments for this movement.
- 2) It needs to be taught to ALL military personnel, that Kawaihae was once a thriving enterprising community and to expect burial sites along the Kawaihae Road thoroughfare. We observe the equipment and trucks come off the Harbor and then park on the shoulders on Kawaihae Road and block local traffic. Kawaihae Road is uphill with at least two bends where visualizing is at risk for local traffic trying to pass.

There should be no stopping on Kawaihae Road, especially near the burial sites. These sites were confirmed by the military survey for unexploded ordinance.

### SEA

According to "Pacific Worlds.com", (a verbal EIS document by Bishop Museum in creating the Kawaihae Road from Waimea to Kawaihae Harbor), there is a historic fishing habitat (called a Ko'a-not Kona like the tree) about 1 mile from the shoreline; from Malae Point to Kawaihae harbor. The Army transport needs to avoid this area; as do the Barge's and other sea craft.

- a) Local residents frequent to shoreline to dive as well. The turbulence in the water toss divers and could be dangerous. Usually there is no notice given when the transport will arrive or depart.
- b) During RIMPAC, the ships are known to drop anchor on the nearshore coral. The state DLNR-Aquatics Division has policies to avoid destroying the coral. Hopefully, this EIS will discontinue this action.
- c) There was an instance recently during RIMPAC, where training was conducted on pontoons. These sea raft created such a huge plume of water that showered our homes, landscape, vehicles and even vehicles on the highway-with no compensation for repairs. Hopefully, this won't happen again. Some of the homes have wood rot.

Thank you again for accepting these comments.

Sincerely,  
Ms. Jojo Tanimoto

cc: Gregory.T.Wahl.civ@mail.mil

Jeff Overton, Design 70, ATR.PTA.EIS@70.design

## Frances Tannen

Please do NOT renew this expansive, now almost destroyed, expanse of land back to the U.S. Army.



**THE BILLING INQUIRY PROCESS:**  
Frequently Asked Questions

**How long does the process usually take?**

We always try to resolve investigations in less than one month, but complex cases sometimes require additional time.

**How does it affect my account?**

We will remove the amount under review from your required payment due so that you do not have to pay the disputed amount while it is under investigation. Once the investigation is complete, depending on the outcome, the amount under review will be:

- replaced with credit issued by American Express, or
- replaced with a credit from the merchant, or
- reapplied to your account if the charge is found to be valid.

**Can I cancel the investigation if I'd like to cancel the investigation or have additional questions?**

Yes. To cancel the investigation, please call the phone number on the back of your American Express Card to speak with a Customer Care Professional. We are available 24/7. If you have any questions, please visit us at [americanexpress.com/inquirycenter](http://americanexpress.com/inquirycenter) for helpful information, tips, and Frequently Asked Questions.

**How will I know when the billing inquiry process is complete?**

We will send you a communication explaining the outcome of the investigation and any affect it may have on your account.

**From:** James Tatar  
**Sent:** Monday, September 7, 2020 2:51 PM  
**To:** USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
**Subject:** [Non-DoD Source] PTA lease extension  
**Attachments:** Pohakaloa Training Area.docx

Hello

I have attached a brief summary of my support for the lease extension for PTA.

Sincerely

James Tatar

Sunday September 6, 2020

I am writing about the future use of the military at PTA. There are many reasons why the military should or shouldn't have a lease extension. My feelings are that they have become more and more responsible stewards of the land over the years and have shown a sincere understanding of what they need to do.

The military also has a need for this land to continue training our military to be more effective without having to travel to distant shores or the difficulty of getting from one section of land to another for the same reason.

While many believe we can exist with no military here I strongly disagree with that viewpoint. I request that the lease be extended to allow a coupling of training sites in the saddle road area of this island where Pohakaloa Training Area is currently located as requested by the military.

Or we may find our grandchildren speaking a language other than English and Hawaiian.

And if history is an indicator, none of us will be protesting much of anything without getting imprisoned or shot.

Respectfully

James P. Tatar

**From:** Jane Taylor  
**Sent:** Sunday, September 27, 2020 10:59 AM  
**To:** USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
**Subject:** [Non-DoD Source] My windows are rattling 40 miles away!

All active links contained in this email were disabled. Please verify the identity of the sender, and confirm the authenticity of all links contained within the message prior to copying and pasting the address to a Web browser.

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I live in Waimea. My home is shaking continuously from the bombing today. (9/27/2020)  
This is stressful to myself & my animals. It is appalling that we are doing this to a unique island ecosystem in a place already damaged beyond sense. Please bring this to a stop.  
It is wrong to do it here!  
Jane Taylor

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*"Wisdom demands a new orientation of science and technology towards the organic, the gentle, the non-violent, the elegant and beautiful."*  
E.F. Schumacher.

## Ariana Thompson-Lastad

I am writing as a concerned citizen with the following recommendations.

1. The Army's lease requires that it "make every reasonable effort to . . . remove or deactivate all live or blank ammunition upon completion of a training exercise or prior to entry by the said public, whichever is sooner" and remove "all trash, garbage and other waste materials[.]" The EIS should fully disclose the extent to which the Army has complied with this lease provision and should include a thorough investigation of the entire area to determine whether there is any military debris (including unexploded ordnance) on the land that the Army has been using.
2. The EIS should disclose the status of the cleanup of the former bazooka range. Has it been completely cleaned up? Is it safe to enter? How much waste was collected? What did it comprise of? Where was it disposed?
3. The EIS should fully disclose the extent to which ungulates exist within the area used by the Army and the damage they have caused.
4. The EIS should include a thorough inventory of the historic sites in the area. It should include a discussion of the cultural significance of Pōhakuloa itself. And it should include a discussion as to how the condition of these sites has changed while the Army has used these lands.
5. The Army must consider a full range of alternatives, including returning these ceded lands back to the Department of Land and Natural Resources after restoring them to the condition that they were in prior to the Army's use of this land.

## Judy Tiktinsky

I believe a \$1 rent is insulting to the Hawaiians who own the land. A Hawaiian citizens advisory council could provide a forum to discuss issues of legitimate concern for everyone. Work with the community and pay a reasonable rent please. There is much I don't know as I am new to this island so perhaps these ideas are already being done. I do know that local communities can add a wealth of understanding and inform decision making for better outcomes. Equity requires a fair rent at a minimum. Thank you.

## Melissa Tomlinson

do not renew the lease! We need the military occupation to leave Hawai'i. We as human beings are facing so very much in the coming years and training camps for death, warfare and control is at the height of what needs to cease. In order for our species to have a future one can thrive in, we must protect land and people and in order to do that we need to defund the military and restrict their access to our future generations. Again, do not renew the lease, understand the true negative impact that will have if it's truly being considered. Listen to the community around you, there are so many reasons the lease shouldn't be renewing!

## Sharon Torbert

I am SO fed up and aggravated by the constant bombing going on for the last two weeks. Those of us who live in Waikoloa Village feel these blasts continuously and it feels like Godzilla stomping around in New York City. It is VERY disconcerting and you guys have taken away a good part of the quality of life here. It is usually peaceful and quiet, which is why I moved here originally. I've been here 15 years and this is the WORST it has ever been. Additionally, the military planes and helicopters flying over the Village is a HUGE annoyance. There's plenty of space for them to fly on either side of the Village and the arrogance and disrespect on the part of the military for the civilian residents here is disgusting.

## Wendy Volkmann

Thank you for considering my comments.

The Army's lease requires that it "make every reasonable effort to . . . remove or deactivate all live or blank ammunition upon completion of a training exercise or prior to entry by the said public, whichever is sooner" and remove "all trash, garbage and other waste materials[.]"

The EIS should fully disclose the extent to which the Army has complied with this lease provision and should include a thorough investigation of the entire area to determine whether there is any military debris (including unexploded ordnance) on the land that the Army has been using.

Additionally, the EIS should disclose the status of the cleanup of the former bazooka range. Has it been completely cleaned up? Is it safe to enter? How much waste was collected? What did it comprise of? Where was it disposed?

Third, the EIS should fully disclose the extent to which ungulates exist within the area used by the Army and the damage they have caused.

Next, the EIS should include a thorough inventory of the historic sites in the area. It should include a discussion of the cultural significance of Pōhakuloa itself. And it should include a discussion as to how the condition of these sites has changed while the Army has used these lands.

Last, the Army must consider a full range of alternatives, including returning these ceded lands back to the Department of Land and Natural Resources after restoring them to the condition that they were in prior to the Army's use of this land.

## Brian Vollert

The State of Hawaii should terminate the Army's lease at Pohakuloa. They have utilized the 23,000 acres for nearly 50 years and have shown an incredible lack of care for the Big island land. Why does the smallest state in the nation have to house the largest Military live-fire range? The State is not adequately compensated for the use of the land and the damage being inflicted upon it. The Army should do the right thing and return the land to the state.

## Brand W

My wish and order is for the military to stop the setting off of explosives within the state of Hawaii immediately. May god guide the hand of the men and women of state and federal government righteously in all that they do. Thank you for your time

## Kalyn Wadsworth

I oppose the Army Training Land Retention at Pōhakuloa due to the continued cultural and environmental harm it will bring. The use of this land for Army training practices brings unnecessary desecration to the land and poses risks for the surrounding ecological communities. The U.S. Army is also illegally occupying Hawai'i and therefore has no legal basis to continue using and desecrating Pōhakuloa. As stated in the documents presented, the Pōhakuloa Training Area (PTA), "...was formally established in 1956 through a maneuver agreement granted by the Territory of Hawai'i. In 1964, the State granted a 65-year lease of approximately 23,000 acres of land to the Army for military purposes." To continue using Pōhakuloa for U.S. Army training purposes would be to accept the wrongful and illegal colonization of the Hawaiian islands that led to it's U.S. statehood. The U.S. never had any right to Hawai'i as a territory or a state and should move forward to correct these illegal actions.

## Sam Warren

1. The Army's lease requires that it "make every reasonable effort to . . . remove or deactivate all live or blank ammunition upon completion of a training exercise or prior to entry by the said public, whichever is sooner" and remove "all trash, garbage and other waste materials[.]" The EIS should fully disclose the extent to which the Army has complied with this lease provision and should include a thorough investigation of the entire area to determine whether there is any military debris (including unexploded ordnance) on the land that the Army has been using.
2. The EIS should disclose the status of the cleanup of the former bazooka range. Has it been completely cleaned up? Is it safe to enter? How much waste was collected? What did it comprise of? Where was it disposed?
3. The EIS should fully disclose the extent to which ungulates exist within the area used by the Army and the damage they have caused.
4. The EIS should include a thorough inventory of the historic sites in the area. It should include a discussion of the cultural significance of Pōhakuloa itself. And it should include a discussion as to how the condition of these sites has changed while the Army has used these lands.
5. The Army must consider a full range of alternatives, including returning these ceded lands back to the Department of Land and Natural Resources after restoring them to the condition that they were in prior to the Army's use of this land.

## Joyce Weaver

Dear Officer Donnelly and United States Army Training Directors:

CONCREN: Spoiling 23,000 acres of natural resources.

Having read here of the value of this land in Army training routines, I ask the Army to respect, preserve and restore Nature's gifts in the Pohakulou Park.

You state the urgency of practise on this land for the purpose of saving lives. Please also consider preserving the lives of nature's gifts. I will not reproduce here facts regarding the dire need for the responsible use of land, of which you are currently apprised, you well know those facts. Please provide a good example of respect for nature to Americans . . .those who provide your supplies and salaries.

## danielle west

1. The Army's lease requires that it "make every reasonable effort to . . . remove or deactivate all live or blank ammunition upon completion of a training exercise or prior to entry by the said public, whichever is sooner" and remove "all trash, garbage and other waste materials[.]" The EIS should fully disclose the extent to which the Army has complied with this lease provision and should include a thorough investigation of the entire area to determine whether there is any military debris (including unexploded ordnance) on the land that the Army has been using.
2. The EIS should disclose the status of the cleanup of the Former Bazooka Range. Has it been completely cleaned up? Is it safe to enter? How much waste was collected? What did it comprise of? Where was it disposed?
3. The EIS should fully disclose the extent to which ungulates exist within the area used by the Army and the damage they have caused.
4. The EIS should include a thorough inventory of the historic sites in the area. It should include a discussion of the cultural significance of Pohakuloa itself. And it should include a discussion as to how the condition of these sites has changed while the Army has used these lands.
5. The Army must consider a full range of alternatives, including returning these ceded lands back to the Department of Land and Natural Resources after restoring them to the condition that they were in prior to the Army's use of this land.

## Wendi White

Clearly, neither the State as trustee or the Federal government as lessee have acted in good faith according to their responsibilities as stewards of this land. It has been damaged, polluted and abused. The \$1 contract is an outrageous act of imperialism. Reparations for the misuse of the Hawaiian people's lands is in order. Clean it up, pay a market rate going forward or vacate.

# Tracy Whyte

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The legacy of weapons testing right at the heart of this island, between the two mountains, in a critical habitat and where our fresh water aquifers can be affected has felt like overt ill will if not apathy towards Kanaka and local Kamaaina civilian health and safety for a while now. As the US military is largely responsible for bringing the methamphetamines (aka Ice) preexisting epidemic to these islands with devastating effects on local populations and culture. I would like to propose turning PTA into an outward bound/ renewable energy jobs/ reforestation of Ohi'a blight and ranching aina that has left the area drought prone and vulnerable training area for local populations struggling with substance abuse and homelessness. The program would ideally be run by vets who have overcome often dual diagnosis themselves (especially relevant because of the recent deaths due to Sars-Covid19 at veterans homes here in the archipelago obviously not taking care of those that have put themselves in harms way the way we should). No weapons testing necessary or war games in this utterly unique critical habitat (the whole archipelago should be protected like a world heritage site, geological and biological conservation zone rather than a tactical spot for US military training Ops...unless those ops are directly natural disaster relief and civilian population and conservation protection operations imho) You have a \$730 billion dollar taxpayer funded budget, please use it to help not harm local populations and lifeways otherwise your conduct in Hawai'i isn't very different than the military state tactics of tyrannical and authoritarian governments elsewhere in the world that you claim to protect us from as US citizens. Mahalo for your consideration on this matter, Local mother and daughter.

**From:** Tracy Whyte  
**Sent:** Wednesday, September 23, 2020 10:22 AM  
**To:** USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
**Subject:** [Non-DoD Source] Repurposing PTA

The legacy of weapons testing right at the heart of this island, between the two mountains, in a critical habitat and where our fresh water aquifers can be affected has felt like overt ill will if not apathy towards Kanaka and local Kamaaina civilian health and safety for a while now. As the US military is largely responsible for bringing the methamphetamines (aka Ice) preexisting epidemic to these islands with devastating effects on local populations and culture. I would like to propose turning PTA into an outward bound/ renewable energy jobs/ reforestation of Ohi'a blight and ranching aina that has left the area drought prone and vulnerable training area for local populations struggling with substance abuse and homelessness. The program would ideally be run by vets who have overcome often dual diagnosis themselves (especially relevant because of the recent deaths due to Sars-Covid19 at veterans homes here in the archipelago obviously not taking care of those that have put themselves in harms way the way we should). No weapons testing necessary or war games in this utterly unique critical habitat (the whole archipelago should be protected like a world heritage site, geological and biological conservation zone rather than a tactical spot for US military training Ops...unless those ops are directly natural disaster relief and civilian population and conservation protection operations imho) You have a \$730 billion dollar taxpayer funded budget, please use it to help not harm local populations and lifeways otherwise your conduct in Hawai'i isn't very different than the military state tactics of tyrannical and authoritarian governments elsewhere in the world that you claim to protect us from as US citizens. Mahalo for your consideration on this matter, Local mother and daughter

## Ellen Wilhite

I think the example of what happened with the training area on Oahu in Waihole Valley is instructive to the Pohakuloa situation. The terms of that lease required stewardship restoration and cleanup of the land after the lease concluded, but that was deemed too expensive. The proposed fix was to offer to buy out the land instead of cleaning it up. But the owners wanted to use it for farming, which had become impossible. See details from the 1992 court case in this article, "From Fertile Fields to No-Man's Land." <https://www.environment-hawaii.org/?p=3850>. My comment ends with: over and over again, the federal government promises the people of Hawaii that the military will care for our lands when they are finished blowing them up, only to later come up with excuses as to why it was not done as written in the contract. The Environmental Impact Statements, and Cultural Impact Assessments for Pohakuloa should be authentically completed, to take the actual situation into account; not just performed pro forma. And the letter of the law, the terms of the actual lease, should be upheld.

## Pete Wilson

There is absolutely why the boys need 23'000 acres to destroy and play with their toys. Their depredations of the environment, cultural heritage sites and the wildlife in that PUBLIC land has been of no benefit to the Hawaiin people.

## Dr. Noe Noe Wong-Wilson

Aloha,

Please accept my comments on the preparation of the EIS for the Pohakuloa Training Area.

1. In your consideration for Alternative 3, I would recommend you consider the impact of retaining a much smaller portion of the 23,000 acres of State of Hawai'i land under the renewed lease agreement. The portion which should be considered is the minimum amount of acreage to provide for transport between the Keamuku Parcel and the firing range area. All other portions of the State of Hawai'i lease should be returned.

2. If any portion of the State of Hawai'i lease should be retained, there must be consideration for a considerably higher payment for lease rent to the State of Hawai'i. \$1/65 years is not acceptable. In addition, a much shorter length of time should be considered, for example 10 years, at which time another renewal can be considered. Technology changes so quickly in the current age that long-term leases are not longer feasible.

3. Consideration should also be given to eliminating "live ammunition" in the weapons that are being used. Given modern technology, it must be a possibility to provide target practice without actually using those elements that make recovery of the land so dangerous. It will eliminate community concerns over unexploded ordinance and cleanup.

4. There must be a plan expressed about how cleanup of exploded and unexploded ordinance will take occur.

5. There must also be a plan and commitment for cultural practitioners to have access to and inspection of cultural and historic sites.

6. There must be a commitment for public access and education/information to be provided to the general public, primarily to residents of Hawai'i Island who are impacted by the presence of military training in this significant area of Hawai'i Island.

7. There must be a plan to mitigate noise which includes percussive impacts during live fire training. This kind of impact is felt from Waimea, Waikoloa and North Kona to Hilo. It is psychologically impactful to humans and the affect of this disturbance so close to a sensitive area for endangered species must be studied and documented. Noise abatement and proper notice must also be given to motorist who drive through the Pohakuloa area, without warning.

8. There should be consideration for a co-management scenario for State lands which include a citizen's group which is created to ensure that the military maintains its commitments to the lease agreement if it is extended, to the community, and provides input from the community to the military decision-makers. This will assist in providing continuity for management of this important resource area for Native Hawaiians and residents of Hawai'i Island, particularly since military personnel are only assigned to Pohakuloa for a few years at a time.

9. The No Action Alternative must be a vigorously considered option and not simply a statement of no consequence. Ultimately, the entire acreage of Pohakuloa, including the live fire range, must be scrutinized in a similar fashion. Emotional arguments about the hesitancy to send soldiers to active war without training if Pohakuloa is not available are not warranted. There must be an honest consideration of the cost, feasibility and other impacts of moving all the facilities that are currently situated on State land to another area - perhaps the Keamuku Parcel can be considered for this purpose.

Mahalo for your consideration.

# Colonel Ann Wright

October 14, 2020

U.S. Army Hawaii

Via email: [usarmy.hawaii.nepa@mail.mil](mailto:usarmy.hawaii.nepa@mail.mil)

As a retired U.S. Army Colonel with 29 years in the U.S. Army and Army Reserves, I am writing in response to the request for public comments for the scoping of the Environmental Impact Statement for the extension of the lease to the U.S. Army of 23,000 acres of State of Hawai'i land for the Pohakuloa Training Area on the island of Hawai'i.

I believe the scoping should include sections on:

- the extent of unexploded ordinance (UXO) clean up on the 23,000 acres from 65 years of military use in small arms weapons, Air Force bombing, artillery rounds,
- whether there is Depleted Uranium contamination on the 23,000 acres,
- whether there is toxic contamination of air, land and ground water from weapons shells and other debris from military operations,
- the extent of invasive species,
- whether there are cultural sites on the site,
- and the cultural significance of Pohakuloa itself.

In particular, I believe there must be an extensive section in the scoping on cultural practices that may have or could be occurring in the 23,000 acres. The 138 page February 2020 Master Plan for Puhakuloa Training Area, [https://home.army.mil/hawaii/application/files/3115/9355/6617/FNSI\\_PTA\\_RPMP\\_PEA\\_Jun2020.pdf](https://home.army.mil/hawaii/application/files/3115/9355/6617/FNSI_PTA_RPMP_PEA_Jun2020.pdf), lists the following traditional and contemporary cultural practices associated with the Saddle Region, in general, and PTA, specifically included (U.S. Army Environmental Command, 2013).

These aspects of cultural practices on the 23,000 acres should be addressed in the scoping document for the requested extension of the lease:

- Quarrying and stone tool manufacture
- Bird hunting
- Human burial
- Shrine construction
- Journeying (Huaka'i)
- Hunting of feral ungulates
- Scattering of cremation remains
- Ranching

The Pacific Consulting Services, Inc. study reported the presence of human burial from observation and oral traditions. This should be thoroughly investigated.

Searching for evidence of bird hunting with traditional hunting methods, a major traditional use of the area from prehistoric times into the early part of the 20th century (U.S. Army Environmental Command, 2013), should also be conducted.

As researchers surmised, and as the 2019 massive demonstration at Mauna Kea revealed, Native Hawaiians feel a "deep cultural attachment to the broad spectrum of natural and cultural resources" found in and around Mauna Kea (Maly, 1999 in U.S. Army Environmental Command, 2013).

That report recommended that the traditions, sites, practices, and continuing significance of Mauna Kea make it "eligible for nomination as a traditional cultural property under federal law and 13 policies" (Maly, 1999).

While much of the cultural resources including historic properties, cultural items, archeological resources, sacred sites and collections and associated records may have been destroyed during the 65-year lease of the property to the U.S. military by shooting, bombing and artillery shells, the scoping should discuss what was in the 23,000 acres 65 years ago when the lease was made and what remains now.

The scoping should address the significant impacts of the military use of the property (ie, bombing, shooting, artillery) to cultural resources such as human remains, funerary items, or items of cultural patrimony and any unmitigated loss or destruction of the property, sites, structures or objects.

Impacts on unique tangible and intangible cultural resources can be direct or indirect and should be addressed in the scoping. Certainly, the continuous bombing and shooting at PTA has resulted in "negative impacts by physical alteration, damage, or destruction of the site or traditional place, alteration of the surrounding environment by introducing visual, audible, or atmospheric elements, instituting other elements out of character with the resource; or reduction of access to traditional places" as defined by the NRHP.

Site-specific impacts to cultural resources should be addressed and avoided, minimized, or mitigated.

Thank you.

Ann Wright, U.S. Army Colonel (Ret)

## Peter Yanan

Study the sound effects on the highway when training is taking place. It is not bothersome to me or my wife, but I have heard that training and its something to be considered. We support the troops, and we hope the land that is owned by the state gets worked out so the troops can train here. Plus, there is alot of economic input to the local commuity, jobs, merchandise, contracts and more so this is important to keep!

## Savory Yarrow

With all respect due to those persons currently living on the Island of Hawaii who claim allegiance to foreign governments, including the United States of America, the primary militarily occupying government, I believe it is now time to relinquish control of this land to the rightful, legal representatives of the internationally recognized Kingdom of Hawaii, rather than the State of Hawaii. By leaving the infrastructure intact and supporting a peaceful transition for use of the property as a Hawaiian Kingdom governmental center, the US Military would garner some respect to offset its years of misconduct. The State of Hawaii is merely a puppet of the US Military, the organization primarily responsible for administering control over occupied territories, thus State governmental agencies should be amenable to this course of action if the Military endorses it through the State Military Courts. In Summary, I suggest that the 'No Action' option be shifted towards 'Affirmative Action' in recognition of Indigenous Hawaiians' existing State, The Kingdom of Hawaii.

**From:** Sandy Yee  
**Sent:** Wednesday, October 14, 2020 9:31 AM  
**To:** USARMY Wheeler AAF ID-Pacific Mailbox NEPA Comments  
**Subject:** [Non-DoD Source] Pohakuloa

Aloha, Why don't you use your own backyard i.e. The Pentagon, instead of polluting and destroying our precious land! Instead of putting so much effort into war why don't you put the effort into creating peace through diplomacy and respecting and learning to live with other nations. Mahalo

## Tatiana Young

Pōhakuloa should no longer be used for live fire training. The land should be returned to the Kānaka Māoli, the cultural stewards and caretakers of the land.

**Jim Albertini\***

*Recorded September 23, 2020, 20:47*

Mike Donnelly, this is Jim Albertini of Malu 'Aina XXX-XXXX. I tried to go to the open house and view the videos it kept stalling, there's nobody to talk to in terms of asking questions or clarifications and no way for the public to hear one another's concerns. So your open house wasn't very open for the community. And it's a pattern of stonewalling the public that I've seen you and others be a part of for decades around here, I'm not very happy about it. So you can call me and I'd let to get some explanation. And there is one specific thing I want to know about is - how is this Cantonment Area and Bradshaw - this little island in the center of the lease land - how is that owned by the Federal Government? Was that part of the Presidential Executive Order that was seized in '64? Anyway, let me know the depleted uranium and all the other types of things. And I want to know what's in that water well that's drilled 7 years ago, and nothing's been released on it. So you have a lot of answering to do and I've asked you a year ago to put me on the list for when things are going on at Pōhakuloa, your community alerts. You haven't even done that, that's a disgrace how you treat the public. Alright, aloha.

*\*Transcribed from recorded message.*

**Dexter\***

*Recorded September 23, 2020, 16:12*

Hey aloha, this is Dexter from Hilo. Yah, so I think you guys need support and check out - look at the natural and all the resources that get affected by the lands. And the other thing is, the economy, yah – cause we get hard times now. So we get plenty guys I know work up there. So, you should look at the workforce. That's it. Aloha. Thank you very much.

*\*Transcribed from recorded message.*

**Mia Evans\***

*Recorded September 23, 2020, 20:18*

Aloha. My name is Mia Evans. I live in Kamalō, Molokaʻi, Hawaiʻi and this is my testimony to the military who is occupying Pōhakuloa on Mauna Kea and I do not want you guys to continue to use that place. You guys have done too much for too long and you need to move to a different place, go to Mars already. Once again, I do not want any more destruction of Pōhakuloa, our water, our climate, our Mauna, please stop training at Pōhakuloa. Mahalo for listening to me and take care.

*\*Transcribed from recorded message.*

**Hanalei Fergerstrom\***

*Recorded September 23, 2020, 17:30*

Aloha, my name is Hanalei Fergerstrom last name is F-e-r-g-e-r-s-t-r-o-m. I'm the spokesperson for Na Kupuna Moku o Keawe. My address is XXX, Kurtistown, Hawai'i. My phone number is XXX-XXX-XXXX. My email is XXX. I'm calling in to tell you, I would like to be able to express my views on the EIS, but I need to have a hard copy sent to me as soon as possible. And the reason why is, is that I am the spokesperson for Na Kupuna Moku o Keawe which are located in all six districts of this island. I need a hard copy to take to them immediately to show them what's going on up there. Again, if there's any questions about this, please call me on my home XXX-XXXX. Thank you very much, Aloha.

*Recorded September 23, 2020, 17:33*

Hi, this is Hanalei Fergerstrom last name is F-e-r-g-e-r-s-t-r-o-m. I am the spokesperson for Na Kupuna Moku o Keawe. My mailing address is XXX, Kurtistown, Hawai'i 96760. And I'm calling because I need a hard copy of the EIS that we're speaking of. I need that as soon as possible, as I am the spokesperson for Na Kupuna Moku o Keawe. I have to travel to all six districts to show them what is going on and I can't do that online. So please send me as soon as possible a hard copy. Okay, thank you very much. Aloha.

**Tina Grandinetti\***

*Recorded September 23, 2020, 16:21*

Hi, my name is Tina Grandinetti and I am calling to leave a comment on the scoping virtual open house. I really want to just stress that this is absolutely unacceptable for public participation. There's no opportunity to ask questions or have a conversation or actually engage real members of the public. I am super appalled that it's just a website with pre-recorded slideshows - we could access that on our own. And the point of public participation is supposed to be that we can speak directly to you, hear directly from you, and make sure that our voices are being heard. I find this incredibly unacceptable. If kindergarteners can learn how to use Zoom, I think the U.S. Army should be able to do so as well. I hope that you can maybe schedule an actual virtual town hall / virtual open house very soon, because this is really important for our community.

*\*Transcribed from recorded message.*

**Corey Harden\***

*Recorded September 23, 2020, 16:25*

Hi this is Corey Harden in Hilo. XXX-XXXX. Things to address - I'll send these in writing, also: Past problems - describe the current condition of the lease area, that was the subject of the August 2019 Supreme Court decision. This concerned the failure of DLNR - Department of Land and Natural Resources – to conduct inspections at leased land at Pōhakuloa for almost 50 years. The area had abandoned, unexploded ordnance and other military debris. Describe steps that have been taken to clean up the area and comply with the Supreme Court decision, including any formal inspection, monitoring, and reporting process conducted by DLNR. Include the text of Judge Chang's 2018 circuit court decision and the Hawai'i Supreme Court August 2019 decision regarding the leased land. Looking at other past problems, list all lawsuits and their outcomes that have been filed regarding environmental concerns at Pōhakuloa since 1938. Also describe the status of all old military sites on the island - have they been cleaned up, are they still in mind to get cleaned up, what condition are they in? This should include the illegal dumping of munitions at O'okala Mill recently. Second thing - land control scenarios. Analyze impacts from various forms of land control, including but not limited to title, lease, easement, license, and condemnation by eminent domain. What types of oversight from DLNR or other entities would take place under each scenario? Compare the effectiveness of each type of oversight in protecting the environment. Specify how long each scenario would be in effect. Would it be temporarily or a forever thing? Analyze impacts in light of these timeframes. Describe what steps have already been taken by the Army towards each form of land control. And last, analyze the alternatives. If the Army loses has control over the land in question in this EIS, describe how training would be done. Thank you.

*\*Transcribed from recorded message.*

**Kyle Kajihira\***

*Recorded September 23, 2020, 16:13*

My name is Kyle Kajihira I'm calling on Wednesday, the 23<sup>rd</sup> of September about 4:13 p.m. I was expecting the scoping open house to be an interactive session and I'm quite disappointed that all I see are these recordings and text - things that we could read from the website, and there's no way to actually ask questions. This is not an acceptable public engagement process. So I would urge that the Army actually have a session utilizing webinar technologies and other online tools that would enable us to actually have a conversation. I'm having a difficult time even downloading or having the streaming video and recordings – um, it's taking forever. And it's not very informative for the kinds of questions that we'd like to ask. So that's my comment for today. So please, expand your process to enable some real conversation. Thank you.

*\*Transcribed from recorded message.*

**Gwendolyn Kim\***

*Recorded September 23, 2020, 17:47*

Aloha. This is Gwen Kim lifelong resident of Hawai'i. I'm calling to say that I strongly support the ruling of Judge Chang that the military needs to clean up their mess and destruction as they have said that they would do at the end of their permitted time. I'm also against any further extension of Army lease. So clean up your mess. You have a responsibility to the earth, and to the Hawaiian people to return the land in as best order as possible and follow through on your commitments. Aloha.

*\*Transcribed from recorded message.*

**Kimo\***

*Recorded September 23, 2020, 16:00*

Aloha, this is Kimo. I just want to provide my comments. I think you guys should support the troops and then study what would happen if the troops went away. Because it's important. Anyway, respect the land, the 'āina etc., but you guys gotta talk about and look at the troops. What if they no train? You gotta, you gotta consider that – important 'eh? So, look at the effect on everything the land, the community l'dat. So yeah okay, thanks. Kimo out.

**Mary Beth Laychak\***

*Recorded September 23, 2020, 16:25*

Hi, my name is Mary Beth Laychak. I'm a Waimea resident, and I think that in the EIS for Pōhakuloa Training Area - one aspect that the EIS should definitely feature and focus on is PTA's involvement in community and community engagement. I have collaborated in my, in my position in several instances, with the team at PTA with multiple events - engineers week, celebrating an engineering bash at the Thelma Parker library, multiple open houses at the Pōhakuloa Training Area for local students. They have some tremendous work that they've done on recycling and is of vast interest to the community. I think it would be unfortunate if this was not emphasized and looked at in the EIS and see how PTA is working with the community and also developing partnerships outside of the traditional, you know, what one would expect from the military. Another great example is the work on the Anuenue playground in Waimea. So, thank you for your consideration and mahalo.

*\*Transcribed from recorded message.*

**Nancy Martin\***

*Recorded September 23, 2020, 16:04*

Hi. I live in Waikaloa Village half of the year. My name is Nancy Martin and my number is XXX-XXX-XXXX. I live at XXX in Waikaloa Village and I am very unhappy about the fact that anything would be exploded above my home. The wind comes from the low side to the Kona side of the island, which brings any chemicals or powders or residue from an explosion towards the Village where I live. We have an elementary school here with K through eighth graders, and we have many elderly here as well. But we are thousands of people, and we are downwind from this facility. Also, you should know that we do hear a tremendous amount of helicopter noise above our Village, especially in the evening hours and we also often have trouble driving on the road when there is a convoy of military vehicles, and we are at the back of that. I've missed appointments and had to call a say I can't make it because I'm behind a convoy, so it definitely impacts us to have the training area there and I sincerely request that you discontinue at least the explosion of devices on our island. Thank you for your help, and please contact me if you'd like more information.

*\*Transcribed from recorded message.*

**Cynthia Massa\***

*Recorded September 23, 2020, 17:41*

Aloha. My name is Cynthia Massa, I am a registered voter since 1981 on the Big Island of Hawai'i. I definitely want to see an EIS for Pōhakuloa Training Area. They have not cleaned up their mess and all the explosives and munitions and everything they have not done anything to deserve any lease extension, new lease, any further use of Pōhakuloa Training Area. It's a tragedy what they're doing there. It's a tragedy, how the Army, Navy military all the training goes on there and the destruction that goes on there on Mauna Kea, on grounds that should be used for other things, not war games. Give the EIS for Pōhakuloa training center and give the specifics. I want to know what the pollution level is in the water tables and everything from their overuse and pollution and war games on Pōhakuloa. Thank you very much. No to further use of Pōhakuloa Training Area by the military, the U.S. military needs to clean up their mess and go home. Thank you.

*\*Transcribed from recorded message.*

**Denise Medeiros\***

*Recorded September 23, 2020, 16:00*

My name is Denise Medeiros. I am a resident of Hawai'i Island for 62 years. I am against continuing to lease to the U.S. government for Pōhakuloa Training. The area of question at this point. What is the reasons - there's plenty. I would like more information, on what their intent as far as the springs that are involved in this acquisition. As well as I want someone to truly investigate the history behind the United States co-op against a rightful kingdom and government that owns this land. As you are all doing to the rest of this world – that's mine. You do not belong there. You don't belong here. And I don't want to see you folks any further, but you folks are asking for continued and permanent lease, which I refuse. I will be refusing. I want to see what your folks answer is to my requests. What is the truth behind your presence here? And what is the reality of your acquisition to these springs?

*\*Transcribed from recorded message.*

**Steven Pommier\***

*Recorded September 23, 2020, N/A*

I'd like to ask about the EIS application. My name is Steven Pommier. My number is XXX-XXX-XXXX. I'd appreciate a call back. Thank you very much.

*\*Transcribed from recorded message.*

**Kahu Ricky\***

*Recorded September 23, 2020, 16:29*

Aloha. This is Kahu Ricky. This is, again regarding the State-owned land. This is a misnomer, and it's a fraud. The State of Hawai'i owns no land in Hawai'i - that needs to be changed. I am going to be addressing the State-owned land and military owned land. The military and the State owns no land. It is in a probate trust - the pure probate trusts for the indigenous practitioners, protected by section 106 and Public 103-150. These are supposed to protect the mineral - the mineral of the air, land and sea, which is allodial title metes and bounds for the Hawaiian Archipelago, which is protected for the Hawaiian Archipelago for the indigenous practitioners. Anything other than that is a fraud or is a fake. These are deceptive measures by the federal agents and the State agents to deceive the people of the Hawaiian Archipelago. The Hawaiian Archipelago is protected in a pure probate trusts for the Hawaiian indigenous people, beneficiaries and subjects. These need to be protected and any contract needs to be addressed with indigenous practitioners, all these contracts are fraudulent contracts. They do not have a first party contract from the indigenous people who live in a jurisdiction here in Hawai'i. The jurisdiction here in Hawai'i Archipelago is for the indigenous people on a pure probate trust - we have the pure probate trust. It is to protect our communities, our families. It is being mismanaged by the State and being deceived by the State. They own no land - the State owns no land, and we need to address this. This is going to the court system, the State is going to have to provide a probate, a pure probate trusts and also authority for that pure probate. XXX-XXXX is my phone number. Thank you.

*\*Transcribed from recorded message.*

**Matthew Kalani Souza\***

*Recorded September 23, 2020, 17:20*

Yes, my name is Matthew Kalani Souza, and I would like to see environmental studies done of the surface hydrology, where the water either permeates or continues along the surface into what areas? How will it be impacted by this change of status? Also concerned about the agricultural capacity. Want to see EIS about the agricultural capacities of the area both traditionally and what's possible today. Food resources are going to become critical in the upcoming years. And these higher altitudes that do have cloud cover and ensure some rainfall will become essential for food producing areas. Thank you.

*\*Transcribed from recorded message.*

**Julie Stowell\***

*Recorded September 23, 2020, 20:44*

Hi. This is Julie Stowell. I live in Hamakua. I wanted to comment on the EIS. I would like to ask for an extensive EIS. I'm concerned about additional lands being seized illegally by the U.S. military and used for ordinance practice, chemical pollutants such as depleted uranium and the effects that would have on groundwater and soil conditions and in fact on human health, given the winds of the Big Island. You know, Hawai'i was illegally seized; Hawai'i has never gone through the official procedures for recognition and becoming the 50th state. It was made a state in 1959. In fact, the U.S. Congress apologized to the Hawaiian people with a joint resolution that was passed by Congress and signed by President Bill Clinton - Public Law 103-150, the Apology Resolution - apologizing for the 1893 for the overthrow of the Hawaiian Kingdom. The unique relationship with the Hawaiians requires the U.S. to be extra cautious extra judicious, inclusive, and responsive to our consistent allies in the Pacific Theater. At a time when tensions are ramping up, we need alliances, and we need to reduce tensions with the native population, not increase them. Thank you so much.

*\*Transcribed from recorded message.*

**Colonel Ann Wright\***

*Recorded September 23, 2020, 16:16*

Aloha. This is Colonel Ann Wright. I'm a retired U.S. Army Colonel 29 years in the U.S. Military. I live on XXX in Honolulu. And I think it's time that the 23,000 acres that belong to the State of Hawai'i, at Pōhakuloa, be returned to the State of Hawai'i. I think the cultural value of returning that land is very important, and having been in the military for 29 years I know that our own military and our own Army sometimes conflate the value of various pieces of property and I do not think that this property that belongs to the State of Hawai'i is necessary for the national defense of the United States of America. And I think it should be returned to the State of Hawai'i. Thank you very much. My number is XXX-XXX-XXXX. It's Colonel Ann Wright and I live it XXX. Thank you so much.

*Recorded September 23, 2020, 16:28*

Aloha, this is retired Colonel Ann Wright from Honolulu, and I left a message a little while ago on my concerns about the EIS. But I also want to issue some concerns about this virtual open house - we certainly were expecting a webinar, where there would be an actual exchange of ideas and comments, but this pre-recorded stuff is really not right and you know I was in the Army 29 years and I know how you work with communities. I work with communities all over the U.S. and in communities in Europe and Central America, and this recorded stuff is just not the way to do it. It's just going to make people mad and there's a lot of concerns and this is not the way to do it. So I hope you will have another actual webinar, where people can actually see people and talk to people, rather than just reading more slide presentations that you attach. So, I certainly hope you'll consider these comments from somebody that's been in the Army probably longer than any of you all have. My number is XXX-XXX-XXXX – Colonel Ann Wright. Thank you.

*Recorded September 23, 2020, 20:55*

Hello this is retired Colonel Ann Wright from Honolulu and I just wanted to say I think that the open house that you all have on the issue of Hawai'i State lands in Pōhakuloa is pretty sadly that all we do is call in on a line and you record the stuff rather than having an interaction with people, it's not really the way to do it and I would certainly hope that before October 14, you actually create a way to have an actual dialogue about Pōhakuloa, but this isn't the way to do it. And I was 29 years in the Army and I expect more out of the Army than what this is. My number is XXX-XXX-XXXX.

**Ann Wurden\***

*Recorded September 23, 2020, 16:28*

Hi, my name is Ann Wurden, I'm a Waikaloa Village resident, and I would be interested in having the EIS – um - study address concerns of noise pollution. The effects it has on the area animals, the area residents, our vets with PTSD. I know that my dog is severely affected by the continually loud booming that happens. I would be interested in the effects of any fallout or misguided accidental fallout from training. I would also be interested if they are addressing the fact that they continually fly low over our residential areas. And I think that the noise pollution is detrimental to people living with that. Also, if there is any effect to our water source and water systems - headwaters - from their bombing, residual effect of soils and pollutants. And area unexploded ordinances - are those all within the training range? Thank you.

*\*Transcribed from recorded message.*

**Unidentified Caller #1\***

*Recorded September 23, 2020, 18:54*

This is a ridiculous sham of an attempt at a town hall, you f\* coward need to hold a proper one. If my 80-year-old mother can have a Zoom conference with her kindergarteners, you can Zoom with the people you're trying to talk to you f\* coward.

*\*Transcribed from recorded message.*

**Unidentified Caller #2\***

*Recorded September 23, 2020, 17:12*

I think that you should study culture and give all of the land back to the Hawaiians.

*\*Transcribed from recorded message.*

**Unidentified Caller #3\***

*Recorded September 23, 2020, 15:30*

Aloha. I'd like to know why the Office of Hawaiian Affairs isn't involved in this process. I want to mandate that they on behalf of our Hawaiian people must be there and do a report for us on what's happening right now. So again, we call upon the Office of Hawaiian Affairs for us as Hawaiian nationals. Kānaka Maoli. And our people of Hawai'i, get them involved in this process. And I'd like proof of that. Please. Mahalo. A hui hou.

**Unidentified Caller #4\***

*Recorded September 23, 2020, 20:54*

Yes. Vote yes on the EIS. And would like to look at some of the environmental issues. Thank you very much.

*\*Transcribed from recorded message.*

Ua mau ke ea i ka 'āina i ka pono. Genesis all people are separated by perimeters and pirimeters and parameters. Article 43 terms of the 1893 Liliu'okalani assignment of agreement. That needs to be investigated. Jurisdiction...jurisdiction of the United States. Jurisdiction of Hawaiian archipelago authority sovereign authority. Who has the authority, the pure authority that's pure jurisdiction? Who has pure allodial title? Who has pure probate? This all needs to be put in your thing, in your EIS. Air land and free soil just, just soil belongs to indigenous population with a pure probate. National boundaries metes and bounds need to be met. People, natural born, Hawaiian naturalism. People residing a culture a heritage of indigenous people lawfully living in their peaceful people living in the Hawaiian archipelago. Section 106. U.S. Public Law 103-150. Genocide acts of war. Hawaiian culture genocide, Hawaiian culture heritage genocide. This all needs to be investigated. These are crimes against the people by foreign agents. Signing foreign contracts on foreign jurisdiction that needs to be investigated. All terms, second, third party terms from the State are false - pseudo quasi. Without authority from that first person, the people with a pure probate who live in a jurisdiction of that contract. So we need to investigate the contracts and your jurisdiction of those contracts in the Hawaiian archipelago probe miles above our airspace. Our ocean and our land protected in a pure probate for the indigenous population, people who are still residing in continuously. This needs to be investigated. We would like to downsize the Army's footprint here. The Army, the Marines and the Air Force. We will be doing that soon. We'll be looking at evaluating all contracts for the future. There's peoples, indigenous population and the people of the islands will be residing on their islands again and the land. We'll be looking at BRAC base realignment and closure for Marine base at the Mokapu peninsula Waimānalo Bellows Pōhakuloa training, Mākua, possibly Kahuku. In the future we will need some training areas. We do need an agreement and we still need a treaty with indigenous people. We need to evaluate and we can start talking to the Department of Interior, Department of Secretary. Anything other than that is a violation of international law crimes being committed against indigenous people in an archipelago Hawaiian archipelago metes and bounds, allodial title, foreign agents that's illegal. If you tamper, inform. Thank you.

**Unidentified Caller #6\***

*Recorded September 23, 2020, 19:18*

Hi, your town hall is just a pre-recorded website and that is not enough for adequate public participation, so it should be redone. Thanks.

*\*Transcribed from recorded message.*

**Unidentified Caller #7\***

*Recorded September 23, 2020, 21:40*

Hi, I'm actually speaking in regards to the bombing of Pōhakuloa. I'm really concerned with the amount of like air quality and damage to the land that has affected the native plants and animals in the area, especially because in that area alone, there is maybe 1% of native plants in the entire world that only exists in that area, such as koa, māmane, a'ali'i and that one specific variety of a'ali'i. I think that know we are all concerned with the noise that it makes and the amount of pollution in the air that it causes from all the dust being kicked up. And of course, like our water system is underneath the ground in that area. It runs underneath from the Mauna Kea glacial iceberg and it flows underneath the ground out to us, and the public, and I feel that none of these things are being taken care of and I see no reason for the bombings to continue. That is all.

*\*Transcribed from recorded message.*

**Unidentified Caller #8\***

*Recorded September 23, 2020, 19:14*

Aloha, Mr. Army. My mana'o is to clean up the place as the Court ordered in the Supreme Court. You need to clean up the place, all of you. Restore it back to our kanaka on our Hawaiian land our ceded land. Our trust land. Please do that. And one thing more would you folks, stop bombing. We've been hearing the artillery over here and Waikōloa and Waimea, these last few days. I would really appreciate if you folks would stop all that. And it's about time that you give the land and the world back to God, please. It belongs to him. He wants it back. So I thank you very much. So clean up, restore our land. It was stated in the Supreme Court and the circuit court, it is law and you folks, are not abiding by the law. That's your own united states of America's law in the court of the America of the American of the United States, whatever you may call it. Please clean up the land, enough, enough of the desecration of our sacred 'āina. Thank you. Mahalo. You guys take care. Be safe and Aloha.

*\*Transcribed from recorded message.*

**Unidentified Caller #9\***

*Recorded September 23, 2020, 18:58*

Hi, I do not believe that the process you guys are currently doing is adequate public participation and it does not meet the requirements of the scoping process. So you need to redo the whole thing and have a Zoom meeting so the public can properly comments on the situation. Thank you.

*\*Transcribed from recorded message.*

**Unidentified Caller #10\***

*Recorded September 23, 2020, 20:14*

Aloha. Hello. My comments are going to be that no is no - Hawaiian land should be in Hawaiian hands, the land should be returned to the Native Hawaiian people so please give the land back. Clean up, what has been the destruction that has been left and let the Native Hawaiians take care of their land. Mahalo.

*\*Transcribed from recorded message.*

**Unidentified Caller #11\***

*Recorded September 23, 2020, 16:19*

Yes, I'm calling – um, I think the military's footprint is way too large in Hawai'i. On the island of O'ahu – major, way too big, and up on that PTA training site - it's ludicrous that we're bombing stuff in a state like Hawai'i. Maybe in Nevada where it's not populated like Hawai'i. It's not a tourist attraction. There's no whales, there's no dolphins, there's no monk seals. So to do all this where tourists are, and where people have to pay a lot of money to live - so I do agree - some of this military especially Marine Corps Base Hawaii - all their stuff should go up to that PTA training, instead of here in this bay where they're on vacation. It should be somewhere like that. We're a military family, have been for years and we didn't get the scenic view. And no, they just make bad neighbors in an environment like this, so bombing and stuff up - no. No, it's not realistic, and it's not okay. And my cell phone number is XXX-XXX-XXXX and I'll be happy to take a call back. But, no, military footprint, way too large in Hawai'i, and bombing and airplanes and flying over the houses touch-and-goes, especially on Marine Corps Base Hawaii, - bad neighbors, even for the sea life - just bad neighbors.

*\*Transcribed from recorded message.*

**Unidentified Caller #12\***

*Recorded September 23, 2020, 20:49*

Hi, I'm calling to make comments on the virtual town hall. Um, I believe that what you presented is inadequate public participation, um, I believe that people should be able to make their own comments. Um, regarding their concerns. And you need to really consider the opinions of the community. Please make it so that the public is able to adequately participate so you can actually get a better idea for what the community's concerns are. Thank you. Mahalo, goodbye.

*\*Transcribed from recorded message.*

**Unidentified Caller #13\***

*Recorded September 23, 2020, 20:11*

Aloha. I'm calling to record a message speaking towards the environmental impact statement for Pōhakuloa, I believe that this is an inadequate method to gather public information, and I would like to see more public hearings held also the EIS needs to contain an accurate assessment of the use of depleted uranium at the training site and that needs and the effects that has upon the watershed of the Big Island of Hawai'i. Again, more public input, public hearings, and a scope of use of depleted uranium at the training site. Aloha.

*\*Transcribed from recorded message.*

**Unidentified Caller #14\***

*Recorded September 23, 2020, 17:51*

Pōhakuloa should be closed and returned to the Hawaiian people. No more. No more destroying of the land. Thank you.

*\*Transcribed from recorded message.*

**Unidentified Caller #15\***

*Recorded September 23, 2020, 17:34*

I am against you guys renewing the lease at Pōhakuloa, and I would like the EIS to look into a soil and plant and all those kinds of things that have been damaged by the bombing and practices and exercises that the military has been doing up there. So if you guys, could please look into that and don't allow them to renew their lease, especially for \$1 for 65 years because they never contributed anything to Hawai'i, let alone the Hawaiians, let alone to the 'āina, other than blow it up. Thank you.

*\*Transcribed from recorded message.*

# **Responses to Scoping Comments**



# Army Training Land Retention at Pōhakuloa Training Area EIS Responses to Scoping Comments

This section of the appendix provides responses to substantive comments received during the 40-day public comment period on the NOI and EISPN from September 4 to October 14, 2020. The topics raised during the scoping comment period are grouped into the following categories: Purpose of and Need for the Proposed Action; Description of Proposed Action and Alternatives; Affected Environment and Consequences; EIS Findings; and Plans and Policies. Multiple people commented on each of the topics and those who commented on each topic is listed below the heading. The Army response to the substantive comments raised is provided under each topic.

## Purpose of and Need for the Proposed Action

### NATIONAL SECURITY

*Army response to comments received from: Jody Brissette; Aaron Stene; David B. Gomes; Amanda Dillon; Helen Jaccard*

Pōhakuloa Training Area (PTA) is the primary tactical training area for United States Indo-Pacific Command (USINDOPACOM), which integrates United States (U.S.) Army, U.S. Navy, U.S. Air Force, and U.S. Marine Corps forces within the USINDOPACOM region to achieve U.S. national security objectives while protecting national interests. PTA provides training capabilities to support home-station training and joint training with other U.S. and multinational military units and supports U.S. military activities throughout the Indo-Pacific theater. PTA also supports U.S. Army Pacific's Joint Pacific Multinational Readiness Capability for a high fidelity, joint and multinational maneuver and live-fire training venue as well as robust after-action reviews.

PTA's mission includes providing modernized training features and facilities for the U.S. Army Pacific and other USINDOPACOM units that train at PTA. These units require a full suite of ranges and maneuver training areas that support live-fire and non-live-fire training requirements. Each soldier and weapon system crew is assigned an annual or semiannual live-fire training and qualification requirement. Facilities at PTA support units by providing doctrinally required training to achieve required readiness levels prior to deployment. PTA is the only U.S. military training facility in the Pacific region where U.S. Army Hawaii (USARHAW) units can complete all mission essential tasks, use weapons systems at maximum capabilities, and conduct larger than company-sized live-fire and maneuver exercises.

PTA must be able to continue to support the following:

1. three battalion level units physically on site
2. two battalions conducting training simultaneously with one battalion in support

3. one battalion conducting collective maneuver and live-fire training at company level or higher
4. one battalion conducting collective maneuver and live-fire training at crew through platoon levels, and situational training exercise lanes.

The State-owned land contains maneuver area and key training facilities, some of which are not available elsewhere in Hawai'i, and provides access between major parcels of U.S. Government-owned land in PTA. Loss of the State-owned land would substantially impact the ability of USARHAW and other military services in USINDOPACOM to meet their training requirements and mission of combat readiness. Without the ability to meet minimal training requirements at PTA, training capabilities for home-stationed troops in Hawai'i would be insufficient and therefore readiness levels in the USINDOPACOM region would be compromised.

### **HAWAI'I'S STRATEGIC LOCATION**

*Army response to comments received from: Mauna Kea Moku Nui 'Aelike/Consensus Building 'Ohana; Native Hawaiian Legal Corporation; Michael Linnolt; Arlene Larrua; Brandie Oye; Shelly Aina; Joseph Nobriga; Scott Malis; Sasha Davis; M. Kalani Souza; Charley Ice; Amanda Dillon; Sofronio Estores; Helen Jaccard*

Hawai'i is a strategic location for national defense and rapid deployment of military forces. The USINDOPACOM region is critical to National Security and covers more of the globe than - and shares borders with all - the other five geographic combatant commands. Army training facilities in Hawai'i provide a range of environments that cannot be replicated at other U.S. training areas located in the continental United States or Alaska, specifically the tropical climate typically found throughout the Indo-Pacific region, and the remote and austere high-altitude environment of PTA on the island of Hawai'i. There are significantly high financial costs associated with the transportation of Army personnel and equipment stationed in Hawai'i to train in the continental United States or Alaska.

PTA is the only training area in the State that is classified as a Major Training Area. Loss of the State-owned land would substantially impact the ability of USARHAW and other military services in USINDOPACOM to meet their training requirements and mission of combat readiness. Without the ability to meet minimal training requirements at PTA, training capabilities for home-stationed troops in Hawai'i would be insufficient and readiness levels in the USINDOPACOM region would be compromised. **Chapter 1** of the Draft Environmental Impact Statement (EIS) provides additional information on the importance of Hawai'i and PTA to the U.S. military.

Relocating training elsewhere does not satisfy the purpose and need for the Proposed Action. **Chapter 1** of the EIS describes the purpose and need for the Proposed Action, and **Chapter 2** describes the Proposed Action and identifies the alternatives considered in the EIS.

## EIS PROCESS

*Army response to comments received from: U.S. Environmental Protection Agency, Region 9 Environmental Review Branch; County of Hawaii Planning Department; Temple of Lono; Hawai'i Peace and Justice; Environmental Caucus of the Democratic Party of Hawai'i; Na Kupuna Moku O. Keawe; Sierra Club, Hawai'i Island Group; Judy Tiktinsky; Seanna Pieper-Jordan; Sofronio Estores; Helen Jaccard; Brenda Bailey-White; Kyle Kajihiro*

The EIS addresses National Environmental Policy Act of 1969 (NEPA) and Hawai'i environmental laws (Hawai'i Revised Statute [HRS] Chapter 343 and Hawai'i Administrative Rules [HAR] Chapter 11-200.1), collectively referred to as the Hawai'i Environmental Policy Act (HEPA). The Notice of Intent was published prior to the September 14, 2020, effective date of the update to the regulations implementing the procedural provisions of the NEPA; therefore, the EIS is being developed in accordance with Council on Environmental Quality and Army NEPA implementation regulations in Title 40 Code of Federal Regulations (CFR) Parts 1500-1508 (1978 version) and Title 32 CFR Part 651, respectively.

Under HEPA, HRS Chapter 343 identifies the accepting authority as the agency with the greatest responsibility for approving the Proposed Action. The State-owned land is held by the Hawai'i Department of Land and Natural Resources (DLNR) Land Division, so DLNR is the accepting authority for the EIS. So as to not overlook any potentially significant impacts, the accepting authority has authorized the applicant to prepare an EIS without first completing an Environmental Assessment, as allowed under HAR Section 11-200.1-14(d)(2).

The scoping process initiated by publication of the Notice of Intent and the Environmental Impact Statement Preparation Notice (EISPN) is described in **Chapter 1** of the EIS. **Chapter 8** lists all parties contacted as part of the scoping effort, and all those who provided comments.

The scoping process fulfilled the requirements of NEPA and HEPA implementation regulations. Project information was made publicly available on the U.S. Army Garrison-Hawaii website, and a contact name and telephone number were provided for requests of materials in a printed format. The Army decided not to hold in-person public scoping meetings to protect public health and safety due to the coronavirus (COVID-19) pandemic. National and local orders and proclamations in response to the pandemic in the U.S. included the County of Hawai'i Mayor's COVID-19 Emergency Rule No. 11 (dated August 25, 2020), the State of Hawai'i Office of the Governor's Twelfth Proclamation Related to the COVID-19 Emergency (dated August 20, 2020), and Army guidance. An online EIS Scoping Virtual Open House was held on September 23, 2020, and included the same components that would have been made available at an in-person open house event. The Army believes that sufficient information was provided during the public scoping period and provided four ways for the public to comment: oral comments via a telephone line during the Scoping Virtual Open House; and written comments via the website, email, or U.S. Postal Service mail throughout the 40-day scoping period.

What constitutes a substantive comment is defined under HEPA. In deciding whether a written comment is substantive, the Army considered the validity, significance and relevance of the comment to the scope, analysis or process of the EIS, as noted in HAR 11-200.1-26(a). The EIS includes all scoping comments received (**Appendix B**), and responses to the substantive topics are also provided.

## Description of Proposed Action and Alternatives

### PROPOSED ACTION

*Army response to comments received from: Sierra Club, Hawai'i Island Group; Mauna Kea Moku Nui 'Aelike/Consensus Building 'Ohana; Jeffrey Mermel; Jim Albertini; Amy Smith; Alexandra Bernstein; Mary Macmillan; Charles Ota; Seanna Pieper-Jordan; Sofronio Estores; Brenda Bailey-White; Dr. Noe Wong-Wilson*

The Proposed Action (i.e., retention of up to approximately 23,000 acres of State-owned land at PTA) is a real estate action (administrative action) that would enable continuation of ongoing activities on the retained State-owned land. It does not include construction, modernization, or changes in ongoing activities. Additionally, the Proposed Action does not include changes to the use, size, or configuration of the special use airspace overlying the State-owned land. Current ongoing activities within the State-owned land were previously analyzed in separate NEPA documents, as applicable, and future construction, modernization, or changes in ongoing activities within the retained State-owned land would require separate NEPA (and potentially HEPA) compliance, as applicable.

The Proposed Action does not include a timeline for the length of retention because the timeline is unknown and subject to future negotiations between the Army and the State based on the land retention estates available to the Army (i.e., title, lease, easement, and license).

In addition to the Proposed Action and alternatives, **Chapter 2** of the EIS provides a summary of the training areas, facilities, utilities, and infrastructure within the State-owned land; current activities conducted within the State-owned land; and land retention estates available to the Army. The purpose of and need for the Proposed Action are explained in **Chapter 1** of the EIS, and **Chapter 3** of the EIS details the affected environment, including region of influence, and potential environmental consequences of the Proposed Action alternatives.

### ALTERNATIVES

*Army response to comments received from: U.S. Environmental Protection Agency, Region 9 Environmental Review Branch; Temple of Lono; Hawai'i Peace and Justice; Mauna Kea Moku Nui 'Aelike/Consensus Building 'Ohana; Helen Jaccard; Brenda Bailey-White; Dr. Noe Wong-Wilson; Michael Jones*

The EIS analyzes potential impacts from implementation of the Proposed Action (general action of retention of the State-owned land) via a range of reasonable alternatives (specific actions for retention of

the State-owned land). The alternatives vary in extent and location of retention based on the areas and features that are most critical to the U.S. military. Therefore, the alternatives are based on usefulness or criticality of the land, facilities, utilities, and infrastructure to the U.S. military, not acreage. The alternatives are Alternative 1 (full retention), Alternative 2 (modified retention), Alternative 3 (minimum retention and access), and the No Action Alternative (no retention), and provide a reasonable range of alternatives, including reduced action alternatives. As with the Proposed Action, the alternatives do not include construction or changes in ongoing activities. Additionally, the alternatives do not include modernization of ranges, facilities, utilities, and infrastructure on the State-owned land but do not prohibit future modernization.

Where available, the alternatives in **Chapter 2** include quantitative information (e.g., acres, miles), and **Chapter 3** contains additional quantitative information for each of the alternatives. Because the State-owned land and various alternatives are only portions of PTA, the number of activities conducted within those areas is not known for all features (e.g., miles travelled on roads, air quality emissions from vehicles and munitions). In these instances, the alternatives present qualitative statements regarding the assumed level of activity reduction associated with each alternative based on the land, facilities, utilities, and infrastructure that would not be retained under each alternative.

Reasonable alternatives must satisfy the purpose of and need for the Proposed Action, and meet the screening criteria, which are based on the purpose and need statements. **Chapters 1** and **2** of the EIS elaborate on the Proposed Action purpose and need statements and the screening criteria, which have been consolidated and simplified. Alternatives 1, 2, and 3 adequately meet the purpose and need statements and all the screening criteria. Alternatives that were considered by the Army but do not adequately meet one or more of the screening criteria (i.e., Alternatives 4: Retention of Only Access, Utilities, and Infrastructure; Alternative 5: Retention with Limits on the Types of Training and Future Modernization; and Alternative 6: Short-term Retention) are addressed in **Chapter 2** of the EIS but are not carried forward for detailed analysis.

Prior to the initiation of the EIS, the Army evaluated alternatives to the Proposed Action (e.g., virtual-only training, relocation of training infrastructure from the State-owned land to other parts of PTA, move training to other areas within and outside of Hawai'i), which are briefly discussed in **Chapter 1** of the EIS. These alternatives are not reasonable alternatives because they are alternatives to implementing the Proposed Action, not alternatives for implementing the Proposed Action. These alternatives do not satisfy the purpose and need statements and do not meet the screening criteria and therefore are not discussed in **Chapter 2** of the EIS. Likewise, alternatives that are not associated with the Proposed Action (e.g., return all of PTA to the State, change training types) are not reasonable alternatives and are not discussed in **Chapter 2** of the EIS.

The alternatives do not incorporate the various land retention estates because the conditions that would be negotiated between the Army and State for each land retention estate are not known and it would be extremely cumbersome and difficult for readers to understand, particularly for alternatives that might work best with a combination of land retention estates. Therefore, to account for the range of potential

impacts that could result from the Proposed Action alternatives, the EIS analyzes potential impacts associated with obtaining title, which generally would have the potential to result in the greatest impacts because it would not involve the conditions that could be associated with the other land retention estates. As discussed in the EIS **Section 3.1**, the Army considered whether different land retention estates would have greater impacts than title but did not identify any instances where this would apply.

The alternatives described in **Chapter 2** of the EIS do not include mitigation measures or additional resource protections; however, **Chapter 3** of the EIS discusses current best management practices, standard operating procedures, and mitigation requirements for existing actions within the State-owned land as well as potential mitigation measures for the alternatives.

**Chapter 2** of the EIS provides a brief summary of potential impacts (reductions) on training under each alternative so all resource area analyses use the same assumptions. The Proposed Action alternatives do not include actions for accommodating training lost due to return of the State-owned land to the State. If the Army proposes actions in the future to accommodate lost training, it would require separate NEPA (and potentially HEPA) compliance.

Because the Proposed Action is a real estate action, not a training action, the alternatives do not contain specifics regarding type and number of munitions used within the State-owned land. Alternatives 2 and 3 and the No Action Alternative include reductions in the land retained by the military, which would reduce the levels and types of training that can be conducted within the State-owned land retained. The EIS qualitatively discusses the potential impacts of the various alternatives on training, including munitions use and safety.

Preferred Alternative: The Army will identify the preferred alternative in the Final EIS and Record of Decision.

Alternative 3: Alternative 3 is not limited to providing access through the State-owned land because that would not meet several elements of the purpose and need statements and several screening criteria. Consequently, Alternative 3 includes access and minimum retention of vital training and support facilities and associated maneuver areas necessary for USARHAW to continue to meet its current training requirements on the State-owned land.

**Chapter 2** of the EIS identifies and describes the areas proposed to be retained under Alternative 3. Alternative 3 continues to include land use rights to enable the firing of indirect-fire weapons from U.S. Government-owned land northwest of the State-owned land into the impact area to enable continued use of firing points that are among the furthest from the impact area. These firing points allow for long distance firing by indirect-fire weapons, which is essential for training. Land use rights associated with firing from these firing points over State-owned land not retained would consider necessary safety requirements.

## **NO ACTION ALTERNATIVE**

*Army response to comments received from: Temple of Lono; Environmental Caucus of the Democratic Party of Hawai'i; Sierra Club, Hawai'i Island Group; Kelsey Amos; Christopher Baker; Danielle West; Amy Perruso; Antoinette Freitas; Bianca Isaki; Jerard Jardin; Sam Jacobs; Wendy Volkmann; Michael Gast; Erika Leaf; Ariana Thompson-Lastad; Sam Warren; Sydney Ji; Aurora Cole; Jonathan & Jamaica Osorio; Elisabeth Mehana Makainai; Mailani Makainai; AziaLynne Bird; Helen Jaccard; Dexter Ka'iama*

The No Action Alternative in the EIS elaborates on the impacts (including training impacts) associated with not retaining the State-owned land and associated training facilities, many of which cannot be located elsewhere within PTA due to operational, safety, and environmental constraints. Under the No Action Alternative, all of the State-owned land would be controlled and managed by the State following lease expiration.

Lease Compliance Actions and Return of Land: **Chapter 2** of the EIS includes additional information describing lease compliance actions (e.g., reforestation, removing signs, removing or abandoning structures, and removing weapons and shells) and return of State-owned land not retained that would be triggered via lease expiration under Alternative 2, Alternative 3, and the No Action Alternative. Per the lease, the lease compliance actions may occur after expiration of the lease. The lease includes provisions regarding the technical capabilities and economic costs associated with the lease compliance actions. The Army would conduct the lease compliance actions and return the State-owned land not retained in accordance with the lease or otherwise negotiated with the State. The parameters for lease compliance actions would be defined and determined after completion of the EIS. It is assumed lease compliance actions would occur under various Department of Defense programs. Additionally, it is assumed removal, investigation, and cleanup of hazardous and toxic materials and wastes, including munitions and explosives of concern, within the State-owned land not retained would occur under the Comprehensive Environmental Response, Compensation, and Liability Act.

## **LAND RETENTION ESTATES**

*Army response to comments received from: Temple of Lono; Hawai'i Peace and Justice; Sierra Club, Hawai'i Island Group; Helen Jaccard; Dr. Noe Noe Wong-Wilson; Alexandra Bernstein*

The EIS clarifies that the current lease of State-owned land cannot be renewed or extended under current State laws. If the Army decides to proceed with the Proposed Action, the Army would negotiate with the State regarding one or more new land retention estates (i.e., title, lease, easement, and license) and methods (e.g., purchase, negotiation, donation, exchange, eminent domain) for the selected alternative. Each of the parties, the Army and State, would negotiate based on its needs and obligations as is typical of any negotiation. Because negotiation options cannot be known prior to initiation of negotiation, which cannot formally begin before the conclusion of the EIS process, the potential conditions, duration, land valuation methods, and fees associated with the various land retention estates are outside the scope of the EIS.

Hawai'i County is not the land owner of the State-owned land; therefore, the Army would not negotiate with the county.

The EIS does not consider the potential land retention methods for conducting the various land retention estates because the potential impacts on the State-owned land would be the same regardless of the land retention method.

## Affected Environment and Consequences

### LAND USE

*Army response to comments received from: U.S. Department of the Interior, National Park Service, National Natural Landmarks Program; Department of Hawaiian Home Lands; Department of Health, Hazard Evaluation and Emergency Response Office; Temple of Lono; Maunakea Observatories; Hawai'i Peace and Justice; University of Hawai'i Institute for Astronomy; Sierra Club, Hawai'i Island Group; Native Hawaiian Legal Corporation; Sheena Lopes; Jeffrey Mermel; Jon Sabati; Keith Okamoto; Laurie Jenkins; Jim Albertini; Henrietta Jeremiah; Jerard Jardin; Hanalei Fergerstrom; Joel Nakamoto; Maka'ala O Ka Hana Wai; Mauna Kea Moku Nui 'Aelike/Consensus Building 'Ohana; Native Hawaiian Legal Corporation; Carl Christensen; Michael Linnolt; Aaron Stene; Kelsey Amos; Christopher Baker; Danielle West; Amy Perruso; Antoinette Freitas; Bianca Isaki; Selah Levine; Carl Geise; Wendy Volkmann; Michael Gast; Erika Leaf; Michael Reimer; Ariana Thompson-Lastad; A'ohē 'Oihana; Sam Warren; Sydney Ji; Aurora Cole; James Anthony; Elisabeth Mehana Makainai; Mailani Makainai; AziaLynne Bird; Amanda Dillon; Sofronio Estores; Helen Jaccard; Dr. Noe Noe Wong-Wilson; Dexter Ka'īama; Linnea Heu; Nancy Redfeather*

**Section 3.2**, the Land Use section of the EIS, encompasses recreation (including hunting), encroachment management, vistas, and land tenure. Hunting is the primary recreational use in State-owned land at PTA; which unit(s) are open for hunting depend on military training schedules. Public hunting within PTA is governed by State rules, and the schedule is subject to training schedule compatibility. State management of hunting areas within PTA is outside the scope of this EIS.

Potential impacts on visual resources, including the Mauna Kea National Natural Landmark, are analyzed in **Section 3.2**.

The EIS describes the State-owned land currently leased by the Army based on federal, State of Hawai'i, and County of Hawai'i laws and classifications of land tenure. The EIS presents the current federal and state laws and legal rulings that affirm the State-owned land at PTA was legally transferred to the State. The EIS analyses is based on these existing legal precedents.

The parcel descriptions attached to the lease provide the legal definition of the land, based on land surveys. The lease identifies DLNR as the lessor of the State-owned land. On the eastern boundary of the area defined as Parcel C in the lease, 250 acres appear to be owned by the State of Hawai'i and managed

and administered by DHHL. **Section 3.2** of the EIS provides further information regarding the status of the lease.

Ceded land was either Crown or government land until 1893, when the Hawaiian Kingdom was overthrown. Tenure of ceded land has evolved over time and ownership is currently held by both the State and federal governments. An overview of ceded land tenure in Hawai'i is provided in EIS **Section 3.2**.

The Proposed Action stated in the EIS, "to retain... State-owned land at PTA," does not specify the estate(s) and method(s) of land retention. This is due to several factors, including (1) negotiation options cannot be known prior to negotiations being initiated, which cannot formally begin before the conclusion of the EIS process, (2) the potential conditions associated with the various land retention estates are not known and would be subject to negotiation, and (3) the final negotiation could include multiple land retention estates and methods. Army Regulation 405-10 authorizes various estates for Army retention of non-federal government-owned land including title (full ownership), lease, easement, and license.

The Army strives to comply with lease terms and was not a party to the lawsuit brought by Ching and Kaha'ulelio (referred to as Ching v. DLNR). **Section 3.5** of the EIS summarizes the current conditions and potential impacts related to hazardous materials and wastes on the State-owned land.

In 1964, all lands in the State were classified into four land use districts: urban, rural, agricultural and conservation. The conservation district encompasses lands in the forest and water reserve zones established prior to 1957. The conservation district statute, HRS Section 183C, considers lawful use of lands established prior to October 1, 1964 as nonconforming. The lease for PTA was executed prior to that date and therefore has not been required to conform to the statute. HAR Chapter 13-5 provides for authorization of additional uses as discussed in EIS **Section 3.2**.

## **BIOLOGICAL RESOURCES**

*Army response to comments received from: U.S. Environmental Protection Agency, Region 9 Environmental Review Branch; Maunakea Observatories; Hawai'i Peace and Justice; Sierra Club, Hawai'i Island Group; Hawai'i Island Chamber of Commerce; Mauna Kea Moku Nui 'Aelike/Consensus Building 'Ohana; Native Hawaiian Legal Corporation; Jared Bernard; Jody Brissette; Jon Sabati; Kelsey Amos; Christopher Baker; Danielle West; Amy Perruso; Antoinette Freitas; Bianca Isaki; Shelly Aina; Wendy Volkmann; Michael Gast; Erika Leaf; William Greentree; Cindy Kester; Ariana Thompson-Lastad; Sam Warren; Sydney Ji; Colonel Ann Wright; Aurora Cole; Amanda Dillon; Seanna Pieper-Jordan; Linnea Heu; Nancy Redfeather; Joel Nakamoto*

Federal activities are guided by Endangered Species Act as discussed in EIS **Section 3.3.2**. All U.S. military installations are required to have an *Integrated Natural Resource Management Plan* (INRMP) to provide technical guidance to those responsible for land use planning and decision-making. The INRMP incorporates information and responsibilities outlined in biological opinions issued by the U.S. Fish and Wildlife Service under Section 7 of the Endangered Species Act. Obligations of the federal government

with respect to all trust resources at PTA are spelled out in the INRMP and pertain to the State-owned land until the land is no longer under U.S. military control.

Conservation efforts have been undertaken at PTA for threatened and endangered plant species. Approximately 28 miles and 8,500 acres of ungulate exclusion fencing has been installed to form seven units located in part, or entirely, on State-owned land (**Figure 3-5**). Fencing enclosure areas allow the Army to manage sensitive species more efficiently and effectively. The distribution of native plants and animals within the State-owned land is described in the EIS, and federally- and State-listed species identified in previous surveys provided in **Tables 3-3, 3-4** and **3-5**. While approximately 5,095 acres of State-owned land in PTA was designated as Palila critical habitat in 1977, *Loxioides bailleui* (finch-billed honeycreeper) is generally seen only at elevations well above those of the State-owned land at PTA (**Figure 3-5**). There have been no observations of this species on State-owned land at PTA.

Hunting opportunities are provided to the public in designated areas outside the ungulate exclusion fencing units. Measures to address ungulate control are included in the existing INRMP. The EIS considers the impact of potential changes to access for hunting on the State-owned land related to the alternatives in **Section 3.2**.

#### **ARCHAEOLOGICAL AND HISTORIC RESOURCES**

*Army response to comments received from: U.S. Environmental Protection Agency, Region 9 Environmental Review Branch; Sierra Club, Hawai'i Island Group; Mauna Kea Moku Nui 'Aelike/Consensus Building 'Ohana; Native Hawaiian Legal Corporation; Ariana Thompson-Lastad; Sam Warren; Sydney Jj; Colonel Ann Wright; Charley Ice; Seanna Pieper-Jordan; Sofronio Estores; Jojo Tanimoto; James Head; Nancy Redfeather*

The EIS presents a thorough review of baseline archaeological and historic resource conditions, including summaries of previous archaeological studies conducted within State-owned land and an inventory of identified archaeological and historic architecture properties. The EIS includes this information in narrative and tabular form. The scope of this EIS covers the alternatives of full to minimum retention of the State-owned land only, and addresses only the current baseline conditions for the State-owned land.

The Proposed Action for this EIS is a real estate action. It does not include proposed changes to the current levels and types of activities conducted at PTA. Potential future actions that are not part of the current Proposed Action would require separate NEPA analysis.

Rigorous avoidance measures for historic properties known to be extant within PTA are defined in two documents: *Programmatic Agreement Among The U.S. Army Garrison, Pōhakuloa Training Area, U.S. Army Garrison, Hawaii, The Hawai'i State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding Routine Military Training Actions and Related Activities at United States Army Installations on the Island of Hawai'i, Hawai'i and Integrated Cultural Resources Management Plan for the U.S. Army Garrison*. The EIS summarizes the applicable elements of the following documents, which can be referenced by the public:

[https://home.army.mil/hawaii/application/files/7215/6262/2746/USAG-P\\_ICRMP\\_Hawaii\\_Final\\_Signed.pdf](https://home.army.mil/hawaii/application/files/7215/6262/2746/USAG-P_ICRMP_Hawaii_Final_Signed.pdf);  
[https://home.army.mil/hawaii/application/files/3916/0210/3455/USAG-P\\_Hawaii\\_Island\\_Training\\_PA\\_Signed\\_27SEP18\\_PUBLIC\\_RELEASE\\_VERSION.pdf](https://home.army.mil/hawaii/application/files/3916/0210/3455/USAG-P_Hawaii_Island_Training_PA_Signed_27SEP18_PUBLIC_RELEASE_VERSION.pdf)

The EIS discusses Proposed Action in relationship to relevant historic preservation laws, including the National Historic Preservation Act (NHPA) and Hawai'i Revised Statutes Chapter 6E.

## **CULTURAL RESOURCES**

*Army response to comments received from: County of Hawaii Planning Department; Hawaii County Council, District 9 (North and South Kohala); Temple of Lono; Ola'a First Hawaiian Church; Hawai'i Peace and Justice; Mālama Mākuā; Sierra Club, Hawai'i Island Group; Maka'ala O Ka Hana Wai; Hawai'i Island Chamber of Commerce; Mauna Kea Moku Nui 'Aelike/Consensus Building 'Ohana; Native Hawaiian Legal Corporation; Et Al. Native Tenants; Tara Rojas; Sheena Lopes; Cat Orlans; Thomas Lenchanko; Donna Grabow; Kelsey Amos; Christopher Baker; Danielle West; Amy Perruso; Antoinette Freitas; Bianca Isaki; Jim Albertini; Shelly Aina; Ellen Schomer; Carol McMillan; Wendy Volkmann; Michael Gast; Erika Leaf; Kinion Wahineali'i Carroll; Savory Yarrow; Ellen Wilhite; Colonel Ann Wright; M. Kalani Souza; Aurora Cole; Jonathan & Jamaica Osorio; Sofronio Estores; Helen Jaccard; Hanalei Fergerstrom; Dr. Noe Noe Wong-Wilson; Dexter Ka'iama; Pearl Kaiama; Jim Albertini; Jojo Tanimoto; Kahumu Rasi*

Archaeological surveys and Cultural Impact Assessments (CIAs) are concerned with distinct and different foci. Archaeological studies are primarily concerned with historic properties and tangible heritage, whereas CIAs consider cultural practices and beliefs, which can be associated with a specific location but are also often intangible in nature. Articles IX and XII of the State Constitution, other state laws, and the courts of the state require state government agencies to protect and preserve cultural beliefs, practices, and resources of native Hawaiians and other ethnic groups. To assist state decision makers in the protection of cultural resources, HRS Chapter 343 and HAR 11-200.1 rules for the environmental impact assessment process require project proponents to assess proposed actions for their potential impacts to cultural properties, practices, and beliefs.

This process was clarified by the Act 50, Session Laws of Hawai'i 2000, which recognizes the importance of protecting native Hawaiian cultural resources and requires that an EIS include the disclosure of the effects of a proposed action on the cultural practices of the community and state, and the native Hawaiian community in particular. Specifically, the Environmental Council suggested the CIAs should include information relating to practices and beliefs of a particular cultural or ethnic group or groups. Such information may be obtained through public scoping, community meetings, ethnographic interviews, and oral histories. The EIS highlights the process undertaken to prepare a CIA for the Pōhakuloa area.

The CIA (**Appendix E**) presents a comprehensive collection of information about the state lands, federal lands, and cultural landscape as the geographic extent of study. It fills gaps in data from previous studies by thoroughly identifying place names and cultural resources found in English and Hawaiian language resources. The comprehensive list of data serves as a critical baseline from which cultural resources and

traditional practices were identified. Numerous historic maps previously excluded from past studies are included in the CIA. Appropriate information concerning the related ahupua'a was collected, focused on areas near or adjacent to the project area, and a thorough analysis of the project's potential impacts to cultural resources and traditional practices (including access rights) was conducted. All the comments from the scoping period related to these issues are summarized in the CIA and were responded to within the analysis framework. Summaries of interviews with recognized cultural experts are included in the CIA.

The State and its agencies have an affirmative obligation to preserve and protect the reasonable exercise of customarily and traditionally exercised rights of Hawaiians to the extent feasible. State law further recognizes that the cultural landscapes provide living and valuable cultural resources where native Hawaiians have and continue to exercise traditional and customary practices, including to hunting, fishing, gathering, and religious practices. In *Ka Pa'akai*, the Hawai'i Supreme Court provided government agencies an analytical framework to ensure the protection and preservation of traditional and customary native Hawaiian rights while reasonably accommodating competing private development interests. The CIA further describes how this is accomplished.

Any analysis of land ownership is outside the scope of these documents. The EIS provides an overview of land tenure in Hawai'i in **Section 3.2**, but land ownership history is not analyzed.

#### **HAZARDOUS MATERIALS AND WASTES**

*Army response to comments received from: U.S. Environmental Protection Agency, Region 9 Environmental Review Branch; Department of Hawaiian Home Lands; Department of Health, Hazard Evaluation and Emergency Response Office; Temple of Lono; Hawai'i Peace and Justice; Environmental Caucus of the Democratic Party of Hawai'i; Sierra Club, Hawai'i Island Group; Maka'ala O Ka Hana Wai; Mauna Kea Moku Nui 'Aelike/Consensus Building 'Ohana; Native Hawaiian Legal Corporation; Carl Christensen; Alexis Cox; Kelsey Amos; Christopher Baker; Danielle West; Amy Perruso; Antoinette Freitas; Bianca Isaki; Dana Keawe; Wendy Volkmann; Michael Gast; Erika Leaf; Lorrie Beggs; Kalai S. Posiulaj; Kinion Wahineali'i Carroll; Michael Reimer; Ariana Thompson-Lastad; Sam Warren; Sydney Ji; Colonel Ann Wright; Mailani Makainai; AziaLynne Bird; Seanna Pieper-Jordan; Sofronio Estores; Brenda Bailey-White; Dr. Noe Noe Wong-Wilson; Jim Albertini; Michael Jones; Nancy Redfeather*

The Army adheres to federal requirements to address potential spills and releases including the Installation Restoration Program, Underground Storage Tank/Aboveground Storage Tank Inspection Program, and the Spill Prevention Control and Countermeasures/ National Pollution Discharge Elimination System. If spills occur at PTA, the extent of the spill is investigated, characterized, and remediated in compliance with regulatory requirements, thus minimizing potential pollutants.

The Army has been working with and continues to work closely with the National Response Center and the State of Hawai'i Department of Health to identify soil and surface water contamination. The Army will continue this collaborative effort to ensure the protection of human health and the environment.

The Resource Conservation and Recovery Act of 1976 provides guidelines and standards for the disposal of hazardous waste. This act is the federal program for management and control of hazardous wastes from “cradle to grave” and is the basic law for the regulation of hazardous waste management practices. The Department of the Army Pamphlet 200-1, *Environmental Protection and Enhancement* governs the use, transport, and disposal of all hazardous materials and regulated waste by military or civilian personnel and on-post tenants and contractors at all Army facilities. In addition to these procedures, USAG-HI follows its own Installation Hazardous Waste Management Plan.

Guidance and procedures for the remediation of Formerly Used Defense Sites can be found in the Department of Defense Ammunition and Explosives Safety Standards (DoDD 6055.9E, 2019).

UXO: Between 1960 and 1968, up to 100 20-millimeter spotting rounds containing a depleted uranium (DU) alloy were fired from three ranges into specific areas of the impact area. These ranges and the impact area represent a small fraction of PTA’s total area, and the State-owned land only contains a portion of one of the three ranges. The Army completed a Baseline Human Health Risk Assessment Report in 2010 to assess the potential risk posed by DU at PTA. The risk assessment report indicated that there are no likely adverse impacts to current and potential future persons working on or living near PTA.

In 2011, the DU data and analysis were presented to the Nuclear Regulatory Commission (NRC), which issued a license for the DU at PTA. Under this license, the Army follows approved Safety and Environmental Radiation Monitoring plans to monitor potential DU migration by periodically sampling groundwater and surface water. The license requires the Army to comply with NRC regulations and standards for protecting the public and the environment from radiation and is subject to NRC inspections and periodic reviews. These requirements are meant to ensure the DU will not pose a future health risk. The license does not authorize the Army to use DU or decommission the sites. Any cleanup would require additional review and approval by the NRC to ensure that public health and safety would continue to be protected. Monitoring data indicates no measurable migration of DU to nearby surface water. An airborne uranium monitoring program concluded that the DU had not impacted air quality, and the uranium levels in the collected particulate matter samples were within the range of naturally occurring uranium in Hawaiian soils and rock.

The vast majority of munitions and explosives of concern, which consists of unexploded ordnance, discarded military munitions, and munitions constituents, at PTA has been found on training areas, ranges, and firing points that are not open to the public and are being actively used for military training. The EIS fully discusses the extent of munitions and explosives of concern within the State-owned land and the Army’s cleanup procedures and status of cleanup. If unexploded ordnance is discovered anywhere on PTA, the Army’s Explosive Ordnance Disposal staff uses various methods, including explosives, to disarm or destroy the item.

The Army performed a surface cleanup of the Former Bazooka Range to remove over 1,000 pounds of visible munitions and munitions debris and to eliminate the imminent and substantial health and safety

risk. The EIS provides the latest information on the cleanup of the Former Bazooka Range and other training area/range sites on the State-owned land.

## **AIR QUALITY**

*Army response to comments received from: U.S. Environmental Protection Agency, Region 9 Environmental Review Branch; Sierra Club, Hawai'i Island Group; Hawai'i Peace and Justice; Jeffrey Mermel; Sofronio Estores*

The Army used the Davy Crocket Weapons System at PTA from 1962 to 1968. The system used a 20-millimeter spotting round (M101) to show where the weapon system was aimed. The body of the spotting round was made of a DU alloy. The Davy Crocket Weapons System was fired on four ranges at PTA, and one of the four ranges is partially on the State-owned land (i.e., Range 13 on TA 9). Fugitive dust downwind of the ranges was suspected to have higher than average levels of uranium. The Army completed a 1-year airborne uranium monitoring program in 2009 to determine if the decay and vaporization of DU fragments has impacted local air quality. The monitoring program collected 210 air samples from three sites upwind and downwind of PTA to provide a basis of comparison. The monitoring program concluded that the DU had not impacted air quality at PTA or in the surrounding area because the total airborne uranium levels in the collected particulate matter samples were within the range of naturally occurring uranium in Hawaiian soils and rock and were several orders of magnitude below U.S. and international chemical and radiological health guidelines.

Air emission sources at PTA include exhaust from military vehicles, aircraft flight operations, liquefied petroleum gas-fired boilers servicing four buildings, and ten internal combustion engines; dust from vehicle use on gravel and dirt roads and near-ground helicopter operations; and ordnance use and explosives detonation. The installation's potential and actual air emissions were last enumerated in 2010 and are summarized in EIS **Section 3.6**. These emissions have not appreciably changed since 2010 because installation activities have remained largely consistent, and no additional major facilities have been constructed. Air emission sources associated with training and other activities within the State-owned land include exhaust from military vehicles and aircraft flight operations, dust from vehicle use on gravel and dirt roads and near-ground helicopter operations, ordnance use and explosives detonation, and a 45-kilowatt (60 horsepower) internal combustion engine for an emergency generator at Building 601.

The Army follows a Dust and Soils Management and Monitoring Plan to identify, monitor, and minimize fugitive dust emissions from PTA. While the predominate source of fugitive dust emissions at PTA is maneuver activities on unpaved roads and trails, rotor downwash from helicopter activities have been identified as a lesser source. The Army can implement restrictions on helicopters hovering and landing if soil and atmospheric conditions indicate that excessive dust generation would occur.

In accordance with EO 13990, Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis, and the Army's 4 March 2021 memorandum titled Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in Army National Environmental Policy Act Reviews, the

EIS will follow CEQ's August 2016 guidance titled Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews. **Section 3.6** of the EIS addresses direct and indirect greenhouse gas emissions from the Proposed Action alternatives and the impacts of ongoing climate change on the Proposed Action alternatives. Because the Proposed Action is a real estate transaction, a full life-cycle analysis of greenhouse gas emissions from non-scope considerations such as manufacturing and shipping equipment and materiel and troop movements to and from PTA is beyond the scope of the EIS.

## **NOISE**

*Army response to comments received from: Hawai'i Peace and Justice; Sierra Club, Hawai'i Island Group ; Mahina Embers; Debora Letelier; Anna Lindsey-Robles; Arlene Larrua; Jhonele Gambill; Alana Carvalho; Dangelo McIntyre; Lillian Merle; Andrew Cooper; Kaiki Gunderson-Cook; Nikki Kepano; Mark Gordon; Matilda Keith; Jane Taylor; Selah Levine; Carl Geise; Jhernie Evangelista; Carol McMillan; Valerie Poag; Robert Gerard; Peter Yanan; Brittney Hedlund; Charley Ice; Amanda Dillon; Dr. Noe Noe Wong-Wilson; Alexandra Bernstein; Jojo Tanimoto*

The Proposed Action is a real estate action. It does not include construction, modernization, or changes to the ongoing activities conducted within the State-owned land; however, the alternatives include various levels of retention of the State-owned land, which would affect the levels of training and resulting noise. The EIS provides detailed information on the existing ambient noise environmental from activities associated with the State-owned land as well as the potential effects associated with the Proposed Action alternatives. Health and safety concerns associated with noise are analyzed within the **Section 3.16** and aircraft entering and exiting the restricted area R-3103, or transiting to PTA airspace are addressed within **Section 3.13** of the EIS.

PTA complies with all State of Hawai'i noise laws and regulations. The U.S. Army Garrison-Pōhakuloa Public Affairs Office routinely sends out community updates advising community members of training schedules and convoy alerts. This notification is submitted via the PTA website. Additionally, the Army provides newspaper training notifications and routinely participates in community meetings and events where information is shared with and received from the public.

Because the Proposed Action does not include construction, modernization, or changes to ongoing activities conducted within the State-owned land, noise modeling is beyond the scope of the EIS. Consequently, the EIS presents the qualitative effects of the Proposed Action alternatives on noise.

## **GEOLOGY AND SOILS**

*Army response to comments received from: Hawai'i Peace and Justice; Jeff Bond; Alexandra Bernstein; Linda Manabe; Nancy Redfeather*

The Proposed Action is a real estate action (i.e., retention of the State-owned land). The EIS does not include proposed changes to the current levels and types of activities conducted within the State-owned

land. Use of the area for farming is not considered as part of the Proposed Action and is therefore beyond the scope of this study.

The island of Hawai'i is geologically active, with many volcanic eruptions recorded in historic times. Mauna Loa is an active basaltic volcano southwest of PTA, and has erupted 33 times since its first documented historic eruption in 1843. Mauna Kea last erupted about 3,500 years ago and is considered dormant. Lava from Mauna Loa's last eruption in 1984, from the Northeast Rift Zone, spread lava that extends northeast from the Mauna Loa crater and skirts the southeast boundary of PTA. Five Mauna Loa flows of known age traverse PTA. Flows from Mauna Loa that have entered the PTA boundary last occurred in 1935.

The U.S. Geological Survey recognizes nine Lava Hazard Zones, based on historical records of eruptions and seismic events. Lava Hazard Zones are discussed in EIS **Section 3.8**. The southeastern portion of the property is located in Zone 2; the southwestern portion of the property is located in Zone 3; and the northern portions of the property located on the upslope of Mauna Kea are located in Zone 8. Zone 8 represents areas where only a few percent of the area has been covered by lava during the past 10,000 years, while Zone 2 represents areas adjacent to and downslope of active rift zones with a 15 to 25 percent of the area being covered by lava since 1800 and 25 to 75 percent of area being covered by lava in the last 750 years, and Zone 3 is slightly less hazardous because of its greater distance from recently active vents or due to the area's topography, which reduces the inundation risk of the area.

The State-owned land is in an area with a 10 percent probability that an earthquake could cause a ground acceleration of more than 40 to 60 percent of gravity in the next 50 years, with the likely size of the earthquake increasing to the south in the direction of Kilauea and the southern coast. Sometimes large regional earthquakes (greater than magnitude six) are related to a subsequent eruption or to some type of unrest at a nearby volcano if the volcano is poised to erupt and meets two significant conditions: (1) enough "eruptible" magma within the volcanic system, and (2) significant pressure within the magma storage region.

The area's relatively young geologic age, low precipitation, and rapid runoff, results in mostly thin and poorly developed soils inadequate for farming. Much of the land surface is characterized by sparsely vegetated basaltic rock in the early stages of decomposition and soil formation.

The conclusions of an Operational Range Assessment Program assessment of PTA conducted in 2009 found that the migration pathways that munitions constituents of concern resulting from operations would use to leave the range area do not exist at PTA. As a result, contaminants are generally confined to the range areas and within the impact area at PTA.

The EIS includes a description of the geologic conditions within the State-owned land and analyzes the potential impacts from the Proposed Action. More information is provided in EIS **Section 3.8**.

## **SOCIOECONOMICS**

*Army response to comments received from: County of Hawaii Planning Department; Girl Scouts of Hawai'i; Associated Universities Inc.; Maunakea Observatories; Hawai'i Peace and Justice; Pacific Resource Partnership; Kona-Kohala Chamber of Commerce; University of Hawai'i Institute for Astronomy; Sierra Club, Hawai'i Island Group; Hawai'i Island Chamber of Commerce; Hawaii County Council, District 9 (North and South Kohala); Jody Brissette; Marco Jablonowitz; Aaron Stene; Marcia Goldman-Manker; Blake Doll; Dale Ross; Keith Marrack; Mark Gordon; John Makoff; Amanda Dillon; Sofronio Estores; Helen Jaccard*

The Army strives to be a good neighbor and adheres to federal, state, and local laws and Army regulations and policies regarding the protection of the human and natural environment.

The Army has not calculated the potential costs associated with the lease compliance actions and investigation, removal, and cleanup of hazardous and toxic materials and wastes within the State-owned land. The parameters for lease compliance actions are subject to the terms of the 1964 lease and negotiation with the State, which cannot be done until the EIS is complete and an alternative has been selected.

If the Army selects to proceed with the Proposed Action, the Army would consider the most appropriate land retention estate(s) method(s) for the selected alternative. Because negotiation options cannot be known prior to negotiations being initiated, which cannot formally start before the conclusion of the EIS process, potential land valuation methods and fees associated with the various land retention estates and methods cannot be evaluated in the EIS.

The Proposed Action is a real estate action. It does not include construction, modernization, or changes in ongoing activities. The EIS provides discussion of the economic benefits PTA has on the local economy, as well as potential socioeconomic impacts of the Proposed Action.

## **WATER RESOURCES**

*Army response to comments received from: Hawaii Department of Land and Natural Resources; Hawai'i Peace and Justice; Sierra Club, Hawai'i Island Group; Maka'ala O Ka Hana Wai; Mauna Kea Moku Nui 'Aelike/Consensus Building 'Ohana; Native Hawaiian Legal Corporation; Jeffrey Mermel; Jim Albertini; Jerard Jardin; Carol McMillan; Kinion Wahineali'i Carroll; Brittney Hedlund; Charley Ice; Seanna Pieper-Jordan; Linnea Heu*

PTA lies within the Northwest Mauna Loa and the West Mauna Kea watersheds of the island of Hawai'i, which drain to the northern Kona and southern Kohala coasts. The highly permeable rock and soil deposits generally absorb precipitation without forming stream channels or gulches, which is why intermittent streams typically only appear during periods of steady rain. The lack of surface water and groundwater greatly reduces the probability of contaminant migration within the State-owned land.

The closest drinking water well is 4,260 to 4,280 feet deep at the Waikiʻi Ranch (14 miles from PTA’s main gate). The state monitors all drinking water sources for water quality. Since August 1989, the State of Hawaiʻi Department of Health has issued “Groundwater Contamination Maps” for Hawaiʻi. According to these maps, most of the well locations where contamination is detected on the island of Hawaiʻi are located along the eastern coast, and groundwater quality generally diminished towards the coasts due to increased saltwater intrusion. Detected contamination levels are below federal and state drinking water standards and do not pose a significant risk to humans. Groundwater quality beneath the State-owned land is likely of higher quality due to its distance inland from the coast. The EIS provides additional information available on groundwater resources on the State-owned land.

Two small-diameter holes were drilled for testing within the U.S. Government-owned land at PTA and were not designed to develop potable water. A non-aerially extensive perched aquifer was encountered in the test hole drilled near the main base at a depth of between 700 to 1,181 feet below ground surface. A more aerially extensive perched aquifer is believed to be present at approximately 1,800 feet below ground surface below the State-owned land. PTA is a remote facility, there are currently no plans to develop potable water within the State-owned land. Potable water is currently trucked to PTA from 40 miles away.

The State-owned land is within Flood Hazard Zone X, which corresponded to an area determined to be outside the 0.2 percent annual chance floodplain. There are no perennial streams, rivers, wetlands, marine waters, or coastal resources within or with a relationship to State-owned land. Lake Waiau, located near the summit of Mauna Kea approximately 4.5 miles from PTA, is the nearest known permanent surface water body, and is not used by PTA.

Additional information regarding groundwater resources is provided in EIS **Section 3.9**.

#### **TRANSPORTATION AND TRAFFIC**

*Army response to comments received from: Hawaiʻi Department of Transportation Statewide Transportation Planning Office; Sierra Club, Hawaiʻi Island Group; Hawaiʻi Peace and Justice; Shelly Aina; Jojo Tanimoto*

The Proposed Action is a real estate transaction (retention of the State-owned land) and does not include construction, modernization, changes to ongoing activities conducted within the retained State-owned land, or changes to use of the local airports, roadways, and harbors. The Proposed Action alternatives vary from full retention to no retention of the State-owned land, which would result in the same or less use of existing PTA and regional transportation networks.

U.S. Army Garrison-Hawaii publishes media releases to local newspapers, radio stations, and online (via the PTA website) to provide advanced notice of upcoming convoys and training activities occurring at PTA. The PTA Public Affairs Office also provides routine community updates and FLASH alerts regarding trainings and convoys via email (upon request). The Army acknowledges the jurisdiction and responsibilities of the State of Hawaiʻi, Department of Transportation Airports, Highways, and Harbors

Divisions. Additional information, including a summary of existing PTA and regional transportation networks and traffic conditions and analysis of potential impacts from the Proposed Action alternatives, is provided in the EIS. In addition, effects from Proposed Action activities near public roadways on human health and safety are summarized in the EIS. **Section 2.3** of the EIS presents the land retention estates available to the Army.

## **AIRSPACE**

*Army response to comments received from: Richard Schulherr; Megan Ploski; Sharon Torbert; Alexandra Bernstein; William Greentree; Kathleen Slaughter*

PTA aircraft comply with all Federal Aviation Administration guidelines and requirements to ensure safe airspace usage and minimize airspace usage conflicts. All aircraft pilots and crew visiting PTA receive a briefing from the Bradshaw Army Airfield Air Traffic and Airspace Chief designed to minimize noise impacts and disruption to local communities. The briefing specifies the flight route to PTA devised specifically to avoid populated areas as much as possible. Additionally, aircraft are directed to fly at 2,000 feet above ground level during transition to PTA airspace, unless low cloud cover necessitates flying lower for safety reasons. Current aircraft and airspace activities were previously analyzed in separate NEPA documents. Bradshaw Army Airfield is located on U.S. Government-owned land.

The Proposed Action is a real estate action (retention of State-owned land) that would enable continuation of ongoing activities within the State-owned land. It does not include changes in ongoing activities conducted within the State-owned land. Aircraft and airspace activities not associated with the State-owned land are outside the scope of the EIS.

## **UTILITIES**

*Army response to comments received from: Department of Water Supply - County of Hawaii; Hawaii Department of Land and Natural Resources; Shelly Aina; Elisabeth Mehana Makainai; Mailani Makainai; AziaLynne Bird; Dexter Ka'iama*

The Proposed Action is a real estate action (i.e., retention of the State-owned land). It does not include construction, modernization, or changes in ongoing activities within the retained State-owned land. Solid waste generated on PTA (including the State-owned land) is managed on the Cantonment (U.S. Government-owned land) and no new solid waste actions would occur under the Proposed Action. Solid waste impacts would be the same under Alternative 1, but less solid waste would be generated under Alternatives 2 and 3 and the No Action Alternative due to Army not retaining State-owned land and therefore not conducting ongoing activities in those areas of the State-owned land or associated activities on U.S. Government-owned land.

Septic tank and portable latrine waste from training events is and would continue to be hauled to county wastewater disposal facilities by commercial haulers. Large capacity cesspools formerly used within the U.S. Government-owned land have been cleaned, backfilled, and abandoned as part of a recent sewer

system upgrade. The Army expects to be in full compliance with Act 125 by the 2050 deadline. The cesspools are not discussed in the EIS because they are not on the State-owned land or impacted by activities on the State-owned land. Wastewater disposal facilities and quantities would remain the same under Alternatives 1 and 2 (due to retention of all or the vast majority of the State-owned land) and decrease under Alternative 3 and the No Action Alternative (due to loss of all or a substantial portion of the State-owned land).

## **HUMAN HEALTH AND SAFETY**

*Army response to comments received from: U.S. Environmental Protection Agency, Region 9 Environmental Review Branch; Temple of Lono; Maunakea Observatories; Sierra Club, Hawai'i Island Group; Mariana Monasi; Jim Albertini; Nancy Martin; Kimi Abbott-Jackson; Aurora Cole; Elisabeth Mehana Makainai; Sofronio Estores; Dexter Ka'iama; Alexandra Bernstein; Jojo Tanimoto*

Ongoing activities within the State-owned land were previously analyzed in separate NEPA documents. Activities not associated with the State-owned land are outside the scope of the EIS.

The EIS characterizes the health and safety conditions of military personnel and the surrounding communities from ongoing activities on the State-owned land. Characterization of the existing health and safety conditions includes consideration of relevant PTA safety reports and health studies, as well as additional information such as how the Army works with the Mauna Kea Observatories and provides essential police and emergency medical services to PTA and surrounding communities. **Section 3.16** of the EIS discusses the potential health and safety effects on military personnel and the community under each of the Proposed Action alternatives.

Between 1960 and 1968, 20-millimeter spotting rounds containing a depleted uranium (DU) alloy were fired from three ranges into specific areas of the impact area. These ranges and the impact area represent a small fraction of PTA's total area, and the State-owned land only contains a portion of one of the three ranges. A Baseline Human Health Risk Assessment Report completed by the Army in 2010 indicated there are no likely adverse impacts to persons working on or living near PTA as a result of DU at PTA. In 2011, the data and analysis were presented to the Nuclear Regulatory Commission, which issued a license for DU at PTA. Under this license, the Army follows approved Safety and Environmental Radiation Monitoring plans to monitor potential DU. **Sections 3.5** and **3.6** in the EIS present information on DU and monitoring results, which conclude that the uranium levels in the collected particulate matter samples are within the range of naturally occurring uranium in Hawaiian soils and rock.

Debris from artillery training is contained within PTA training areas, ranges, firing points, and impact areas that are not open to the public and are closely monitored by the Army. The Army monitors the potential for offsite migration of contamination under the Operational Range Assessment Program and has determined groundwater and surface waters are unlikely to be contaminated by explosive residues. Information regarding contaminants, groundwater, and surface waters at PTA is included in **Section 3.5**

and **Section 3.9** of the EIS. All health and safety concerns, including the potential for lead contamination in water and soils, is summarized in the EIS.

## EIS Findings

### CUMULATIVE

*Army response to comments received from: County of Hawaii Planning Department; Hawai'i Peace and Justice; Sierra Club, Hawai'i Island Group; Mauna Kea Moku Nui 'Aelike/Consensus Building 'Ohana; Native Hawaiian Legal Corporation; Sasha Davis; Jonathan & Jamaica Osorio; Brenda Bailey-White*

NEPA analyses must assess cumulative effects, which are the impact on the environment resulting from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions. The EIS considers the effects of past activities at PTA in combination with the effects of the action alternatives, and a set of reasonably foreseeable actions proposed by federal, non-federal agencies, and private parties on the island of Hawaii. (See full discussion in the EIS **Chapter 4**.)

The cumulative impact analysis considers actions where impacts of the proposed action would have a connection, in space or time, with impacts from other actions and consequently have the potential to contribute to cumulative impacts. This connection includes one between individuals or groups who may incur impacts related to events of a historical nature (e.g., the connection between native Hawaiians and the maintenance of customary practices). The timeframe for actions addressed in the cumulative analysis is 10 years, which is approximate to the timeframe anticipated for implementation of any of the action alternatives.

Impacts of past activities at PTA are addressed for each resource, including hazardous and toxic materials and waste. Information in **Section 3.5** draws from numerous sources including Environmental Condition of Property Reports, which the Army undertakes to investigate the potential for environmental contamination of a property for hazardous substances, petroleum products, or other environmental concerns. The most recent ECOP investigation at PTA was conducted in 2017 in order to protect the health of those who formerly, currently, or will potentially in the future occupy the property.

## Plans and Policies

*Army response to comments received from: Department of Hawaiian Home Lands; Environmental Caucus of the Democratic Party of Hawai'i; Carl Christensen; William W. Milks; Charles Ota*

**Chapter 5** of the EIS provides decision makers with an overview of the Proposed Action's conformance with relevant federal, State, and county land use plans, policies and regulations.



Appendix C

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# Scoping Virtual Open House Meeting Materials

Posters

Fact Sheet

Flyer

Direct Mail Postcard

Questions and Answers



**Posters**





# Welcome to the EIS Scoping Virtual Open House

## What is Public Scoping?

Public scoping is conducted early in the process, in compliance with NEPA and HEPA, to provide the public opportunity to inform the Army of known issues and alternatives to be addressed in the EIS.

Public scoping allows the public to:

- Learn about the Proposed Action.
- Offer promising alternatives.
- Explain potential concerns.
- Recommend potential impacts that should be studied.

Scoping materials and other information about the Proposed Action are available on the project website at <https://home.army.mil/hawaii/index.php/PTAEIS>.

## What to Expect after Scoping?

After the public scoping period has ended, the Army will consider all public input and incorporate substantive public input into the development of the Draft EIS. The Draft EIS will be made available for public review for at least 45 days. The Army will again consider all public input and incorporate substantive public input into development of the Final EIS. The Army's decision will be documented in a Record of Decision made available to the public no sooner than 30 days following publication of the Final EIS.

Your input is valuable!

## Options to Submit Written Comments

Comment period is September 4 - October 14, 2020

- EIS website: <https://home.army.mil/hawaii/index.php/PTAEIS>
- Email: [usarmy.hawaii.nepa@mail.mil](mailto:usarmy.hawaii.nepa@mail.mil)
- Mail: ATLR PTA EIS Comments  
P.O. Box 3444  
Honolulu, HI 96801-3444

## EIS Scoping Virtual Open House

Wednesday, September 23, 2020 at 4 p.m.

During the Virtual Open House you can:

- View online presentations at <https://home.army.mil/hawaii/index.php/PTAEIS>.
- Call (808) 300-0220 to submit oral comments from 4 – 9 p.m. (only on Wednesday, September 23).
- \* *Please Read: Comment submittal through the EIS website is preferred. All comments will be valued equally, regardless of how they are submitted. Please do not submit duplicate comments. Comments should be written clearly, as commenters will not be contacted to provide clarification. Personal contact information will not be published in the Draft or Final EIS. Personal contact information will be maintained for the project record and will not be released unless required by law.*



# National Environmental Policy Act (NEPA) and Hawai'i Environmental Policy Act (HEPA)

## NEPA

- NEPA is a U.S. law implemented via Title 40 Code of Federal Regulations, Parts 1500–1508.
- NEPA procedures ensure environmental information is available to public officials and citizens before decisions are made, and before actions are taken.
- The Proposed Action is a federally funded action.



## HEPA

- HEPA refers to the State EIS process: Hawai'i Revised Statutes Chapter 34-3, and Hawai'i Administrative Rules Chapter 11-200.1.
- HEPA establishes a system of environmental reviews to guide decision making.
- The Proposed Action includes State-owned land and will comply with HEPA processes.



Natural resource management at PTA  
Photo Credit: PTA/M. Donnelly

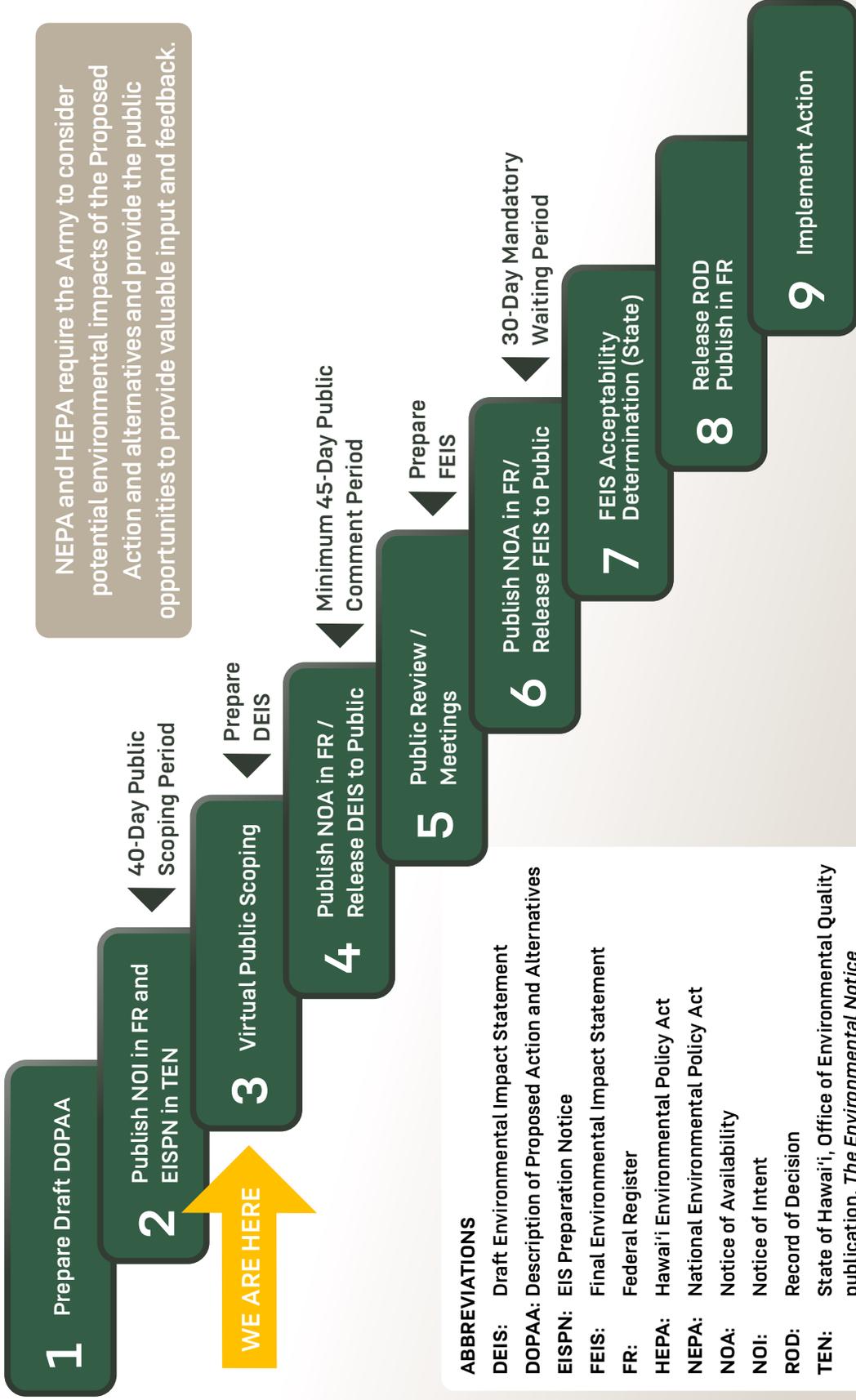
The EIS will be a joint NEPA-HEPA document. Both public involvement processes will run concurrently.

## NEPA/HEPA

- Public involvement is a key component of the NEPA and HEPA processes. Opportunities include:
- A 40-day public scoping period for NEPA NOI and HEPA EIS Preparation Notice.
  - EIS Scoping Virtual Open House with in-person scoping comment stations and oral comment phone line.
  - HEPA Cultural Impact Assessment.
  - Draft EIS with a no less than 45-day comment period and public meetings.

# EIS Process

ARMY TRAINING LAND RETENTION AT PŌHAKULOĀ TRAINING AREA  
ENVIRONMENTAL IMPACT STATEMENT



## ABBREVIATIONS

- DEIS: Draft Environmental Impact Statement
- DOPAA: Description of Proposed Action and Alternatives
- EISPN: EIS Preparation Notice
- FEIS: Final Environmental Impact Statement
- FR: Federal Register
- HEPA: Hawai'i Environmental Policy Act
- NEPA: National Environmental Policy Act
- NOA: Notice of Availability
- NOI: Notice of Intent
- ROD: Record of Decision
- TEN: State of Hawai'i, Office of Environmental Quality publication, *The Environmental Notice*



# Military in Hawai'i and PTA

## Hawai'i is Important to the Military

- Hawai'i is strategically important to national defense. Its location between the continental U.S. and the Indo-Pacific region serves as a logistics link and allows for rapid troop deployment.
- Hawai'i is home to U.S. Indo-Pacific Command, which has responsibility for half of the globe and more than 50% of the world's population.
- Hawai'i hosts the headquarters for U.S. Army Pacific, U.S. Pacific Fleet, U.S. Marine Corps Pacific, Pacific Air Forces, and U.S. Special Operations Command Pacific.
- Hawai'i provides a range of training environments that cannot be replicated in other states, preparing troops to fight as they train.

## The Military is Important to Hawai'i

- As of March 2020, the military employed 71,955 personnel in the State.
- In FY2018, the DOD spent \$7.2 billion in the State.
- In FY2018, the DOD spent \$20.8 million on personnel payroll in the County of Hawai'i.

## PTA is Important to the Military

- PTA is the only area in Hawai'i that supports larger unit (i.e., battalion and brigade) collective live-fire and maneuver training. It is the largest contiguous live-fire range and maneuver training area in Hawai'i, and the primary tactical training area for units conducting military mission essential tasks and training requirements.
- PTA supports joint and multi-national exercises critical to ensure that the U.S. military and allied nations know how to cooperatively work together.
- PTA is the only training area in Hawai'i where military units can use weapons systems at maximum capabilities to complete training requirements.
- PTA is used by the U.S. Army, U.S. Marine Corps, U.S. Navy, U.S. Air Force, U.S. Army Reserve, Hawaii Army National Guard, Hawaii Air National Guard, Hawai'i Police Department and others.



LTC Borce and CSM Ortiz with Youth Challenge Academy Leadership; Civil Air Patrol cadets from Hilo and Kona; Tropic Lightning Soldiers in local parade. Photo Credit: PTA/M.Donnelly



# Why Retain State-owned Land at PTA?

## LEASE IS EXPIRING

The U.S. Government leases approximately 23,000 acres of PTA from the State. The Army has been training there for the past six decades.

## STATE-OWNED LAND ESSENTIAL TO PTA

The State-owned land is the connective tissue of PTA, providing access between major parcels of U.S. Government-owned land in PTA and supporting training facilities, maneuver areas and capabilities that are essential to U.S. Army Hawaii and other military services and local agencies.

## TRAINING AT PTA SAVES LIVES

Properly trained military personnel are prepared for their mission and return home from deployments to their families.

### Examples of Training Facilities on State-owned Land



Military Operation in Urban Terrain Facility. Photo Credit: HDR



Firing Point. Photo Credit: PTA/M. Donnelly



Battle Area Complex (BAX). Photo Credit: PTA/M. Donnelly



# Overview of the Proposed Action

## Proposed Action

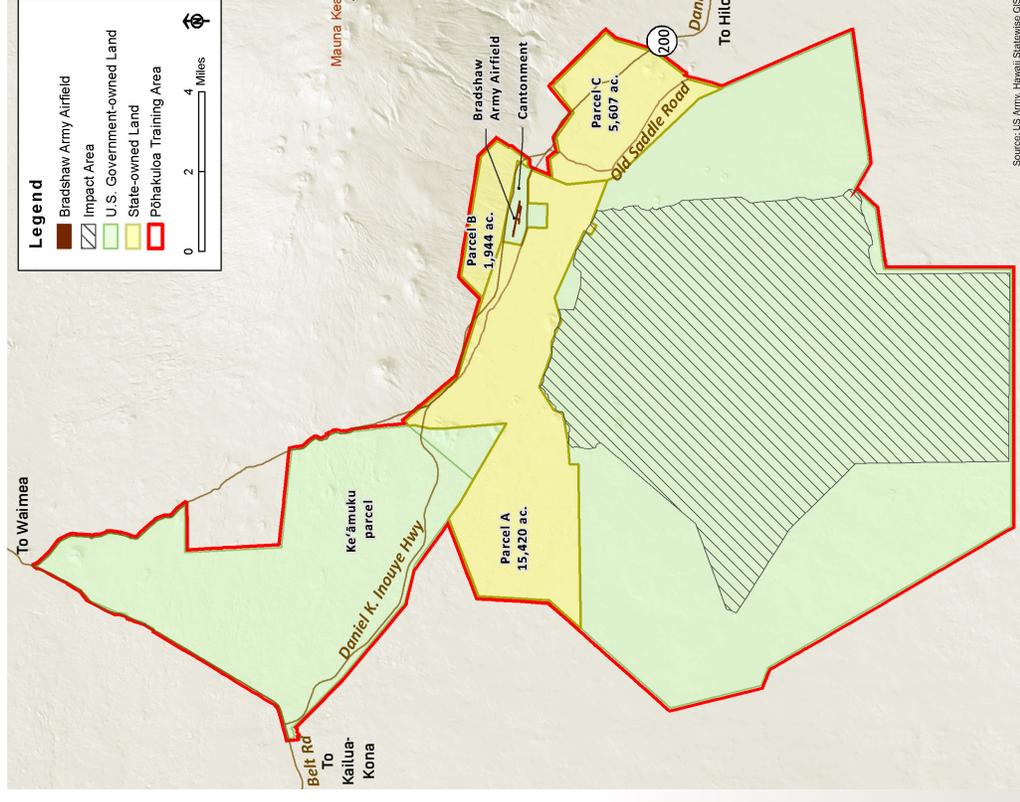
- To retain up to approximately 23,000 acres of State-owned land at PTA in support of continued military training. Multiple land retention methods could be used.
- To retain the State-owned land prior to the end of the current lease and prevent interruption of essential military training.
- After retention of the State-owned land, the Army would continue to conduct the current levels and types of military training; facility and infrastructure maintenance; natural and cultural resources stewardship; and to manage use of the State-owned land by other organizations.
- The Proposed Action does not involve new training, construction, or resource management at PTA. Instead, it is a real estate action that would enable continued military use of the State-owned land.

## Purpose of the Proposed Action

To enable the U. S. Army Hawaii to continue to conduct military training on the State-owned land within PTA to meet its current and future training requirements.

## Need for the Proposed Action

To enable access between major parcels of U.S. Government-owned land in PTA, retain substantial Army infrastructure investments, allow for future facility and infrastructure modernization, preserve limited maneuver area, provide austere environment training, and maximize use of the impact area in support of U.S. Army Hawaii-coordinated training.



Source: US Army, Hawaii; Statewide GIS

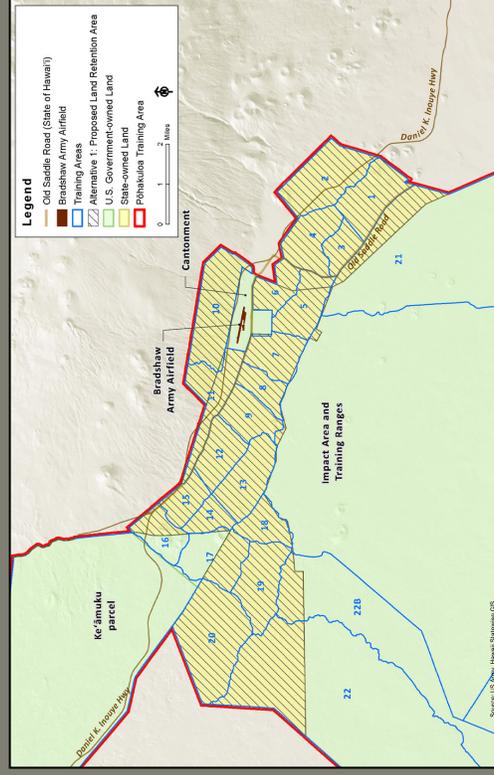
Map Credit: G70

ARMY TRAINING LAND RETENTION AT PŌHAKULOĀ TRAINING AREA  
ENVIRONMENTAL IMPACT STATEMENT



# Alternatives 1 and 2

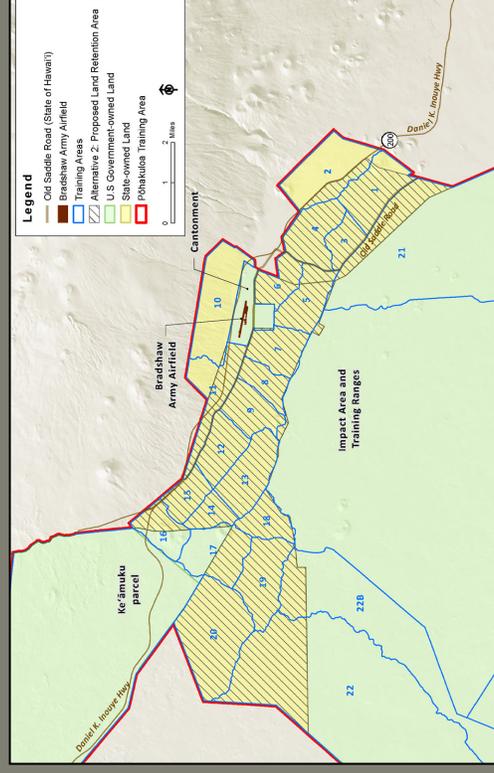
## Alternative 1: Full Retention



Map Credit: G70

Under Alternative 1, all State-owned land would be retained. This alternative allows the Army to retain its substantial investment in facilities, utilities and infrastructure; continue military training without downtime; and conduct future modernization.

## Alternative 2: Modified Retention



Map Credit: G70

Under Alternative 2, the Army would retain approximately 20,000 acres of the State-owned land at PTA. Additionally, the Army would retain all Army-owned utilities, firebreaks/fuel breaks, and fire access roads in the State-owned land not retained.



# Alternative 3 and No Action Alternative

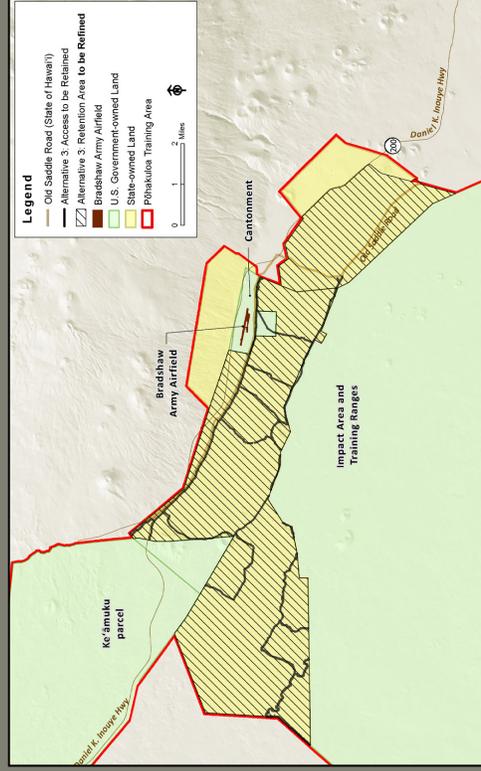
## No Action Alternative



Photo Credit: G70

Under the No Action Alternative, the Army would not retain any of the State-owned land at PTA.

## Alternative 3: Minimum Retention and Access



Map Credit: G70

Under Alternative 3, Army would retain the following: vital training and support facilities and associated maneuver land not able to be relocated within U.S. Government-owned land at PTA; select roads and training trails; all Army-owned utilities; firebreaks/fuel breaks and fire access roads; tactical vehicle wash facility; and land use rights to enable the firing of indirect fire weapons (e.g., artillery, mortars) from U.S. Government-owned portions of PTA northwest of the State-owned land into the impact area. (Specific retention area to be refined in the EIS.)



# Environmental Topics to be Analyzed

## Land Use



Land use compatibility, easements, and real property management

## Geological & Soil Resources



Bedrock, seismology, volcanology, soil properties and erosion

## Biological Resources



Vegetation and wildlife, threatened and endangered species, invasive species, wetlands and wildland fires

## Cultural Resources



Historic buildings and viewsheds, archaeological resources, Native Hawaiian Organizations, traditional and customary practices, hunting, gathering, and cultural beliefs, uses and accesses

## Airspace



Controlled airspace, Special Use Airspace and Military Operations Areas

## Air Quality & Greenhouse Gas



Ambient Air Quality Standards, Prevention of Significant Deterioration, and dust

## Water Resources



Surface water, groundwater, floodplains, and Clean Water Act

## Noise



Zones, community and wildlife impacts

## Hazardous Materials



Hazardous materials and wastes, petroleum products, storage tanks, unexploded ordnance, and depleted uranium

## Socioeconomics



Demographics, housing, economic development, recreation, environmental justice and protection of children

## Transportation & Traffic



Roadways, air transportation, traffic volume and level of congestion

## Utilities



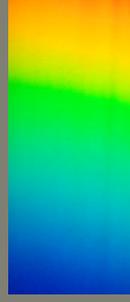
Potable water, wastewater, stormwater, solid waste, electricity and communications

## Human Health & Safety



Health, safety and safety danger zones

## Electromagnetic Spectrum



Radio waves to gamma waves, radio frequency, spectrum use, radar and satellite

ARMY TRAINING LAND RETENTION AT PŌHAKULOĀ TRAINING AREA  
ENVIRONMENTAL IMPACT STATEMENT



**Thank You**

# Fact Sheet





U.S. ARMY

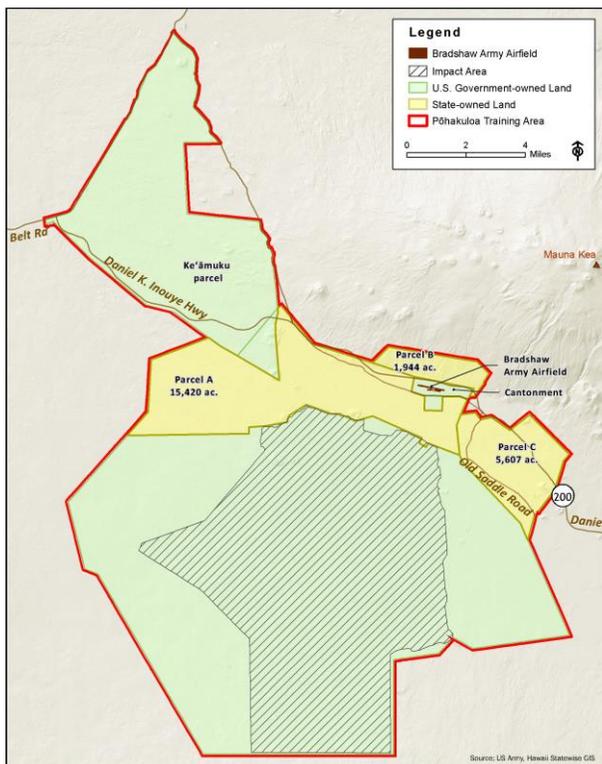
# ARMY TRAINING LAND RETENTION AT PŌHAKULOĀ TRAINING AREA

## ENVIRONMENTAL IMPACT STATEMENT

The Army is preparing an Environmental Impact Statement (EIS) for Army Training Land Retention at Pōhakuloā Training Area (PTA) on the island of Hawai'i. The Army proposes to retain up to approximately 23,000 acres of State-owned land at PTA. Military training has taken place at PTA since 1956.

The Army is initiating the EIS process under the National Environmental Policy Act (NEPA), guided by the Council on Environmental Quality NEPA implementing regulations in Title 40 Code of Federal Regulations (C.F.R.) Parts 1500–1508, and Army NEPA implementing regulations in Title 32 C.F.R. Part 651. The EIS also will comply with Hawai'i Revised Statutes Chapter 343 and Hawai'i Administrative Rules Chapter 11-200.1, collectively referred to as the Hawai'i Environmental Policy Act (HEPA). Like NEPA, HEPA ensures environmental concerns are given appropriate consideration in decision making, along with economic and technical considerations.

The first step in the NEPA and HEPA processes is to alert the public of the intention to prepare an EIS. This is done through publication of a Notice of Intent (NOI) in the *Federal Register*, and publication of an EIS Preparation Notice (EISPN) in the State Office of Environmental Quality Control's publication, *The Environmental Notice*. The NOI was published on September 4, 2020, and the EISPN was published on September 8, 2020.



*Hawaii Army National Guard Soldiers react to a simulated ambush during annual training at PTA. These Soldiers conduct combat operations training for several weeks during their annual training at PTA.*

## BACKGROUND

PTA consists of approximately 132,000 acres between the volcanic mountains of Mauna Loa, Mauna Kea, and Hualālai on the island of Hawai'i. United States Army Hawaii (USARHAW) conducts training at PTA to meet its federally mandated mission of readiness. Training offered at installations such as PTA supports the Army's fulfillment of its role in the Nation's defense. Users of PTA, including the Army, U.S. Marine Corps, U.S. Navy, U.S. Air Force, U.S. Army Reserve, Hawaii Army National Guard, Hawaii Air National Guard, State and County of Hawai'i first responders and firefighters, Hawai'i Civil Defense Agency, Hawai'i Emergency Management Agency, State Office of Homeland Security, Hawai'i Police Department, and others, rely on the installation to fulfill agency-specific mission and readiness requirements. PTA is the largest contiguous live-fire range and maneuver training area in Hawai'i and is considered the Pacific's Premier Training Center. It is the only U.S. training area in the Pacific region where training units can complete all mission essential tasks, and the only installation in Hawai'i that can accommodate larger than company-sized units (i.e., battalion and brigade) for live-fire and maneuver exercises.

The U.S. Government leases approximately 23,000 acres at PTA from the State. The 65-year lease expires on August 16, 2029. Over the past six decades, the State-owned land has been the keystone of PTA, supporting numerous training facilities and capabilities essential to USARHAW and other military services and local agencies. The State-owned land contains maneuver land and key training facilities, some of which are not available elsewhere in Hawai'i, and provides access between major parcels of U.S. Government-owned land in PTA. Loss of this land would substantially impact the ability of USARHAW and other military services and local agencies to meet their training requirements and mission of readiness.

### FOR MORE INFORMATION OR ACCESSIBILITY REQUESTS

Please contact Michael Donnelly, PTA Public Affairs Officer  
Email: [michael.o.donnelly.civ@mail.mil](mailto:michael.o.donnelly.civ@mail.mil); Phone: (808) 969-2411



U.S. ARMY

# ARMY TRAINING LAND RETENTION AT PŌHAKULOĀ TRAINING AREA

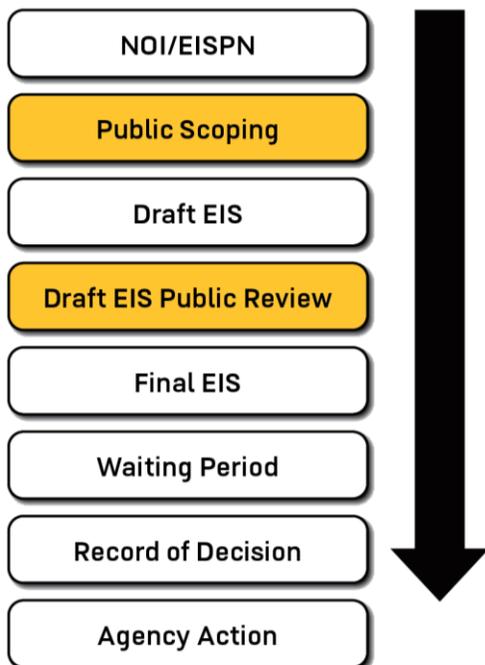
## PROPOSED ACTION AND ALTERNATIVES

The EIS will evaluate the potential direct, indirect, and cumulative impacts of a variety of reasonable alternatives that meet the purpose and need of the Proposed Action, which is to retain up to approximately 23,000 acres of State-owned land at PTA in support of continued military training to meet current and future training requirements. Alternatives to be analyzed in the EIS include: 1) Full Retention; 2) Modified Retention; and 3) Minimum Retention and Access. The No Action Alternative (no retention of State-owned land after 2029) also will be analyzed. Other reasonable alternatives raised during the scoping process and capable of meeting the purpose and need of the Proposed Action will be considered for evaluation in the EIS.

## NEPA/HEPA PUBLIC PARTICIPATION PROCESS

The NEPA/HEPA process graphic (below) shows opportunities for public input in gold. The EIS is currently in the Public Scoping period, which is a time when public comments are received to help shape development of the Draft EIS.

### NEPA/HEPA PROCESS



## PUBLIC SCOPING PROCESS

The intent of the scoping process is to reach out early and engage a broad range of stakeholders with the purpose of informing and eliciting input. The public scoping process will help identify reasonable alternatives, potential impacts, and key issues of concern to be evaluated in the EIS, as well as determine which stakeholders (e.g., individuals, organizations, and government agencies) are interested in commenting on the Draft EIS. Scoping serves as an opportunity to obtain input from the community regarding issues and resources to be addressed or analyzed through the EIS process. In this regard, it helps to define the “scope” of issues and analyses in the EIS.

The public scoping process began September 4, 2020, with publication of the NOI in the *Federal Register*, to be followed by publication of the EISPN. Federal, state, and local agencies, Native Hawaiian organizations, and the public are invited to participate in the scoping process. The 40-day public scoping period ends on October 14, 2020.

### OPTIONS TO SUBMIT WRITTEN COMMENTS

Comment period is September 4 – October 14, 2020

- EIS Website: <https://home.army.mil/hawaii/index.php/PTAEIS>
- Email: [usarmy.hawaii.nepa@mail.mil](mailto:usarmy.hawaii.nepa@mail.mil)
- Mail: ATLR PTA EIS Comments  
P.O. Box 3444  
Honolulu, HI 96801-3444

### EIS SCOPING VIRTUAL OPEN HOUSE

Wednesday, September 23, 2020 at 4 p.m.

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**Note:** Comment submittal through the EIS website is preferred. All comments will be valued equally, regardless of how they are submitted. Please do not submit duplicate comments. Comments should be written clearly, as commenters will not be contacted to provide clarification. Personal contact information will not be published in the Draft or Final EIS. Personal contact information will be maintained for the project record and will not be released unless required by law.

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Email: [michael.o.donnelly.civ@mail.mil](mailto:michael.o.donnelly.civ@mail.mil); Phone: (808) 969-2411

**Flyer**





# ARMY TRAINING LAND RETENTION AT PŌHAKULOĀ TRAINING AREA

## ARMY SEEKS PUBLIC COMMENTS ON SCOPE OF ENVIRONMENTAL IMPACT STATEMENT

The Army is preparing an Environmental Impact Statement (EIS) for Army Training Land Retention at Pōhakuloā Training Area (PTA) on the island of Hawai'i. The Army proposes to retain up to approximately 23,000 acres of State-owned land at PTA. Military training has taken place at PTA since it was established in 1956.

The Army is initiating the EIS process under the National Environmental Policy Act (NEPA), guided by the Council on Environmental Quality NEPA implementing regulations in Title 40 Code of Federal Regulations (C.F.R.) Parts 1500–1508, and Army NEPA implementing regulations in Title 32 C.F.R. Part 651. The EIS also will comply with Hawai'i Revised Statutes (HRS) Chapter 343 and Hawai'i Administrative Rules Chapter 11-200.1, collectively referred to as the Hawai'i Environmental Policy Act (HEPA). Like NEPA, HEPA ensures environmental concerns are given appropriate consideration in decision making, along with economic and technical considerations.

## PUBLIC SCOPING PROCESS

The public scoping process will help to identify reasonable alternatives, potential impacts, and key issues of concern to be evaluated in the EIS. In this regard, it helps to define the "scope" of issues and analyses addressed in the EIS. The public scoping period starts on September 4, 2020 and ends on October 14, 2020. Federal, state, and local agencies, Native Hawaiian organizations, and the public are invited to participate in the scoping process. Due to uncertainties regarding COVID-19 restrictions, in-person public scoping meetings will not be held. The Army is providing opportunities for public input during the scoping process by facilitating an EIS Scoping Virtual Open House.

## REVIEW PROJECT INFORMATION

- ▶ <https://home.army.mil/hawaii/index.php/PTAEIS>

## OPTIONS TO SUBMIT WRITTEN COMMENTS

Comment period is September 4, 2020 - October 14, 2020.

- ▶ EIS website: <https://home.army.mil/hawaii/index.php/PTAEIS>
- ▶ Email: [usarmy.hawaii.nepa@mail.mil](mailto:usarmy.hawaii.nepa@mail.mil)
- ▶ Mail: ATLR PTA EIS Comments  
P.O. Box 3444  
Honolulu, HI 96801-3444

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## EIS SCOPING VIRTUAL OPEN HOUSE

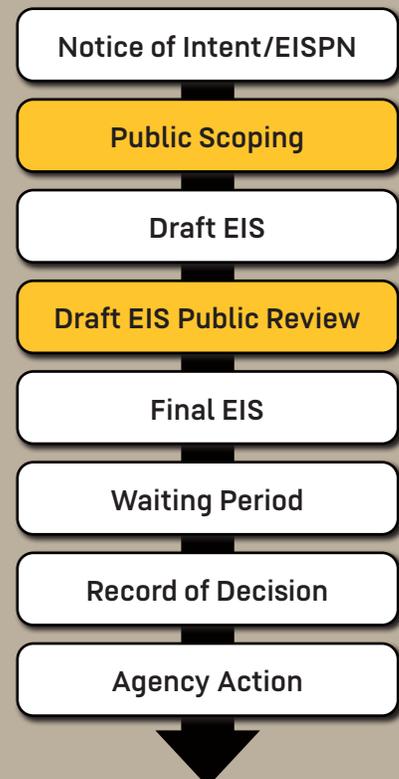
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## NEPA/HEPA PUBLIC PARTICIPATION PROCESS

The NEPA/HEPA process graphic (below) shows opportunities for public input in gold.





# **Direct Mail Postcard**





## ARMY TRAINING LAND RETENTION AT PŌHAKULOA TRAINING AREA

### Army seeks public comments on scope of Environmental Impact Statement (EIS)

The Army proposes to retain up to approximately 23,000 acres of State-owned land at Pōhakuoloa Training Area on the island of Hawai'i in support of continued military training. The Army is initiating the EIS process under the National Environmental Policy Act (NEPA) and the Hawai'i Environmental Policy Act (HEPA). The NEPA and HEPA processes ensure environmental and economic issues are given appropriate consideration in decision making. The Army is seeking public comments during the EIS scoping period from September 4 – October 14, 2020, to identify reasonable alternatives, potential impacts, and key issues of concern to be evaluated in the EIS. Scoping materials and other information about the Proposed Action are available on the project website at: <https://home.army.mil/hawaii/index.php/PTAEIS>.

#### OPTIONS TO SUBMIT WRITTEN COMMENTS

Comment period is September 4 - October 14, 2020.

- EIS Website: <https://home.army.mil/hawaii/index.php/PTAEIS>
- Email: [usarmy.hawaii.nepa@mail.mil](mailto:usarmy.hawaii.nepa@mail.mil)
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Mike Donnelly, PTA Public Affairs Officer  
Email: [michael.o.donnelly.civ@mail.mil](mailto:michael.o.donnelly.civ@mail.mil)  
Phone: (808) 969-2411

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NEPA Program Manager  
U.S. Army Garrison Hawaii  
Directorate of Public Works - Environmental  
948 Santos Dumont Ave.  
Building 105, 3rd Floor  
Wheeler Army Airfield  
Schofield Barracks, HI 96857-5013

# Questions and Answers



## **QUESTIONS AND ANSWERS (Q's & A's)**

### **Environmental Impact Statement for Army Training Land Retention at Pōhakuloa Training Area in Hawai'i**

**September 3, 2020**

#### **Q-1. What is the Pōhakuloa Training Area (PTA) and what is it used for?**

**A-1:** PTA is on the island of Hawai'i and encompasses approximately 132,000 acres of land for the specific purpose of preparing military personnel for the rigors of combat. U.S. Army Hawaii (USARHAW) conducts training at PTA to meet its federally mandated mission of readiness. Training offered at installations such as PTA support the Army's fulfillment of its role in the Nation's defense. Users of PTA, including the Army, U.S. Marine Corps, U.S. Navy, U.S. Air Force, U.S. Army Reserve, Hawaii Army National Guard, Hawaii Air National Guard, State and County of Hawai'i first responders and firefighters, Hawai'i Civil Defense Agency, Hawai'i Emergency Management Agency, State Office of Homeland Security, Hawai'i Police Department, and others, rely on the installation to fulfill agency-specific mission and readiness requirements. PTA is the largest contiguous live-fire range and maneuver training area in Hawai'i and is considered the Pacific's Premier Training Center. It is the only U.S. training area in the Pacific region where training units can complete all mission essential tasks, and the only U.S. training facility in the Pacific region that can accommodate larger than company-sized units for live-fire and maneuver exercises.

#### **Q-2. What is the background of Army training use at PTA and future needs?**

**A-2:** The Pōhakuloa area was used for training as early as 1938, but not routinely used until 1943. PTA was formally established in 1956 through a maneuver agreement granted by the Territory of Hawai'i. Approximately 23,000 acres of land were leased for military purposes to the Army in 1964 by the state (State-owned land). The 65-year lease expires on August 16, 2029. The State-owned land contains maneuver land and key training facilities, some of which are not available elsewhere in Hawai'i, and provides access between major parcels of U.S. Government-owned land on PTA. This land has been key to PTA's ability to support numerous training facilities and capabilities essential to USARHAW and other military services and local agencies. The Army proposes to retain up to approximately 23,000 acres of State-owned land at PTA in support of continued military training (the "Proposed Action").

#### **Q-3. Why is the Environmental Impact Statement (EIS) being prepared?**

**A-3:** The National Environmental Policy Act of 1969 (NEPA) requires federal agencies to examine the potential effects of proposed actions on the human environment. Under Hawai'i Revised Statutes (HRS) Chapter 343 and Hawai'i Administrative Rules (HAR) Chapter 11-200.1, collectively referred to as the Hawai'i Environmental Policy Act

(HEPA), use of State lands is a trigger that requires environmental disclosure. An EIS-level analysis is being conducted as, in accordance with HAR Section 11-200.1-14(d)(2), the accepting authority, the Hawai'i Department of Land and Natural Resources, has determined, through its judgement and experience, that the applicant's Proposed Action may have a significant effect.

NEPA regulations for environmental disclosure (environmental assessments or environmental impact statements) are guided by the Council on Environmental Quality (CEQ) in Title 40 Code of Federal Regulations [C.F.R.] Parts 1500-1508. Specific Army NEPA implementation regulations are in Title 32 C.F.R. Part 651.

The Army intends to prepare a single EIS, compliant with both NEPA and HEPA regulations, to facilitate concurrent public review and processing at both the federal and state levels of government.

**Q-4. What is the difference between NEPA and HEPA?**

**A-4:** NEPA and HEPA require government agencies proposing to use government land to identify and analyze the potential adverse environmental, social and economic effects of the Proposed Action and reasonable alternatives to the Proposed Action that would provide similar benefits with different environmental impacts. NEPA and HEPA procedures ensure environmental information is available to public officials and citizens before decisions are made and before actions are taken, and both allow for public disclosure and participation.

Like NEPA, the purpose of HEPA is to ensure environmental concerns are given appropriate consideration in decision making, along with economic and technical considerations, and allow for public disclosure and participation. Both require publication of a notice to alert the public to preparation of an EIS, with a public scoping period prior to preparation of an EIS.

**Q-5. What agency is undertaking the EIS?**

**A-5:** The project proponent undertaking the EIS is U.S. Army Garrison-Hawaii (USAG-HI). The preparer of the EIS is the Department of the Army.

**Q-6. What Proposed Action is being considered in the EIS?**

**A-6:** The Proposed Action is to retain up to approximately 23,000 acres of State-owned land at PTA in support of continued military training. The Army would retain the State-owned land prior to the end of the current lease to limit impacts on training.

**Q-7. What is the purpose and need for the Proposed Action?**

**A-7:** The purpose of the Proposed Action is to enable USARHAW to continue to conduct military training on the State-owned land within PTA to meet its current and future training requirements. The Proposed Action is needed to allow access between major parcels of U.S. Government-owned land at PTA, retain substantial Army infrastructure investments, allow for future facility and infrastructure modernization, preserve limited maneuver area, provide austere environment training, and maximize use of the impact area in support of USARHAW-coordinated training.

**Q-8. What resources will be analyzed in the EIS?**

**A-8:** The EIS will analyze the following resources: air quality and greenhouse gases, airspace, biological resources, archaeological and cultural resources, electromagnetic spectrum, geology and soils, hazardous and toxic materials and wastes, human health and safety, land use, noise, socioeconomics and environmental justice, transportation and traffic, utilities, and water resources. The EIS will quantitatively and qualitatively analyze and evaluate the potential environmental and socioeconomic impacts of the proposed alternatives.

**Q-9. What resources may be significantly impacted from implementation of the Proposed Action?**

**A-9:** An EIS-level analysis is being undertaken as the land retention action could have significant impacts (adverse or beneficial) on biological resources, cultural resources, hazardous and toxic materials and wastes, socioeconomics, utilities, and human health and safety.

**Q-10. Q-10. What methods of land retention is the Army considering?**

**A-10:** Army Regulation 405-10 identifies authorized methods for Army retention of non-federal land which include title, lease, easement, and license. Several retention methods can be accomplished through different mechanisms according to Army Regulations. The Army would negotiate with the State regarding the most appropriate land retention method(s) for the selected alternative after issuance of the Record of Decision.

**Q-11. When is the scoping period for the EIS?**

**A-11:** The scoping period for a NEPA EIS will occur for 40 days after the publication of the Notice of Intent (NOI) in the *Federal Register*. In accordance with HAR Section 11-200.1-23(c), the HEPA scoping period is within 30 days after the publication of the EIS Preparation Notice (EISPN) in *The Environmental Notice*, the state Office of Environmental Quality Control's publication.

As the EIS will be a joint NEPA-HEPA document, the public scoping processes will run concurrently and will jointly meet NEPA and HEPA requirements. The NOI will be published in the *Federal Register* on September 4, 2020 and the EISPN will be

published in *The Environmental Notice* on September 8, 2020. The joint NEPA-HEPA scoping period will end on October 14, 2020.

The Army has voluntarily chosen to extend the NEPA scoping period. The collective NEPA scoping period will be 40 days.

**Q-12. How can the public be involved in the EIS scoping process?**

**A-12:** The public scoping process will help identify possible alternatives, potential environmental impacts, and key issues of concern to be analyzed in the EIS, as well as eliminate issues from detailed consideration that are not significant, or which have been covered by prior environmental reviews.

The Army invites public comments on the scope of the EIS during a 40-day public scoping period beginning September 4, 2020. Comments can be submitted on the EIS website: <https://home.army.mil/hawaii/index.php/PTAEIS>, as well as emailed to [usarmy.hawaii.nepa@mail.mil](mailto:usarmy.hawaii.nepa@mail.mil), or mailed to: ATLR PTA EIS Comments, P.O. 25 Box 3444, Honolulu, HI 96801-3444. All comments must be postmarked or submitted by October 14, 2020, to be considered in preparation of the EIS.

Due to public health concerns from COVID-19, large group, in-person public scoping meetings will not be held. The public is invited to participate in an online EIS scoping virtual open house September 23, 2020, which will take place on the project website: <https://home.army.mil/hawaii/index.php/PTAEIS>. During the virtual open house participants can:

- 1) View online presentations.
- 2) Call (808) 300-0220 to submit oral comments from 4 p.m. – 9 p.m. (Wednesday, September 23 only).

Written comments (mail, email, EIS website) will be accepted throughout the scoping period. Oral comments will be summarized in the Draft EIS, and the recording will be made available to the Office of Environmental Quality Control for the public record. Written comments and associated responses will be included in the Draft EIS.

**Q-13. How do you submit comments and, if you have further questions, whom should you contact?**

**A-13:** Written comments and/or concerns regarding the scope of the EIS can be submitted via the EIS website at: <https://home.army.mil/hawaii/index.php/PTAEIS>. Alternatively, comments can be emailed to: [usarmy.hawaii.nepa@mail.mil](mailto:usarmy.hawaii.nepa@mail.mil), or mailed to: ATLR PTA EIS Comments, P.O. Box 3444, Honolulu, HI 96801-3444.

Comments will be accepted from September 4 through October 14, 2020. All comments will be valued equally, regardless of how they are submitted. Comment submittal through the EIS website is preferred. Please do not submit duplicate comments. Personal contact

information will not be published in the Draft or Final EIS. Personal contact information will be maintained for the project record and will not be released unless required by law. All relevant identifying information of public agencies, organizations, and elected officials will be published in the EIS. Comments should be written clearly, as commenters will not be contacted to provide clarification. For those who do not have ready access to a computer or internet, the scoping materials posted to the EIS website will be made available upon request by mail.

For more information or accessibility requests, please contact Michael Donnelly, PTA Public Affairs Officer by email: michael.o.donnelly.civ@mail.mil, or phone: (808) 969-2411.

**Q-14. Will the public have additional opportunities to participate in the EIS process?**

**A-14:** Yes, there will be additional opportunities to participate in the EIS process. The public will be able to participate in a minimum 45-day review period following publication of a future Notice of Availability (NOA) for the Draft EIS. Public outreach will be conducted during the 45-day comment period. Written comments will be accepted on the Draft EIS for 45 days after publication of the NOA in the *Federal Register*.

The Final EIS will also be made available through an NOA, to be published in the *Federal Register*, initiating the 30-day waiting period. The Army will complete the EIS process by issuing a Record of Decision no sooner than 30 days following the U.S. Environmental Protection Agency's NOA in the *Federal Register*, to provide notice that a Final EIS has been filed.

Written comments also will be accepted for the HRS Chapter 343 process for 45 days after publication of the NOA of the Draft EIS in *The Environmental Notice*. A similar NOA will be published in *The Environmental Notice* for the Final EIS. The Hawai'i Department of State Board of Land and Natural Resources will conduct an acceptability determination of the Final EIS.

**Q-15. When will the Draft EIS be completed?**

**A-15:** A definitive timeline has not been established for the completion of the Draft EIS; however, it is estimated that the Draft EIS will be available by February 2022.



Appendix D

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# **Archaeological Literature Review**



**Archaeological Literature Review for  
Army Training Land Retention at Pōhakuloa Training Area  
Project, Ka‘ohe Mauka and Humu‘ula Ahupua‘a,  
Hāmākua and Hilo Districts, Island of Hawai‘i**

**TMKs (3) 3-8-001:013 and :022, (3) 4-4-015:008, (3) 4-4-016:005, and (3) 7-1-004:007**

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KLF/GANDA Project No. 02430000.GNDA



13 October 2021



## **MANAGEMENT SUMMARY**

Kleinfelder/GANDA prepared an archaeological literature review for the Army Training Land Retention at Pōhakuloa Training Area (PTA) project located within the ahupua‘a of Ka‘ohe Mauka (Hāmākua District) and Humu‘ula (Hilo District) on the island of Hawai‘i. The project does not involve new training, construction, or resource management activities at PTA. Instead, it is a real estate/administrative action that would enable continued military use of the State-owned land.

The current study consists of background archival research, a records search at the State Historic Preservation Division Library in Kapolei, and a review of archaeological reports and geographic information system (GIS) data on file with the PTA Cultural Resources Management Program. This archaeological literature review also includes summary discussions on previously conducted archaeological work and known archaeological resources within the project area; these summaries were limited to prior studies and site information approved for use by the U.S. Army Garrison-Hawaii in meeting confidentiality requirements in the Archaeological Resources Protection Act (ARPA) of 1979. The results of this literature review and desktop analysis lead to recommendations to ensure impacts to culturally and historically significant archaeological sites are identified, mitigated, and managed.

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## **1.0 INTRODUCTION**

At the request of Group 70 International, Inc. (G70), and on behalf of the U.S. Army Corps of Engineers, Honolulu District, Kleinfelder/GANDA prepared an archaeological literature review for the Army Training Land Retention (ATLR) at Pōhakuloa Training Area (PTA) project located within the ahupuaʻa of Kaʻohe Mauka (Hāmākua District) and Humuʻula (Hilo District) on the island of Hawaiʻi (Figure 1 and Figure 2). PTA encompasses approximately 132,000 acres of U.S. Government-owned and State-owned land. Since 1964, the U.S. Government has leased approximately 23,000 acres of State-owned land (the project area) which has been a keystone of PTA, supporting numerous facilities and capabilities that are deemed essential to U.S. Army Hawaii (USARHAW) and other military services and local agencies. This lease expires in August 2029.

G70 is preparing an Environmental Impact Statement (EIS) for the ATLR at PTA project which does not involve new training, construction, or resource management activities at PTA. Instead, it is a real estate/administrative action that would enable continued military use of the State-owned land. The EIS evaluates the potential impacts of a variety of reasonable alternatives that meet the purpose and need of the project. Alternatives analyzed in the EIS include 1) Full Retention, 2) Modified Retention, 3) Minimum Retention and Access, and 4) a No Action Alternative (no retention of State-owned land after 2029).

The current study consists of background archival research, a records search at the State Historic Preservation Division Library in Kapolei, and a review of archaeological reports and geographic information system (GIS) data on file with the PTA Cultural Resources Management (CRM) Program. This archaeological literature review also includes summary discussions on previously conducted archaeological work and known archaeological resources within the project area; these summaries were limited to prior studies and site information approved for use by the U.S. Army Garrison-Hawaii (USAG-HI) in meeting confidentiality requirements in the Archaeological Resources Protection Act (ARPA) of 1979.

### **1.1 Project Overview**

The ATLR at PTA project proposes to retain up to approximately 23,000 acres of State-owned land prior to the expiration of the current lease to ensure training is not interrupted. Following retention of the project area (or portion thereof), the Army would continue to conduct ongoing activities (training and other activities such as public use programs). The Army would continue to permit and coordinate training and other activities on the retained State-owned land by other PTA users.

The purpose of the ATLR at PTA project (a Proposed Action) is to enable USARHAW to continue to conduct military training within the project area to conduct military training on the State-owned land within PTA to meet its ongoing training requirements. The Proposed Action is needed to enable access between major parcels of U.S. Government-owned land in PTA, retain substantial Army infrastructure investments, allow for future facility and infrastructure modernization, preserve limited maneuver area, provide austere environment training, and maximize use of the impact area in support of USARHAW-coordinated training.

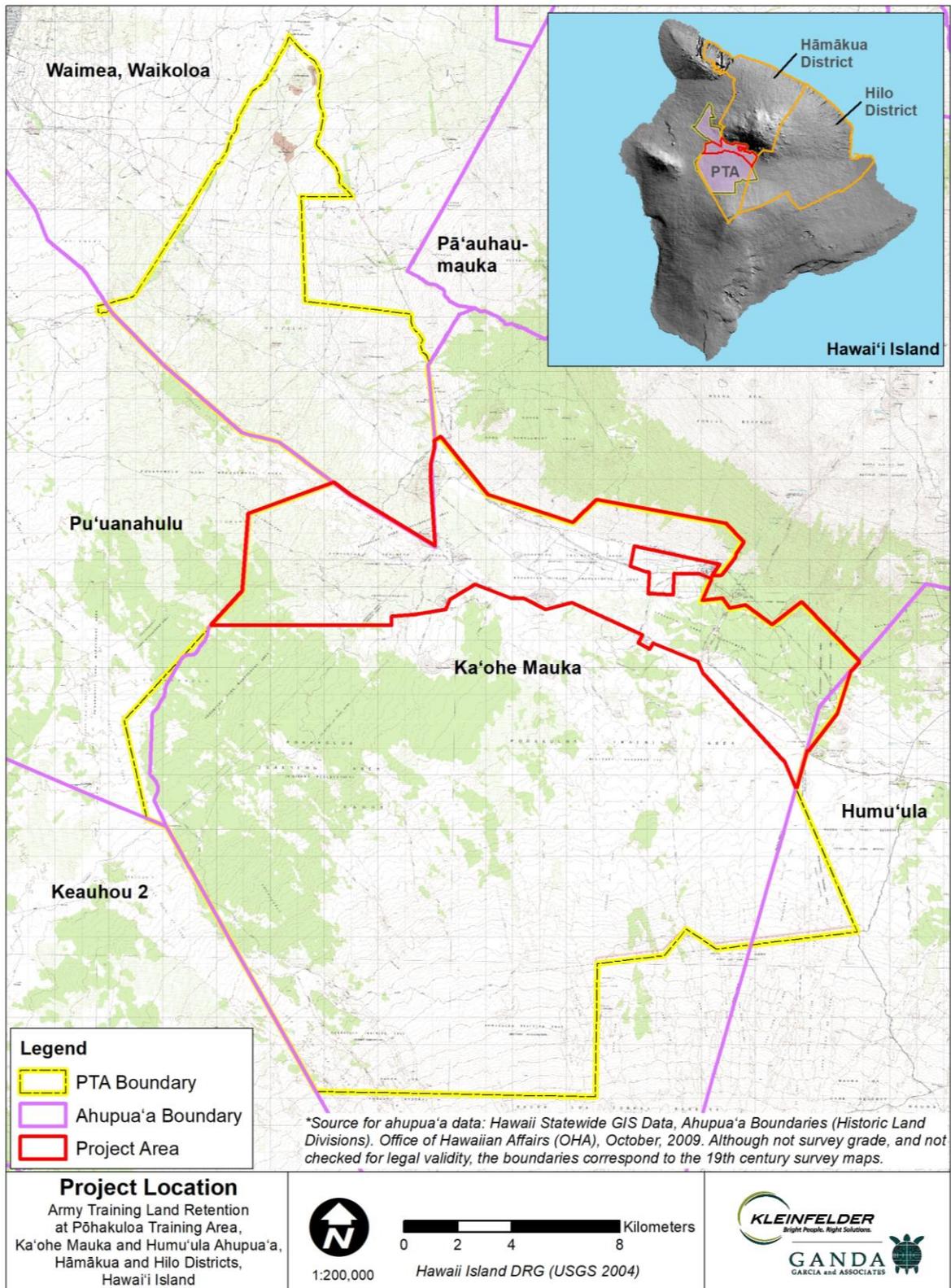


Figure 1. Project area depicted on 2004 USGS quadrangle.

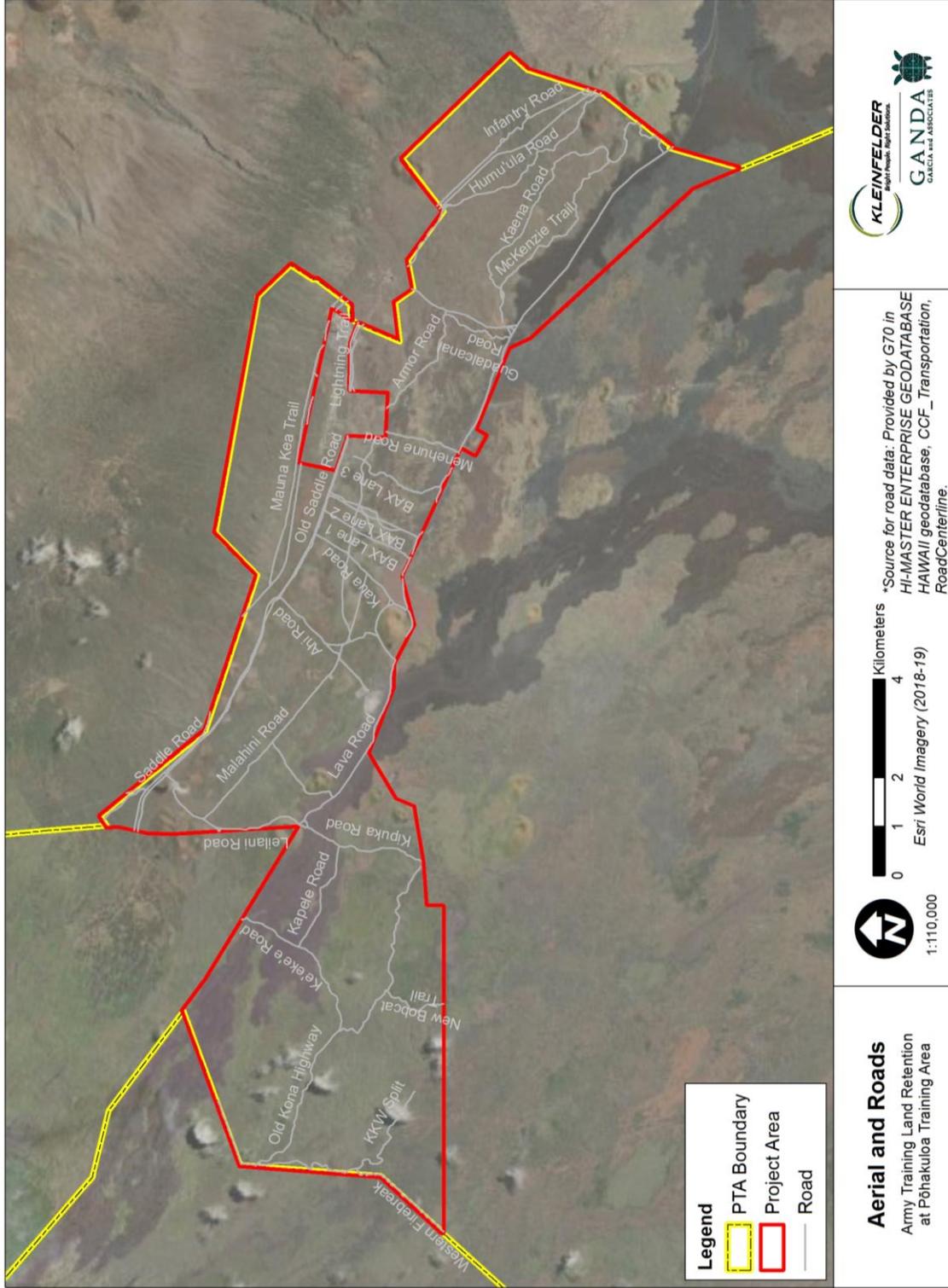


Figure 2. Project area and roadways within project area depicted on aerial imagery.

## **1.2 Regulatory Framework**

The Proposed Action requires compliance with the National Environmental Policy Act of 1969 (NEPA). NEPA directs federal agencies to examine the direct and indirect environmental impacts that may result from the Proposed Action and alternatives, including potential impacts to “historic and cultural resources” (42 United States Code 1502.16). NEPA requirements ensure that environmental information is available to public officials and citizens for review before decisions are made and before actions are taken. The EIS will address relevant laws and regulations to provide decision makers with a comprehensive overview of the regulatory issues associated with the Army’s Proposed Action.

The Army is initiating an EIS process under the Council on Environmental Quality NEPA implementing regulations in Title 40 Code of Federal Regulations (CFR) Parts 1500–1508, and Army NEPA implementing regulations in Title 32 CFR Part 651. The EIS will also fulfill the Hawai‘i EIS statute and implementing rule, codified in Hawai‘i Revised Statutes (HRS) Chapter 343 and Hawai‘i Administrative Rules (HAR) Chapter 11-200-1. Collectively, the Hawai‘i statute and rule are referred to as the “Hawai‘i Environmental Policy Act (HEPA).” Like NEPA, HEPA requires disclosure of the direct and indirect effects of a Proposed Action and alternatives on the environment, including “natural and human-made resources of historic, archaeological, or aesthetic significance” (HAR 11-200-17).

This document is meant to support the NEPA review process by compiling background information on existing conditions of tangible cultural resources (historic architectural resources and archaeological sites) known to exist within State-owned land at PTA. This document will be appended to the EIS as a contributing technical study. The effects on cultural practices, areas of traditional importance, and intangible cultural resources are evaluated through a cultural impact assessment (CIA) prepared in accordance with the Hawai‘i Office of Environmental Quality Control “Guidelines for Assessing Cultural Impacts” (adopted November 19, 1997). The Army has contracted for the completion of a CIA in support of the HEPA requirement through a separate technical study.

## **1.3 Project Area Description**

The project area consists of State-owned land within PTA that is currently leased by the U.S. Government which encompasses five Tax Map Key (TMK) parcels: (3) 3-8-001:013 and :022, (3) 4-4-015:008, (3) 4-4-016:005, and (3) 7-1-004:007 (Figure 3). These parcels are also referred to as “Parcel A” (Tract A-105-1), containing approximately 15,420 acres; “Parcel B” (Tract A-105-2), containing approximately 1,944 acres; and “Parcel C” (Tract A-105-3), containing approximately 5,607 acres (Figure 3). These parcels are designated by the Army as Training Areas (TAs) 1–22, although TAs 16, 17, 21, and 22 also include portions of U.S. Government-owned land.

The eastern two-thirds of the project area consists of a roughly two-mile-wide corridor extending northwest-southeast through PTA along the Saddle Road (State Route 200) corridor between Gilbert Kahele Recreation Park to the east and the Saddle Road-Daniel K. Inouye Highway junction to the west. The western third of the project area comprises a roughly 8,000-acre area which extends towards the western PTA boundary and southwest of the Ke‘āmuku Maneuver Area.

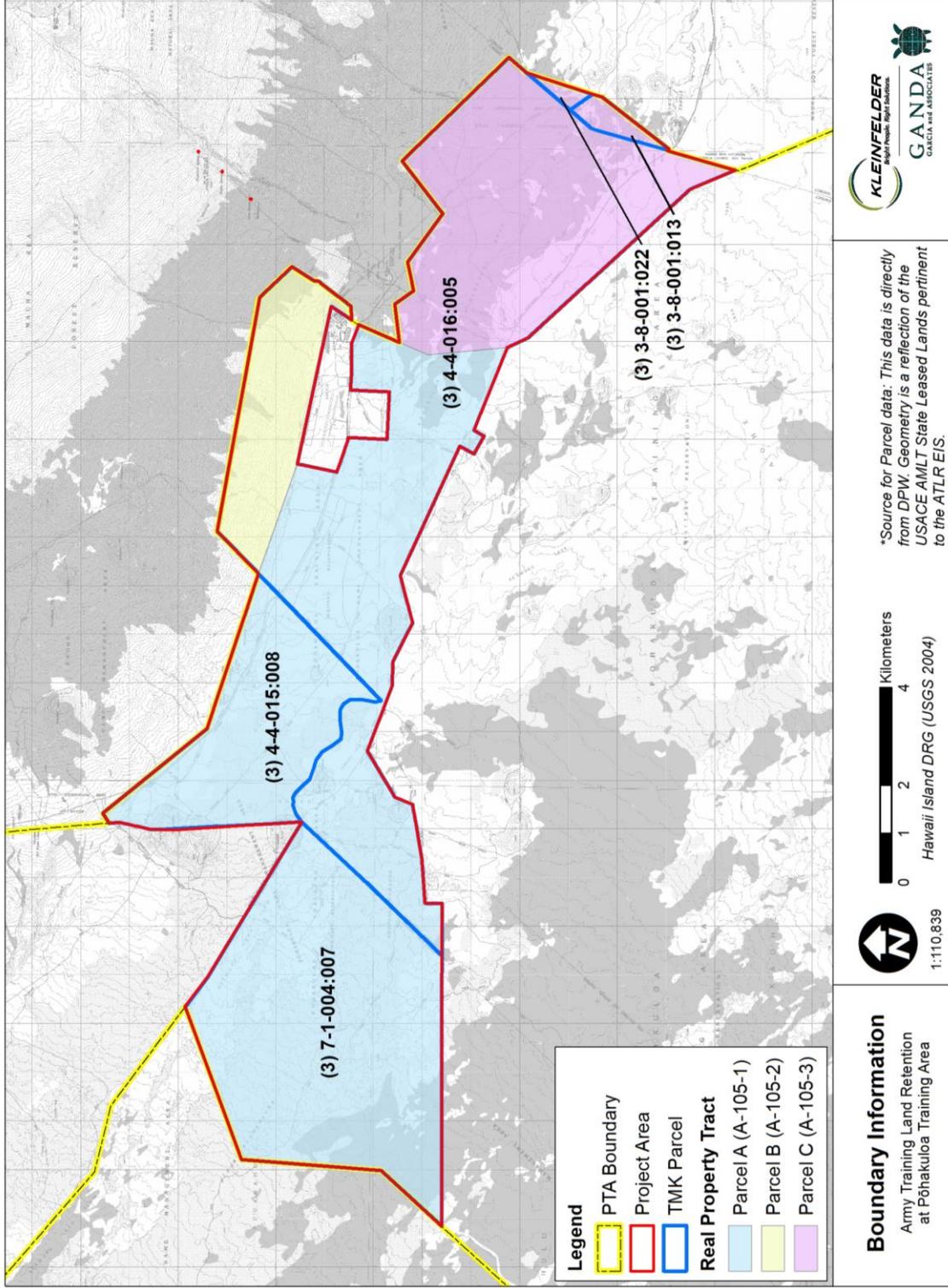


Figure 3. Project area showing TMK and Real Property Tract parcel boundaries.

The lands surrounding PTA include federal, State-owned, and private lands. Land use in the area includes cattle grazing at Parker Ranch, a residential subdivision at Waiki‘i Ranch, and undeveloped lands owned by the state of Hawai‘i and Kamehameha Schools.

## **2.0 BACKGROUND**

The following background information establishes the environmental and historical setting of the project area. This information provides a contextual framework for assessing current conditions and conducting an environmental analysis for the project EIS.

### **2.1 Environmental Context**

PTA is located in the arid Saddle Region of the island of Hawai‘i, between Mauna Kea and Mauna Loa volcanic mountains, extending over an area approximately 44,055 hectares (170 square miles). The Saddle Region is characterized by fairly level, undulant lava flows marked by pu‘u (cinder cones). Elevations within the project area range from approximately 4,200 feet above mean sea level (amsl) in the west to approximately 7,700 feet amsl in the northeast along the southwestern slope of Mauna Kea. Annual rainfall in the region ranges from 43 to 56 centimeters (Giambelluca et al. 2013).

The geology of the project area is comprised mostly of older (300,000 to 11,000 B.P.) lava flows (Laupahoehoe Volcanics) originating from Mauna Kea partially overlain with more recent (5,000 to 180 B.P.) pāhoehoe and a‘a flows (Kau basalt) originating from Mauna Loa (Sherrod et al. 2007) (Figure 4). These lava flows created a variety of geologic features that were utilized by Native Hawaiians, particularly lava tubes and blisters. Lava tubes are linear cavities under solidified lava that are the result of underground rivers of molten lava, while lava blisters are “small, steep-sided swellings that are hollow and raised on the surfaces of some basaltic lava flows [and are] formed by gas bubbles pushing up the lava’s viscous surface” (Parker 1997:146). Collapsed lava tubes and blisters were conducive for human habitation, storage, and shelter.

Pāhoehoe flows provided rocks suitable for construction of Traditional Hawaiian architectural features (e.g., platforms, terraces, and cairns), as well as ranching features (e.g., boundary walls, fence-lines, enclosures) and recent military features (e.g., cairns, C-shapes, walls, and related construction for defensive positions).

Some pāhoehoe flows such as the Kau basalt series formed surface chills of volcanic glass that were utilized as lithic quarries by Hawaiians. Sinton (2004) describes the processes by which the flow is formed:

The flow field is a complex of individual flow lobes that range in character from brown-weathering areas with only very thin glass crusts, to blue-black-weathering units that are characterized by conspicuous glass surface crusts ranging up to ~3cm in thickness. It is within the latter units that specific areas were exploited as glass quarries. The black-weathering units are very dense pāhoehoe, typical of that which has degassed during transit in lava tubes and subsequently oozed out down slope....The quarried lava is a basalt with scattered micro-phenocrysts of olivine ranging up to ~1mm in size.

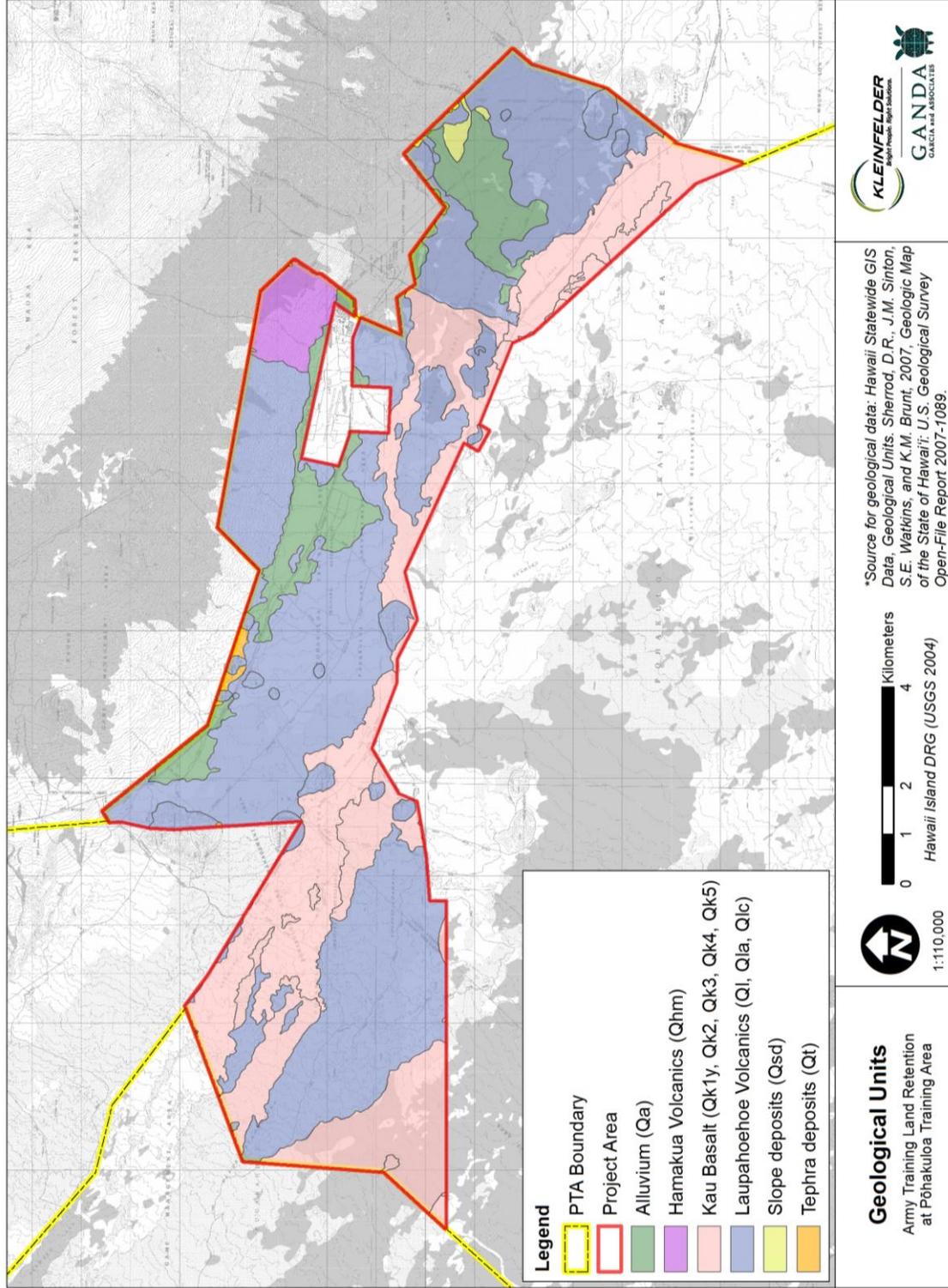


Figure 4. Geological units within the project area.

Soils within the project area are generally comprised of weakly developed series, supporting a vegetation community classified as montane dry and mesic forest grading to subalpine forest and shrubland. According to Shaw (1997:10) vegetation at PTA “is a complex mosaic of plant communities directly related to the type and age of the substrate and subsequent amount of soil development.” Younger flows are relatively barren, supporting only limited vegetation such as ‘ohi‘a lehua (*Metrosideros* spp.), while older flows with more developed soils support grasses, small trees, and shrubs, such as māmane (*Sophora chrysophylla*), naio (*Myoporum sandwicense*), pūkiawe (*Leptecophylla tameiameia*), a‘ali‘i (*Dodonaea viscosa*), and ‘āweoweo (*Chenopodium oahuense*) (Shaw 1997:10; Juvik and Juvik 1998:125–126).

## 2.2 Pre-Contact Land Use

Pre-Contact Hawaiians generally favored coastal and lower valley locales for habitation. Traditional land use centered on agricultural production, coastal exploitation of marine resources, and the collection of wild plants and animals (Kirch 1985:2–3). Agricultural intensification accounted for a wide variety of cultigens, the two most prolific being kalo (*Colocasia esculenta*, taro) and ‘uala (*Ipomoea batatas*, sweet potato). Kalo was grown across the islands but particularly within irrigated pond fields along river valleys. Sweet potato was grown primarily in drier areas or those not typically favorable to wetland farming. Other important cultigens included pia (*Tacca leontopetaloides*, arrowroot), ti (*Cordyline terminalis*), niu (*Cocos nucifera*, coconut), mai‘a (*Musa paradisiacal*, banana), and kō (*Saccharum officinarum*, sugarcane). The exploitation of coastal marine resources was equally important and centered on fishing, the collection of limu (various seaweed species), marine invertebrates, salt production, and aquaculture.

The mauka areas beyond the limits of agriculture also provided a wide range of natural resources. While specific information regarding traditional land use of the Saddle Region is extremely limited, ethnohistoric information can be inferred from data collected from previous archaeological work conducted in the region (Maly 1999). While the arid environment, high altitude, lack of reliable water sources, and scarce cultivable land within the region discouraged use of the area for permanent settlement, radiometric assays from archaeological excavations indicate use of the region soon after settlement of the island of Hawai‘i as early as AD 1000–1200, with intermittent visits occurring by AD 1200–1300 (Athens and Kaschko 1989; Haun 1986; Shapiro and Cleghorn 1998). Early use of the area likely involved short-term, low-impact visits by small groups of Hawaiian specialists who used the area to gather wild fauna, hardwood for tool use and canoe making, and wild plants for subsistence, medicinal, and ceremonial purposes.

Archaeological evidence suggests that many of the site types identified within PTA may be associated with travel corridors through the region (Robins et al. 2006; Shapiro et al. 1998; Williams 2002). Travel routes through the Saddle Region have been identified in ethno-historical documents that connected Pre-Contact settlements (e.g., Kona, Waimea, and Hilo) and led to the Mauna Kea adze quarry and places of ceremonial and cultural importance (Byerly et al. 2014; Cordy 2000). Two of the Saddle Region’s main trails are referenced in the 1873 Boundary Commission testimonies as “Chief ‘Umi’s trails” (Cordy 2000:210) (Figure 5). Native historian Samuel Kamakau (1992:18) noted ‘Umi-a-Liloa’s use of trails for traveling through the Saddle during times of war:

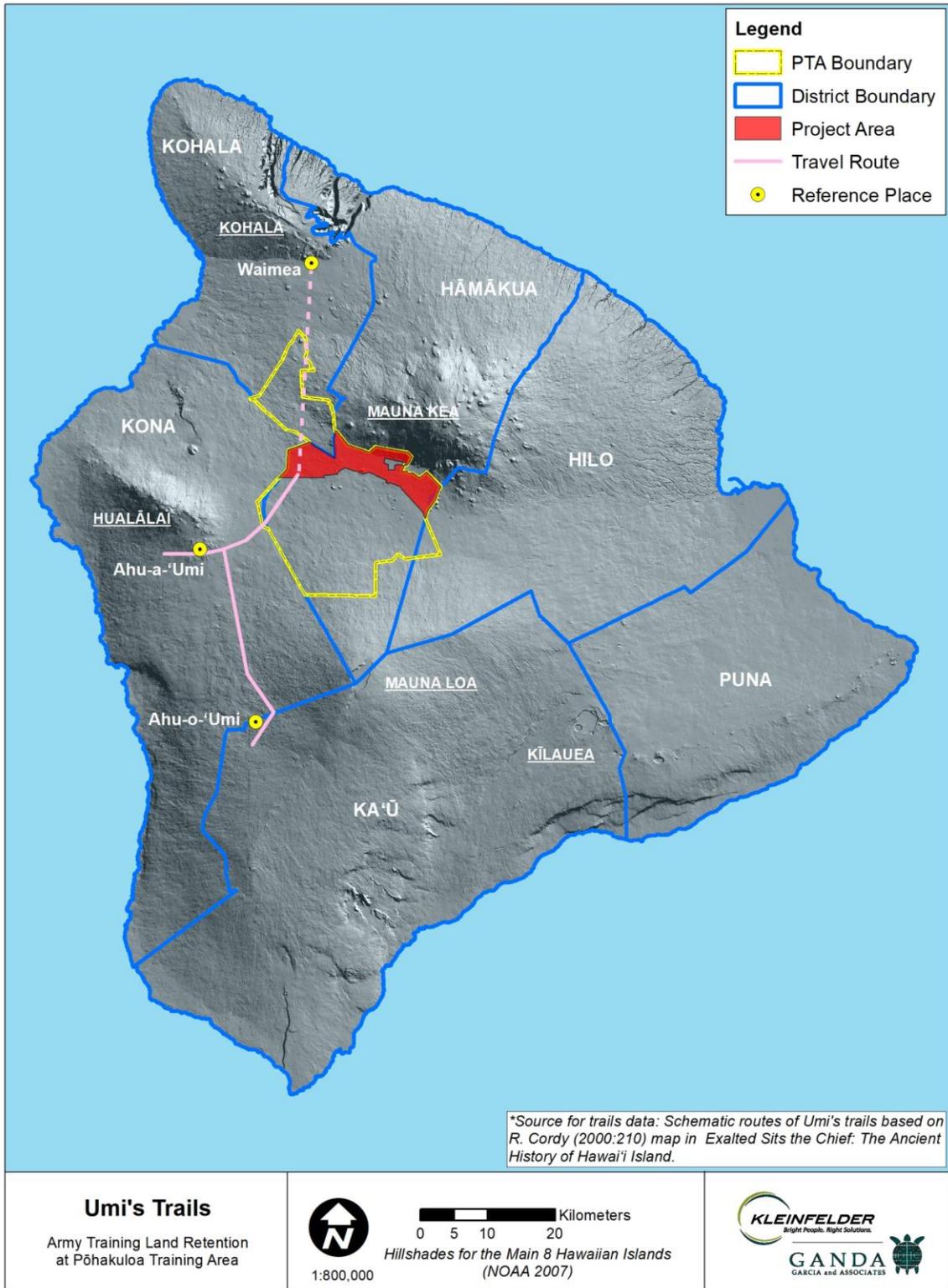


Figure 5. Map of the island of Hawai'i showing schematic routes of 'Umi's trails, adapted from Cordy (2000:210).

“Umi went by way of the mountains to stir up fight with I-mai-ka-lani and the chiefs of Kona. He became famous as a chief who traveled through the mountains of Hawaii, and (its trails) became the routes by which he went to war.”

Resource gatherers and travelers through the area found shelter in lava tubes, blisters, overhangs, and, to a lesser degree, small C-shaped surface structures that were typically found near the travel corridors (Athens and Kaschko 1989; Cordy 1994:206; Hommon and Ahlo 1983; Streck 1992:102). Occupation and use of these shelters were likely confined to short-term stays, although these groups likely established repeated-use camps while exploiting resources (Reinman and Schilz 1993:116–118).

Sociopolitical changes during AD 1400–1650 included the expansion of dryland agriculture and the development of territorial land divisions (e.g., ahupua‘a) which coincided with a surge in population growth (Kirch 1985). Pre-Contact activity in the Saddle Region increased around AD 1400–1450 (Athens et al. 1991); by AD 1450, there was a dramatic increase of production at the Mauna Kea adze quarry to mine the highly valued volcanic glass and fine-grained basalt (Williams 2002).

Increased use of the Saddle Region may also be related to the capture of birds whose feathers were increasingly used as tribute items (Athens et al. 1991:81–82). The plumage of the ‘ō‘ō (*Moho nobilis*), ‘i‘iwi (*Vestiaria coccinea*), and ‘apapane (*Himatione sanguinea*) provided colorful feathers, a particularly potent symbol of chiefly power. Goods ornately decorated with feathers were a direct measure of a chief’s power and influence, including ‘ahu ‘ula (feathered capes), mahiole (helmets), and akua hulu manu (feathered gods) (Valeri 1985:246). According to Emerson (1885, in Welch 1993:26), the collection of bird feathers was done by a specialist known as a kia manu, who captured a bird using a pole with a sticky gum-like substance derived from the pāpala kēpau (*Pisonia umbellifera*) or ‘oha (*Delissea rhytidosperra*) plants. Although some of the birds with fewer colorful feathers survived the plucking, the ‘i‘iwi and ‘apapane were inevitably cooked and eaten, having not survived the extensive plucking of their abundant red plumage (Buck 2003:217–218). The ground-nesting pueo (*Asio flammeus sandwichensis*, Hawaiian owl), although considered an ‘aumakua (family or personal god) by many Hawaiians, were also captured for their plumage which was commonly used in the making of feather kāhili (feather standard, symbolic of royalty) (Malo 1971:38).

A number of bird species that habituated the Saddle Region were consumed by Hawaiians, particularly the larger nēnē (*Branta sandvicensis*, Hawaiian goose) and ‘ua‘u (*Pterodroma sandwichensis*, Hawaiian petrel). A post-Contact native testimony discussing the upland boundaries of Waikōloa Ahupua‘a claimed that nēnē and ‘ua‘u were hunted beyond Waikōloa in neighboring Ka‘ohe and the Saddle Region (Records from Proceedings of Boundary Commission, in Maly and Maly 2002:87). Malo (1971:37) reported that nēnē were often captured in the uplands during their molting season for food and feathers, the latter of which was used in the making of kāhili (Malo 1971:37).

The ‘ua‘u were seasonally hunted in the Saddle Region and were considered a high value food resource, especially for the adze makers visiting the quarries on the Mauna Kea summit (McCoy 1986; Williams 2002; Ziegler 1994, 2003). As a subsistence resource, Moniz (1997) suggests Hawaiians may have favored seabirds over land birds due to their large size and predictable

behavioral patterns that made them an easier target to catch. A mid-nineteenth century account stated the residents of Ka'ohē Ahupua'a had the "sole privilege of capturing the 'ua'u, a mountain-inhabiting sea-fishing bird" (Lyons 1875:111, in Hommon and Ahlo 1983:21). Petrel fledglings were also reportedly procured for the ali'i (Athens et al. 1991:81–82). Juvenile 'ua'u were extracted from their burrows with a long stick used to pierce the bird's down feathers:

It is said the years ago the nesting of the uuau were considered a great delicacy, and were tabooed for the exclusive use of the chiefs. Natives were dispatched each season to gather the young birds which they did by inserting into the burrows a long stick and twisting it into the down of the young which were then easily pulled to the surface. [Henshaw 1902:102]

Hawaiians also captured the 'ua'u with nets as the birds flew up to the mountains in the evening (Handy et al. 1972:259). The birds were cooked by broiling their carcasses over hot stones or coals, or the birds were "cooked in ti leaves with young taro leaves (lu'au) and stems (haha)" (Handy et al. 1972:259). Food items, including birds, were also cooked from the inside out, as described by Buck (2003:18):

The boiling method used throughout Polynesia consisted of applying heat from the inside instead of from the outside. The food was placed in wooden bowls with water, into which red hot stones were dropped. Heated stones termed 'eho were also placed in the interior of the fowls.

An 1891 map by C.J. Lyons referred to the historic survey station Nā'ōhule'elua on the western boundary of Ka'ohē Mauka Ahupua'a as being the "scene of battle between Kona and Hāmākua bird-catchers" (Figure 6), thus suggesting territorial conflicts between traditional bird catchers in the Saddle Region. Nā'ōhule'elua, and an ahu that marks it, was named for two bald men from Waimea and Kona who met on the road at this place (Emerson 1885). One may surmise the two men were the embattled bird catchers mentioned on Lyons 1891 map. At the turn of the twentieth century, it was noted the 'ua'u once "nested in great numbers in the lava between Mauna Kea and Mauna Loa," but the nesting sites were no longer occupied after being invaded by the introduced mongoose (Henshaw 1902:120).

### **2.3 Early Post-Contact Accounts**

During the early post-Contact era, Waimea and Kawaihae continued to be the primary population centers of the region, with a sizable fishing village maintained at Puakō on the shoreline south of Kawaihae. The upland settlement of Waimea contained prime agricultural lands that provided crops to the Kawaihae settlement and foreign voyagers arriving at the busy leeward port. Menzies (1920:55–56) described the cultivated lands of Waimea from afar:

I saw in the verge of the woods several fine plantations, and my guides took great pains to inform me that the inland country was very fertile and numerously inhabited. Indeed I could readily believe the truth of these assertions, from the number of people I met loaded with the produce of their plantations and bringing it down to the water side to market, for the consumption was now great, not only by ship but by the concourse of people which curiously brought into the vicinity of the bay.

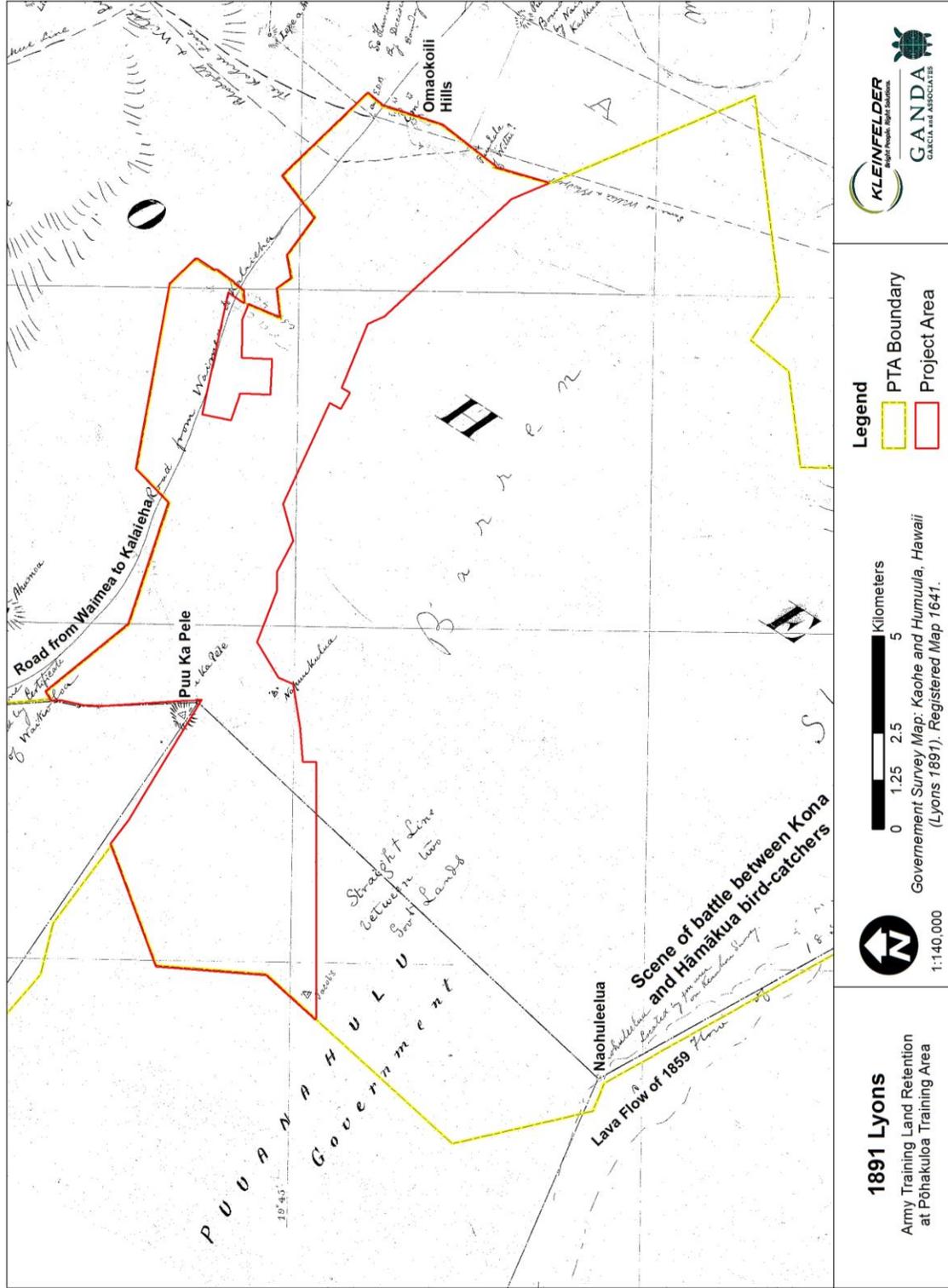


Figure 6. Portion of 1891 Hawaii i Government Survey Map showing place names and regional information (Lyons 1891; RM 1641).

Between approximately 1815 and 1826, 'iliahi (*Santalum* spp., sandalwood) was actively harvested in the upland forests of the Hawaiian Islands for export to China (Cuddihy and Stone 1990:38). 'Iliahi was a desirable export as the trees were plentiful, could be harvested year-round, and did not have to be cultivated. The maka'āinana (commoners) were forced to labor in the upland forests for days or weeks to satisfy their chiefs' growing debts to the King and foreign entrepreneurs (Kamakau 1992:252; McGrath et al. 1973:18). Thousands of trees were taken from the upland slopes of Kohala and Mauna Kea and transported by foot to Kawaihae for shipping to Honolulu and beyond. A Native testimony described the boundary of Waikōloa bordering Ka'ōhe Mauka Ahupua'a on the west and speaks of cutting sandalwood in the region:

Kiai, sworn:...Puuhinai is a slight rise in the pili lands, a low hill...Keamuku is a lava field quite near Puukapele. Hanaialii is two miles perhaps from Keamuku. Puuhinai is about the same distance from Hanaialii. There is no road nor any gulches on the boundary. I know no gulch between Hanaialii and Puukapele. There is a gulch of Waikii and one of Palihai, but they are not near the line. These gulches join at Naamana or Namahana. The same gulch runs to the sea at Puako, runs through Waikoloa... I am well acquainted with that part of the boundary and the rest of it also. I have travelled the whole line personally. Used to hunt for uwau and neenee [nēnē], and to cut sandal wood in that part of the country... [Records from Proceedings of Boundary Commission, in Maly and Maly 2002:87]

The overharvesting of 'Iliahi would soon exhaust the resource, leaving the upland regions deforested. By the 1840s, the 'Iliahi forests had been completely depleted to the point that only saplings remained (Wilkes 1845:217, in Clark 1983:48).

In 1823, British missionary William Ellis toured the island of Hawai'i in search of suitable areas in which to establish churches. In his journal, Ellis (1984:3–4) noted the sparse settlement of the uplands and, of particular interest, included accounts of Native Hawaiians who traveled into the mountain lands.

There are few inland settlements on the east and north-west parts of the island, but, in general the interior is an uninhabited wilderness. The heart of Hawaii, forming a vast central valley between Mauna Roa, Mauna Kea, and Mauna Huararai, is almost unknown, no road leads across it from the east to the western shore, but it is reported by the natives who have entered it, to be "Bristled with forests of ohia," or to exhibit vast tracts of sterile and indurated lava.

Early historic accounts provide some insight into the remoteness of the Saddle Region and the difficulties foreigners had while traveling across the Saddle. Hommon and Ahlo (1983:27) provide a summary of historic accounts that suggest the Saddle Region contained a scarcity of well-defined trails and those that existed were difficult to follow even with Hawaiian guides present (Hommon and Ahlo 1983:28). As accounted by J.S. Emerson in his survey field book on December 8, 1885, during his journey from Waimea through Ke'āmuku to the Judd Trail near Ahu a 'Umi, located on the southwest corner of the Saddle, the arid and rocky landscape was an added challenge for Western travelers:

The terminus of the Judd Road among the other points is carefully located. No expedition which I have ever conducted has caused me such anxiety and has attended with such loss as this. It was a frightful trip, the remembrance of which

haunts me. The water holes were dry and the country parched with drought. At Waimea we encountered a cold storm of wind and rain. At Keamuku the animals drank too freely of bad water. Used up with hunger, thirst, cold and improper drink, they fell by the way. Though I did my best to save them, I lost my poor old horse at Waimea and left the old Waawaaikinaauao to die on the flow of 1859 along with a mule belonging to my man. [Emerson 1885]

## **2.4 The Māhele and Land Tenure Change**

In 1848, the Māhele instituted a change from the Traditional Hawaiian system of land tenure to a system based on the western concept of fee simple ownership. During the Māhele, the Hawaiian chiefs and konohiki (headman of an ahupua‘a) were required to present their claims to the Land Commission and receive awards for the lands quit-claimed to them by Kamehameha III. Until an award for these lands were issued, the title remained with the government. A Land Commission Award (LCA) gave complete title to the lands except for the government’s right to commutation. Upon satisfaction of the commutation, which could be settled by cash payment or through the exchange of land of equal value, a Royal Patent was issued by the minister of the interior. A Royal Patent quit-claimed the governments’ interest in the land and served as proof that the government’s right to commutation no longer existed.

The Kuleana Act of 1850, sometimes referred to as the “Second Great Māhele,” bolstered private land ownership even further by permitting maka‘āinana to own land as well as foreign-born individuals. The restrictions within the Kuleana Act, however, made it difficult for commoners to receive a land award. The Act also discouraged Hawaiians who did not actively cultivate the land. The Act of August 10, 1854, later dissolved the Land Commission and stated, “a Land Commission Award shall furnish as good and sufficient a ground upon to maintain and action for trespass, ejectment, and other real action, against any persons or persons, whatsoever, as is the claimant, his heirs of assigns, has received a Royal Patent for the same” (Chinen 1958:14). An LCA recipient was thus still protected if they had not received a Royal Patent (Chinen 1958:13–14).

Overall, the Māhele and subsequent land ownership regulations marked a key shift in Hawaiian land use history and ushered in a drastic transformation from a redistributive economy to a market-based system. This facilitated the rapid decline of native land tenure and led to the widespread purchase of land by wealthy foreign investors.

### **2.4.1 LCA and Kuleana Claims within Project Area**

The majority of the project area is located within the ahupua‘a of Ka‘ohe Mauka, with a small portion of the project area extending into the ahupua‘a of Humu‘ula. It is important to note that Ka‘ohe Mauka is a modern ahupua‘a designation that has divided the traditional ahupua‘a of Ka‘ohe into two separate areas; Ka‘ohe Mauka is not named in the Māhele or listed in the LCA Indices.

In 1848, Ka‘ohe Ahupua‘a was designated as Crown Lands and awarded to Victoria Kamamalu, who then relinquished the land to Kamehameha III (Buke Māhele 1848:5–6). Later that same year, Kamehameha III gave Ka‘ohe to the government land inventory (Buke Māhele 1848:191). There were four kuleana claims registered by native tenants within Ka‘ohe, of which only one award was granted (Table 1). Koolau was granted one ‘āpana of seven acres under

*Table 1. Kuleana Claims for Ka ‘ohe Ahupua‘a*

| <i>LCA Number</i> | <i>Claimant</i> | <i>Awarded</i>    | <i>Description</i>                  |
|-------------------|-----------------|-------------------|-------------------------------------|
| 3705B             | Koolau          | 1 ‘āpana, 7 acres | Kalo, arrowroot, banana, and coffee |
| 3722B             | Keopohaku       | Not awarded       | -                                   |
| 8297              | Kookooku        | Not awarded       | -                                   |
| 10180             | Malao, Tatina   | Not awarded       | -                                   |

LCA 3705B. The LCA testimony indicates kalo, arrowroot, banana, and coffee were cultivated on the parcel. This parcel was likely located north of Mauna Kea at lower elevations where the modern boundary of Ka‘ohe Mauka Ahupua‘a is delineated.

Like Ka‘ohe, Humu‘ula Ahupua‘a was also initially designated as Crown Lands awarded to Victoria Kamamalu and relinquished to Kamehameha III (Maly and Maly 2005:62). However, Humu‘ula was retained as part of the Crown Lands inventory. There were no kuleana claims registered or awarded in Humu‘ula.

## **2.5 Historic Period Land Use**

Concurrent with the declining ‘iliahi (sandalwood) trade, the ranching industry soon came to dominance in the Saddle Region, supplying a growing foreign population in the Hawaiian Islands with meat, tallow, hides, and wool. The rocky, arid landscape, inconducive to commercial agriculture, eventually gave way to U.S. military use of the area by the 1930s, which has continued into the modern period.

### **2.5.1 Cattle and Sheep Industry**

Ranching has a long history on the island of Hawai‘i, traced back to the introduction of cattle and sheep in 1793 when the English Captain George Vancouver presented Kamehameha I a gift of seven longhorn cows and four sheep (Brennan 1974:23). Vancouver returned the following year bringing goats and geese, as well as more cattle and sheep. These first cattle were the personal property of Kamehameha I and initially had little economic impact (Desilets et al. 2017:9). To ensure the cattle had a chance to propagate, Kamehameha I instituted a kapu (prohibition) stipulating cattle were not to be molested or killed, which was punishable by death (Brennan 1974:19–20).

The free roaming cattle herds reproduced rapidly in the Waimea Region and mountain slopes, and by 1802, the animals had become so feral “that none of the natives dare approach them” (Turnbull 1813:243, in Kelly 1974:44). During the ten-year-long kapu, cattle numbers increased dramatically and had an enormous impact on the environment, devouring and trampling native crops (Brennan 1974:45). Stone walls were built on a massive scale throughout the island of Hawai‘i to protect traditional homes and agricultural fields from the free roaming cattle. Large tracts of land were negatively impacted as a direct result of the cattle and sheep industries.

Kamehameha III lifted the kapu on cattle in 1815, and in a measure to control the large free roaming herds, he sanctioned the hunting of bullocks by hiring foreign hunters in 1819. One of the first bullock hunters to be authorized by the Hawaiian Kingdom was John P. Parker, the founder of

the Parker Ranch (Kelly 1974:44). Parker was compensated with live cattle, from which he selected the best cattle for breeding and re-domestication to form Parker Ranch (Brennan 1974:48). Cattle started to become a significant economic resource as the bullocks were hunted for meat, hides, and tallow to supply the visiting fleets of whaling ships stopping in the islands to replenish their stores (Brennan 1974:45). Reverend William Ellis described early bullock hunting observed by his companion Mr. Goodrich after returning from a trip to Mauna Kea:

In his way down, he saw at a distance several herds of wild cattle, which are very numerous in the mountains and inland parts of the island, and are the produce of those taken there, and presented to the king, by Captain Vancouver. They were, at his request, tabued for ten years, during which time they resorted to the mountains, and became so wild and ferocious, that the natives are afraid to go near them.

Although there are immense herds of them, they do not attempt to tame any; and only advantage they derive is by employing persons, principally foreigners, to shoot them salt the meat in the mountains, and bring it down to the shore for purpose of provisioning the native vessels. But this is attended with great labour and expense. They first carry all the salt to the mountains. When they have killed the animals, the flesh is cut off the bones, salted immediately, and afterwards brought on the men's shoulders ten or fifteen miles to the sea-shore. [Ellis 1984:402]

By the 1830s, bullock hunting was a flourishing industry with over 60 independent operators (Bergin 2004:28). The arrival of the *vaqueros* or Spanish cowboys from California in the early 1830s brought with them skilled horsemanship and advanced strategies for capturing and killing cattle. It is during this time there was a significant shift from procuring salted beef for the visiting merchant and whaling ships to hunting bullocks for just their hides and tallow (*Sandwich Island Gazette* 1836). By 1840, the unrestricted hunting of bullocks for hides and tallow effectively depleted the once numerous free roaming wild herds, forcing Kamehameha III to restore the kapu on killing bullocks for their hides alone (Langlas et al. 1999:43). During an expedition to Hawai'i, naturalist Charles Pickering noted in his journal on January 10, 1841, the decline in wild cattle was largely due to the induction of horses and the more effective hunting methods of the experienced *vaqueros*:

Horses have been imported at a great expense, and Spaniards from N. California employed to carry on the business systematically. The consequence is that the cattle are now almost exterminated, and the few that remain are so harassed that they even seek the very summit of the mountain "to get out of the way." [Pickering 1838–1841]

### **2.5.1.1 Parker Ranch**

Following the Māhele, John P. Parker acquired land from the Land Commission in 1847 (Desilets et al. 2017:10). In 1861, Parker acquired the pasture lands of Pā'auhau Mauka (37,888 acres), adjacent to Kā'ohe Mauka. The following year Parker bought Pā'auhau Makai (8,165 acres) from C.R. Bishop. These tracts were acquired by Parker to secure unbranded cattle (many of which were the offspring of Parker Ranch cattle) wandering beyond the ranch's immediate holdings and to thwart cattle rustling (Bergin 2004:155). Parker also obtained 640 acres at the base of Mauna Kea through his Hawaiian wife Chiefess Kipikane, granddaughter of Kamehameha I. Upon Parker's death in 1868, the 94,000-acre ranch was divided between his two sons, John Parker II and Samuel Parker. Parker Ranch continued to flourish through the remainder of the nineteenth century, shipping many of its cattle to Honolulu for processing (Figure 7).



*Figure 7. Preparing cattle for loading on an approaching steamer in Kawaihae Harbor (Hawai'i State Archives online).*

In 1903, Alfred Carter became the manager of Parker Ranch, with Samuel Parker still owning half of the ranch assets. John Parker II's 50-percent interest was transferred through inheritance to John Parker III's five-year-old daughter Annie Thelma Parker (Brennan 1974:115–117). The PTA portion of the leased land was used as pasture by Parker Ranch until about 1943, when the U.S. military began operating a camp for artillery live-fire exercises (Langlas et al. 1999:55; Maly and Maly 2005:15).

#### **2.5.1.2 Humu'ula Sheep Station**

The sheep industry in Hawai'i emerged concurrently with cattle ranching and was prevalent by the 1840s (Langlas et al. 1999:43). During this time, the merchant William French was already raising sheep and goats in Waimea and was exporting wool by 1844 (Wellmon 1969:57). Frances Spencer and James Louzada came to Waimea in the 1850s and following the death of French, acquired his holdings with the purchase of a tract of land called Lihu'e (Wellmon 1969:76). They raised cattle and sheep on the land and operated a store in Kawaihae (Langlas et al. 1999:44).

In 1857, Spencer purchased the leases for Ka'ohē and Humu'ula which extended their land holdings through the mountain lands of Mauna Kea, the Saddle, and the north slope of Mauna Loa (Maly and Maly 2005:15). In 1860, Robert Janion bought out Spencer and Louzada's operation in Ka'ohē and Humu'ula after securing his own lease of the land in 1859 (Maly and Maly 2005:377–378). A year later, Janion, Spencer, Louzada, and Henry Cornell consolidated their holdings to establish the Waimea Grazing and Agricultural Company (WGAC):

This indenture made the first day of August A.D., One Thousand Eight Hundred & Sixty one, between Francis Spencer & Robert Janion, lately copartners in the

Grazing business at Puuloa, Waimea, on the Island of Hawaii, under the name & Style of F. Spencer & Company, of the first part, & the Waimea Grazing & Agricultural Company of the other part. Whereas by articles of agreement & co partnership made & entered into & concluded by & between the said F. Spencer & R.C. Janion of the one part and Francis Spencer, James Louzada and Henry Cornell copartners in another Grazing Establishment at Lihue in the District of Kohala in the said Island of Hawaii, of the other part, reciting that the said several parties & firms respectively had agreed & did thereby agree to consolidate & unite their several partnership propositions that the same should be therefore held, managed & conducted as a Joint Stock Establishment in the name style & title of “The Waimea Grazing and Agricultural Company...” [Maly and Maly 2005:377–378]

The WGAC had various business interests including the hide and tallow trade, the export of salted beef, sheep production and the export of wool, and the selling of goods at company stores in Waimea (Langlas et al. 1999:44). According to Bergin (2004:231), Spencer developed three separate stations at Kalai‘eha, Lahohinu, and Keanakolu around 1870. By 1873, a wagon road, likely following a Traditional Hawaiian trail and generally following the present route of the Saddle Road, was in use and provided access to the sheep station from Waimea. Traveler Isabella Bird, who visited Humu‘ula in 1873, described the Kalai‘eha sheep station:

There are 9000 sheep here, but they require hardly any attendance except at shearing time, and dogs are not used to herd them. Indeed, labour is much dispensed with, as the sheep are shorn unwashed, a great contrast to the elaborate washings of the flocks of the Australian Riverina. They come down at night of their own sagacity, in close converging columns, sleep on the gravel about the station, and in the early morning betake themselves to their feeding grounds on the mountains. [Bird 1998:232–233]

Three years later, in 1876, the declining WGAC sold the Humu‘ula land lease and sheep station operation to James Gay who incorporated the Humu‘ula Sheep Company. The company was later mortgaged to a German businessman named Hackfeld in 1885 (Bergin 2004:231). Hackfeld’s holdings were managed by the Haneburg brothers who eventually purchased the Humu‘ula Sheep Company in 1893. Ranch walls, many of which can be seen from Saddle Road, were laid out by A. Haneburg, station manager, and built by Japanese immigrants in 1895 (Langlas et al. 1999:45).

Samuel Parker bought a controlling interest in the Humu‘ula Sheep Company in 1900 (Langlas et al. 1999:50). The purchase was a private venture and not incorporated into the Parker Ranch estate. In 1914, Samuel Parker decided to sell the sheep operation in Humu‘ula to an anonymous buyer, A.W. Carter, representing Parker Ranch (Maly and Maly 2005:439–440). A series of 1926–1927 United State Geological Survey (USGS) quadrangle maps show a telephone line and the Saddle Road being called “Humuula-Waikii Road,” which likely served the sheep operations in the area (Figure 8). An informant in the 1930s recalled witnessing the cowboys drive sheep across the Saddle from Humu‘ula to Kawaihae for shipping to Honolulu (Langlas et al. 1999:53):

We used to bring the sheep down in the afternoon from Humu‘ula, down to a corral they call Pu‘u Ke‘eke‘e on the right hand side of Saddle Road as you come up Pu‘u Mau, we used to put sheep in there and ride back to Humu‘ula, spend the night at Humu‘ula and leave Humu‘ula about 2:00 in the morning, ride down to Pu‘u Mau, pick up the sheep and bring ‘em down to Nohonaohe and leave ‘em at Nohonaohe.

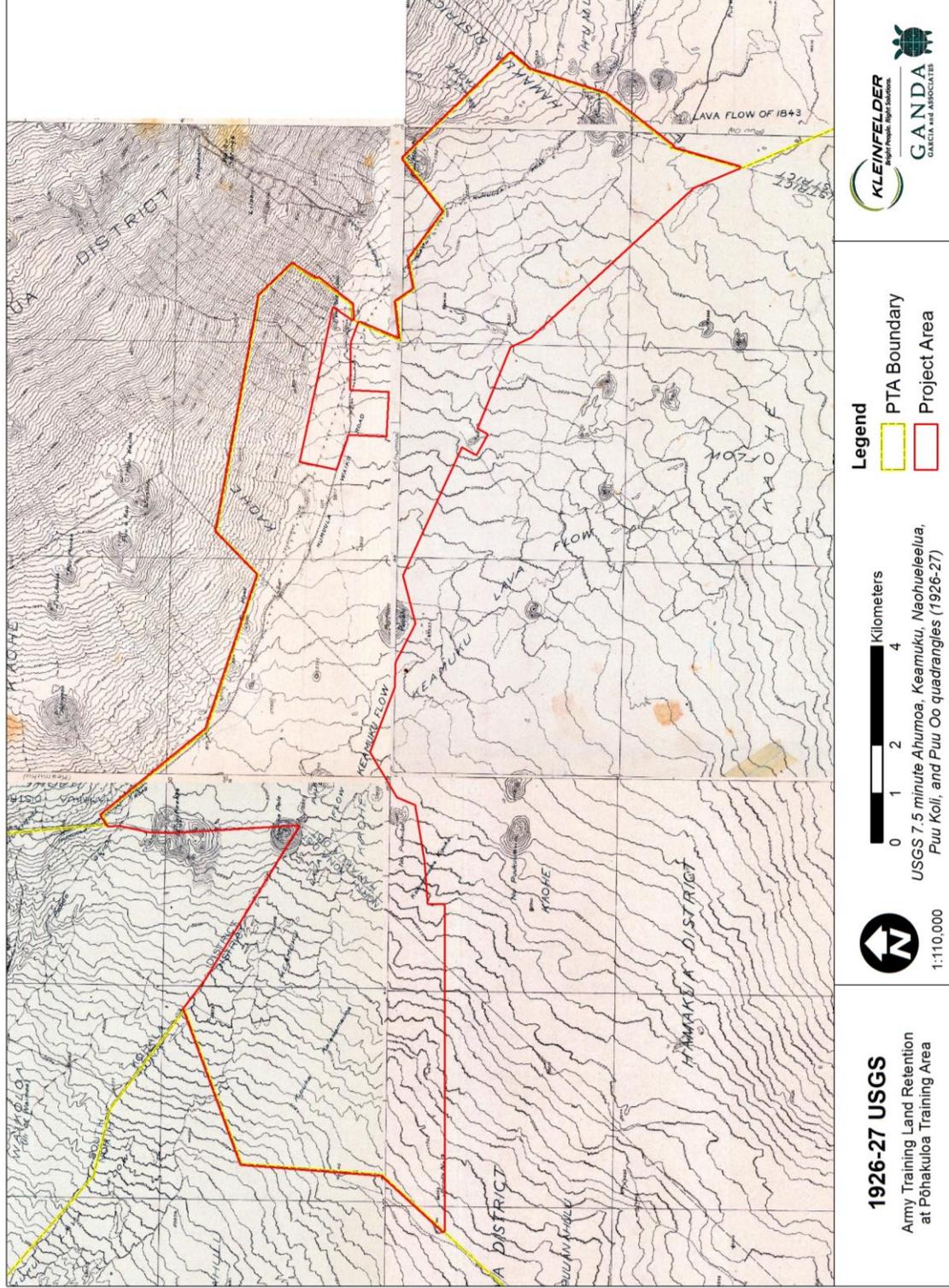


Figure 8. 1926–1927 USGS quadrangle maps showing a telephone line and Humuula-Waikii Road within the project area.

Right where the big pasture. Then from there the sheep were brought into Waimea for about a night and then from there-down to Pu‘u Iki, halfway to Kawaihae. And then the next morning early they would take ‘em to Kawaihae and put on the boat, send to Honolulu.

By 1950, there were approximately 6,000 to 8,000 sheep and 3,000 cattle in Humu‘ula. Around 1965, the sheep operation was phased out completely after the ranch constructed a number of water ponds to run more cattle (Langlas et al. 1999:51).

### **2.5.2 U.S. Military Land Use**

In 1943, during World War II, the U.S. Government constructed Kaumana Road (currently Saddle Road) to allow soldiers ease of access to the island interior in the event of a coastal attack by invading forces (Langlas et al. 1999:55). At this time, the U.S. military also established several firing ranges at Pōhakuloa as well as Bradshaw Army Airfield (BAAF) and an Army camp consisting of Quonset huts and tents (Langlas et al. 1999:55–56) (Figure 9). Following the war, Pōhakuloa was under the control of the Hawai‘i Territorial Guard until 728 acres were ceded to the Army under the Territorial Governor’s Executive Order No. 1719 for the establishment of a multi-functional military training facility. The training facility was established in 1956, which included over 116,000 acres of land under lease and ownership.

In 1964, lease agreements were reorganized, and approximately 84,057 acres (including the 55,000-acre impact area) was transferred to the Army under Presidential Executive Order No. 11167. The project area, consisting of approximately 23,000 acres between the base camp and the impact area, were leased from the state of Hawai‘i under Lease No. DA-94-626-ENG-80c. The most recent expansion to PTA was the purchase of the 24,000-acre Ke‘āmuku parcel from Parker Ranch in 2006, located northwest of the project area.

## **3.0 ARCHAEOLOGICAL CONTEXT**

This section provides a summary of previously conducted archaeological studies and previously recorded archaeological sites within the project area, followed by an overview of the Traditional Hawaiian and Historic Period site types known to exist in the region. Archaeological sites are referred to using the unique portion of the Hawai‘i State Inventory of Historic Places (SIHP 50-10-31-) site numbers and by temporary numbers (C-, PL-, T-) designated during surveys by consultants and PTA CRM staff.

### **3.1 Previous Archaeological Studies within the Project Area**

PTA is well studied archaeologically and has been subjected to numerous Phase I and II inventory surveys that include portions of the project area (Figure 10 to Figure 13). Inventory surveys of PTA began in the 1960s and 1970s, supported by the Bishop Museum (Rosendahl 1977). Since the 1980s, PTA archaeologists and CRM consultants have conducted numerous archaeological investigations associated with infrastructure development projects, including the construction of roadways, firebreaks, training facilities, fence lines, an ammunitions holding area,

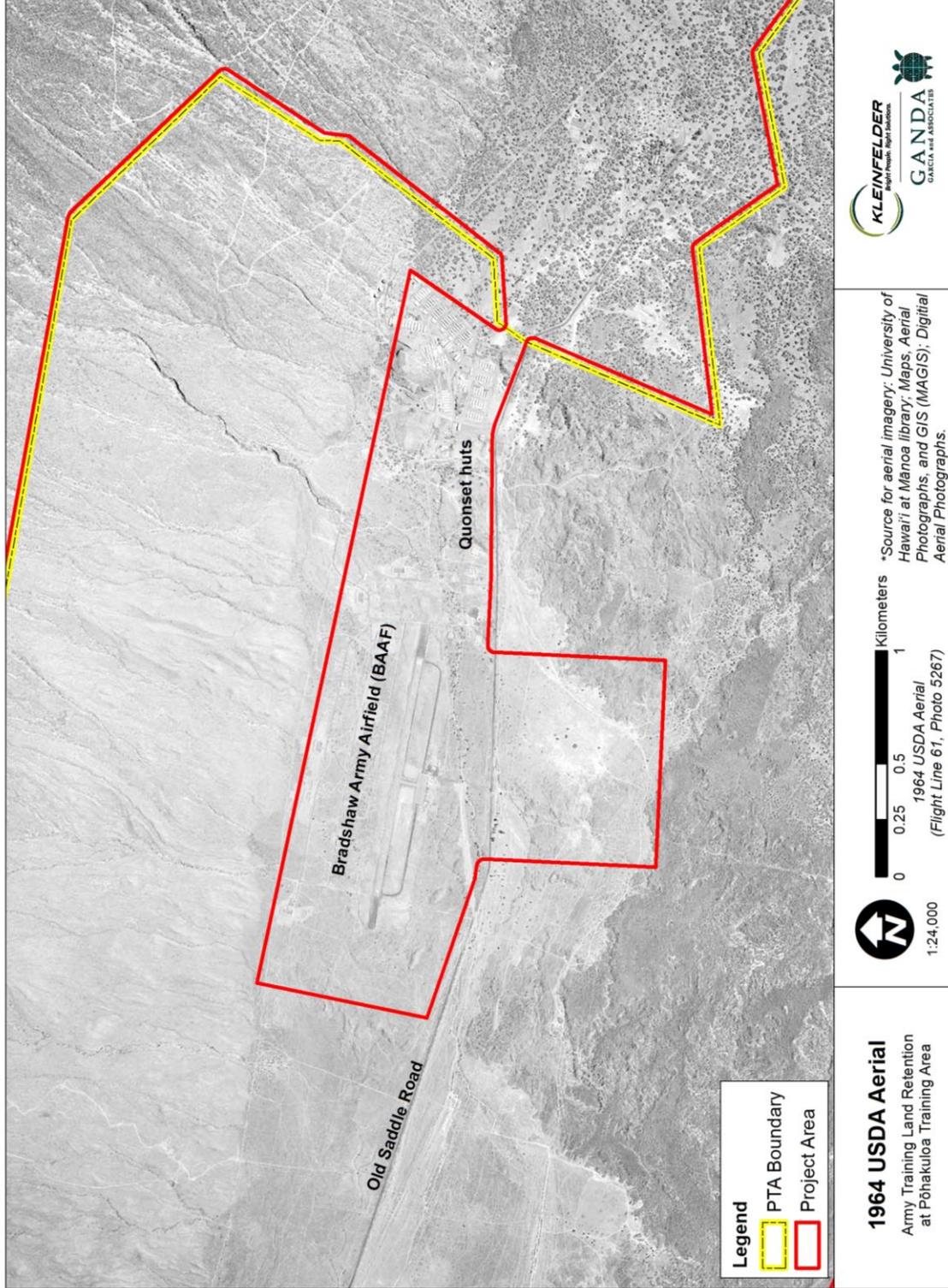
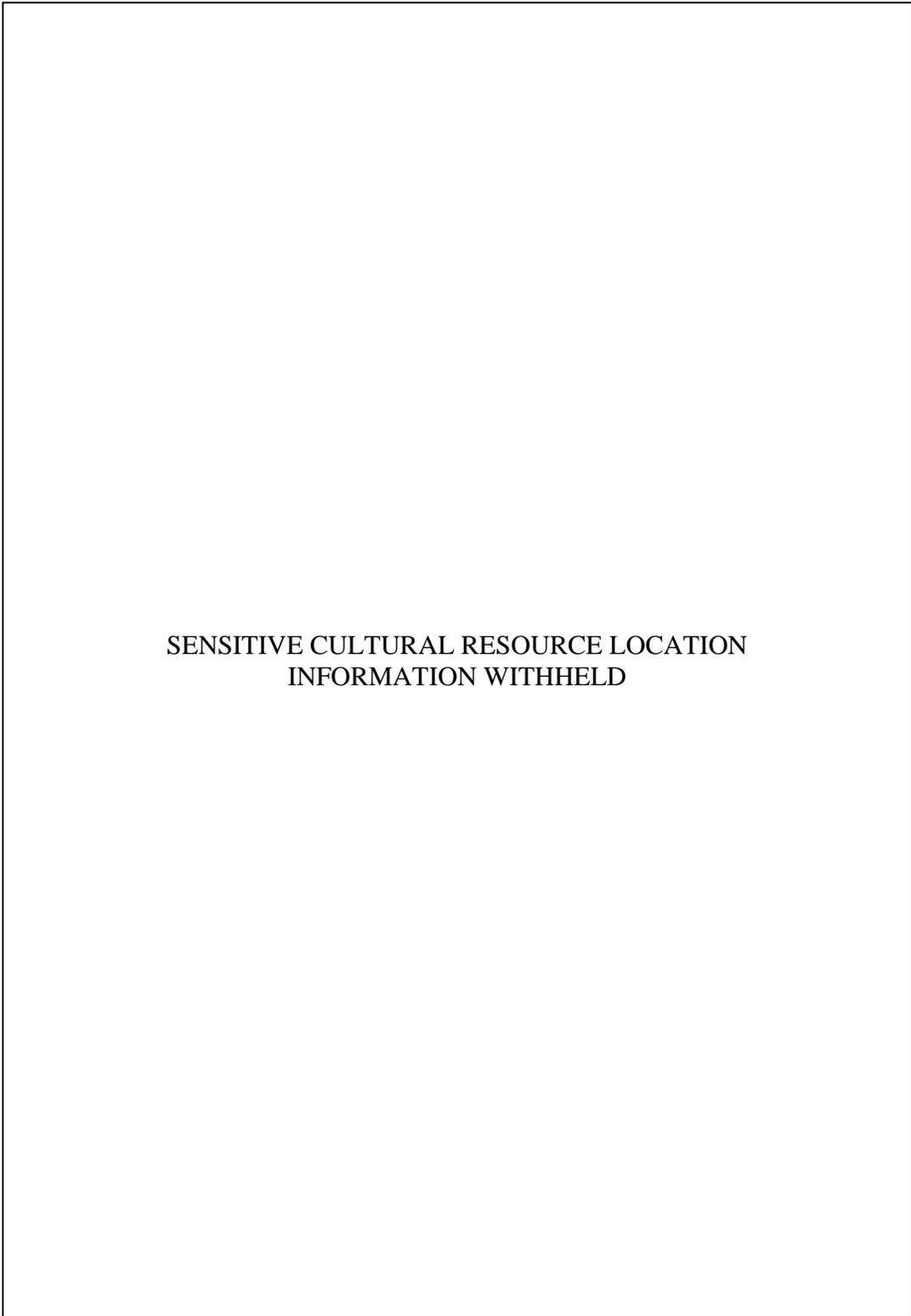


Figure 9. 1964 aerial photograph showing post-World War II developments at PTA.

SENSITIVE CULTURAL RESOURCE LOCATION  
INFORMATION WITHHELD

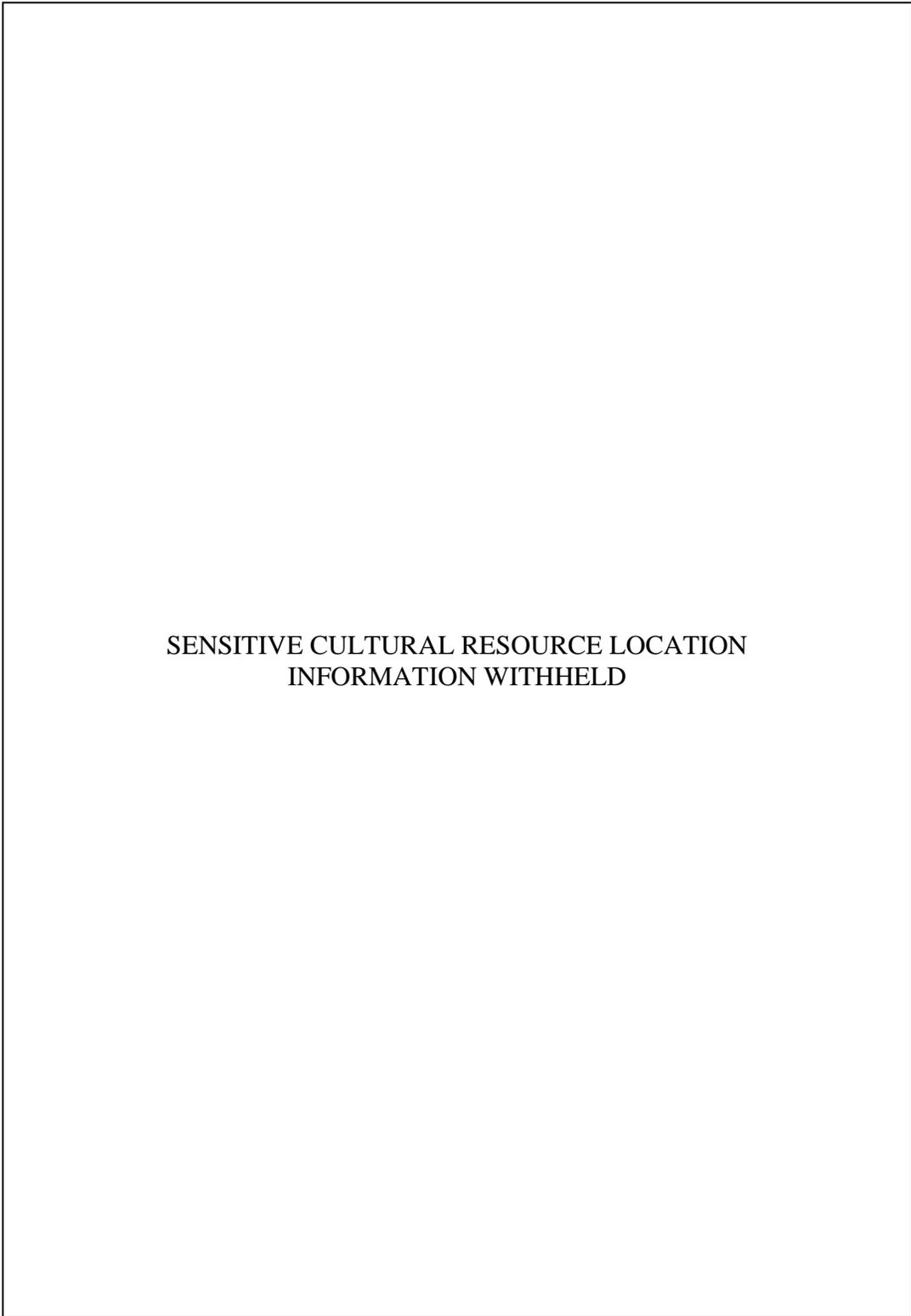
*Figure 10 Overview map showing survey coverage of previous archaeological studies within the project area.*



*Figure 11 Detail map 1 showing archaeological studies within the project area.*

**SENSITIVE CULTURAL RESOURCE LOCATION  
INFORMATION WITHHELD**

*Figure 12 Detail map 2 showing archaeological studies within the project area.*



*Figure 13 Detail map 3 showing archaeological studies within the project area.*

and a tactical vehicle wash. The majority of these studies have been conducted internally by PTA CRM staff, who currently are responsible for the management of more than one hundred archaeological sites within the project area.

Several previously conducted inventory surveys within the project area have been omitted from the present discussion, as they do not meet current archaeological standards and do not count toward the Army’s total survey coverage. For example, Shapiro and Cleghorn (1998) performed both intensive pedestrian and aerial (i.e., helicopter) surveys within the project area, and of their total 8,000-acre survey area, only 2,300 acres of pedestrian-surveyed land is included in the present study. Other unsurveyed portions of the project area include areas covered in geologically recent lava flows (in the west) and the steep foot slopes of Mauna Kea (in the north and northeast).

### 3.1.1 PTA Cultural Resources Management Studies

PTA CRM staff have conducted numerous archaeological studies within the project area (Table 2). Ongoing documentation of known archaeological sites is also regularly conducted by PTA CRM staff, consisting of mapping, archaeological testing, site evaluations and condition updates, and GIS documentation. These studies have been documented in various annual reports that provide project descriptions and results of the various projects.

*Table 2. Archaeological Studies Conducted by PTA CRM Staff*

| <i>Reference</i>                        | <i>Training Area</i> | <i>Study Type</i>  | <i>Summary of Findings</i>                                                                                                                                                                                                                                                                 |
|-----------------------------------------|----------------------|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Moniz 1997                              | 5, 6                 | Survey             | Two previously recorded sites (Sites 5003 and 14638) and one new site (Site 21351).                                                                                                                                                                                                        |
| Moniz-Nakamura 1999; Bayman et al. 2001 | 5                    | Survey and Testing | Two previously recorded sites (Sites 5003 and 21351) and two new sites (Sites 21744 and 21745). Testing at Site 5003 documented lithic debitage, basalt tools, and bird bone. Radiocarbon dating placed Site 5003 within the Pre-Contact Period. Testing at Site 14638 recovered charcoal. |
| Godby 2003                              | 22                   | Survey             | Identified human remains at Site 23694.                                                                                                                                                                                                                                                    |
| King and Head 2004                      | 6–8                  | Survey             | Four previously recorded sites (Sites 23452, 24326, 24327, and 24328).                                                                                                                                                                                                                     |
| Stine 2006a                             | 22                   | Survey             | Five new sites (T-082306-01 to T-082306-05).                                                                                                                                                                                                                                               |
| Stine 2006b                             | 22                   | Survey             | No sites identified within the project area.                                                                                                                                                                                                                                               |
| Stine 2006c                             | 22                   | Survey             | No sites identified within the project area.                                                                                                                                                                                                                                               |
| Taomia 2006a                            | 17                   | Survey             | No sites identified within the project area.                                                                                                                                                                                                                                               |
| Taomia 2006b                            | 22                   | Survey             | No sites identified within the project area.                                                                                                                                                                                                                                               |
| Taomia 2007                             | 22                   | Survey             | No sites identified within the project area.                                                                                                                                                                                                                                               |

*Table 2. (cont.)*

| <i>Reference</i>      | <i>Training Area</i> | <i>Study Type</i>       | <i>Summary of Findings</i>                                                                                                                                                                         |
|-----------------------|----------------------|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Taomia and Stine 2007 | 17–20, 22            | Survey                  | Site 23452 identified and flagged for avoidance.                                                                                                                                                   |
| Luscomb 2007          | 22                   | Survey                  | No sites identified within the project area.                                                                                                                                                       |
| Escott 2007           | 22                   | Survey                  | No sites identified within the project area.                                                                                                                                                       |
| Stine 2008            | 11                   | Survey                  | No sites identified within the project area.                                                                                                                                                       |
| Taomia 2009           | 18                   | Survey                  | One new site (T-031709-01).                                                                                                                                                                        |
| Crowell et al. 2010   | 21                   | Survey                  | No sites identified within the project area.                                                                                                                                                       |
| Stine 2010            | 2                    | Survey                  | No sites identified within the project area.                                                                                                                                                       |
| Tejeda 2013           | 7                    | Testing and Evaluations | Testing conducted at four previously recorded sites (Sites 23457, 23462, 24326, and 24327). Site 23457 was evaluated as eligible and Sites 23462, 24326, and 24327 were evaluated as not eligible. |

### 3.1.2 Consultant Studies

Cultural resources management consultants have conducted 12 archaeological surveys within the project area, beginning in the 1990s (Table 3; see Figure 11 to Figure 13). Other, less rigorous studies have been omitted from the present discussions as PTA CRM staff does not include these studies as part of the formal survey coverage of PTA.

Archaeological surveys of the Saddle Road corridor were conducted in the 1990s and included portions of the project area. An intensive archaeological survey of a 14.5-mile-long segment of Saddle Road was conducted that included portions of TAs 1, 3–9, 12, 15, and 16 (Welch 1993). During that survey, two previously recorded sites were identified within the project area including a historic rock wall (Site 5002) and a lava tube cave shelter (Site 5003). Subsurface testing was conducted at Site 5003 which documented cultural deposits containing charcoal, ash, faunal bone, and lithic debitage. Welch (1993:85) interpreted the site as a Pre-Contact temporary shelter related to the procurement of lithic resources from the quarries on Mauna Kea. One new site (Site 14638) was identified at the edge of the survey corridor, consisting of a volcanic glass quarry with associated lithic scatters and lava blisters. In 1996, an archaeological survey was conducted of more than 187 miles of the Saddle Road corridor (including existing roadways and alternative corridors) that included portions of TAs 1, 3–9, 11, 12, 15, and 16 (Langlas et al. 1999). That study identified 13 new sites, but none were located within the project area.

*Table 3. Archaeological Studies Conducted by Consultants*

| <i>Reference</i> | <i>Training Area</i> | <i>Study Type</i> | <i>Summary of Findings</i> |
|------------------|----------------------|-------------------|----------------------------|
|------------------|----------------------|-------------------|----------------------------|

|                           |                              |                                        |                                                                                                                                                                                                  |
|---------------------------|------------------------------|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Welch 1993                | 1, 3–9,<br>12, 15,<br>16     | Survey and<br>Testing                  | Two previously recorded sites (Sites 5002 and 5003) and one new site (Site 14638). Testing at Site 5003 documented cultural deposits containing charcoal, ash, faunal bone, and lithic debitage. |
| Langlas et al. 1999       | 1, 3–9,<br>11, 12,<br>15, 16 | Survey                                 | No sites identified within the project area.                                                                                                                                                     |
| Shapiro and Cleghorn 1998 | 5, 22                        | Survey                                 | Three new sites (Sites 19490, 19509 and 19529).                                                                                                                                                  |
| Buffum et al. 2004        | 6, 7                         | Survey                                 | Seven new pāhoehoe pit features were documented at Site 23455.                                                                                                                                   |
| Roberts et al. 2004a      | 5, 7, 21                     | Survey                                 | One previously recorded site (Site 19490) and four new sites (Sites 23455, 23456, 23457, and 23462).                                                                                             |
| Roberts et al. 2004b      | 5, 21                        | Survey                                 | Four previously recorded sites (Sites 14638, 21351, 21744, and 21745) and eight new sites (Sites 23455, 23562, 23563, 23565, 23566, 23568, 23572, and 23575).                                    |
| Roberts et al. 2004c      | 1, 3, 4                      | Survey                                 | Three previously recorded sites (Sites 5002, 21746, and 22941) and 14 new sites (Sites 23842 to 23854 and 23856).                                                                                |
| Desilets and Roberts 2005 | 16, 17,<br>20                | Survey                                 | No sites identified within the project area.                                                                                                                                                     |
| Desilets et al. 2005      | 6, 8, 9,<br>12–16,<br>19     | Survey                                 | Three previously recorded sites (Sites 23450, 23452, and 23455).                                                                                                                                 |
| Robins et al. 2006        | 5, 7, 21                     | Survey,<br>Testing, and<br>Evaluations | Five previously recorded sites (Sites 19490, 23455, 23456, 23457, and 23462).                                                                                                                    |
| Brown et al. 2008         | 6, 8, 9,<br>12–17,<br>19, 20 | Survey and<br>Testing                  | Three previously recorded sites (Sites 23450, 23452, and 23455).                                                                                                                                 |
| Monahan et al. 2013       | 4–6                          | Survey and<br>Testing                  | Investigated previously recorded pit features.                                                                                                                                                   |

In 1994, an archaeological survey was conducted within the project area that included portions of TAs 5 and 22 (Shapiro and Cleghorn 1998). Forty sites were identified or re-located during that study, consisting of 39 newly identified sites (Sites 19490 to 19529) and one previously recorded site (Site 10265). Three of these new sites (Sites 19490, 19509 and 19529) were identified within the project area.

The largest survey projects conducted within the project area were performed by Garcia and Associates (Brown et al. 2008; Buffum et al. 2004; Desilets and Roberts 2005; Desilets et al. 2005; Roberts et al. 2004a, 2004b, 2004c; Robins et al. 2006), which focused on Stryker Brigade Combat Team (SBCT) project areas and potential maneuver areas covering approximately 10,315 acres.

Archaeological surveys were conducted for the SBCT facilities within TAs 6 and 7 (Buffum et al. 2004). No new sites were identified during that study; however, seven new pāhoehoe pit features were documented at Site 23455. In 2002, additional surveys were conducted within TAs 5, 7, and 21 (Roberts et al. 2004a). Five sites were identified within the project area during that study, including four new sites (Sites 23455, 23456, 23457, and 23462) and one previously recorded site (Site 19490). Archaeological surveys were also conducted within TAs 5 and 21 between 2001 and 2002 (Roberts et al. 2004b). During that study, four previously recorded sites (Sites 14638, 21351, 21744, and 21745) and eight new sites (Sites 23455, 23562, 23563, 23565, 23566, 23568, 23572, and 23575) were identified within the project area. In 2003, Garcia and Associates conducted more surveys within TAs 1, 3, and 4 (Roberts et al. 2004c). Seventeen (17) sites were identified within the project area during that study, including three previously recorded sites (Sites 5002, 21746, and 22941) and 14 newly recorded sites (Sites 23842 to 23854 and 23856).

Survey work continued in 2003 to support the designation of SBCT Go/No Go maneuver areas within TAs 6, 8, 9, 12–16, and 19 (Desilets et al. 2005). Three previously recorded sites (Sites 23450, 23452, and 23455) were identified within the project area during that study. Six possible Traditional Hawaiian sites were also identified, along with dozens of likely military features. Further work was recommended at all but one site (two stone cairns designated as Site 13) to assist with determining cultural affiliation, function, age, and intensity of use.

In 2002, an archaeological survey was conducted of 1,010 acres within Ke‘āmuku Maneuver Area (Desilets and Roberts 2005), which overlaps slightly into TAs 16, 17, and 20 within the project area. Twenty sites (Sites 23368 to 23387) were identified during that study, but none were located within the project area.

In 2003, Phase II archaeological surveys that included subsurface testing and site evaluations were conducted within TAs 5, 7, and 21 (Robins et al. 2006). Five previously recorded sites (Sites 19490, 23455, 23456, 23457, and 23462) were identified within the project area. All of the sites were Traditional Hawaiian in origin and were associated with short-term habitation, lithic quarrying activities, possible seabird hunting, and travel through the region. Additional Phase II surveys were conducted between 2004 and 2005 within TAs 6, 8, 9, 12–17, 19, and 20 (Brown et al. 2008) that investigated three sites (Sites 23450, 23452, and 23455) within the project area.

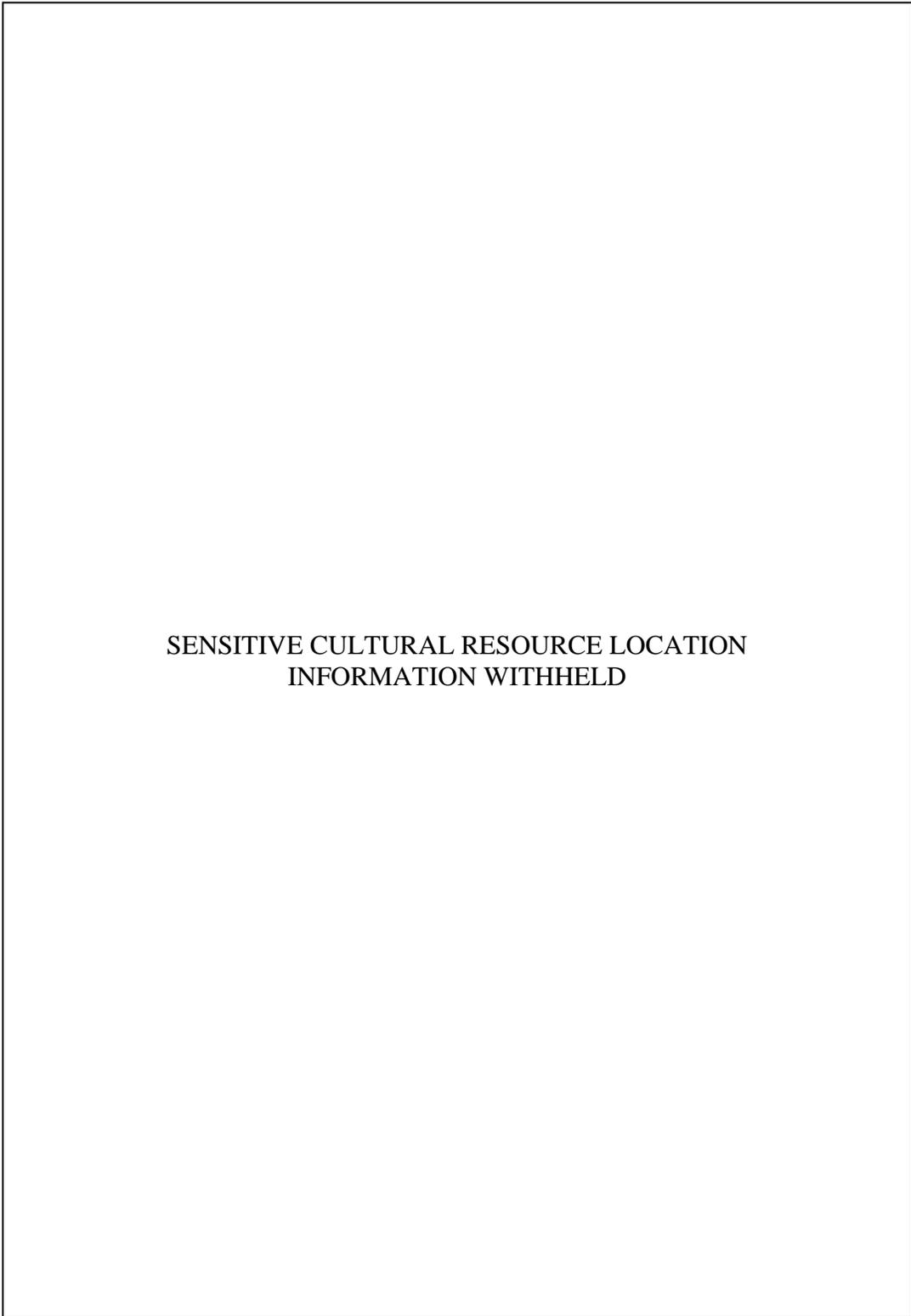
In 2013, Cultural Surveys Hawai‘i conducted an archaeological investigation of previously recorded pit features within TAs 4–6 (Monahan et al. 2013). Monahan et al. (2013:256) determined the likely function of the pits was to enhance nesting seabird habitat based on the results of residue analysis that identified avian signals in collected soil samples.

### **3.2 Previously Recorded Sites in State-Owned Land of PTA**

PTA CRM staff are currently responsible for the management of 105 archaeological sites (Figure 14 to Figure 18; Table 4) within the project area, and also keep track of military-associated features (foxholes, enclosures, walls, excavations, trash/ammunition scatters). Due to their recent age, military features are not included in the table or maps in this report.

**SENSITIVE CULTURAL RESOURCE LOCATION  
INFORMATION WITHHELD**

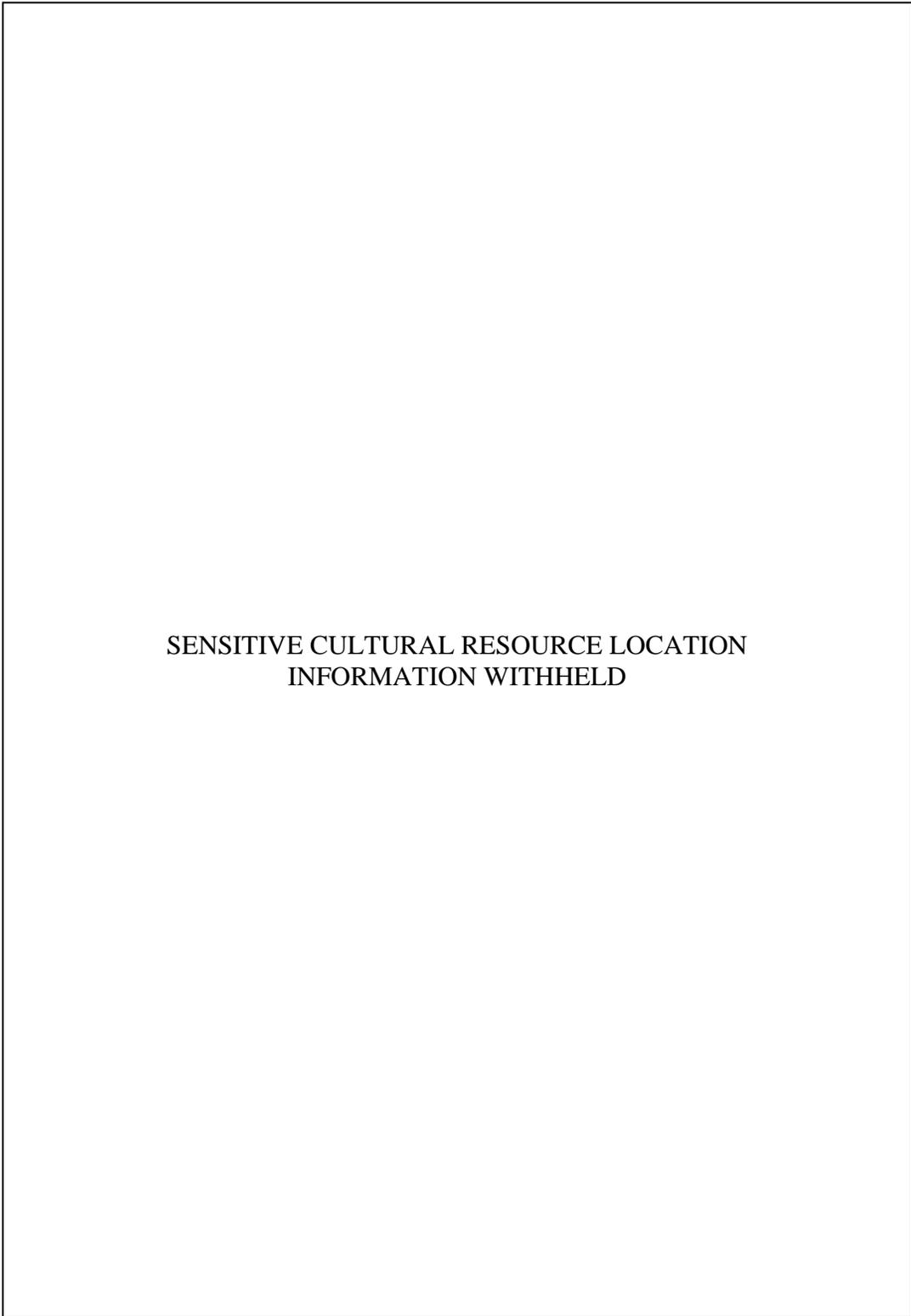
*Figure 14. Overview map showing archaeological sites within the project area.*



*Figure 15. Detail map 1 showing archaeological sites within the project area.*

**SENSITIVE CULTURAL RESOURCE LOCATION  
INFORMATION WITHHELD**

*Figure 16. Detail map 2 showing archaeological sites within the project area.*



*Figure 17. Detail map 3 showing archaeological sites within the project area.*

**SENSITIVE CULTURAL RESOURCE LOCATION  
INFORMATION WITHHELD**

*Figure 18. Detail map 4 showing archaeological sites within the project area.*

*Table 4. Archaeological Sites within the Project Area.*

| <i>Site Number</i> | <i>Training Area(s)</i> | <i>Description</i>                                                              | <i>Period</i> |
|--------------------|-------------------------|---------------------------------------------------------------------------------|---------------|
| 50-10-31-5002      | 5                       | Ranch wall                                                                      | Historic      |
| 50-10-31-5003      | 6                       | Habitation lava tube                                                            | Traditional   |
| 50-10-31-5009      | 17                      | Trail                                                                           | Traditional   |
| 50-10-31-14638     | 5                       | Habitation lava tubes, rectangular house foundation, artifact scatter, pavement | Traditional   |
| 50-10-31-19490     | 5                       | Habitation lava tubes, trails, C-shape                                          | Traditional   |
| 50-10-30-19509     | 22                      | Habitation lava tube                                                            | Traditional   |
| 50-10-30-19529     | 22                      | Habitation lava tube                                                            | Traditional   |
| 50-10-31-21351     | 5                       | Lithic workshop complex                                                         | Traditional   |
| 50-10-31-21744     | 5                       | Lithic scatter                                                                  | Traditional   |
| 50-10-31-21745     | 5                       | Habitation lava blister                                                         | Traditional   |
| 50-10-31-21746     | 4                       | Mound/excavation complex                                                        | Unknown       |
| 50-10-31-22941     | 4                       | Lava blisters                                                                   | Traditional   |
| 50-10-31-23450     | 15                      | Habitation, overhang shelter, artifact scatter, pictographs                     | Traditional   |
| 50-10-31-23452     | 1, 3–9, 13, 14, 16, 17  | Ranching fence line                                                             | Historic      |
| 50-10-31-23455     | 5                       | Pāhoehoe pits                                                                   | Traditional   |
| 50-10-31-23456     | 5                       | Possible habitation enclosure                                                   | Traditional   |
| 50-10-31-23457     | 7                       | Trail                                                                           | Traditional   |
| 50-10-31-23462     | 7                       | Cairn                                                                           | Unknown       |
| 50-10-31-23562     | 5                       | Habitation lava tube                                                            | Traditional   |
| 50-10-31-23563     | 5                       | Modified outcrop/wall                                                           | Traditional   |
| 50-10-31-23565     | 5                       | Volcanic glass quarry                                                           | Traditional   |
| 50-10-31-23566     | 5                       | Habitation lava tube                                                            | Traditional   |
| 50-10-31-23568     | 5                       | Habitation lava tube                                                            | Traditional   |
| 50-10-31-23572     | 5                       | Habitation complex                                                              | Traditional   |
| 50-10-31-23575     | 5                       | Habitation lava blister                                                         | Traditional   |
| 50-10-30-23694     | 22                      | Lava tube and burial                                                            | Traditional   |
| 50-10-31-23842     | 1                       | Habitation platform/terrace                                                     | Unknown       |

| <i>Site Number</i> | <i>Training Area(s)</i> | <i>Description</i>                         | <i>Period</i> |
|--------------------|-------------------------|--------------------------------------------|---------------|
| 50-10-31-23843     | 1                       | Enclosure/mound complex                    | Unknown       |
| 50-10-31-23844     | 1                       | Mound                                      | Unknown       |
| 50-10-31-23845     | 1                       | Mound                                      | Unknown       |
| 50-10-31-23846     | 1                       | Ranching enclosure                         | Historic      |
| 50-10-31-23847     | 3                       | Ranching alignments                        | Historic      |
| 50-10-31-23848     | 3                       | Mound                                      | Historic      |
| 50-10-31-23849     | 4                       | Mound                                      | Historic      |
| 50-10-31-23850     | 4                       | Ranch corral                               | Historic      |
| 50-10-31-23851     | 4                       | Habitation lava tube                       | Unknown       |
| 50-10-31-23852     | 1, 3-9, 13, 14, 16, 17  | Rock wall and enclosure                    | Historic      |
| 50-10-31-23853     | 4                       | Habitation lava tube                       | Unknown       |
| 50-10-31-23854     | 3                       | Volcanic glass quarry                      | Traditional   |
| 50-10-31-23856     | 4                       | Pāhoehoe pits                              | Traditional   |
| 50-10-31-24326     | 7                       | Blister cave and pit complex               | Unknown       |
| 50-10-31-24327     | 7                       | Cairn                                      | Unknown       |
| 50-10-31-24328     | 7                       | Wall, C-shape                              | Unknown       |
| 50-10-31-26728     | 5                       | Habitation lava tube                       | Traditional   |
| 50-10-31-26729     | 5                       | Habitation lava tube blister               | Traditional   |
| C-020305-01        | 22                      | Lava tube                                  | Unknown       |
| C-031705-01        | 22                      | Lava tube                                  | Traditional   |
| C-031705-02        | 22                      | Lava tube                                  | Traditional   |
| C-031705-03        | 22                      | Lava tube                                  | Traditional   |
| C-031705-04        | 22                      | Lava tube                                  | Traditional   |
| C-031705-05        | 22                      | Lava tube                                  | Traditional   |
| C-031705-06        | 22                      | Lava tube                                  | Traditional   |
| PL-PTA-02          | 21                      | Volcanic glass quarry                      | Traditional   |
| PL-PTA-03          | 21                      | Volcanic glass quarry                      | Traditional   |
| PL-PTA-04          | 21                      | Volcanic glass quarry                      | Traditional   |
| PL-PTA-05          | 21                      | Volcanic glass quarry                      | Traditional   |
| PL-PTA-06          | 21                      | Volcanic glass quarry                      | Traditional   |
| PL-PTA-029         | 21                      | Volcanic glass quarry and artifact scatter | Traditional   |

| <i>Site Number</i> | <i>Training Area(s)</i> | <i>Description</i>                         | <i>Period</i> |
|--------------------|-------------------------|--------------------------------------------|---------------|
| PL-PTA-030         | 21                      | Volcanic glass quarry                      | Traditional   |
| PL-PTA-031         | 21                      | Volcanic glass quarry and artifact scatter | Traditional   |
| PL-PTA-032         | 21                      | Volcanic glass quarry and artifact scatter | Traditional   |
| PL-PTA-033         | 21                      | Volcanic glass quarry                      | Traditional   |
| PL-PTA-034         | 21                      | Volcanic glass quarry                      | Traditional   |
| PL-PTA-061         | 21                      | Volcanic glass quarry and artifact scatter | Traditional   |
| PL-PTA-062         | 21                      | Volcanic glass quarry and artifact scatter | Traditional   |
| PL-PTA-063         | 21                      | Volcanic glass quarry and artifact scatter | Traditional   |
| PL-PTA-064         | 21                      | Volcanic glass quarry and artifact scatter | Traditional   |
| PL-PTA-065         | 21                      | Volcanic glass quarry                      | Traditional   |
| PL-PTA-066         | 21                      | Volcanic glass quarry and artifact scatter | Traditional   |
| PL-PTA-067         | 21                      | Volcanic glass quarry and artifact scatter | Traditional   |
| PL-PTA-068         | 21                      | Volcanic glass quarry and artifact scatter | Traditional   |
| T-012805-02        | 22                      | Habitation lava tube                       | Traditional   |
| T-020305-02        | 22                      | Habitation lava tube                       | Traditional   |
| T-020701-02        | 6                       | Artifact scatter                           | Traditional   |
| T-031709-01        | 18                      | Mound                                      | Unknown       |
| T-040418-01        | 1                       | USGS survey marker                         | Historic      |
| T-041906-01        | 22                      | Habitation lava tube                       | Unknown       |
| T-041906-02        | 22                      | Habitation lava tube                       | Unknown       |
| T-041906-03        | 22                      | Habitation lava tube                       | Unknown       |
| T-043094-02        | 22                      | Habitation lava tube                       | Unknown       |
| T-043094-03        | 22                      | Habitation lava tube                       | Unknown       |
| T-043094-04        | 22                      | Habitation lava tube                       | Unknown       |
| T-043094-05        | 22                      | Habitation lava tube                       | Unknown       |
| T-050906-01        | 22                      | C-shape                                    | Unknown       |
| T-070104-01        | 5                       | Artifact scatter                           | Traditional   |

| <i>Site Number</i> | <i>Training Area(s)</i> | <i>Description</i>    | <i>Period</i> |
|--------------------|-------------------------|-----------------------|---------------|
| T-071306-01        | 22                      | Enclosure             | Unknown       |
| T-080206-01        | 1                       | Enclosure             | Unknown       |
| T-082217-08        | 14                      | USGS boundary marker  | Historic      |
| T-082306-01        | 22                      | Cairn                 | Unknown       |
| T-082306-02        | 22                      | Modified outcrop      | Unknown       |
| T-082306-03        | 22                      | Lava tube             | Unknown       |
| T-082306-04        | 22                      | Pāhoehoe pit          | Unknown       |
| T-082306-05        | 22                      | Pāhoehoe pit          | Unknown       |
| T-092202-01        | 3                       | Volcanic glass quarry | Traditional   |
| T-092202-02        | 3                       | Artifact scatter      | Traditional   |
| T-092202-03        | 3                       | Artifact scatter      | Traditional   |
| T-092202-04        | 3                       | Artifact scatter      | Traditional   |
| T-092202-05        | 3                       | Artifact scatter      | Traditional   |
| T-092899-01        | 22                      | Habitation lava tube  | Traditional   |
| T-100606-01        | 22                      | Mound                 | Unknown       |
| T-100606-02        | 22                      | Mound                 | Unknown       |
| T-111402-01        | 3                       | Artifact scatter      | Traditional   |
| T-111402-02        | 3                       | Volcanic glass quarry | Traditional   |
| T-111402-05        | 3                       | Volcanic glass quarry | Traditional   |
| T-111402-06        | 3                       | Volcanic glass quarry | Traditional   |

### **3.2.1 Traditional Hawaiian Sites**

Traditional Hawaiian archaeological resources recorded in the project area fall into several broad site types, including temporary habitation features (lava tube caves, blisters, and overhangs, stone platforms, walls, enclosures, and C-shaped structures); excavated pāhoehoe pits, likely related to the procurement of ‘u‘au; lithic quarries; rock cairns; and trail segments.

#### **3.2.1.1 Temporary Habitation Sites**

Temporary habitation sites are typically classified as either limited-use or repeated-use sites. Limited-use sites were occupied on a short-term basis, such as an overnight stay (Streck 1992:102) in surface structures (e.g., rock-constructed enclosures) and natural shelters formed in lava flows (e.g., caves and rock shelters). The limited-use occupations are defined by sparse amounts of cultural material, often limited to charcoal scatters or shallow ash deposits, and small artifact scatters.

Repeated-use sites contain midden deposits, features, and exhibit structural modifications, such as platforms, walls, terraced areas, and cupboards. Within the project area in TA 15, one



Figure 19. Pictograph panel at Site 23450, photograph from Brown et al. (2008:169).

habitation complex (Site 23450) includes a panel of at least 13 pictographs with anthropomorphic figures, an animal, and linear patterns (Figure 19). Cultural deposits at repeated-use sites are stratified and typically contain a wide range of well-preserved artifacts (Athens and Kaschko 1989; Haun 1986; Robins et al. 2006; Shapiro and Cleghorn 1998; Shapiro et al. 1998). Faunal assemblages at repeated-use sites are dominated by bird bone, particularly those of adult ‘ua‘u, though marine shell and fish bone also occur in limited quantities (Athens and Kaschko 1989; Ziegler 1994). Some repeated-use sites may represent base camps for groups exploiting resources in upland areas (Reinman and Schilz 1993:116–118).

Temporary and repeated-use habitation site types are typically located along trails running through the Saddle Region and near important upland resources, such as quarries, lava tubes with drip water sources, and bird nesting areas. Within the project area, habitation sites are generally concentrated within TAs 5 and 22. Site 19490 in TA 5 is comprised of several lava tube habitation features along with a trail segment, a C-shaped structure, and other archaeological features, including midden deposits, ahu, and a surface artifact scatter. In 2003, a pair of well-preserved ti leaf sandals (Figure 20) was collected from Site 19490 by PTA CRM staff. Within TA 22, Site 23694 is situated within the “C” (Charlie) lava tube cave system (Figure 21), where archaeological features and cultural materials were first identified during a biological resources survey of PTA (Godby 2003). A subsequent site visit by PTA CRM staff in 2003 documented human remains at Site 23694 along with an artifact scatter containing lithic debitage, water-worn stones, and gourd fragments. A circular-shaped hearth containing charcoal, ash, and bird bone was also noted near one of the cave entrances (Godby 2003).



*Figure 20. Ti leaf sandals (ti kama'a) from Site 19490, photograph from Robins et al. (2006:35).*



*Figure 21. Entrance 3C at Site 23694 where human remains were documented, photograph from Godby (2003:11).*

### 3.2.1.2 Excavated Pāhoehoe Pits

Excavated pāhoehoe pits are by far the most abundant feature type within the Saddle Region and have been subjected to numerous archaeological investigations. Williams (2002:26) noted the pit features typically exhibit broken ceiling slabs removed from the excavations that are stacked, piled, or merely “thrown” along the outer rim of the pits. Some pits appeared to be filled in, which Williams (2002:26) suggested might be from rocks being thrown behind the excavator (into the open pit) as the pāhoehoe shelf continues to be dismantled. He also noted the presence of deep battering scars on the pit edges that suggest the use of a heavy, pointed tool to break open the lava crust (Williams 2002:26).

Moniz-Nakamura (Moniz 1997; Moniz-Nakamura 1999) suggested the excavated pits represented efforts to create nesting habitat for ‘ua’u or to enlarge natural burrows to retrieve nestlings. Nesting burrows can be up to 1.8 meters long with 15- to 20-centimeter-high entrances; enlarging these entrances makes it easier to retrieve the nestlings from the burrow. Microfossil and organic residue analysis of sediment samples from excavated pit features within the project area was conducted at Site 23455 (Figure 22) in TA 5 and Site 23856 in TA 4 (Monahan et al. 2013).

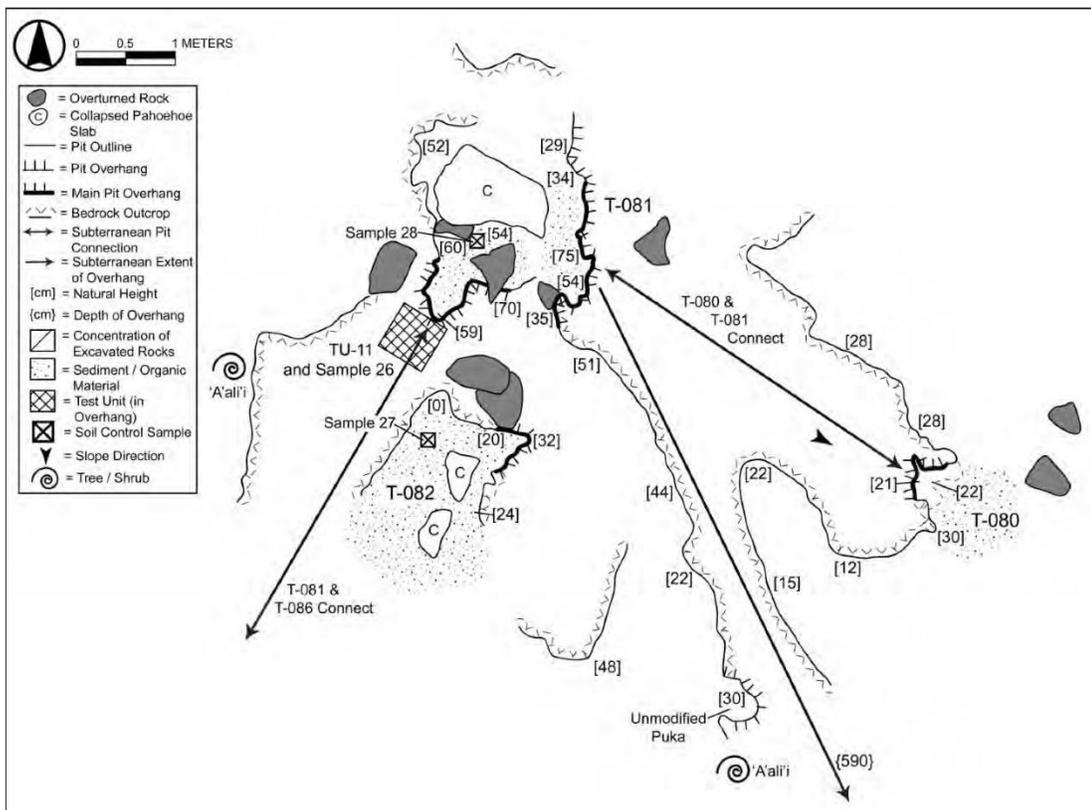


Figure 22. Plan view of pit features and excavation unit at Site 23455, from Monahan et al. (2013:171).

Using control samples from known petrel nesting sites on the slopes of Mauna Loa, the samples produced strong Fourier Transform Infrared Spectroscopy (FTIR) avian signatures from all sampled pits and some of the samples closely resembled the Mauna Loa samples (Monahan et al. 2013:252). However, this same signature was also found in control samples outside the pits, indicating birds were in the area but not necessarily targeting the excavated pits. Monahan also cautioned that the avian signature is general (not classified to genus or species) and could reflect the presence of birds other than seabirds that are known to use the pits during recent times (Monahan et al. 2013:250).

Moniz-Nakamura (1999) and Monahan et al. (2013) attempted to cultivate ‘uala in excavated pits; however, these experimental attempts were unsuccessful; the plants sustained green leaves for up to several months, but none produced viable tubers (Monahan et al. 2013:255).

### 3.2.1.3 Lithic Quarries

The Saddle Region is one of Hawai‘i’s most abundant volcanic glass sources. The project area’s relatively recent pāhoehoe flows contain a great number of volcanic glass outcrops, most of which have been exploited. Lithic quarries identified within the project area are generally concentrated within the eastern portion of the project area.

In addition to volcanic glass debitage, quarry sites also frequently contain fragmented and complete hammerstones, hundreds of which have been documented within the project area. Williams (2002:71) noted the use of “large hammerstones made of vesicular pahoehoe” for initial quarrying of the material and small, dense basalt hammerstones derived from Mauna Kea basalt for secondary reduction activities. While lithic scatters are commonly associated with quarried areas where primary reduction of lithic material occurred, they are also frequently documented at both repeated and limited-use occupation sites (Figure 23), representing secondary reduction to produce adze blanks, and the maintenance and production of flake tools.



Figure 23. Volcanic glass artifacts recovered from excavations at Site 19490, photograph from Robins et al. (2006:139).

### 3.2.1.4 Trails

Several Traditional Hawaiian trail segments are situated within the project area and other major trails have been identified within the larger PTA boundaries. These isolated trail segments often consist of worn lava paths, sometimes with associated linear curbstone constructions, and alignments of cairns or ahu. Site 5009, the Pu'u Kapele trail, is located within TA 17, and a 100-meter-long trail segment is mapped at Site 23457 within TA 7. Trail segments leading to habitation features have also been documented at Site 19490 within TA 5 (Figure 24).

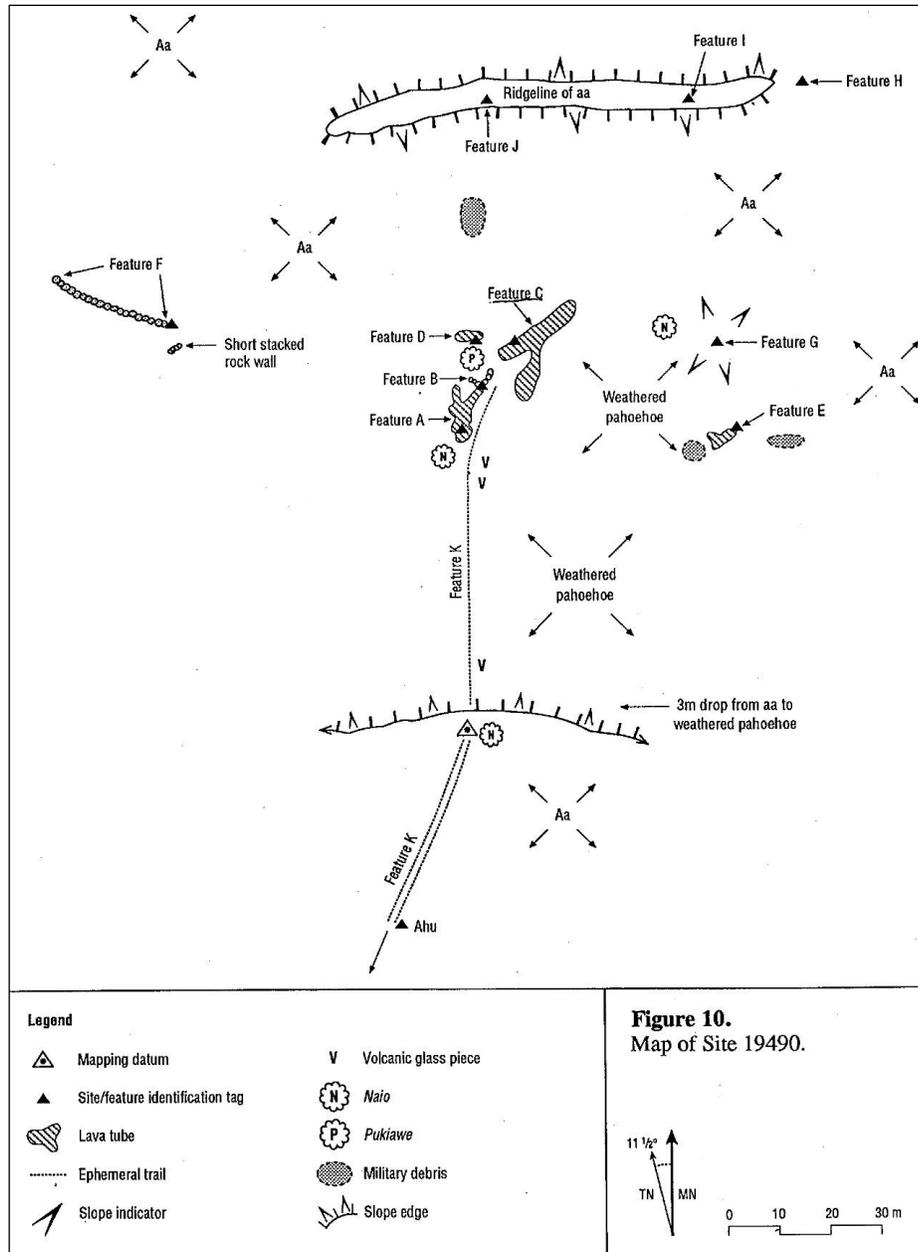


Figure 24. Plan view showing trail segments (Features F and K) mapped at Site 19490, from Shapiro et al. (1998:45).

### **3.2.2 Historic Period Sites**

Historic Period archaeological sites located within the project area include late-nineteenth to early-twentieth century ranching infrastructure remnants (walls, mounds, animal enclosures, fence lines) and features associated with land surveying activities (survey benchmark, boundary monuments). Several additional sites of unknown origin (mounds, modified outcrops, C-shaped structures, habitation lava tubes) may be affiliated with the early Post-Contact to Historic periods, but no determination on the origin of these sites has been made by PTA CRM staff.

#### ***3.2.2.1 Ranching Sites***

Ranching sites include rock walls, fence lines, and animal enclosures. Some of these are associated with Parker Ranch and the Humu‘ula Sheep Station, located just east of the project area. Site 23452, a fence line incorporating a rock wall base constructed around 1895, extends across a roughly 10-mile-long alignment within the project area, situated to the south of Saddle Road. Other Historic Period ranching features are in the eastern portion of the project area, including Sites 23846 (animal enclosure), 23847 (alignment), and 23850 (corral).

#### ***3.2.2.2 Trails, Transportation, and Land Survey Associated Sites***

While the age of the trail segments located within the project area (Sites 5009 and 23457) are classified as Traditional Hawaiian in origin, they were also likely utilized during the Post-Contact and Historic periods. Their original construction and/or design may have been modified or expanded by foreigners traveling with horses and other pack animals.

Two historic features associated with government land surveying activities are situated within the project area, including a USGS survey marker (Site T-082217-08) at the southern boundary of the Ke‘āmuku parcel in TA 14 and a USGS elevation benchmark (Site T-040418-01) at the top of Pu‘u Omaokoili in TA 1.

### **3.2.3 Recent Military Features**

Following the attack at Pearl Harbor in 1941, over 50,000 acres of Parker Ranch were taken over by the U.S. military for war maneuvers (termed the Waikoloa Maneuver Area) and used as a live-fire training area. The town of Waimea was converted to an encampment named Camp Tarawa (Brennan 1974:164). The current Saddle Road was constructed in 1943 to allow movement into the interior in case of another foreign attack (Langlas et al. 1999:55). Military training maneuvers have expanded into the project area in the modern era, as indicated by the presence of hastily constructed rock training structures and associated debris. PTA CRM staff and cultural resource consultants have identified at least 435 military-associated features within the project area. Basic descriptive and locational data is maintained for these recent military features, which are avoided during current training activities.

## **4.0 HISTORIC ARCHITECTURAL RESOURCES**

Historic architectural resources represent the built human environment and are typically expressed as buildings and as structures, such as engineering works. The NHPA provides a definition for historic architectural properties as being typically 50 years of age or older and retaining historical significance and integrity per 36 CFR Part 800.4(c). To date, there are no historic architectural

resources known to be extant within State-owned land. Previous cultural resources studies have recorded and evaluated historic structures within PTA, including Quonset huts and other Cantonment facilities that date from the World War II to Cold War periods. These resources are located outside the region of influence in the nearby Cantonment and BAAF.

## **5.0 CONCLUSIONS**

Kleinfelder/GANDA conducted an archaeological literature review to support the preparation of an EIS that analyzes the environmental effects of a Proposed Action for the ATLR at PTA project. The current document is meant to support the NEPA review process by compiling background information on existing conditions of tangible cultural resources (historic architectural resources and archaeological sites) known to exist within State-owned land at PTA. The results of this analysis help to generate a preliminary assessment of the project's potential impacts on tangible cultural resources as well as recommendations for managing the impacts of the Proposed Action. This document will be appended to the EIS as a contributing technical study.

The majority of the project area is located within Ka'ohē Mauka Ahupua'a, Hāmākua District, with a small portion extending east into Humu'ula Ahupua'a, Hilo District, on the island of Hawai'i. The State-owned land forming the project area consists of approximately 23,000 acres encompassing five TMK parcels: (3) 3-8-001:013 and :022, (3) 4-4-015:008, (3) 4-4-016:005, and (3) 7-1-004:007. The eastern two-thirds of the project area consist of a roughly two-mile-wide corridor extending northwest-southeast through PTA along the Saddle Road (State Route 200) corridor between Gilbert Kahele Recreation Park to the east and the Saddle Road-Daniel K. Inouye Highway junction to the west. The western third of the project area comprises a roughly 8,000-acre area which extends towards the western PTA boundary and southwest of the Ke'āmuku parcel.

One hundred-five (105) archaeological sites are recorded within the project area. Recorded sites within the project area include a range of Traditional Hawaiian and Historic Period archaeological sites; no historic structures or buildings are present within the project area. Approximately 50 percent of the project area has been subjected to archeological inventory survey, comprising 31 separate investigations. Although other archaeological projects have been conducted within State-owned land, these 31 studies meet USAG-HI's standards for archaeological investigation and so are counted as surveyed and inventoried land. Approximately 50 percent of State-owned land has either remained unsurveyed or was subjected to older studies that do not meet the USAG-HI's current standards.

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Appendix E

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# Cultural Impact Assessment





**Cultural Impact Assessment Report for the Army Training Land Retention of  
Pōhakuloa Training Area**

**Ka'ōhe Mauka Ahupua'a, Hāmākua District; Humu'ula Ahupua'a, North Hilo District;  
Pu'uanahulu Mauka Ahupua'a, North Kona District, Hawai'i Island**

**TMKs: [3] 4-4-015:008, [3] 4-4-016:005, [3] 3-8-001:013 & 022, and [3] 7-1-004:007**

Prepared by



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### **FRONT COVER CREDIT**

**Watson, T.K.** “Backside of Ki’i located at Pu’u Ka Pele facing Pu’u Kea, located on State land at Pōhakuloa.” 2019. JPEG file.

### **SUGGESTED CITATION**

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2021 *Cultural Impact Assessment Report for the Army Training Land Retention of Pōhakuloa Training Area Ka’ohe Mauka Ahupua’a, Hāmākua District; Humu’ula Ahupua’a, North Hilo District; Pu’uanahulu Mauka Ahupua’a, North Kona District, Hawai’i Island, TMKs: [3] 4-4-015:008, [3] 4-4-016:005, [3] 3-8-001:013 & 022, and [3] 7-1-004:007, Prepared for G70, Honua Consulting, Honolulu, Hawai’i.*

## Note on Hawaiian Orthography

In keeping with the standard established by Hawaiian scholars<sup>1</sup> who have published vital work in the perpetuation of Hawaiian knowledge, this document does not italicize Hawaiian words. This effort was best articulated by Noenoe Silva in 2004 in her ground-breaking work *Aloha Betrayed*:

I have not italicized Hawaiian words in the text in keeping with the recent movement to resist making the native tongue appear foreign in writing produced in and about a native land and people. Readers will also notice that not all of the Hawaiian text has modern orthography (i.e., the ‘okina to mark the glottal stop and the macron to mark the long vowel). I choose to quote text as is without imposing the marks, which were not developed until the mid-twentieth century. This allows readers literature in Hawaiian to see the original spelling and perhaps glean alternative and/or additional meanings. Particularly for names of people, I conservatively avoid using the marks, except in cases where such spelling has become standards (e.g., Kalākaua) or where the meaning of the name has been explained or is obvious (Silva, 2004).

Hawaiian is both the native language of the pae ‘āina of Hawai‘i and an official language of the State of Hawai‘i. Some reports will leave Hawaiian words italicized if part of a quote; this report does not. In the narrative, the report uses diacritical markings to assist readers, except in direct quotes, in which the markings used in the original text are maintained. Contextual translations are provided when appropriate. A glossary is not provided. Online dictionaries are readily available for use at [www.wehewehe.com](http://www.wehewehe.com).

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<sup>1</sup> See also University of Hawai‘i Style Guide (2021), which states, “In general, do not italicize Hawaiian words (there are exceptions). Hawaiian and English are the two official languages of the State of Hawai‘i. ...”

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## Abbreviations and Acronyms

- A.B.C.F.M.:** American Board of Christian Foreign Missions
- Act 50:** Act 50 Session Laws of Hawaii 2000 or Act 50 SLH 2000
- AHA:** Ammunition Holding Area
- AIS:** Archaeological Inventory Survey
- AMSL:** Above Mean Sea Level
- Article XII, Section 7:** Article XII, Section 7 of the Hawai'i State Constitution
- BAX:** Battle Area Complex
- BMP:** Best Management Practice
- BO:** Biological Opinion
- BPBM:** Bernice Pauahi Bishop Museum
- CFR:** Code of Federal Regulations
- Ching:** *Ching v. Case*, 449 P.3d 1146 (Haw. 2019)
- CIA:** Cultural Impact Assessment
- DoD:** Department of Defense
- EIS:** Environmental Impact Statement (for the Army Training Land Retention at Pōhakuloa Training Area)
- DKI Highway:** Daniel K. Inouye Highway
- DLNR:** Department of Land and Natural Resources
- EIS:** Environmental Impact Statement
- HAR:** Hawaii Administrative Rules
- Haw.:** Hawaii
- HDOT:** State of Hawaii Department of Transportation
- HEPA:** Hawaii Environmental Policy Act
- HIARNG:** Hawaii Army National Guard
- HGS:** Hawaii Government Survey
- HRS:** Hawaii Revised Statutes
- ICH:** Intangible Cultural Heritage
- ILK:** Indigenous Local Knowledge
- Ka Pa'akai:*** *Ka Pa'akai O Ka 'Āina v. Land Use Commission*, 94 Haw. 31 [2000]
- L.C.A.:** Land Commission Awards
- MOU:** Memorandum of Understanding
- NARA:** National Archives and Records Administration
- NEPA:** National Environmental Policy Act
- NHO:** Native Hawaiian Organization
- NHPA:** National Historic Preservation Act
- No.:** Number
- NRHP:** National Register of Historic Places
- OEQC:** Office of Environmental Quality and Control

**OHA:** Office of Hawaiian Affairs  
**PA:** Programmatic Agreement  
**PEIS:** Programmatic Environmental Impact Statement  
**PTA:** Pōhakuloa Training Area  
**PTRCI:** Properties of Traditional Religious and Cultural Importance  
**Pub. L.:** Public Law  
**ROI:** Region of Influence  
**SIHP:** State Inventory of Historic Places  
**SLH:** Session Laws of Hawaii  
**SOP:** Standard Operating Procedure  
**TA:** Training Area  
**TCP:** Traditional Cultural Property  
**TEK:** Traditional Ecological Knowledge  
**TMK:** Tax Map Key  
**UH:** University of Hawaii  
**USARHAW:** U.S. Army Hawaii  
**U.S.:** United States  
**USACE:** United States Army Corps of Engineers  
**U.S.S.:** United States Ship  
**USGS:** U.S. Geological Survey

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## Executive Summary

Honua Consulting prepared this Cultural Impact Assessment (CIA) as a part of a larger Environmental Impact Statement (EIS) being prepared by the U.S. Army Corps of Engineers, Honolulu District, that analyzes the environmental and cultural effects of the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area (PTA). The EIS to which this CIA is appended is being prepared in accordance with the National Environmental Policy Act, Hawai'i Revised Statutes Chapter 343, and Hawai'i Administrative Rules Chapter 11-200.1. Hawaii's environmental impact rules require project proponents to assess proposed actions for potential impacts to cultural practices. Disclosure of the effects of a proposed action on the cultural practices of the community and state, particularly the Native Hawaiian community, is required in environmental impact statements as defined in Act 50, Session Laws of Hawaii (SLH) 2000.

The State-owned land of PTA are considered the project area and are comprised of Tax Map Keys: [3] 4-4-015:008, [3] 4-4-016:005, [3] 3-8-001:013 & 022, and [3] 7-1-004:007 in the ahupua'a of Ka'ohe (Hāmākua district), Humu'ula (North Hilo district) and Pu'uanahulu mauka (North Kona district) on the island of Hawai'i. The majority of PTA is within Ka'ohe ahupua'a.

Research in preparation of this report consisted of a thorough search of primary sources written in Hawaiian language, including but not limited to the Bishop Museum mele index and Bishop Museum archival documents, including the Hawaiian language archival caché. All Hawaiian language documents were reviewed by Hawaiian language experts to search for relevant information to include in the report. Documents considered relevant to this analysis are included herein, and translations are provided when appropriate to the discussion. Summaries of interviews with lineal and cultural descendants with ties to the study area are included in the assessment, and information on other past oral testimonies is also provided herein. Data was extrapolated from these sources that provide an overview of cultural resources, including traditional and customary practices, on this 'āina.

The following traditions and customs were identified to occur in or be associated with the project area or larger geographic extent:

- Mo'olelo
- Alanui (Trail Usage)
- Quarrying
- Stone Tool Manufacture

- Hōlua
- Habitation
- Lā'au Lapa'au
- Life Cycle Patterns
- Disposition of Creation Remains
- Bird Catching
- Agriculture, Cooking, and Food Traditions
- Ranching
- Paniolo
- Modern Hunting
- Kilo
- Uhaul Humu Pohaku (Dry Stone Stacking)
- Parietal Art (Petroglyphs and Petrographs)
- Haku Mele and Haku Oli
- Hula
- Cosmologies and Genealogies
- Mālama Iwi
- Ceremonial Practices
- Hana Kahuna

This assessment identifies valued cultural, historical, and natural resources in the project area, including the extent to which traditional or customary practices are or were exercised in the project area.

Any tangible or physical impacts to historic sites are addressed in the archaeological study included with the EIS and not covered by this CIA. Similarly, any tangible physical impacts to flora or fauna are addressed in the assessment of biological resources in the EIS and not covered by this CIA. This CIA focuses on affects to cultural practices of the community and state as required by Hawaii Revised Statutes Chapter 343.

The three alternatives analyzed in the EIS (Alternatives 1 through 3) include retention of State-owned land by the Army that include potential properties of traditional religious and cultural importance (PTRCI), specifically Pu'u Kapele, Pu'u Ke'eke'e, Pu'u Kea, Pu'u Koko,

Pu'u Ahi, and Pu'u Mau'u. Pu'u Ko'ohi and Pu'u Pōhakuloa would be retained in Alternative 1, but not Alternatives 2 and 3. All of these sites would be returned to state control under the No Action Alternative.

The impacts resulting from current military control of the State-owned land and the Proposed Action stem from limitations of access as identified by practitioners who provided ethnographic data for this assessment. Physical impacts to cultural resources are managed and mitigated by existing agreements. Access to important cultural resources is limited physically and by current Army practice. It is this limitation of access that directly creates adverse effects to cultural practices, as practice cannot be conducted absent access to sites of traditional, religious, or cultural importance. This adverse effect to cultural practices equates to a significant effect under the express language of HAR §11-200.1.

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## 1.0 INTRODUCTION<sup>2</sup>

Honua Consulting prepared this Cultural Impact Assessment (CIA) as a part of a larger Environmental Impact Statement (EIS) being prepared by the U.S. Army Corps of Engineers, Honolulu District, that analyzes the environmental and cultural effects of the proposed retention of up to approximately 23,000 acres of state-owned land at Pōhakuloa Training Area (PTA). The EIS to which this CIA is appended has been prepared in accordance with National Environmental Policy Act, Hawaii Revised Statutes Chapter 343, and Hawaii Administrative Rules Chapter 11-200.1. The Hawaii statute and rules (collectively referred to as “HEPA”) for the environmental impact assessment process require project proponents to assess proposed actions for potential impacts to cultural practices. Disclosure of the effects of a proposed action on the cultural practices of the community and state, particularly the Native Hawaiian community, is required in EISs as defined in Act 50, Session Laws of Hawaii (SLH) 2000.

PTA is located between the volcanoes of Mauna Loa, Mauna Kea and Hualālai, in an area referred to as the “Saddle Region” (**Figure 1**). PTA is the largest contiguous United States (U.S.) military live-fire range and maneuver training area in Hawai‘i. The training area covers 132,000 acres, consisting of impact areas, firing ranges, an airfield, and maneuver areas. PTA has been used for more than 60 years and is the primary ground maneuver tactical training area that provides the U.S. Indo-Pacific Command Commander with capabilities to support home-station training, joint training with other U.S. military units, and multinational training with other Indo-Pacific region militaries. Approximately 100,000 acres of PTA are under the direct ownership or control of the U.S. Army, while approximately 23,000 acres are owned by the State of Hawai‘i and have been leased to the Army since 1964. (These lands are referred to in the Environmental Impact Statement as “State-owned land.”<sup>3</sup> For the purpose of this CIA, the terms “State-owned land” and “state-leased land” shall be considered synonymous.) The 23,000 acres link the centrally located U.S. Government-owned Cantonment to the training areas north and south of the Cantonment.

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<sup>2</sup> Wherever possible and appropriate, language, especially regarding the project description and Proposed Action and alternatives, was taken verbatim and in its entirety from other project documents. The purpose of this is to ensure full transparency in the assessment, and to also ensure continuity between project documents.

<sup>3</sup> This CIA recognizes that this statement is refuted by many individuals, including those who provided comments during scoping or to the CIA. It is utilized for the purpose of consistency throughout the project documents and is not intended to be interpreted as a disregard for the comments and concerns raised by Hawaiian practitioners.

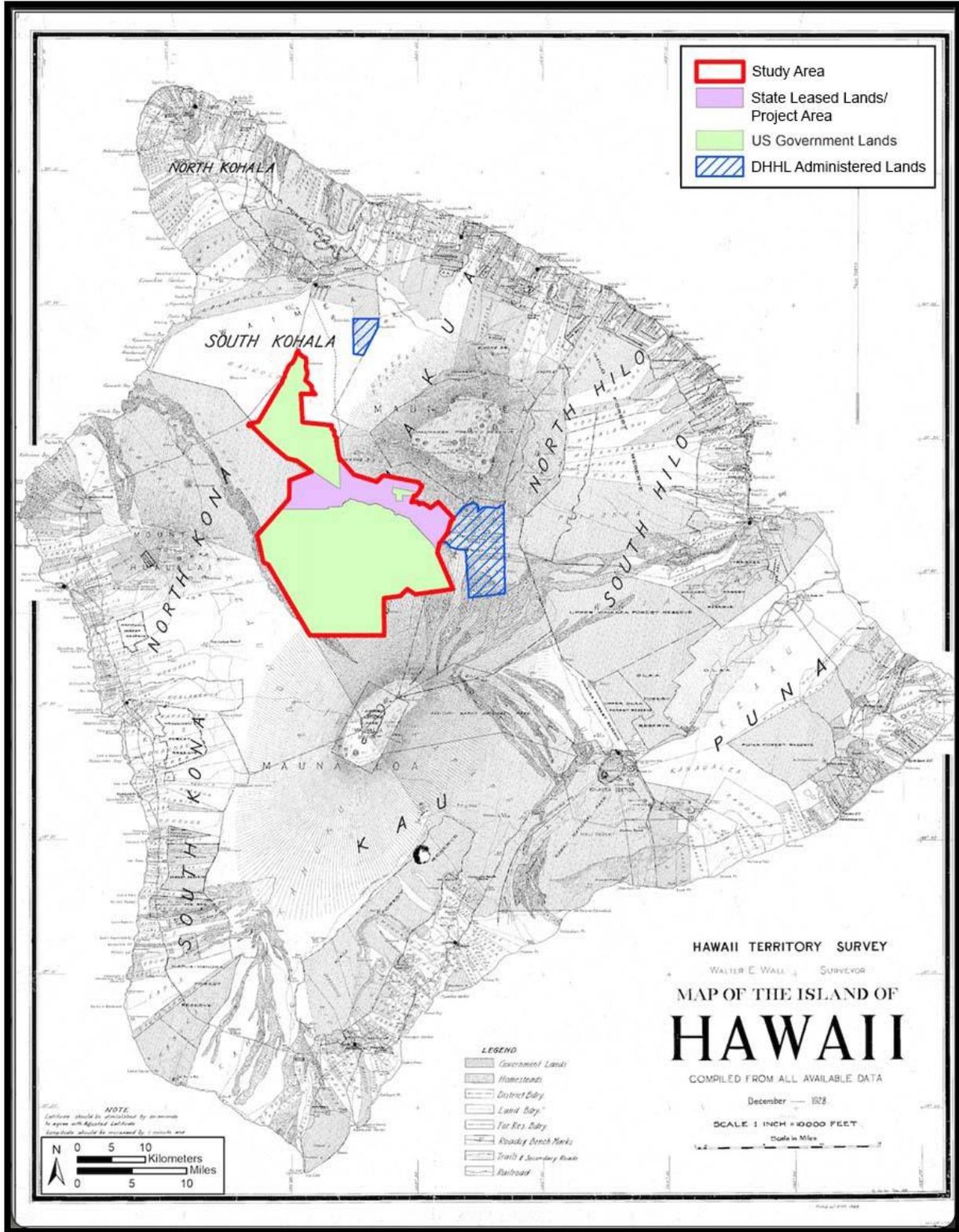


Figure 1. Location

The 65-year lease between the U.S. Government and the State of Hawai‘i through its Department of Land and Natural Resources (DLNR) expires on August 16, 2029. Over the course of the lease, these lands have played a critical role in the 132,000-acre training area. The leased lands provide access between the portions of PTA to which the federal government holds title and supports training facilities and capabilities considered essential to U.S. Army Hawaii (USARHAW) and other military services and local agencies. The leased land contains some key training facilities not available elsewhere in Hawai‘i, and the contiguous maneuver area that accommodates exercises at larger than company size is also not available anywhere in the Hawaiian Islands.

The state-leased land of PTA is considered the project area and are comprised of Tax Map Keys: [3] 4-4-015:008, [3] 4-4-016:005, [3] 3-8-001:013 & 022, and [3] 7-1-004:007 in the ahupua‘a of Ka‘ohe (Hāmākua district) and Humu‘ula (North Hilo district) on the island of Hawai‘i (**Figure 2**)<sup>4</sup>. The majority of PTA is within Ka‘ohe ahupua‘a. This CIA identifies and assesses potential impacts to cultural practices through a careful inventory of the natural and cultural environment with particular attention to archaeological sites, culturally significant landforms, places, and flora and fauna.

The EIS analyzes a range of reasonable alternatives that could meet the Proposed Action regarding the extent (e.g., full, modified, and minimum) and location of retention of the State-owned land. Regulations also require the inclusion of a No Action Alternative. The state<sup>5</sup> would become responsible for land not retained under Alternatives 2, 3, and the No Action Alternative, and the Army may conduct various lease compliance actions within the State-owned land not retained.

The scope of work for this report looks at the range of cultural resources within the geographic extent (the Study Area), while focusing primarily on the project area, which includes the state-leased land (**Figure 3**). Cultural resources include three distinct categories of resources: tangible resources, intangible resources, and natural resources with cultural value.

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<sup>4</sup> Historic ahupua‘a maps include a portion of Pu‘uanahulu mauka (North Kona district).

<sup>5</sup> The terms “the state” and “the State of Hawai‘i” are used interchangeably throughout the document.

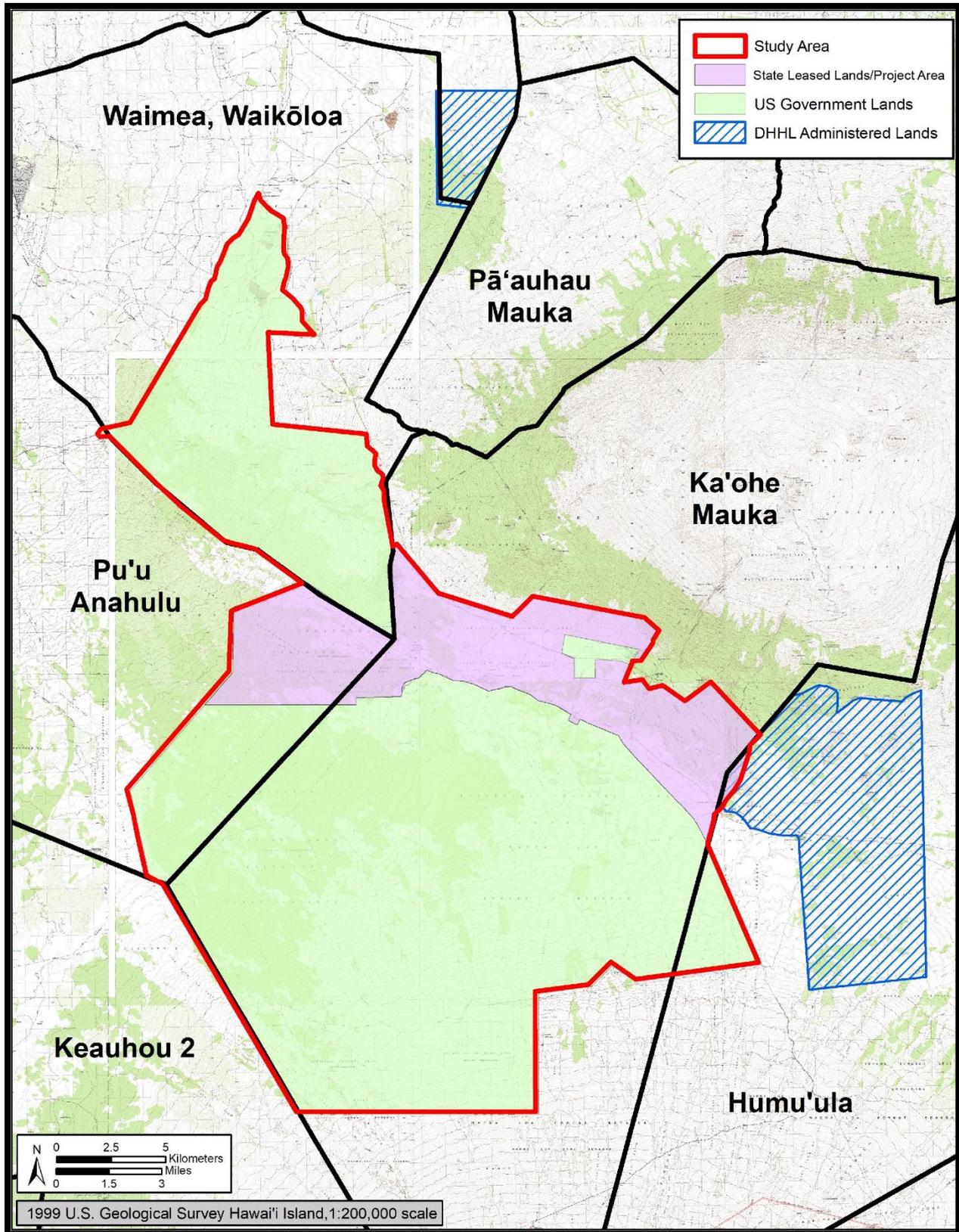


Figure 2. Project area and study area over 1999 USGS Map

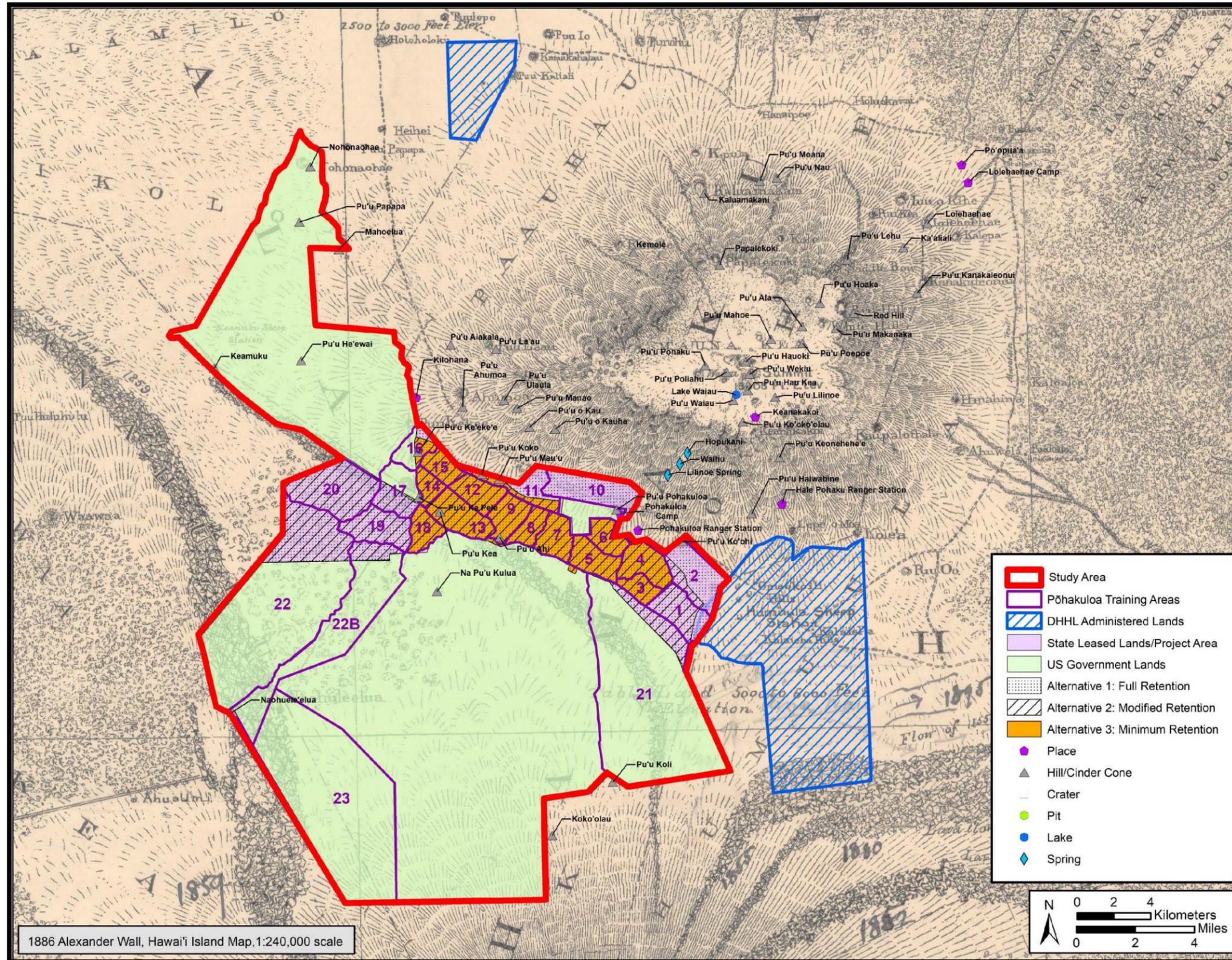


Figure 3. 1886 Alexander Wall map showing the project area and study area

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The identification of biological resources is not within the scope of this report. Nonetheless this report utilizes information collected for biological assessments for the purpose of identifying if these biological resources also have cultural components. Similarly, the identification of tangible cultural resources, which are historic and archaeological properties, is not primarily within the scope of this report. However, similar to the use of information regarding biological resources, the information developed regarding historic and archaeological properties will be utilized for the purpose of assessing how traditionally customary practices may be impacted as a result of impacts to these properties and resources.

The scope of this report is also limited to identifying how cultural resources (tangible, intangible or natural) and traditionally customary practices may be impacted by the Proposed Action and its alternatives. It is not within the scope of this report to conduct an assessment per Hawaii Revised Statutes (HRS) Chapter 6E or the National Historic Preservation Act (NHPA). Those responsibilities are to be managed by the U.S. Government, although it can be reasonably anticipated that some of the information from this CIA may be utilized to comply with those regulations.

## 1.1 Proposed Action<sup>6</sup>

The Army proposes to retain up to approximately 23,000 acres of State-owned land at PTA in support of continued military training. Retention would occur through attainment of a land interest that would allow continued use of the land. The Army would arrange for retention and continued use of the State-owned land prior to expiration of the 1964 lease to ensure training is not interrupted. Following arrangement for retention of the State-owned land, the Army would continue to conduct Army ongoing activities (military training; facility, utility, and infrastructure maintenance and repair activities; resource management actions; and associated activities such as emergency services) on the retained State-owned land. The Army also would continue to permit and coordinate ongoing activities (training and other activities such as public use programs) on the retained State-owned land by other PTA users, including Department of Defense (DoD) agencies, international partners, local agencies, and the community.

The Proposed Action is a real estate action (i.e., administrative action) that would enable continuation of ongoing activities on the retained State-owned land. It does not include construction, modernization, or changes in ongoing activities in the retained State-owned land. Additionally, the Proposed Action does not include changes to the use, size, or configuration of the SUA overlying the State-owned land. Current activities within the State-owned land were

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<sup>6</sup> The language in this sub-section and in the following sub-sections that detail the alternatives are taken from Chapter 2 of the EIS to ensure that the alternatives are being properly considered in this assessment.

previously analyzed in separate NEPA documents, as applicable, and future construction, modernization, or changes in ongoing activities within the retained State-owned land would require separate NEPA (and potentially HEPA) compliance, as applicable. **EIS Chapter 2** provides additional details and explanation of the Proposed Action.

## **1.2 State-Leased Land Training Areas, Facilities, Utilities, and Infrastructure**

The State-owned land includes Training Areas (TAs) 1–15, 18, 19, and 20, and portions of TAs 16, 17, 21, and 22 (including the northern portion of TA 22B), which accounts for 22 of the 24 TAs at PTA. The TAs are used for maneuver and weapons training and include a variety of training and support facilities, utilities, and infrastructure. U.S. Government-owned facilities within the State-owned land include live-fire and non-live-fire firing points; ranges for mounted, dismounted, and aviation training; and support facilities such as ammunition storage areas and helicopter and tilt-rotor aircraft landing zones. U.S. Government-owned utilities within the State-owned land include electricity (electrical distribution lines and the installation’s only electrical substation), potable water facility (pump stations, storage tanks, chlorination system, and distribution pipe), fire protection water (storage tank and distribution pipe), and communications equipment. U.S. Government-owned infrastructure within the State-owned land includes roads (65 miles), training trails (94 miles), and firebreaks/fuel breaks. The State-owned land supports larger than company-sized units (i.e., battalion and brigade) for live-fire and maneuver exercises. (See **EIS Chapter 2.1.1** for additional information.)

## **1.3 Alternatives Considered**

The NEPA process includes consideration of reasonable alternatives for the Proposed Action. Reasonable alternatives must satisfy the purpose of and need for the Proposed Action, as defined in **EIS Section 1.3**, and meet the screening criteria specified in **EIS Section 2.1.4**. The alternatives carried forth for analysis in the EIS are summarized here and presented in more detail in **EIS Sections 2.2.1** through **2.2.3**. The alternatives analyzed are a practical representation of the range of reasonable alternatives regarding the extent (e.g., full, modified, and minimum) and location of retention of the State-owned land. The EIS analyzes the potential impacts associated with these alternatives. CEQ regulations require the inclusion of a No Action Alternative (**EIS Section 2.2.4**) for EISs. While the No Action Alternative would not satisfy the purpose of or need for the Proposed Action, it is analyzed in detail in the EIS. **EIS Section 2.2.5** addresses the alternatives considered and eliminated from detailed study. **Figure 4** illustrates the general areas to be retained under the alternatives.

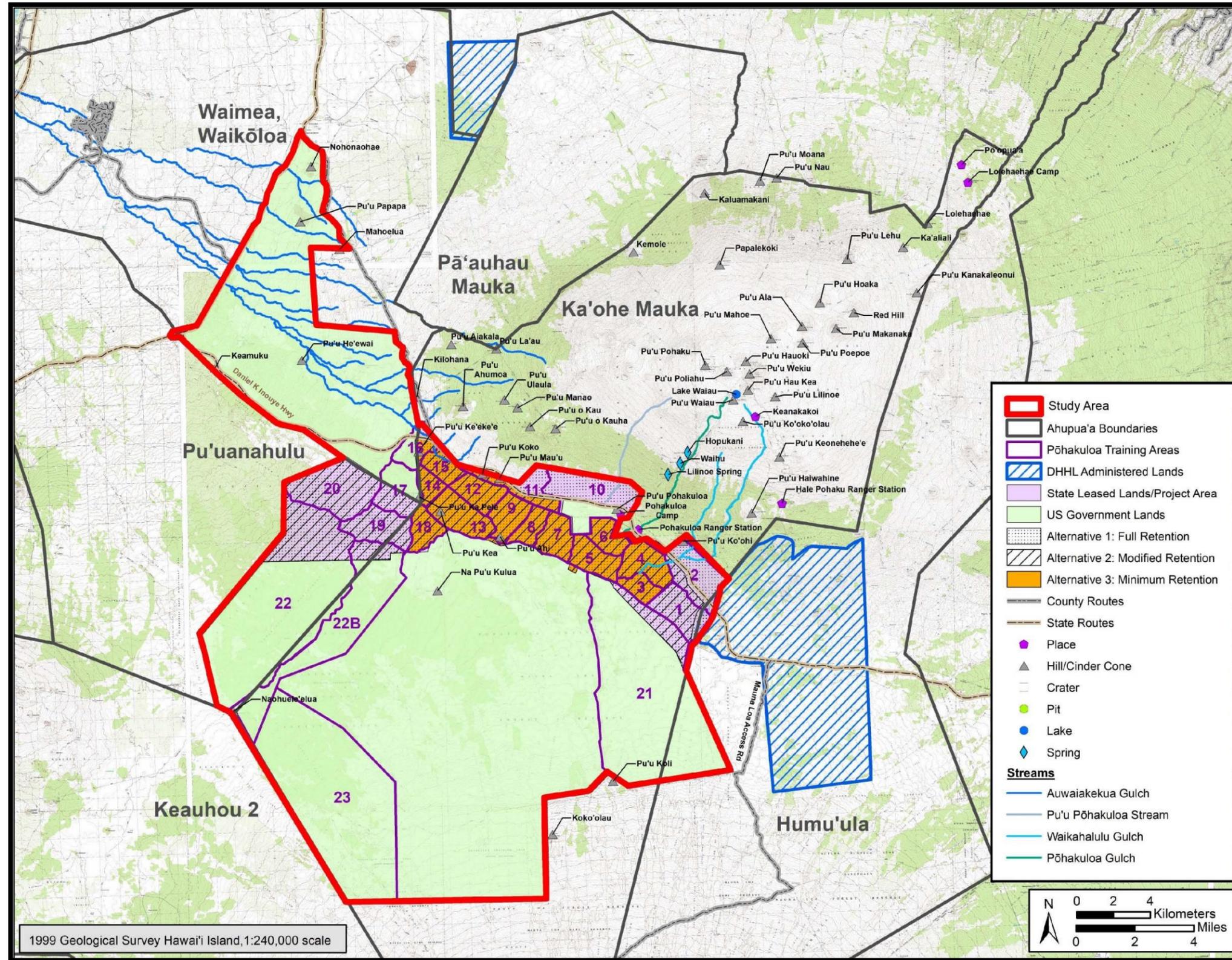


Figure 4. Map showing Alternatives 1 through 3 (Modified to show all the natural features in the study area.)

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### 1.3.1 Alternative 1: Full Retention

Under Alternative 1, the Army would retain all the State-owned land (approximately 23,000 acres) at PTA (**Figure 4**). The Army would continue to manage and use all the State-owned land; have unrestrained access between the Cantonment, impact area and training ranges, and Ke'āmuku parcel; and conduct Army ongoing activities. The Army also would continue to permit and coordinate ongoing activities on all the State-owned land by other PTA users (see **EIS Section 1.2.6**). Alternative 1 is considered the baseline land retention alternative with respect to the area of land that would continue to be used and managed by the Army.

### 1.3.2 Alternatives 2 and 3: Partial Retention

Under Alternative 2, the Army would retain approximately 19,700 acres of the State-owned land at PTA (**Figure 4**). Additionally, the Army would retain all U.S. Government-owned utilities and associated access throughout the State-owned land to enable continued safe operation of U.S. Government-owned land and retained State-owned land at PTA. **EIS Figure 2-3** depicts the principal retention area, but for security reasons it does not include the U.S. Government-owned utilities and associated access that would be retained under Alternative 2.

Under Alternative 3, the Army would retain approximately 10,100 acres and 11 miles of select roads and training trails within the State-owned land at PTA. The approximately 10,100 acres contains vital training and support facilities and associated maneuver areas necessary for USARHAW to continue to meet its ongoing training requirements on the State-owned land (see purpose and need statements in **EIS Section 1.3** and screening criteria in **EIS Section 2.1.4**). Additionally, the Army would retain all U.S. Government-owned utilities and associated access throughout the State-owned land; firebreaks/fuel breaks and associated access along most of the 11 miles of select roads and training trails proposed for retention; and land use rights to enable the firing of indirect-fire weapons from three firing points on U.S. Government-owned portions of PTA northwest of the State-owned land into the impact area. **Figure 4** depicts the principal retention area (approximately 10,100 acres) and select roads and training trails (approximately 11 miles) but for security reasons it does not show the U.S. Government-owned utilities and associated access that would be retained under Alternative 3. The firebreaks/fuel breaks proposed for retention are included in the select roads and training trails proposed for retention and are not shown separately on **EIS Figure 2-4** due to scale.

Access to vital training and support facilities (and associated maneuver areas), U.S. Government-owned utilities, and infrastructure within the State-owned land is necessary to enable continuation of larger unit collective live-fire and maneuver exercises at PTA; range

and emergency services communication at PTA; and facility, utility, and infrastructure maintenance and repair within the State-owned land. Access to the 11 miles of select roads and training trails (and associated firebreaks/fuel breaks) is necessary to ensure continuance of wildfire protection and firefighting activities along vital areas within the State-owned land not retained, as well as training, range operations, repair and maintenance activities, resource management actions; wildfire protection and firefighting activities; and emergency services on U.S. Government-owned land. The three firing points on U.S. Government-owned land northwest of the State-owned land (see TAs 16 and 17 in **EIS Figure 2-1**) are among the farthest from the impact area, allowing for long distance firing by indirect-fire weapons, and are therefore essential for training. Land use rights associated with firing over State-owned land not retained from these three firing points would consider appropriate safety requirements.

### 1.3.3 No Action Alternative

Under the No Action Alternative, the Army would not retain any of the State-owned land at PTA after lease expiration.

### 1.3.4 Changes Related to Land Retained and Land Not Retained

Following lease expiration and in accordance with the lease or otherwise negotiated with the State, the Army may conduct various lease compliance actions within the State-owned land not retained under Alternatives 2, 3, and the No Action Alternative. Lease compliance actions and responsibilities are considered connected actions in the EIS, and may include items such as reforestation, removing signs, removing or abandoning structures, and removing weapons and shells (i.e., payload-carrying projectiles such as mortar and artillery shells). The parameters for lease compliance actions are subject to the terms of the 1964 lease and negotiation with the State, which cannot be done until the EIS is completed, and an alternative has been selected; therefore, the parameters would be defined and determined after completion of the EIS. It is assumed lease compliance actions would occur under various DoD programs. Additionally, it is assumed investigation, removal, and cleanup of hazardous and toxic materials and wastes, including munitions and explosives of concern, within the State-owned land not retained, would occur under the Comprehensive Environmental Response, Compensation, and Liability Act, which is the legal framework for these actions in contaminated property and plays a substantial role in the cleanup and transfer of DoD sites. (**EIS Section 2.2.**)

Under Alternatives 2, 3, and the No Action Alternative, the Army would continue to conduct Army ongoing activities (training, maintenance and repair activities, resource management actions, and associated activities such as emergency services) on the retained State-owned land. (**EIS Section 2.2.**)

The Army would continue to permit and coordinate other PTA users' ongoing activities (training and other activities such as public use programs) on the retained State-owned land, and to maintain and repair U.S. Government-owned utilities on the State-owned land not retained to ensure their operability for U.S. Government-owned land and retained State-owned land. **(EIS Section 2.2.)**

The State would become responsible for land not retained under Alternatives 2, 3, and the No Action Alternative. Responsibilities would include the State to assume full control and management after lease expiration, and to be solely responsible for the funding and management of resource management and public use programs on the State-owned land not retained. **(EIS Section 2.2.)**

## **1.4 Regulatory Background**

According to Act 50, SLH 2000, "Articles IX and XII of the State Constitution, other state laws, and the courts of the State impose on government agencies a duty to promote and protect cultural beliefs, practices, and resources of native Hawaiians as well as other ethnic groups." To assist decision makers in the protection of cultural resources, Chapter 343, HRS and HAR §11-200.1 rules for the environmental impact assessment process require project proponents to assess proposed actions for their potential impacts to cultural properties, practices, and beliefs.

Act 50 recognized the importance of protecting Native Hawaiian cultural resources and required that EISs include the disclosure of the effects of a proposed action on the cultural practices of the community and state, and the Native Hawaiian community in particular. This CIA includes information relating to practices and beliefs of a particular cultural or ethnic group or groups. The information was obtained through public scoping, community meetings, ethnographic interviews, and oral histories.

It is important to note that while similar in their areas of studies, archaeological surveys and CIAs are concerned with distinct and different foci. Archaeological studies are primarily concerned with historic properties and tangible heritage, whereas CIAs look at cultural practices and beliefs, which can be associated with a specific location but are also often intangible in nature. Additionally, although consideration of and compliance with Chapter 6E, HRS, is outside the scope of this CIA, it should be noted that process for identifying important cultural resources under Act 50 can inform the determination as to whether a property may also be significant under Criterion "e" of the HAR 13-275-6 or HAR 13-284-6, should either rule be applicable. Criterion "e" properties:

Have an important value to the native Hawaiian people or to another ethnic group of the state due to associations with cultural practices once carried out, or still carried

out, at the property or due to associations with traditional beliefs, events or oral accounts – these associations being important to the group’s history and cultural identity (HAR 13-275-6(b)(5), see also HAR 13-284-6-(b)(5).

## 1.5 Compliance Requirements

The state and its agencies have an affirmative obligation to preserve and protect Native Hawaiians’ customarily and traditionally exercised rights to the extent feasible.<sup>7</sup> State law further recognizes that the cultural landscapes provide living and valuable cultural resources where Native Hawaiians have and continue to exercise traditional or customary practices, including hunting, fishing, gathering, and religious practices. In addition to the state constitution, state law, and state regulations, there is an extensive body of case law in Hawai’i that provides additional guidance for state agencies to follow in order for the state to adequately meet their obligations in the preservation and protection of these rights.

In *Ka Pa’akai*, the Hawai’i Supreme Court provided government agencies an analytical framework to ensure the protection and preservation of traditional or customary Native Hawaiian rights while reasonably accommodating competing private development interests. This is accomplished through the following:

- 1) the identification of valued cultural, historical, or natural resources in the project area, including the extent to which traditional or customary Native Hawaiian rights are exercised in the project area
- 2) the extent to which those resources—including traditional or customary Native Hawaiian rights—will be affected or impaired by the proposed action
- 3) the feasible action, if any, to be taken to reasonably protect Native Hawaiian rights if they are found to exist.

These guidelines serve as a partial framework in this assessment, in addition to the requirements of HRS Chapter 343 and Act 50 SLH 2000.<sup>8</sup> While the focus of this assessment is the ahupua’a of Ka’ohe, Humu’ula and Pu’uanahulu (Project Area), which includes the state-leased land, areas outside the state-leased land are also considered in the identification

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<sup>7</sup> Article XII, Section 7 of the Hawai’i State Constitution, *Ka Pa’akai O Ka ‘Āina v. Land Use Commission*, 94 Haw. 31 [2000] (*Ka Pa’akai*), Act 50 SLH 2000.

<sup>8</sup> The scope of work for this report only calls for [incorporating and addressing] “the requirements of HEPA (e.g., inclusion of a Cultural Impact Assessment [CIA] in an EIS appendix).” The requirements of *Ka Pa’akai*, although required per case law, have not been codified into HEPA requirements or by the OEQC, and therefore are not addressed in this CIA. It shall be the responsibility of the Army and/or State of Hawai’i (i.e., DLNR Land Division) to comply with *Ka Pa’akai* should any state action, including but not limited to, a state-issued land lease, state-issued right of entry (ROE), or state-issued land license proceed following the Chapter HRS 343 compliance process.

of traditional or customary practices that may have occurred in the region. A thorough analysis of this project and potential impacts to cultural resources, historical resources, and archaeological sites is included in this assessment, which primarily focuses on impacts to traditional or customary practices.

It is important to further distinguish that when considering the protection of cultural practices, there are generally two categories of activities: activities protected under Article XII, Section 7 and activities protected under Act 50. The resources protected under Act 50 extend beyond those specified in Article XII, Section 7 and include consideration for other “ethnic groups” in addition to Native Hawaiians.

Article XII, Section 7 of the Hawaii State Constitution:

Section 7. The State reaffirms and shall protect all rights, customarily and traditionally exercised for subsistence, cultural and religious purposes and possessed by ahupua‘a tenants who are descendants of native Hawaiians who inhabited the Hawaiian Islands prior to 1778, subject to the right of the State to regulate such rights. [Add Const Con 1978 and election Nov 7, 1978]

Act 50, SLH (2000) (excerpt):

The legislature finds that there is a need to clarify that the preparation of environmental assessments or environmental impact statements should identify and address effects on Hawaii’s culture, and traditional and customary rights.

The legislature also finds that native Hawaiian culture plays a vital role in preserving and advancing the unique quality of life and the “aloha spirit” in Hawaii. Articles IX and XII of the state constitution, other state laws, and the courts of the State impose on government agencies a duty to promote and protect cultural beliefs, practices, and resources of native Hawaiians as well as other ethnic groups.

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## 2.0 METHODOLOGY

This section discusses the various methodologies utilized to compile the background information included in this assessment. It specifically identifies the various resources researched and reviewed in the identification of cultural resources and practices within the project and study areas.

### 2.1 Region of Influence and the Geographic Extent of the Study Area

The Region of Influence (ROI) for historic and archaeological resources includes state-leased land within PTA and is further described in **Section 3.4** of the EIS. The study area or geographic extent for traditional and customary practices can extend beyond the ROI utilized for tangible cultural resources. For the CIA, the geographic extent considered included the region between Mauna Kea, Mauna Loa, and Hualālai, known generally as the Saddle Region (**Figure 5**). The geography of this interior plateau was primarily formed by the convergence of lava flows from Mauna Kea, Mauna Loa, and Hualālai, thus making this a largely distinct wahi pana (storied place). The CIA does not, nor does it intend to, identify all cultural resources within this geographic extent; rather the CIA assesses how the Proposed Action within the State-owned land at PTA would potentially affect traditional and customary practices within the larger geographic extent. Based on the collected ethnographic data, which largely focused on PTA, it was decided that the installation would make the most appropriate Study Area.

The Integrated Cultural Resource Management Plan for the U.S. Army Garrison – Pōhakuloa describes the region in which PTA is located as:

At the center of the island is the high-elevation Saddle Region or interior plateau, formed by the convergence of lavas from Mauna Kea, Mauna Loa, and Hualālai. Most of PTA is located on the Saddle, at elevations from about 5,000 to 8,800 feet amsl. The northwest portion of PTA, the Ke‘āmuku Maneuver Area, extends from 5,000 to 2,500 feet amsl on the northwest leeward slope of Mauna Kea. Large areas of the Saddle are pāhoehoe and ‘a‘ā lava flows from Mauna Loa. The flows contain subsurface features such as lava tubes and lava blisters; the lava tubes form extensive and sometimes interconnected networks of underground passageways that are accessed from the surface by collapsed openings. Other volcanic constructs in the Saddle Region include pu‘u (spatter or scoria cones). Older lava flow surfaces are preserved in kīpuka, which are islands of pre-existing terrain and vegetation surrounded by more recent lava flows. Mauna Kea eruptions are represented by sediment covered flows with some lava tubes and pu‘u, some of which are now surrounded by Mauna Loa flows (USAGHI-P, 2018).

This assessment considers two areas: the project area (State-owned land) and the geographic extent or study area of the project (see **Figure 5**). The level of inquiry and study is most intensive within the protect area with additional considerations for the larger geographic extent where appropriate.

**Project Area:** The project area is located primarily within the ahupua‘a of Ka‘ohe Mauka in the moku of Hāmākua with a small portion of the eastern area of the western portion of the Humu‘ula ahupua‘a in the moku of Hilo.

**Geographic Extent or Study Area:** PTA, including both State and Federal lands, is located largely in the ahupua‘a of Ka‘ohe Mauka in the moku of Hāmākua, with the eastern portion of PTA being located within the western portion of the Humu‘ula ahupua‘a in the moku of Hilo, the northwestern portion of PTA being within the southern portion of the Waikoloa ahupua‘a in the moku of (South) Kohala covering areas south and west of Mauna Kea, and the southwestern portion of PTA being within the ahupua‘a of Keauhou and Pu‘uanahulu in the moku of (North) Kona immediately east of Mauna Hualālai and north of Mauna Loa.

## 2.2 Background Research Methodology

Numerous studies have been conducted on this area, but very few have utilized Hawaiian language resources and knowledge about this area. There are relevant documents of native testimonies given by kānaka Hawai‘i (Hawaiians) who lived on this land. Efforts to identify and include historic accounts, including those from Hawaiian language resources, were a primary focus of this study.

While conducting the research, primary references included, but were not limited to: land use records, including the Hawaiian Land Commission Awards (L.C.A.) records from the Māhele ‘Āina (Land Division) of 1848; the Boundary Commission Testimonies and Survey records of the Kingdom and Territory of Hawai‘i; and historical texts authored or compiled by – D. Malo (1951); S.N. Haleole (1862-1863); J.P. I‘i (1959); Kupahu (1865); S.M. Kamakau (1961, 1964, 1976, 1991); Wm. Ellis (1963); records of the American Board of Commissioners of Foreign Missions (A.B.C.F.M.) (1820–1860); Chas. Wilkes (1845); Alexander & Preston (1892–1894); A. Fornander (1916–1919 and 1996); Isabella Bird (1964); G. Bowser (1880); and many other native and foreign writers. The study also includes several native accounts from Hawaiian language newspapers (compiled and translated from Hawaiian to English by K. Maly), and historical records authored by nineteenth century visitors, and residents of the region.

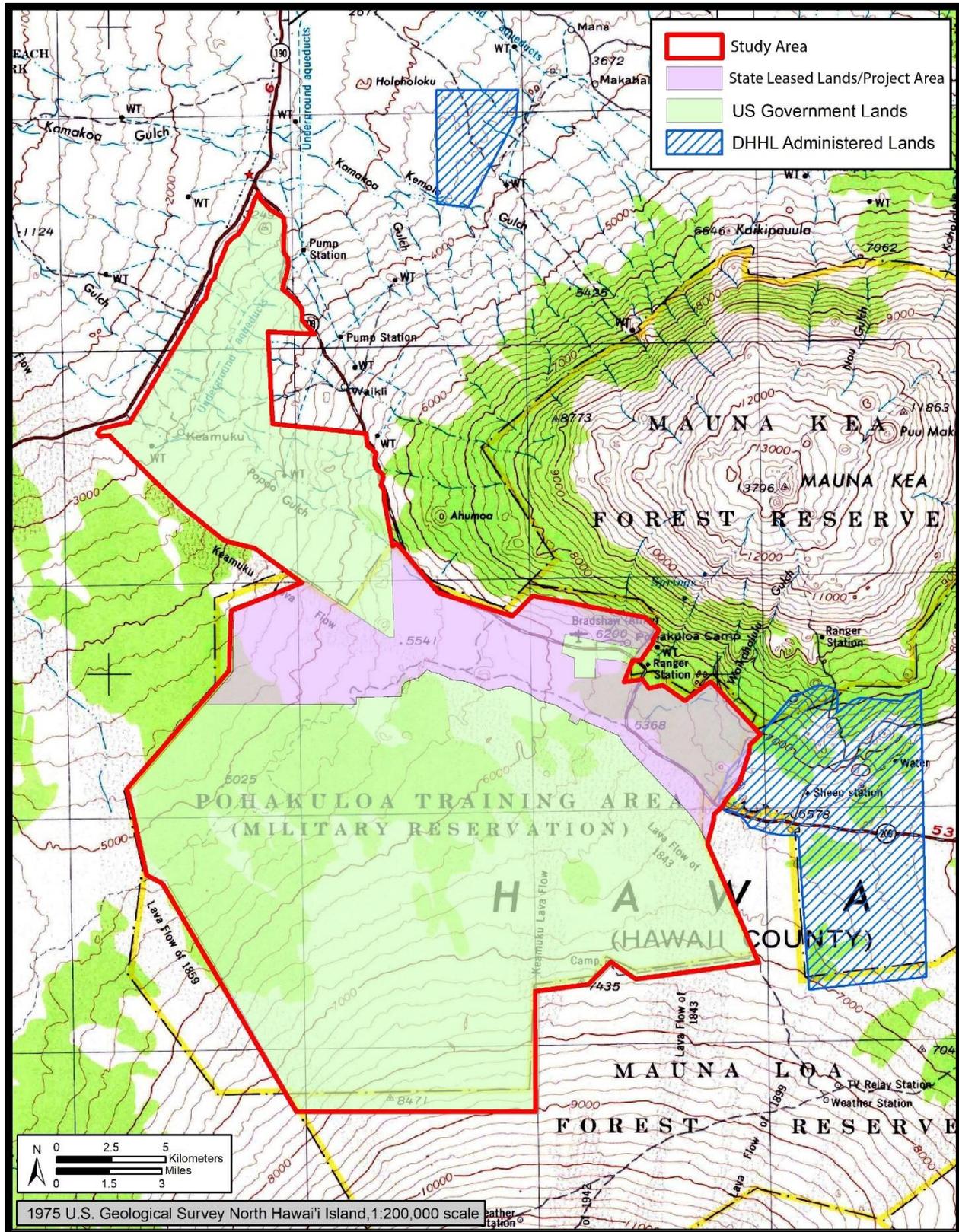


Figure 5. 1975 USGS map showing the Region of Influence and geographic extent of study

Historical and archival resources were located in the collections of the Hawaii State Archives, Survey Division, Land Management Division, Survey Division, and Bureau of Conveyances; the Bishop Museum Library and Archives; the Hawaiian Historical Society and the Hawaiian Mission Children's Society Library; University of Hawai'i-Hilo Mo'okini Library; the National Archives and Records Administration (NARA), Maryland; the Library of Congress, Washington D.C.; the National Oceanic and Atmospheric Administration National Library, Maryland; the Smithsonian Institution Natural History and National Anthropological Archives libraries, Washington, D.C.; the Houghton Library at Harvard; the United States Geological Survey (USGS) Library, Denver; the Paniolo Preservation Society and Parker Ranch collections; private family collections; and in the collection of Kumu Pono Associates LLC. This information is generally cited in categories by chronological order of the period depicted in the narratives.

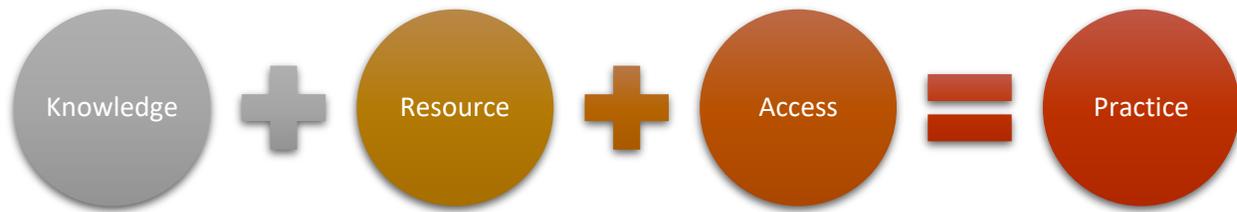
Puakea Nogelmeier (2010) discusses the adverse impacts of methodology that fails to properly research and consider Hawaiian language resources. He strongly cautions against a monorhetorical approach that marginalizes important native voices and evidence from consideration, specifically in the field of archaeology. For this reason, Honua Consulting consciously employs a polyrhetorical approach, whereby all data, regardless of language, is researched and considered (Nogelmeier, 2010).

A substantial part of the archival research utilized in this study was previously compiled and published by Kepā and Onaona Maly, who have granted their permission to use this important work and are identified properly as associated authors and researchers to this study.

This study also specifically looks to identify intangible resources. Tangible and intangible heritage are inextricably linked (Bouchenaki, 2003). Intangible cultural resources, also identified as intangible cultural heritage (ICH), are critical to the perpetuation of cultures globally. It has been noted, "At present, we are aware on a daily basis of the definitive loss – throughout the world – of language, knowledge, knowhow, customs, and ideas, leading to the progressive impoverishment of human society" (Lenzerini, 2011).

Therefore, tradition and practice, as elements of Hawaiian ICH, are essential to the protection of Hawaiian rights and the perpetuation of the Hawaiian culture.

It is within this context that traditional or customary practices are studied. The concept of traditional or customary practices can often be a challenging one for people to grasp. **Figure 6** summarizes the definition of traditional or customary practices.



*Figure 6. Diagram of elements that contribute to traditional or customary practices (Honua Consulting, 2021)*

The first element is knowledge. This has been referred to as traditional ecological knowledge (TEK), indigenous local knowledge (ILK), or ethnoscience. In the context of this study, it is the information, data, knowledge, or expertise Native Hawaiians or local communities possessed or possess about an area’s environment. In a traditional context, this would have included information Hawaiians possessed in order to have the skills to utilize the area’s resources for a range of purposes, including, but not limited to, travel, food, worship or habitation. This element is largely intangible and often preserved through oral histories, including, but not limited to, mo’olelo, mele, and/or ‘oli.

The second element are the resources themselves. These are primarily tangible resources, either archaeological resources (i.e., habitation structures, walls, etc.) or natural resources (i.e., plants, animals, etc.). These can also be places, such as a sacred or culturally important sites, wahi pana (storied places), wahi kapu (sacred places), and/or wahi kupuna (place known to or inhabited by our elders). Sometimes these places are general locations; this does not diminish their importance or value.

The third element is access. The first two elements alone are not enough to allow for traditional or customary practices to take place. The practitioners must have access to the resource(s) in order to be able to practice their traditions or customs. Access does not just mean the ability to physically access a location, but it also means access to resources. Access also requires the freedom to perform activities in a manner consistent with tradition or custom. For example, traditional bird hunting activities would likely be impacted today by existing state and federal laws that prohibit the taking of certain species of birds or species.<sup>9</sup> Another example, if a particular plant is used for medicinal purposes, there needs to be

<sup>9</sup> The Papahānaumokuākea Marine National Monument has established a Permit Application specifically for “Native Hawaiian Practices” (see OMB Control # 0648-0548). Under this permit process, Native Hawaiian practitioners have been granted access to protected species for cultural use in traditional or customary practices. See also Office of Hawaiian Affairs (2021) *Mai Ka Pō Mai: A Native Hawaiian Guidance Document for the Management of Papahānaumokuākea Marine National Monument*, which “establishes a collaborative management framework that guide Co-Trustee agencies towards integrating traditional Hawaiian knowledge systems, values, and practices into all area of management” (4).

enough of that plant available to practitioners for use. Therefore, an action that would adversely impact the population or sustainable yield of a particular plant with cultural properties would impact practitioners' ability to access that plant. By extension, it would adversely impact the traditional or customary practice. Traditional or customary practices are, therefore, the combination of knowledge(s), resource(s) and access(es).

### **2.3 Traditional Knowledge, or Ethnoscience, and the Identification of Cultural Resources**

The concept of ethnoscience was first established in the 1960s and has been defined as “the field of inquiry concerned with the identification of the conceptual schemata that indigenous peoples use to organize their experience of the environment” (Roth, 2019). Ethnoscience includes a wide range of subfields, including but not limited to ethnoecology, ethnobotany, ethnozoology, ethnomedicine and ethnopedology. Traditional Native Hawaiian practitioners were scientists and expert natural resource managers by necessity. Without modern technological conveniences to rely on, Hawaiians developed and maintained prosperous and symbiotic relationships with their natural environments for thousands of years. Their environments were their families, their homes and their laboratories. They knew the names of every wind and every rain. The elements taught and inspired. The ability of indigenous people to combine spirit and science led to the formation of unique land based methodologies that spurred unsurpassed innovation. Therefore, identifying significant places requires a baseline understanding of what made places significant for Hawaiians.

The Native Hawaiians who inhabited the Hawaiian Islands prior to 1778 were both settlers and explorers. Beatrice H. Krauss' *Plants in Hawaiian Culture* explains: “Exploration of the forests revealed trees, the timber of which was valuable for building houses and making canoes. The forests also yielded plants that could be used for making and dying tapa, for medicine, and for a variety of other artifacts” (1993). Analysis of Native plants and resource management practices reveals the depth to which Hawaiians excelled in their environmental science practices:

[Hawaiians] demonstrated great ability in systematic differentiation, identification, and naming of the plants they cultivated and gathered for use. Their knowledge of the gross morphology of plants, their habits of growth, and the requirements for greatest yields is not excelled by expert agriculturists of more complicated cultures. They worked out the procedures of cultivation for every locality, for all altitudes, for different weather conditions and exposures, and for soils of all types. In their close observations of the plants they grew, they noted and selected mutants (sports) and natural hybrids, and so created varieties of the plants they already had. Thus over the years after their arrival in the Islands, the Hawaiians added hundreds of named

varieties of taro, sweet potatoes, sugarcane, and other cultivated plants to those they had brought with them from the central Pacific (Krauss, 1993).

It was the Native Hawaiians who reinforced through their natural resource management practices the biodiversity that exists in Hawai'i today.

The present analyses of archival documents, oral traditions (oli [chants], mele [songs], and/or hula [dance]), and Hawaiian language sources, including books, manuscripts, and newspaper articles, are focused on identifying recorded cultural resources present on the landscape, including: Hawaiian and non-Hawaiian place names; landscape features (ridges, gulches, cinder cones); archaeological features (kuleana parcel walls, house platforms, shrines, heiau [places of worship], etc.); culturally significant areas (viewsheds, unmodified areas where gathering practices and/or rituals were performed); and significant biological, physiological, or natural resources. This research also looks to document the wide range of Hawaiian science that existed within the geographic extent.

### **2.3.1 Native Hawaiian Traditions of Ka'ohē, Humu'ula and the 'Āina Mauna**

In Hawaiian, mo'olelo (traditions and historical narratives) are expressions of native beliefs, customs, practices, and history. In Hawai'i, the very landscape is storied (wahi pana). Each place name is associated with a tradition – names might describe the presence and interactions of the gods with people, document historic events, or describe the characteristics of a given place. Over time many of these mo'olelo have been lost, although some remain and provide a glimpse into the history of the lands and people of the 'āina mauna, or mountain lands.

A collection of narratives written by native Hawaiian authors and nineteenth century historians are presented throughout this document, recording history, the occurrence of events and travel, and traditions of place name that have survived the passing of time. Several of the mo'olelo were translated here from the original Hawaiian by Kepā Maly; selected place names and events are emphasized by use of bold face (as in place names), and by italics. The accounts date back to the period of antiquity to the first-hand accounts of those who traveled the 'āina mauna in historic times, and were found in accounts written between 1794 and 1940.

The narratives are presented in three sections: 1) Mo'olelo 'Āina: Native Traditions of the Land; 2) Historical Accounts of the 'Āina Mauna Recorded by Visitors and Foreign Residents (1778-1899); and 3) Historical Accounts of the 'Āina Mauna Recorded after 1900. These resources are then included throughout this assessment into respective ethnosience subfields, serving as historical accounts of Hawaiian knowledge, cultural resources, and access.

### **2.3.2 Mo'olelo 'Āina: Native Traditions of the Land**

Among the most significant sources of native mo'olelo are the Hawaiian language newspapers which were printed between 1838 and 1948, and the early writings of foreign visitors and residents. Most of the accounts that were submitted to the papers were penned by native residents of areas being described and noted native historians. Over the last 30 years, Kepā Maly has reviewed and compiled an extensive index of articles published in the Hawaiian language newspapers, with particular emphasis on those narratives pertaining to lands, customs, and traditions. Several traditions naming places on Humu'ula, Ka'ohē, and the neighboring mountain lands have been located in these early writings. Those accounts describe native practices, the nature of land use at specific locations, and native lore, providing a means of understanding how people related to their environment and sustained themselves on the land (Maly 2005: 18).

### **2.3.3 Historical Accounts of the 'Āina Mauna Recorded by Natives, Foreign Residents and Visitors (1778-1899)**

The historic records of native writers share that from the Native Hawaiian perspective, Mauna Kea – from shoreline to the dense forests and lofty peaks – was a source of awe and inspiration. While the project area may be largely outside the physical boundaries of both Mauna Kea and Mauna Loa, these storied peaks and the area between them constitute an ethnographic landscape, defined by the Cultural Landscape Foundation as “a cultural landscape containing a variety of natural and cultural resources that associated peoples define as heritage resources” (The Cultural Landscape Foundation, 2021). The natural resources and mountain itself were believed to be manifestations of various creative forces of nature and were revered, although on a different level, the natural beauty of Mauna Kea and the surrounding 'āina mauna<sup>10</sup>, or mountain lands, also inspired foreign visitors of the eighteenth and nineteenth centuries to wax poetically. In the journals of many eighteenth and nineteenth century visitors, descriptions of the natural environment and glimpses into the native history of the mountain may be found. Selected narratives penned by many early foreign visitors in letters and journals, the observations of historians describing first-hand and eyewitness accounts of travel across the mountain lands, and traditions learned from native guides are cited in the following sub-sections. The accounts are presented in chronological order by date of observations and travel to the 'āina mauna (Maly 2005: 97).

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<sup>10</sup> Reference to the area as 'Āina Mauna is not unique to the work of the Malys or this report. The Department of Hawaiian Home Lands, which owns over 50,000 acres in the region also refers to their lands as 'Āina Mauna and manages the 'Āina Mauna Legacy Program. The purpose of this program is to “take into consideration not only the immediate needs of the area, but also traditional cultural knowledge, and how best to manage the legacy for the area for future generations.” See Department of Hawaiian Home Lands (2009), 'Āina Mauna Legacy Program.

#### 2.3.4 Historical Accounts of the 'Āina Mauna Recorded After 1900

Starting in the 1900s, travel to the summit of Mauna Kea and the mountain lands became more frequent. This included numerous journeys through the Saddle Region, where the current project area lies. Travelers included the adventurous, curious, and those of a scientific interest. Selected articles, journals, letters, and reports describing travel to the mountain lands and observations of both cultural and natural resources are cited. The narratives describe travel conditions, forest resources, introduction of plant and animal species to the landscape, cultural and historic resources, ranching activities, proposals for road development and land use activities, forestry and hunting programs, the results of scientific surveys covering historical resources, the geology and glaciation of Mauna Kea, botanical surveys, and the development of skiing interests on Mauna Kea.

Pertinent excerpts from the articles and papers are provided verbatim, and presented in chronological order by date of visit to Mauna Kea and the neighboring 'āina mauna, or when given as general accounts of the mountain lands, by date of publication (Maly 2005: 206).

#### 2.3.5 Historic Maps

There are also numerous, informative historic maps for the region. Surveyors of the eighteenth and nineteenth centuries were skilled in traversing land areas and capturing important features and resources throughout Hawaii's rich islands. Historic maps were carefully studied, and the features detailed therein were aggregated and categorized to help identify specific places, names, features, and resources throughout the study area (for example, see **Figure 7**). From these, among other documents, new maps were created that more thoroughly capture the range of resources in the area.

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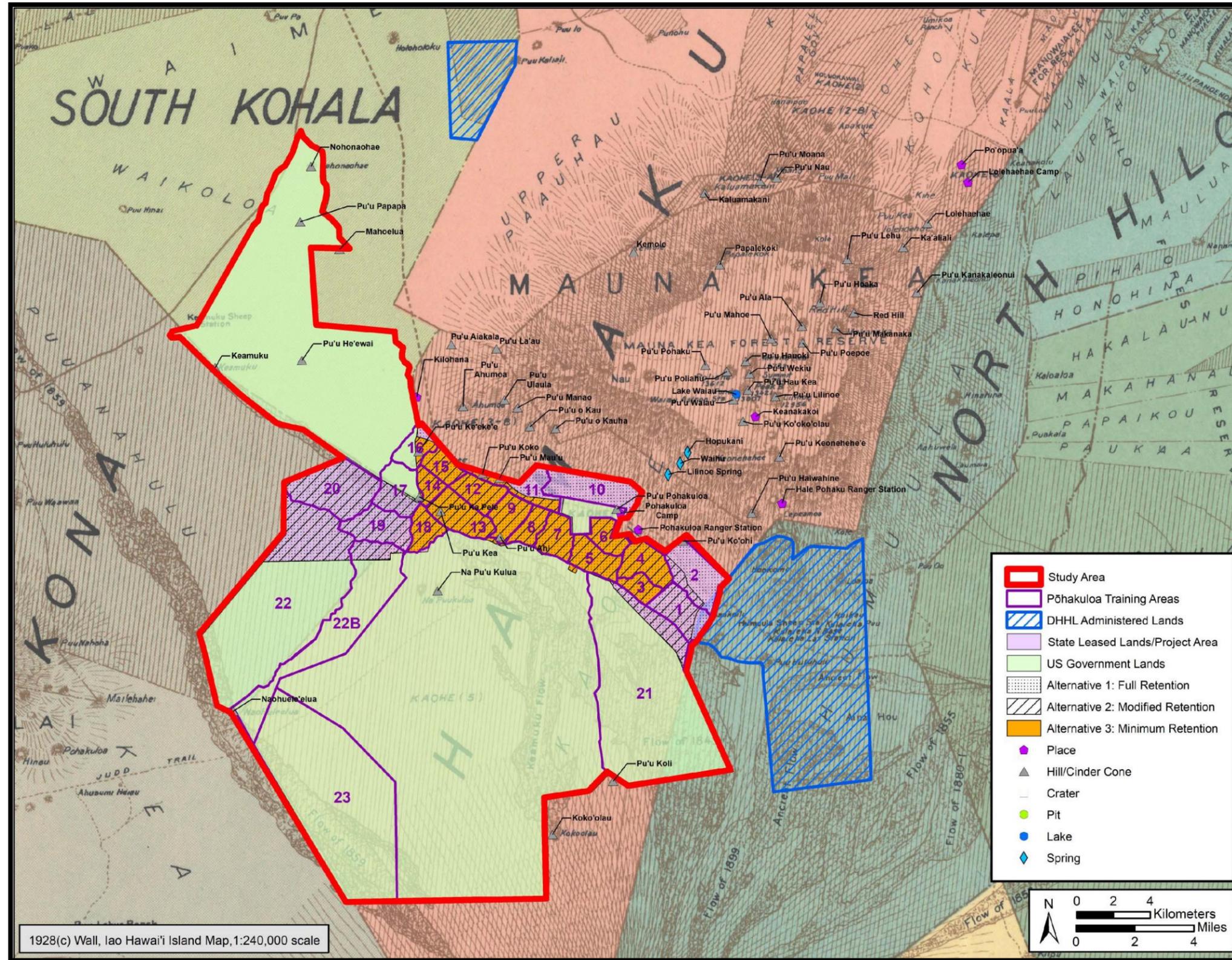


Figure 7. Example of historic map (Wall 1928) which provides detail of the region include ahupua‘a and other natural resources identified through historic surveys. Such maps are important to identifying place names within the area.

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### 2.3.6 Archaeological and Biological Studies

An archaeological literature review was conducted by Kleinfelder/GANDA (formerly known as Garcia and Associates).<sup>11</sup> The information from that review was combined with the information from this assessment and included in **EIS Chapter 3** as the existing conditions for cultural analysis, and a table of the historic sites (both traditional<sup>12</sup> and historic<sup>13</sup>) is provided in **Section 9.2** of this assessment.

The biological overview and analysis for the EIS was utilized for this assessment to identify specific native plants within the project area. An EIS requires regulatory context and therefore focuses on candidate, threatened, or endangered flora and fauna under State and federal laws. These species identified in the project area were reviewed for cultural uses and any uses identified were summarized in **Section 6.2**.

Both the archaeological and biological studies relied on existing studies and data; no new field work was conducted for the EIS.

### 2.3.7 Ethnographic Methodology

Information from lineal and cultural descendants is instrumental in procuring information about the project area's transformation over time and its changing uses. Considering the high public interest in this project, technology was employed wherever possible to increase access to the process and the amount of information gathered. In lieu of individual interviews, a survey was made widely available for any individual wanting to provide information. This was to avoid the potential of having interviewees arbitrarily selected by the authors of this assessment, a concern expressed during the EIS scoping comments, thereby casting a wide net to gather respondees and comments. Additionally, if any individuals contacted the project team seeking to be interviewed, those interviews were granted.

Notices were placed in the *Ka Wai Ola*, published by the Office of Hawaiian Affairs (OHA), for two months. Additionally, social media advertisements were purchased that targeted the entirety of Hawai'i Island. An email address and telephone number were provided for anyone who wanted to provide their information via email or telephone. Additionally, letters

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<sup>11</sup> In August 2020, The Kleinfelder Group, Inc. ("Kleinfelder") acquired the assets of Garcia and Associates ("GANDA"). GANDA has worked in Hawai'i since 1994.

<sup>12</sup> Traditional historic sites are generally identified by historic sites (over 50 years of age) that are associated with pre-contact activities or of pre-contact origin.

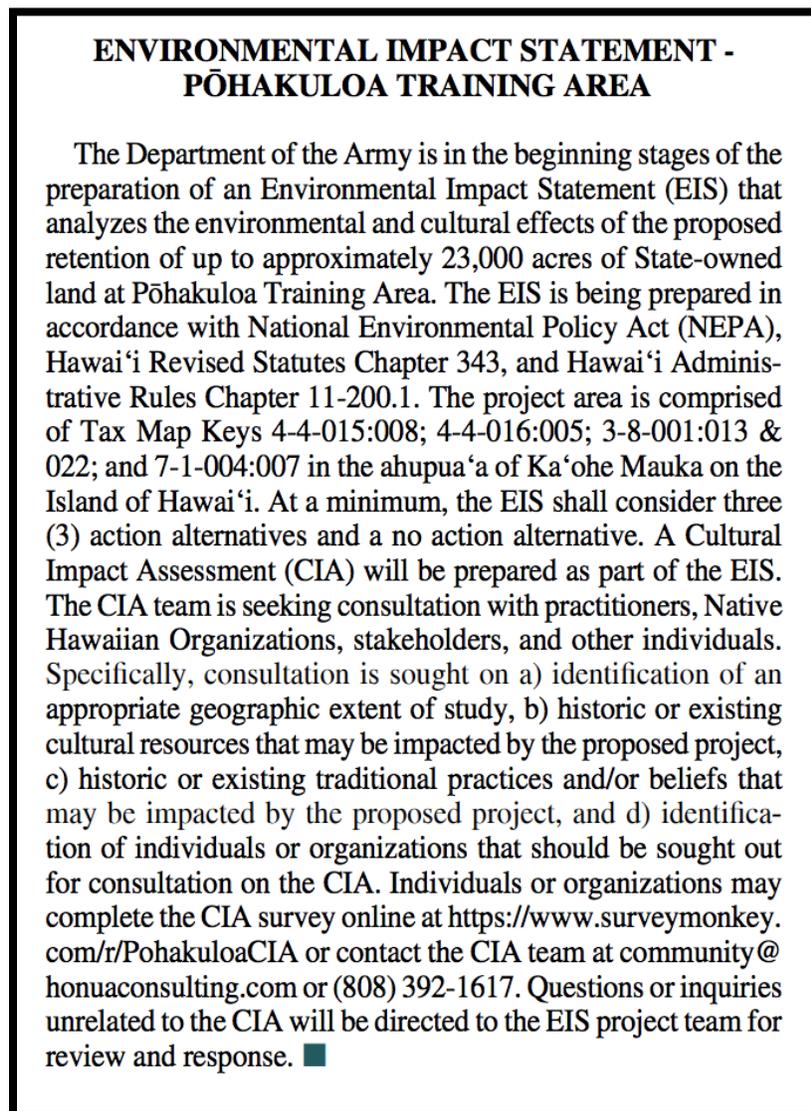
<sup>13</sup> Historic sites are generally identified as those sites over 50 years of age that are of post-contact origin.

were sent to approximately 50 organizations inviting their participation. All the correspondence provided through these processes is included in the appendices.

### 2.3.7.1 Public Notices

#### *Ka Wai Ola*

To provide notice to practitioners and the general public as to the opportunity to participate in the CIA, public notices were placed in the Office of Hawaiian Affairs *Ka Wai Ola* for the months of October 2020 and November 2020. **Figure 8** shows a copy of this notice.



*Figure 8. Ho'olaha Lehulehu (Public Notice) that ran in both in the October 2020 and November 2020 Office of Hawaiian Affairs Ka Wai Ola.*

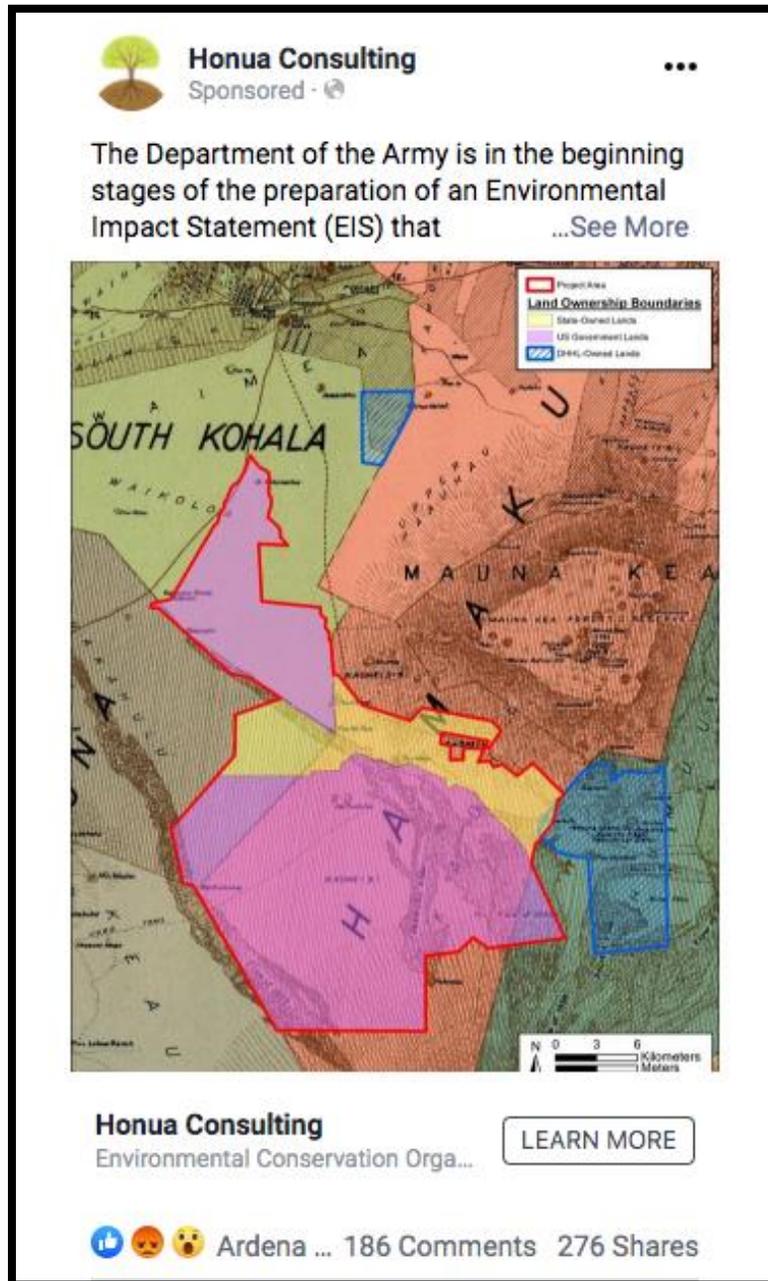


Figure 9. Social media ad that ran on Facebook and Instagram with a link to the online survey.

In addition to the ad in *Ka Wai Ola*, an ad was placed on Facebook and Instagram (Figure 9) that announced the availability of the preparation of the CIA and linked the online survey. The ad specifically targeted the entirety of Hawai'i Island to identify potential persons who may be interested in participating and sharing information relevant to this study. Additionally, this eliminated any arbitrary selection of participants in this assessment. By making participation available to any interested party, this study sought to maximize opportunity for participation to the widest group of individuals possible.

According to the ad’s performance report, the post reached 32,072 people and resulted in 2,933 post engagements. The age and gender distribution among those who engaged with the post is provided in **Figure 10**.

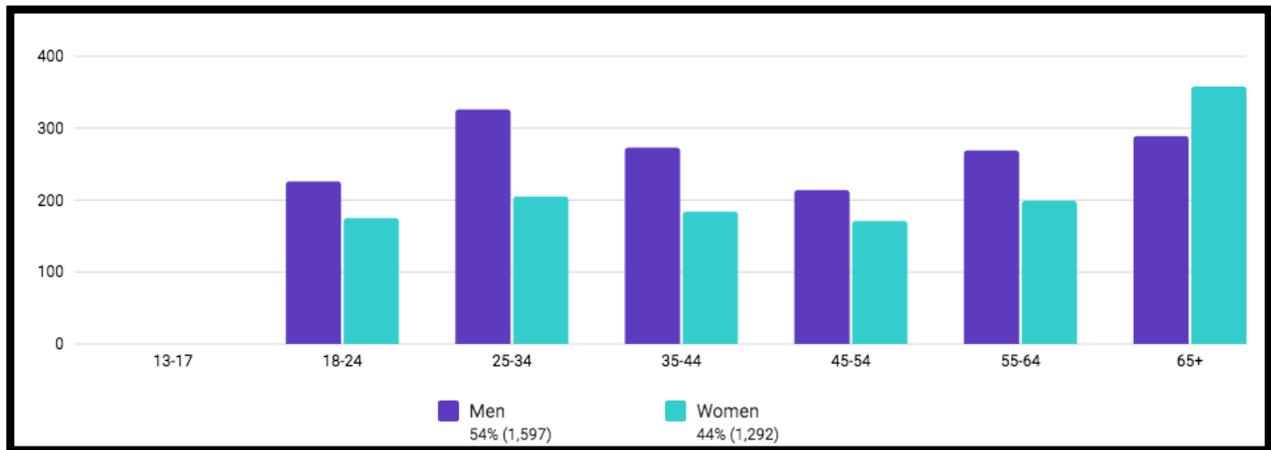


Figure 10. Age and gender distribution of social media ad engagement.

The performance per platform placement is provided in **Figure 11**.

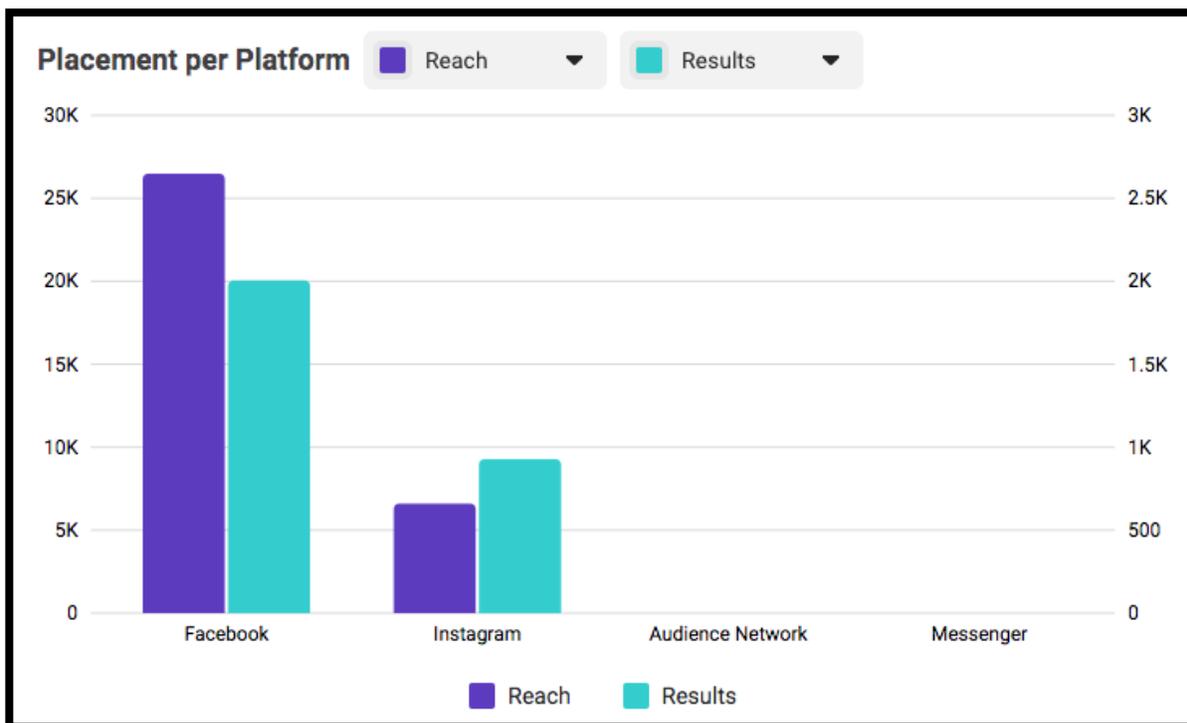


Figure 11. Placement per platform and resulting performance of social media ad.

### 2.3.7.2 Letters to Native Hawaiian Organizations and Practitioners

In addition to the public notices, individual letters were mailed via the U.S. Postal Service to the following individuals and organizations in December 2020. This list (**Table 1**) was compiled through two primary sources: a list of practitioners and consulting parties who regularly work with PTA or have been consulting parties to past Section 106 consultations provided by Dr. Julie Taomia, the former cultural resources manager at U.S. Army Garrison-Pōhakuloa. Additionally, a review of the current (December 2020) Native Hawaiian Organization list maintained by the U.S. Department of Interior Office of Hawaiian Relations was conducted, and organizations that self-identified Hawai'i Island or Statewide interests were added to this list.

*Table 1. List of Individual Letters Sent to Practitioners and Organizations via U.S. Postal Service*

| First     | Last            | Title    | Organization, if applicable                           |
|-----------|-----------------|----------|-------------------------------------------------------|
| Kealoha   | Pisciotta       | Ms.      | Mauna Kea Anaina Hou                                  |
| Kalani    | Flores          | Mr.      | University of Hawai'i, Hilo                           |
| Maulili   | Dickson         | Mr.      | Nā Kālai Wa'a                                         |
| Hailama   | Farden          | Mr.      | Association of Hawaiian Civic Clubs                   |
| Kaleo     | Paik            | Ms.      | Ala Kahakai Trail Association                         |
| Haaheo    | Guanson         | Dr.      | Pacific Justice and Reconciliation Center             |
| Taffi     | Wise            | Ms.      |                                                       |
| Nicole    | Lui             | Ms.      |                                                       |
| Dutchie   | Kapu-Saffery    | Ms.      |                                                       |
| Maxine    | Kahaulelio      | Ms.      |                                                       |
| Ku        | Ching           | Mr.      | Former OHA Trustee                                    |
| Daniel K. | Akaka           | Mr.      |                                                       |
| Leilani   | Hino            | Ms.      |                                                       |
| J. Curtis | Tyler           | Mr.      |                                                       |
| Leiola    | Garmon-Mitchell | Ms.      |                                                       |
| Leningrad | Elarionoff      | Mr.      |                                                       |
| Angela    | Thomas          | Ms.      |                                                       |
| David     | Heaukulani      | Reverend |                                                       |
| Ruth      | Aloua           | Ms.      | Malu 'Āina Center for Nonviolent Education and Action |
| Napua     | Burke           | Ms.      |                                                       |
| Ronald    | Fujiyoshi       | Mr.      | Ola'a First Hawaiian Church (retired)                 |
| Cory      | Harden          | Ms.      |                                                       |
| Danny     | Li              | Mr.      |                                                       |
| Stephen   | Paulmier        | Mr.      |                                                       |

## Methodology

| First          | Last           | Title | Organization, if applicable                           |
|----------------|----------------|-------|-------------------------------------------------------|
| Geoff          | Shaw           | Mr.   |                                                       |
| Fred           | Cachola        | Mr.   | Moku o Kohala                                         |
| Kū             | Kahakalau      | Dr.   | Kū-A-Kanaka                                           |
| Justin         | Hill           | Mr.   |                                                       |
| Hanalei        | Fergerstrom    | Mr.   | Na Kupuna Moku O Keawe                                |
| Clare          | Loprinzi       | Ms.   |                                                       |
| Mana Kaleilani | Caceres        | Mr.   | Ohana Kupono Consulting Inc                           |
| Melvin K.      | Soong          | Mr.   | The Imua Group                                        |
| Tom            | Lenchanko      | Mr.   | Wahiawa Hawaiian Civic Club                           |
| William J.     | Aila, Jr.      | Mr.   | Department of Hawaiian Home Lands                     |
| Lani Ma'a      | Lapilio        | Ms.   | Aukahi                                                |
| James          | Albertini      | Mr.   | Malu 'Āina Center for Nonviolent Education and Action |
| Tuahine        | Kaleikini      | Ms.   |                                                       |
| JR Keonekapu   | Williams       | Mr.   |                                                       |
| James          | Medeiros       | Mr.   |                                                       |
| Keola          | Lindsey        | Mr.   | Office of Hawaiian Affairs, East Hawaii               |
| Kamuela        | Bannister      | Mr.   | Office of Hawaiian Affairs, East Hawaii               |
| Samson         | Brown          | Mr.   | Au Puni O Hawaii                                      |
| Joseph         | Kūhiō Lewis    | Mr.   | Council for Native Hawaiian Advancement               |
| Pi'ilani       | Hanohano       | Ms.   | Kamehameha Schools, Government Relations              |
| Patrick        | Kahawaiola'a   | Mr.   | Keaukaha Community Association                        |
| Paula          | Kekahuna       | Ms.   | Maku'u Farmers Association                            |
| Mililani       | Trask          | Ms.   | Na Koa Ikaika Ka Lahui Hawaii                         |
| Hanalei        | Fergerstrom    | Mr.   | Na Kupuna Moku O Keawe                                |
| Carolyn        | Keala-Norman   | Ms.   |                                                       |
| Victoria       | Holt-Takamine  | Ms.   | Pa'i Foundation                                       |
| Robin          | Puanani-Danner | Ms.   | Sovereign Council of Hawaiian Homestead Associations  |
| Eugene         | O'Connell      | Mr.   | The Makua Group                                       |

A copy of the letter is provided as **Appendix A** of this assessment.

### 2.3.8 Properties of Traditional Religious and Cultural Importance (PTRCIs)

In 1992, Public Law 102-575 amended Section 101 of the National Historic Preservation Act (16 United States Code 470a) to specify that “Properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization may be determined to be eligible for inclusion of the National Register.”

While compliance with NHPA is outside the scope of this assessment, this category of properties provides a framework under which to identify and assess traditional cultural resources under the obligations established under NEPA and HEPA.

This also provides a framework for future compliance with HRS Chapter 6E by proactively identifying traditional sites that may “have an important value to the native Hawaiian people or to another ethnic group of the state due to associations with cultural practices once carried out, or still carried out, at the property or due to associations with traditional beliefs, events or oral accounts—these associations being important to the group’s history and cultural identity” (i.e., criterion “e”) under HAR Section 13-275-6 or HAR Section 13-284-6, should either rule become applicable to this proposal project. In order for any of the following properties to be found “significant” under the applicable HAR, a complete assessment of significance as set forth in the applicable HAR would need to be completed, and this assessment would need to find that the property or properties possessed “integrity of location, design, setting, materials, workmanship, feeling, and association” in addition to meeting one of the criteria promulgated under HAR Section 13-275-6(b) or HAR Section 13-284-6(b).

## 2.4 Access Research

Prior to federal control of the area, the study area was accessible to travelers, as is documented throughout this study, whether under the governance of Hawaiian chiefs or, later, under private ownership. Numerous historical accounts document travel throughout the Saddle Region. Those accounts are included herein. Currently, public access to the study area is restricted, as it is to all military installations. In this CIA, each subfield includes a description of any cultural access currently made available for traditional or customary practices.

Access for cultural practice is, as is with any public access request, allowed on a case-by-case basis at the discretion of the Army, and requires an escort for the duration of their time at PTA. There are no SOPs in place for how access is granted with the exception of hunting, which has a regulated program established for recreational hunting. In September 2018, the *Programmatic Agreement among the U.S. Army Garrison, Pōhakuloa Training Area, the U.S. Army Garrison, Hawaii, the Hawaii State Historic Preservation Officer, and the Advisory Council*

on *Historic Preservation Regarding Routine Military Training Actions and Related Activities at the United States Army Installations on the Island of Hawai'i, Hawai'i* (2018 PA) was executed. While this 2018 PA accounts for consultation with Native Hawaiian Organizations (NHOs), it does not address HRS 6E compliance or compliance with Article XII, Section 7 of the Hawai'i State Constitution. There is no provision or stipulation in the 2018 PA that prevents or restricts cultural access.

## 2.5 Traditional or Customary Practices in the Geographic Extent

The Joint Resolution passed by Congress in 1993 to acknowledge the 100<sup>th</sup> anniversary of the January 17, 1893, overthrow of the Kingdom of Hawai'i found that “prior to the arrival of the first Europeans in 1778, the Native Hawaiian people lived in a highly organized, self-sufficient, subsistent social system based on communal land tenure with a sophisticated language, culture, and religion” (Pub. L. No. 103-150, 1993).

In a recent Hawaii State Supreme Court decision regarding PTA, the Court articulated Findings of Fact from a lower court decision, which included recognition of cultural practices that the Plaintiffs in that case participated in “upon the leased PTA land” *Ching v. Case*, 449 P.3d 1146 (Haw. 2019). It was stated: “These cultural practices included song, dance, and chant about the PTA area, walking upon and celebrating the land and the flora and fauna that grow upon it, and honoring the current and historic cultural significance of the area” (*Ching*). The following sections expand upon the practices identified by the plaintiffs in that case, who are both recognized practitioners with ties to the area.

The goal of this study is to not provide an exhaustive list of cultural resources and/or traditional or customary practices, as many practitioners subscribe to a lifestyle in which tradition or custom can comprise a wide range of activities throughout their daily lives. The hope here is to instead provide a comprehensive list of cultural resources and/or traditional or customary practices that were known to have occurred within the cultural landscape or were likely to have occurred based on the resources present in the area and known practices associated with those resources. This demonstrates a good faith effort based on the best data available to disclose the presence of cultural resources, which include tangible cultural and natural resources, and practices that fall within a larger cache of Native Hawaiian customs associated with the geographic extent defined for this assessment.

There are effectively two separate categories of traditional or customary practices among Hawaiians: 1) those which originate prior to contact and remain largely similar to how they were practiced prior to 1778, which are considered herein “traditional practices”, and 2) those which originate or are largely influenced or aided by foreign contact, considered herein as “customary practices”. Makahiki is an example of the first, and modern hunting with modern weaponry is an example of the second. Both categories are protected by the Hawai'i

State Constitution as recognized in court decisions or by Act 50 as being cultural beliefs, practices, and resources of native Hawaiians or other ethnic groups.

Foreigners would have a profound influence on traditional Hawaiian culture. With the introduction of materials like steel and animals like cattle, numerous traditions would emerge that blended both traditional Hawaiian culture and its foreign influences. In some cases, these practices may not be purely “traditional” in the sense that they were not practiced prior to contact, yet, due to their importance over time to the culture, they may still be considered customary in that they constitute beliefs, customs or practices that have been passed down over generations. These practices, whether traditional or customary, are an essential part of Hawaii’s culture and heritage, and their protection is critical to the preservation of the people, culture, and identity of Hawaiians or other ethnic groups.

## 2.6 Land Retention Categories

The CIA impact assessment looks generally at two categories of potential actions: land retained under the Proposed Action by the Army, and land not retained by the Army under the No Action Alternative.

The cultural impact analysis considers the effects of a long-term continuation of Army activities on land retained under the Proposed Action. Under the No Action Alternative, the cultural impact analysis assumes the land not retained would be returned to the State and be available for cultural use.

This assessment provides limited consideration of the mechanism by which state-leased land may be retained by the Army. Authorized mechanisms (termed “estates”) for Army acquisition or retention of non-federal government-owned land include title, lease, easement, and license. **(EIS Section 2.3.)** While the mechanism may not affect potential impacts to other resources because there would be no difference in physical impacts to the lands, the mechanism may impact traditional or customary practices that are protected under Hawai’i state law but not otherwise protected under federal law. The land retention estate would not be selected until after completion of the EIS and the Army would consider the most appropriate land retention estate and method based on the selected alternative.

One or more methods may be considered. **(EIS Section 2.3.)** This includes options where the U.S. Government would acquire title to the lands, thereby removing them from the state lands inventory. If title were to be acquired by the federal government, there is reason to believe the rights afforded under State laws that promote and protect cultural beliefs, practices, and resources of Native Hawaiians as well as other ethnic groups could be extinguished by this action as there is no equivalent federal law for protection of cultural beliefs, practices, and resources.

## 2.7 Limitations of This Study

Like the EIS itself, a CIA is primarily a disclosure document. The purpose of this report is to 1) make a good faith effort to identify all resources within the appropriate geographic extent; and 2) identify the extent to which these resources may be impacted by the Proposed Action and its alternatives.

It is also not the role of this report to wade into ongoing political issues, especially those associated with questions related to land-use and or the political status of the Native Hawaiian people. This report is obligated to look at existing precedent, but it is also appropriate, if not essential, for this report to also properly document the comments and concerns provided from the Native Hawaiian community and to also document the extent to which these comments and concerns are related to the project area and the surrounding geographic extent. Therefore, where such comments, positions, or statement may be either emotional or highly political in nature, it is nonetheless critical for the CIA as a disclosure document to ensure that those positions are fully captured and considered as appropriate to the purpose of this assessment.

As a CIA is not a requirement under federal law, this report focuses only on applicable state laws and regulations. Use of any terminology throughout this report that is consistent with language in federal laws and regulations is solely for the purpose of creating continuity between technical reports and the EIS itself. It is in the best interest in the integrity of this report to ensure that there is continuity between terminology such that any reader can easily understand the resources that are being described and assessed.

### 3.0 BACKGROUND OF THE STUDY AREA

This section presents land tenure and land use organized by time periods in the “historic era,” defined in this report as the period between the first contact in 1778, and when the military began to gain control of the project area in 1943. Changes over time resulted in different cultural practices occurring within the project area, which are further documented in **Section 5** and summarized by era. Traditional (pre-contact) practices that occurred before first European contact in 1778 are identified, as are customary practices (post-contact) that emerged after 1778. The period following 1943 is considered the contemporaneous era. For the study area, Act 50 requires disclosure of impacts to the practices of other ethnic groups, therefore, these customary practices, which often were practiced by both Hawaiians and other cultural groups, are also documented.

The following section provides a chronological history of land use activities and leases on the ‘āina mauna between 1842 and 1963. The records include a wide range of documents found in the collections of the Bureau of Conveyances, the Crown Lands Commission, Interior Department, Survey Division, Land Division, Parker Ranch-Paniolo Preservation Society documents, and the Hawaii State Archives; describing the lands, permitted uses, restrictions, and later, removal of tracts of land from the leases for conservation purposes. The documentation is organized in several primary categories, including: 1) Land Tenure and the Māhele ‘Āina (1842–1855); 2) Mauna Kea and the Neighboring ‘Āina Mauna (1790s–1890s); 3) Land Use and Leasehold Interests on the ‘Āina Mauna Following the Māhele ‘Āina (1850–1963); 4) Historical Use of the Lands of Humu‘ula, Ka‘ohe, and the ‘Āina Mauna; and 5) Nā Ala Hele o ka ‘Āina Mauna – Native Trails to Government Roads (Maly 2005: 265).

#### 3.1 History on the ‘Āina Mauna (1842–1963)

The following section discusses history of the mountain lands region of the geographic extent. The archive of Hawaiian language resources is extensive and, as such, allows for research into a wide collection of documents on the history of the project area and larger geographic extent.

Land use records from Kingdom and Government collections for the lands of Humu‘ula and Ka‘ohe (project area), and the neighboring ‘āina mauna (the geographic extent) date back to at least the 1840s. Early communications describe the taking of wild cattle, sheep, goats, and pigs from the region, through rights granted by, or on behalf of, the King. By the 1850s, formal leases of the Crown and Government land holdings were granted to ranchers on the mountain lands – while plantation interests were granted leases, and in some instances, fee-simple interests on the lowlands.

As described in the historical journals and communications cited in this study, by the 1820s, populations of wild cattle (bullocks), sheep, goats, pigs, and dogs increased to a point where they were causing impacts to the landscape, and at times, even harassing travelers. Between the 1830s and 1850s, the Kingdom established a program, which it managed through local agents, for taking wild cattle, sheep, and other stock from the mountain lands as needed for hides, tallow, and meat, or in payment for services rendered. Following the Māhele 'Āina of 1848, which established a system of fee-simple property rights in Hawai'i, individual ali'i and the Government began entering into leasehold agreements with parties for vast tracts of land throughout the islands.

### **3.2 Land Use Activities**

While John Palmer Parker's Parker Ranch is most generally associated with activities on the mountain lands, his early competition, Francis Spencer, and subsequently the Waimea Grazing and Agricultural Company, was at one time the largest lessee of Government and Crown lands around and on Mauna Kea. As a part of his operations, Spencer's activities included the entire mountain lands of Ka'ohe and Humu'ula, including the summit of Mauna Kea, and lands up to the summit of Mauna Loa. He also held leases on large tracts of the Waimea plain lands, and by the 1860s, leased the entire 'ili of Waikōloa (more than 90,000 acres), and a short time later, also leased the ahupua'a of Pu'uānāhulu and Pu'u Wa'awa'a. During that time, Spencer had a monopoly on all sheep and wild cattle on Mauna Kea and the mountain lands, and smaller stations in between these areas. It was not until 1870 that John Palmer Parker began to work his way into leasehold interests in Ka'ohe, and not until 1914 that A.W. Carter, trustee of the Parker Ranch, secured a lease on the land of Humu'ula, including the sheep station at Kalai'eha and other smaller stations.

#### **3.2.1 Land Tenure and the Māhele 'Āina (1842-1855)**

In pre-Western contact Hawai'i, all land and natural resources were held in trust by the highchiefs (ali'i 'ai ahupua'a or ali'i 'ai moku). The use of lands and resources were given to the hoā'āina (native tenants), under the governance of the ali'i and their representatives or land agents (Konohiki), who were generally lesser chiefs as well. In 1848, the Hawaiian system of land tenure was radically altered by the Māhele 'Āina (Division of Lands). This change in land tenure was promoted by the missionaries, the growing Western population, and business interests in the island kingdom. Generally, these individuals were hesitant to enter business deals on lease-hold lands (Maly 2005: 266).

In the years leading up the Māhele 'Āina the primary references to the mountain lands were in regards to the right to take cattle from the mountain, and the enforcement of kapu on them. Among the earliest letters were two, dating from March 1842:

**Lahaina**

**March 26, 1842**

**Kamehameha III and Kekauluohi; to John Davis Kuakini:**

...This is our communication to you. George Bush is going up to Hawaii for the purpose of taking cattle on the mountain, to the amount of three hundred. These three hundred cattle are to settle the difficulty with Bill, formerly spoken of. These are what we have given him for the settlement of that difficulty.

When those three hundred are taken, then the kapu shall again be put on the cattle, according to the former charge... (HSA ID Misc. Box 141)

**Lahaina**

**March 26, 1842**

**Kamehameha III and Kekauluohi; to William Beckley:**

...This is our charge to you. George Bush is going up there to take cattle to the amount of three hundreds, and when those hundreds are taken, then they are to be kapu again, according to the former charge.

Furthermore, you are to aid George Bush by yourself and horses in all his business and necessities... (HSA ID Misc. Box 141)

In 1848, the Māhele 'Āina defined the land interests of Kamehameha III (the King), the high-ranking chiefs, and the Konohiki. As a result of the Māhele, all land in the Kingdom of Hawai'i came to be placed in one of three categories: 1) Crown Lands (for the occupants of the throne); 2) Government Lands (to support public works and government programs); and 3) Konohiki Lands (for the chiefs associated with the Kamehameha lineage and rise to power). Subsequently, the hoā'āina were granted the right to claim parcels of land for their personal use from lands situated in the three categories of land listed above. The "Enabling" or "Kuleana Act" laid out the framework by which native tenants could apply for, and be granted fee-simple interest in "Kuleana" lands, and confirmed their rights to access to, and collection of resources necessary to their life upon the land in their given ahupua'a. The Act reads:

**August 6, 1850**

An Act confirming certain resolutions of the King and Privy Council passed on the 21<sup>st</sup> day of December 1849, granting to the common people allodial titles for their own lands and house lots, and certain other privileges.

Be it enacted by the Nobles and Representatives of the People of the Hawaiian

Islands in Legislative Council assembled;

That the following sections which were passed by the King in Privy Council on the 21<sup>st</sup> day of December A.D. 1849 when the Legislature was not in session, be, and are hereby confirmed, and that certain other provisions be inserted, as follows:

Section 1. Resolved. That fee simple titles, free of commutation, be and are hereby granted to all native tenants, who occupy and improve any portion of any Government land, for the land they so occupy and improve, and whose claims to said lands shall be recognized as genuine by the Land Commission; Provided, however, that the Resolution shall not extend to Konohikis or other persons having the care of Government lands or to the house lots and other lands, in which the Government have an interest, in the Districts of Honolulu, Lahaina and Hilo.

Section 2. By and with the consent of the King and Chiefs in Privy Council assembled, it is hereby resolved, that fee simple titles free of commutation, be and are hereby granted to all native tenants who occupy and improve any lands other than those mentioned in the preceding Resolution, held by the King or any chief or Konohiki for the land they so occupy and improve. Provided however, this Resolution shall not extend to house lots or other lands situated in the Districts of Honolulu, Lahaina and Hilo.

Section 3. Resolved that the Board of Commissioners to quiet Land titles be, and is hereby empowered to award fee simple titles in accordance with the foregoing Resolutions; to define and separate the portions belonging to different individuals; and to provide for an equitable exchange of such different portions where it can be done, so that each man's land may be by itself.

Section 4. Resolved that a certain portion of the Government lands in each Island shall be set apart, and placed in the hands of special agents to be disposed of in lots of from one to fifty acres in fee simple to such natives as may not be otherwise furnished with sufficient lands at a minimum price of fifty cents per acre.

Section 5. In granting to the People, their House lots in fee simple, such as are separate and distinct from their cultivated lands, the amount of land in each of said House lots shall not exceed one quarter of an acre.

Section 6. In granting to the people their cultivated grounds, or Kalo lands, they shall only be entitled to what they have really cultivated, and which lie in the form of cultivated lands; and not such as the people may have cultivated in different spots, with the seeming intention of enlarging their lots; nor shall they be entitled to the waste lands. [Generally wet lands, ponds and fallow fields (see citations later in this section).]

Section 7. When the Landlords have taken allodial titles to their lands the people on each of their lands shall not be deprived of the right to take firewood, aho cord, thatch, or ti leaf from the land on which they live, for their own private use, should they need them, but they shall not have a right to take such articles to sell for profit. They shall also inform the Landlord or his agent, and proceed with his consent. The people shall also have a right to drinking water, and running water, and the right of way. The springs of water, and running water, and roads shall be free to all should they need them, on all lands granted in fee simple. Provided, that this shall not be applicable to wells and water courses which individuals have made for their own use.

Done and passed at the Council House, Honolulu this 6<sup>th</sup> day of August 1850. (Copied from original hand written “Enabling Act”<sup>14</sup> – Hawaii State Archives, DLNR 2-4.)

The lands awarded to the hoā‘āina became known as “Kuleana Lands.” All of the claims and awards (L.C.A.) were numbered, and the L.C.A. numbers remain in use today to identify the original owners of lands in Hawai‘i.

The work of the Land Commission was brought to a close on March 31, 1855. The program, directed by principles adopted on August 20, 1846, met with mixed results. It is reported that the total amount of land awarded to hoā‘āina equaled approximately 28,658 acres (cf. Kame‘eleihiwa, 1992:295).

### ***3.3.1.1 Disposition of Selected Lands of the ‘Āina Mauna During the Māhele***

In the period leading up to the Māhele of 1848, all the land was held by Kamehameha III and the ali‘i who had supported his father and he in the formation of the kingdom. During that time, the lands were held by one or more chiefs. The Māhele ‘Āina clarified those interests.

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<sup>14</sup> See also Kanawai Hoopai Karaima no ko Hawaii Pae Aina (Penal Code) 1850.

Disposition of the primary lands which rest upon the 'āina mauna of Hawai'i, Humu'ula and Ka'ōhe, was resolved on the following dates:

### **Humu'ula, Hilo**

Relinquished by Victoria Kamamalu to Kamehameha III on January 27, 1848 (Buke Mahele, 1848:5-6). Retained as a part of the Crown Land Inventory (Buke Mahele, 1848:186-187). One native claim registered, not awarded.

### **Ka'ōhe, Hāmākua**

Relinquished by Victoria Kamamalu to Kamehameha III on January 27, 1848 (Buke Mahele, 1848:5-6).

Given by Kamehameha III to Government Land Inventory on March 8, 1848 (Buke Mahele, 1848:191). Four native claims registered, one awarded.

#### **3.3.1.2 Livestock on the 'Āina Mauna**

In the years leading up to, and through the Māhele 'Āina, all livestock was considered the possession of the King. Following the Māhele, the livestock was divided between the King and the government, and individuals who were granted private interest in the same. The livestock held by private parties was required to be branded. While the policy of the Kingdom was clear in the procedure of the government, it is also recorded that individuals were also taking up illegal hunting of livestock.

In 1860, a dispute regarding the hunting of wild "mountain" cattle arose between the lessee of the Crown and Government lands on Mauna Kea, and the owner of Waikōloa. This dispute focused on the "right" to hunt, and clarified the position of the Government in this matter – that no one had the right to hunt on the public lands, except for those who had acquired leasehold interests or special permission to do so. The entire case centered around Mauna Kea, and included important documentation on tenants and developments on the mountain lands. It is also reported that between 1826 and 1841, 40,000 wild cattle were taken from Mauna Kea and the surrounding mountain lands by licensed hunters on behalf of the King. Up until that time, the cattle had become so numerous, that they overran vast tracts of land and the gardens of the native tenants.

#### **3.2.2 Mauna Kea and the Neighboring 'Āina Mauna (1790s-1890s): Traditional Customs, Practices, Resource Collection, and Land Use Described Before the Boundary Commission**

In 1862, the Boundary Commission was established in the Kingdom of Hawai'i to legally set the boundaries of ahupua'a that had been awarded to Ali'i, Konohiki, and foreigners during

the Māhele. By the middle 1860s, landowners and their lessees were petitioning to have the boundaries of their respective lands – which were the foundation of ranching interests on Hawai‘i – settled. The mountain lands on the Island of Hawai‘i, including those surrounding Mauna Kea, made up the heart land of the largest ranch in the Hawaiian Kingdom. As a result, Commissioner G.M. Robertson began taking testimonies from native residents by 1865, for lands of the Waimea-Waikōloa region. Following Robertson’s death, brothers, Rufus and Fredrick Lyman continued the work and collection of detailed testimonies for the Third Judicial Circuit (Island of Hawai‘i). Those testimonies of kama‘āina witnesses and resident foreigners, described the lands which rest upon Mauna Kea, and make up the ‘āina mauna, across the District of Hilo, Hāmākua, and South Kohala.

In 1874, the Boundary Commission was authorized to certify the boundaries for lands brought before them (W.D. Alexander in Thrum, 1891:117-118). The primary informants for the boundary descriptions were old native residents of the areas being discussed, generally born between the 1780s and 1830s. The native witnesses usually spoke in Hawaiian, and their testimony was translated into English and transcribed as the proceedings occurred.

### **3.2.2.1 Humu‘ula Ahupua‘a**

The earliest detailed map of Humu‘ula was produced in 1862 and recorded as Register Map No. 668 (**Figure 12**). At the time of its survey by S.C. Wiltse, Humu‘ula reportedly included a portion of the summit of Mauna Kea – taking in Kaluakakoi (Keanakāko‘i) and Pond Poliahu (Lake Waiau). By the time the Boundary Commission was authorized to certify the boundaries for lands brought before them in 1874, disputes over the boundary of Humu‘ula and Ka‘ohe had arisen. By the time of settlement in 1891, the boundary of Humu‘ula was taken down to around the 9,000-foot elevation, with Ka‘ohe taking the entire summit region (Maly 2005: 289).

### **3.2.2.2 Ka‘ohe Ahupua‘a**

As a Government Land, Ka‘ohe was not brought before the Commission (Maly 2005:337).

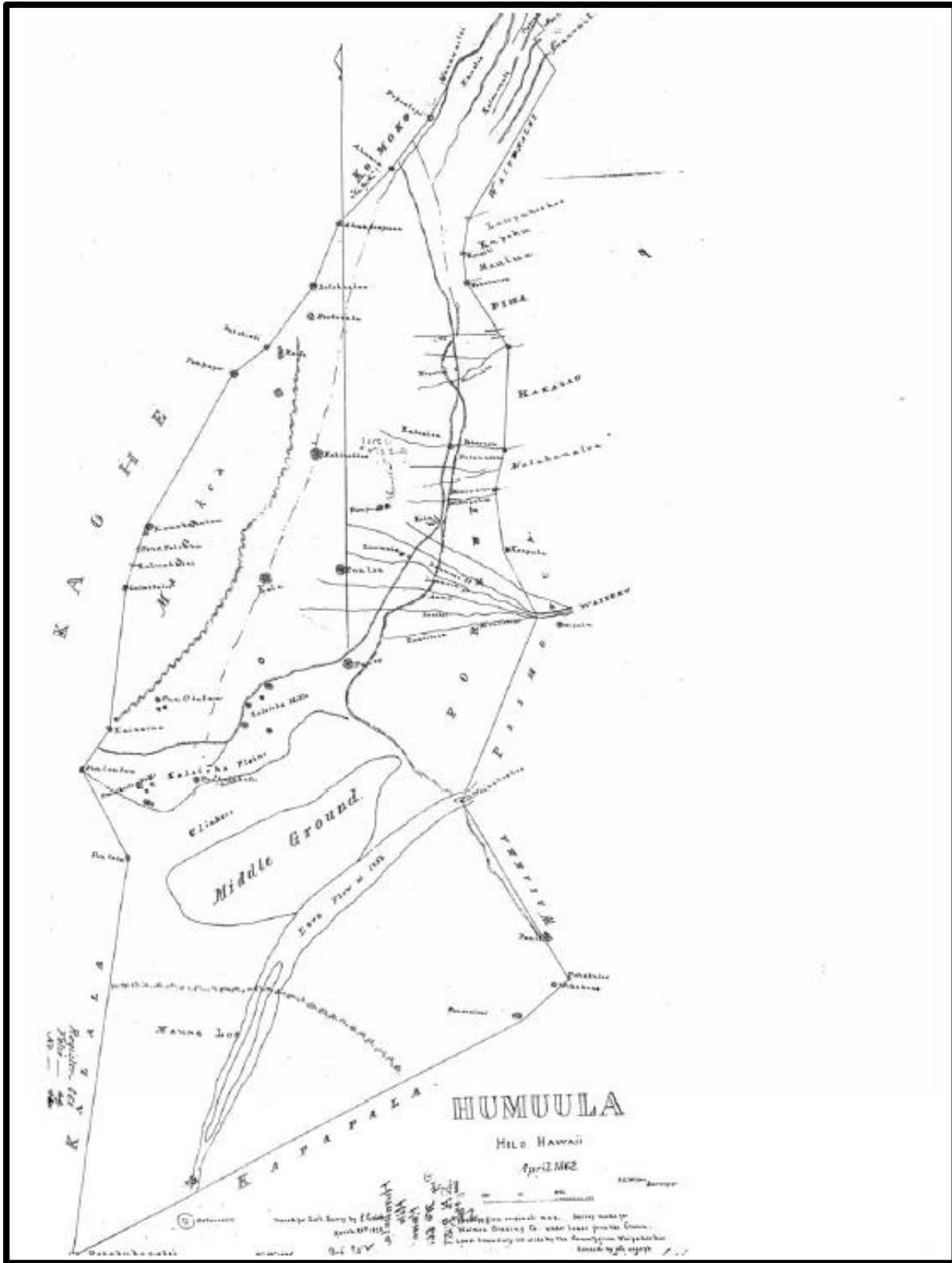


Figure 12. Portion of Register Map No. 668, the land of Humu’ula (S.C. Wiltse, April 1862)

### **3.2.3 Land Use and Leasehold Interests on the ‘Āina Mauna Following the Māhele ‘Āina (1850–1963)**

After the Māhele ‘Āina, large tracts of land (from Government and Ali‘i Land inventories) were more readily available to lessees who sought to develop a wide range of business interests – these interests were also the force behind the defining of boundaries of land. On the ‘āina mauna – lands extending from the vicinity of the forest line to the mountain peaks – ranching was determined to be the best economic use. The history of leasehold interests and transitions in ranching activities, including the competition between ranchers for the right to develop the ranches, is an important one in the history of the ‘āina mauna. These activities shaped the landscape as it was known up to the time of development with the ranches, who controlled most access, and maintained the closest ties to Mauna Kea and the ‘āina mauna (Maly 2005: 371).

#### ***3.2.3.1 History of the Humu‘ula Sheep Station and Land Use on the ‘Āina Mauna***

In his personal notes, A.W. Carter documented facets of the history of land use and conveyances associated with the Humu‘ula Sheep Station. His notes (viewed in the Parker Ranch & Paniolo Preservation Society Collections) provide a fairly detailed summary of that history, and are partially based on his personal experiences and research. Additional information clarifies and, in some instances, corrects points made by Carter pertaining to land use and the individuals involved on the mountain lands (Maly 2005: 389).

#### **December 12, 1946**

#### **Humuula Recollections of A.W. Carter**

James W. Gay started the Humuula Station as a sheep station and established his headquarters at Keanakolu and built the sheep shearing shed there. This

was apparently in 1876. He found that this section was so wet, it was impossible to handle the wool and his shed and equipment were pulled down and taken by bullock cart into Waimea and from there, to Kaleieha via Waikii. Kaleieha has been the headquarters ever since. Keanakolu was between twenty and thirty miles from Kaleieha but the bullock cart could not haul over the shorter distance. That is the reason it was taken in a roundabout way.

Shortly after the beginning of Mr. Gay’s occupancy, the place was, I think, operated as a sheep station. The first few years, I imagine he put in his time shooting wild cattle and selling the hides which was quite a business on both sides of Mauna Kea.

Mr. Gay obtained a lease of Humuula on March 6, 1876. The original lease was signed by John O. Dominis, Commissioner and Land Agent for the Board of Commissions of Crown lands. The term of the lease was 25 years from April 1, 1876 and the annual rental was \$800. The lease covered:

“All that tract and parcel of the land situated in the Island of Hawaii, one of the Hawaiian Islands, known as the land of Humuula and the boundaries whereof are or will be more particularly described in the Certificate of the Commissioner of Boundaries for the said Island of Hawaii, together with full and free liberty to kill all wild and unbranded cattle which may be found upon the said land.”

Subsequently, on October 30, 1883, a Charter of Incorporation of the Humuula Sheep Station Co. was given to James W. Gay by Chas. T. Gulick, Minister of the Interior. Capital was \$100,000.00. 1000 shares at \$100, the stock being owned by James W. Gay (400 shares) Conrad Henke (400 shares), and Paul Isenberg (200 shares). On October 31, 1883, the lease was assigned to the Humuula Sheep Station Co. by James W. Gay, consent to this assignment having been given on July 30, 1883 by Charles H. Judd, Crown Commissioner and Land Agent. At that time also (July 30, 1883) the Commissioner of Crown Lands extended the term of the lease for a period of 7 years and the rent was increased to \$1,000. per annum and the additional reservation given to Mr. Gay, as follows:

“Adding to the reservations that all indigenous wild birds for the time being on the said lands, with the full right to take, kill or capture the same.”

At the time James W. Gay assigned the lease (October 31, 1883) he reserved to himself “the lower or makai portion bounded on the East by the sea, on the south by Kaawalii Gulch in Waipunalei, on the north by the land of Ookala and on the west by a line through the woods to include in the above makai reserved portion, an area of 1200 acres more or less.” By this same document, he sold all herds and flocks of sheep and cattle running in and upon the land of Humuula, 150 heads of horses, and all agricultural implements and other chattels used in connection with the sheep station.

Sometime about 1887, A. Haneberg apparently went to Humuula as manager as he testified at the hearing for boundaries in 1891 that “he had been there about 4 years.”

On September 26, 1895, J.F. Brown, Commissioner, consented to the assignment of the Humuula lease for the balance of the term, together with the extension by James Gay to Messrs. H. Hackfeld & Co. Hackfeld sent up a couple of young German officers who operated the place. I remember seeing their swords and helmets on the wall of the room at Kaleieha. One of them was murdered and it was never known whether the survivor murdered him or not.

Subsequently a Mr. Glad, as a young man, was sent up by Hackfeld & Co. and managed the place for some time.

Later, the stock of the corporation was sold to Mr. Gramberg. He remained there a number of years. He sold out to Sam Parker Sr. in 1906, who gave it to his sons, principally to Sam Parker Jr. but he prevailed upon them to permit him to mortgage it, for a large sum of money. Sam Parker Jr. decided to Humuula, or the stock of the company. He promised Davies & Co. to give them the first chance to purchase it but Davies & Co. considered his price too high. He promised Shingle the second chance but Shingle ridiculed Sam for the amount he was asking. He then came to my man and the Parker Ranch purchased all of the corporation stock for the price he asked. The Parker Ranch has held the lease continuously since that time.

At the time, I purchased the lease of Humuula [conveyance of 1915], the piece of land at Waipunalei, which was owned by Sam Parker, was conveyed to me. This has been a valuable addition to Humuula on account of the water in the gulch.

Mr. W. H. Shipman once told me that in the early days, he took cattle (steers, I think) to Pohakuloa for fattening. Whether he dealt through the government or the Humuula Sheep Station Co., I do not know.

I do not remember when the little house which formerly stood near the large eucalyptus tree and close to the end of the pipeline, was built. I do remember that Joe Mehrrens lived in that little house and attended to the water. He lived there alone. I think his reason for staying there was that he had eczeme very badly and so long as he lived there in that cool climate, it did not bother him... (Journal of A.W. Carter, December 12, 1946)

### **3.2.4 Historical Use of the Lands of Humu'ula, Ka'ohe, and the 'Aina Mauna**

The land of Humu'ula – extending from sea level to the 9,000-foot elevation on Mauna Kea, and above the 13,000-foot elevation on Mauna Loa – is apparently named for a type of stone

(Red jasper stone) that was used in making ko'i (adze). The place name of Ka'ohe – a land area extending from sea level to the summits of Mauna Kea and Mauna Loa – may be literally translated as “The-bamboo” or named for a type of kalo (taro) that may have been common in the region (cf. Pukui et al., 1974).

Native Hawaiian traditions and historical accounts describe the lands of Humu'ula and Ka'ohe – those areas extending from shore to around the 6,000 foot elevation – as having once been covered with dense forests, and frequented by native practitioners who gathered forest-plant resources, birds, and food. The larger 'āina mauna were frequented by individuals who were traveling to the upper regions of Mauna Kea to worship, gather stone, bury family members, or deposit the piko (umbilical cords of new-born children) in sacred and safe areas; and by those who were crossing from one region of the island to another.

As early as the 1820s, introduced cattle, sheep, goats, and wild dogs made their way up to the mountain lands and were bothersome to those who traveled the 'āina mauna. In 1834, Scottish naturalist, David Douglas, was gored and killed by a wild bullock near the boundary of Humu'ula and Laupāhoehoe. By 1850, the natural-cultural landscape of the 'āina mauna was being significantly altered by the roving herds of wild bullocks, sheep, and other ungulates, and ranching interests were being formalized in the region. By 1857, the Crown and Government mountain lands – including Humu'ula and Ka'ohe – were leased to Francis Spencer and the Waimea Grazing and Agricultural Company, which established ranching stations and operations around the mountain lands. As a result, the 'āina mauna have been intensively ranched for more than 150 years (Maly 2005: 15-16).

### **3.2.4.1 Humu'ula**

Because hunting and ranching of bullocks, cattle, and sheep was the primary activity on the mountain lands of Humu'ula, areas once forested soon became open pasture land. While the first formal lease of Humu'ula was issued in 1857 (Keoni Ana to F. Spencer), it was interests of the Parker Ranch that held the longest lease on the Humu'ula mountain lands. The lease, from 1900 to 2002, covered the area extending around Mauna Kea to the 'Āina Hou-Pu'u Huluhulu vicinity. The Parker Ranch interests initially focused on sheep ranching in the Humu'ula-Kalai'eha section, but in 1964, the ranch terminated its sheep program. Cattle operations were maintained until the end of the Parker lease in August 2002.

Today, limited ranching of cattle continues in Humu'ula, under a permit by the Department of Hawaiian Home Lands and leases from the State of Hawai'i. Also, some 6,000 acres between Pu'u 'Ō'ō and Pu'uloa, have succumb to an infestation of the introduced gorse (first recorded on the land in 1892), which has had little maintenance since circa 1980.

### **3.2.4.2 Ka'ohē**

Early leases of the Ka'ohē mountain lands date back to 1857 (Keoni Ana to F. Spencer), and the operations of Francis Spencer's Waimea Grazing and Agricultural Company. The lease took in all of the mountain lands, to the summit of Mauna Kea, across Ka'ohē to its Mauna Loa boundary. Activities were all tied to sheep and cattle ranching. Subsequently, in 1870, the lease was acquired by Parker Ranch, which held most of the Ka'ohē mountain lands until their removal from the lease in 1905 for the Mauna Kea Forest Reserve, and later withdrawals as a part of the Pōhakuloa Military installation in 1956 (Governor's Executive Order No. 1719; Presidential Executive Order No. 1167). Portions of the land of Ka'ohē, generally those on the northern (Waimea) side of Mauna Kea, are still grazed by Parker Ranch. The lands of Ka'ohē V (the Pōhakuloa section) were turned over to the U.S. Army and have been used for military training operations since that time.

The summit of Mauna Kea, situated in the ahupua'a of Ka'ohē, was noted as a site of importance for modern astronomical observations by the Pendulum Party of 1892. In 1964, the first modern observatory was built on top of Pu'u Poli'ahu. By 1968, the scientific community recognized the value of Mauna Kea as a setting for development of multiple observatories, and in 1967, the University of Hawai'i Institute for Astronomy was founded. In 1968, the Board of Land and Natural Resources leased the entire summit of Mauna Kea to the Institute by Lease No. S-4191.

### **3.2.4.3 Na 'Āina e pili 'ana iā Mauna Kea**

All other lands lying on the slopes of Mauna Kea – including those belonging to the districts of Hilo, Hāmākua and Kohala which are adjacent to the geographic extent of this project – generally extended through the forests, where they were cut off by the traditional boundaries of Ka'ohē and Humu'ula. From the middle 1800s, those lands such as Waiākea, Pi'ihonua, Pāpa'ikou, Laupāhoehoe, 'O'ōkala, Ka'ala, Kūka'iau, Pā'auhau, and Waikōloa, were either held in fee-simple interest or leased out by the Crown and Government, for development of lumber collection, bullock hunting, cattle and sheep grazing, and in the elevations below approximately the 2,000 foot level, to development of sugar plantations.

In the early 1900s, forest lands below Humu'ula and Ka'ohē, and the Mauna Kea mountain lands from approximately the 9,000 foot elevation to the summit, were dedicated to forest reserves. The primary purpose of the reserves was watershed protection, to ensure that plantations would have access to the water necessary for the cultivation, harvesting, and processing of sugar. Interest in and the value of Hawaiian forests and watersheds has since evolved with a greater awareness of the unique and fragile ecosystems of the Hawaiian mountain lands .

### 3.2.5 Nā Ala Hele o ka 'Āina Mauna – Native Trails to Government Roads

Travel across the 'āina mauna is documented in native traditions, which describe ala hele (trails) passing from the coastal lowlands through the forest lands, along the edge of the forests, across the plateau lands of the Pōhakuloa-Ka'ohē region, and to the summit of Mauna Kea. These trails traverse the project area. These ala hele approached Mauna Kea from Hilo, Hāmākua, Kohala, Kona, and Ka'ū, five of the major districts on the island. Only Puna, which is cut off from direct access to the mountain lands, apparently did not have a direct trail to the 'āina mauna. Thus, people traveling to Mauna kea from Puna traveled through the lands of Waiākea, Hilo or Keauhou, Ka'ū to reach Humu'ula and the slopes of Mauna Kea.

By the early 1820s, foreign visitors, in the company of native guides, began making trips across the 'āina mauna and to the summit of Mauna Kea. Based on their accounts, travel in the region through the middle 1800s basically followed the old trails or cut across new areas where dense forest growth and new lava flows covered older routes. By the 1850s, the Kingdom of Hawai'i entered into a program of improving ancient trails and identifying new routes, by which to improve travel between various locations and facilitate commerce. The earliest recorded improvements, describing work government on a trail around Mauna Kea, document work on the Waimea-Kula'imano trail (cutting across the lands of Ka'ohē, Hāmākua and Hilo). The route ran above the forest line and to the coast of Hilo, and in 1854 was improved to accommodate wagon travel.

In the latter 1850s, as leases were given out for the lands of Humu'ula and Ka'ohē, and the sheep and bullock hunting interests grew, the 1854 route was maintained and the upper trail between Kula'imano-Makahalanaloa was improved to the Kalai'eha vicinity. In 1862, the Kingdom again initiated a program to improve the government roads across the 'āina mauna. Two routes were proposed, one between Hilo and Waimea via Kalai'eha, and the second to improve on the trail from Kalai'eha towards Kula'imano-Makahalanaloa, and around through Hanaipoe-Mānā and Waimea. These trails, termed Alanui Aupuni, were appropriated and work was completed by the late 1860s. The routes appear on island maps through 1901 with subsequent designations as trails on later maps.

Several ancient trails approached the summit of Mauna Kea, and were used by maka'āinana through the 1920s. Most of these trails were accessed via the improved government roads around the mountain. Primary approaches included, but were not limited to, the Kalai'eha-Waiiau Trail, the 'Umikoa-Ka'ula Trail, and the Kemole-Pu'u Nanahu Trail. Historical accounts and oral history interviews record that these trails provided travelers with access to various sites, including areas where rituals and practices were observed, and that the trails converged at Waiiau. At Waiiau, travelers found a sheltered area and water for their use while on the mountain. Those who were traveling to the summit of Mauna Kea, or to other locations

in the summit region then followed smaller trails that provided them with the access necessary for their purposes.

By the early 1870s, the ancient trail between Kalai'eha and the summit of Mauna Kea was improved into a horse trail by the Spencers, lessees of the Mauna Kea mountain lands. Other routes, accessing outlying ranching stations, such as at Pu'u 'Ō'ō and Puaka (Pua'ākala), Lahohinu, and Hānaipoe had also been improved by lessees, with routes running around the mountain and down to Hilo, or out to to Waimea. In the leases of the Crown Lands and Government Lands, it was specified that improvements, including trails, reverted to the Crown or Government upon termination of the leases. Until the late 1940s and early 1950s, these trails and government roads were primarily used by lessees for transportation of goods and cared for by the lessees. There are also numerous accounts by visitors to the 'āina mauna document travel in the region. By the late 1890s, the Kohala road supervisor reported that while the mountain roads belonged to the Government, they were all but private by the nature of their use.

Between the 1930s and 1940s, improvements were made to the Kalai'eha-Waipunalei section of the road to Waimea as a part of the Civilian Conservation Corps (CCC) and Territorial Forestry programs, with work also being done by the Parker Ranch. Likewise, the Kalai'eha-Waiki'i route was maintained by the ranch and improved by the United States Army-U.S.E.D. in 1942.

Little work was done on the Kalai'eha-Hilo section of the road (trails) after the 1870s. The trail was accessed by ranchers, with routes diverging to Kalai'eha and Pu'u 'Ō'ō, as described in survey records, journals, and kama'āina testimonies. It was also periodically used by visitors to the mountain lands, usually those who were traveling to view Mauna Loa lava flows or to make the ascent of Mauna Kea. It was not until 1942 that the route was modified as a vehicular road to what became the Saddle Road, following in areas the native trail and historic route, and cutting across new lands in other areas. The "Saddle Road" was formally turned over to the Territory in 1947, after which the general public was given an opportunity to travel to the mountain lands unhindered.

In 1963, interest in Mauna Kea emerged as a site for a telescope. Hawai'i-based scientists Walter Stieger (with the University of Hawai'i) and Howard Ellis (with the National Weather Service's Mauna Loa Weather Station) facilitated trips by Dr. Gerard Kuper and Alike Herring (both associated with the University of Arizona and NASA) to the summits of Mauna Loa and Mauna Kea. The Mauna Kea route basically followed the old foot trail from Kalai'eha, past Kalepeamoā, Keonehe'ehe'e, and up to the summit. Over the years, the old trail was modified for horses and pack animals, and after World War II, for the occasional four-wheel drive vehicles that ascended the mountain. In 1964, Pu'u Poli'ahu on Mauna Kea had been chosen as the site for the first telescope, and state funds were released for grading a road to Pu'u

Poli'ahu, to facilitate construction and access by the scientists. Since 1964, the primary route of access up the mountain slopes has remained generally the same, although new accesses and realignments of the earlier route were made as additional development in the summit region occurred.

### **3.3 Modern History of the Project Area**

As illustrated in the previous section, the lands spanning Mauna Kea, Mauna Loa, and Hualālai were used regularly by Hawaiians prior to foreign contact. “First contact” occurred in January 1778 when James Cook and his crew first happened upon the widely populated Hawaiian Islands.

The wide range of practices, as briefly identified in the previous section, speak to the pre-contact usage of the area. These pre-contact uses would continue into the nineteenth century and to a lesser extent into the twentieth century. Prior to and following European contact in 1778, the Pōhakuloa area was used for bird hunting, resource gathering, and other cultural purposes by Native Hawaiians, among other purposes.

Tensions between the monarchy and foreigners grew in the late nineteenth century. It is recognized that “from 1826 until 1893, the United States recognized the independence of the Kingdom of Hawaii, extended full and complete diplomatic recognition to the Hawaiian Government, and entered into treaties and conventions with the Hawaiian monarchs to govern commerce and navigation in 1826, 1842, 1849, 1875, and 1887” (Pub. Law No. 103-150, 1993). The friendly relationship that had existed between the United States and the Kingdom of Hawai'i would end abruptly on January 14, 1893, when United States Minister John L. Stevens, assigned to the sovereign and independent Kingdom of Hawai'i, conspired with a small group of non-Hawaiian residents of the Kingdom of Hawai'i, including citizens of the United States, to overthrow the indigenous, lawful, and sovereign Government of Hawai'i.

In furtherance of the conspiracy to overthrow the Government of Hawai'i, the United States Minister and naval representatives had armed naval forces invade the sovereign Hawaiian nation on January 16, 1893 and position themselves near the Hawaiian Government buildings and 'Iolani Palace to intimidate Queen Lili'uokalani and her Government (Pub. Law No. 103-150, 1993). Then on January 17, 1893, a Committee of Safety that represented the American and European sugar planters, descendants of missionaries, and financiers led a coup d'état against the Hawaiian monarchy, causing Queen Lili'uokalani to yield her authority to the United States out of concern for her people. This committee then proclaimed the establishment of a Provisional Government.

One of the results of this coup d'état was the seizure and continued state control over "ceded lands." Ceded lands are those that were controlled by the Kingdom of Hawai'i as "Government or Crown lands" (Van Dyke, 2008), when then-Queen Lili'uokalani yielded her authority to the United States in 1893. The self-proclaimed "Provisional Government" installed itself into power until 1894. The successor government, the Republic of Hawai'i, ceded these lands, defined as "all public, Government or Crown lands, public buildings or edifices, ports, harbors, military equipment, and all other public property of every kind" (Van Dyke, 2008), to the United States under the 1898 Joint Resolution of Annexation (30 Stat. 750), by which the United States accepted the absolute fee and ownership of the ceded lands.

While the acceptance of fee and ownership of the ceded lands would have long-standing political impacts, this transfer did not have immediate impacts on most on-going land uses that occurred at the end of the nineteenth century. Despite the upheaval in Honolulu, the leases and ranching activities within the Pōhakuloa area remained unchanged, until the twentieth century when an increased need for U.S. military activities in the islands emerged.

The PTA area was first used for U.S. military training during World War II by U.S. Marine Corps as an artillery live-fire training area. After the end of WWII, control of PTA was transferred to the Hawaii Territorial Guard. Following this, in the mid-1950s, the Army took over PTA. In 1956, Samuel Wilder King, who was then the Governor of the Territory of Hawai'i signed Executive Order No. 17192 for approximately 758 acres at PTA for ". . . uses and purposes of the United States of America, to be under the control and management of the Department of the Army." King was the son of James A. King, who assisted in the 1893 coup d'état against the Kingdom of Hawai'i and its sovereign Queen Lili'uokalani. The elder King subsequently became the minister of the interior for the self-proclaimed Provisional Government of Hawai'i. The 758 acres signed over by Governor King encompasses the Cantonment and Bradshaw Army Airfield.

In 1956, PTA was permanently established as a training site through a formal Maneuver Agreement between the Territory of Hawai'i and the United States. The Maneuver Agreement granted exclusive use of 99,200 acres to the U.S. Government to conduct training. In 1964, President Lyndon B. Johnson issued Executive Order No. 111673 and authorized 84,057 acres of the 99,200-acre training area for fee simple (i.e., owned completely without any limitations or conditions) use of the United States (EIS **Section 1.1.2**). This 84,057-acre area encompasses the U.S. Government-controlled land south of the State-leased land, including the impact area (**Figure 13**).

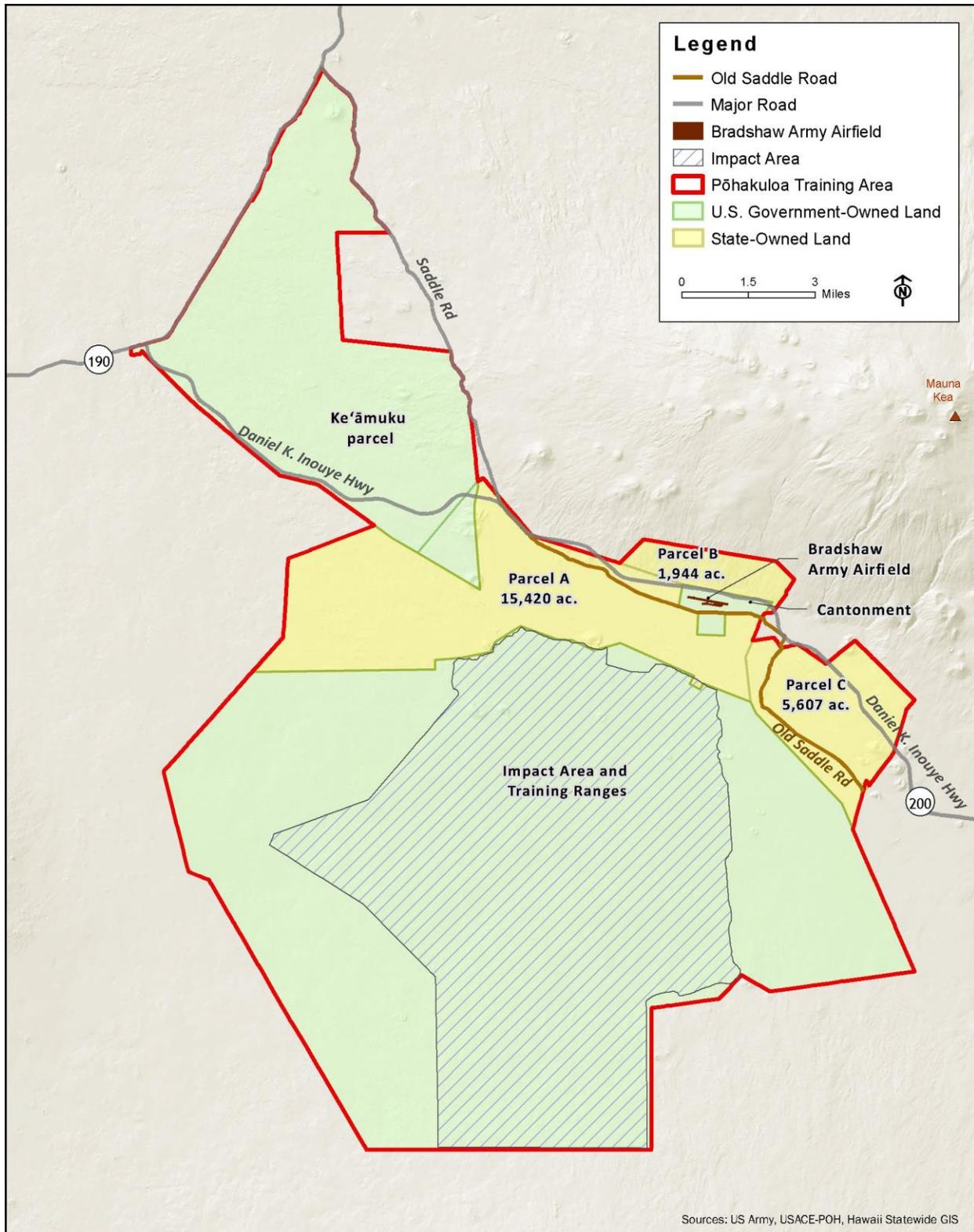


Figure 13. Map depicting both U.S. Government lands and State-owned land (Reproduced from EIS)

## 4.0 PREVIOUS ETHNOGRAPHIC STUDIES

Use of previous studies for this report included 1) studies previously commissioned and approved for use by USAG-HI, and 2) publicly available ethnographic studies of the area.

### 4.1 Langlas et al. (1999)

*Charles Langlas, Thomas R. Wolforth, and James Head. Archaeological, Historical, and Traditional Cultural Property Assessment for the Hawai'i Defense Access Road A-AD-6(1) and Saddle Road (SR 200) Project, Paul H. Rosendahl, Ph.D., Inc., April 1999.*

In 1999, Paul Rosendahl supervised an archaeological and traditional cultural property inventory survey for the Hawaii Defense Access Road A-AD-6(1) and Saddle Road (SR 200). 19 sites were recorded during that survey, excluding 35 modern military sites that were evaluated as not significant. The study was commissioned by the U.S. Federal Highways Administration.

The survey included a historical and ethnographic study. The purpose of this study was to a) identify Native Hawaiian cultural sites or other historic sites, which might be affected by the project, b) describe the Native Hawaiian cultural or historical context of those sites, c) evaluate the Hawaiian cultural or historic significance of the sites to determine whether they are eligible for listing on the NRHP, and d) assess the effects of the project on significant sites and recommend mitigation to any adverse effects (Langlas et al. , 1999).

Interviews conducted with Henry Auwae in 1996 identified the likely presence of “Native Hawaiian burials and ritual sites within the project area” (Langlas et al., 1999: 7). The study also noted “ritual sites would generally be considered ‘traditional cultural properties,’ as described in National Register Bulletin 38” (Langlas et al., 1999: 7).

The 1999 team conducted extensive interviews and research to identify burial areas and ritual sites. These findings are further discussed in Section 12 of this study.

### 4.2 Maly (1999)

*Kepā Maly. Mauna Kea Science Reserve and Hale Pōhaku Complex Development Plan Update: Oral History and Consultation Study, and Archival Literature Research, Kumu Pono Associates LLC, February 1, 1999.*

Kepā Maly is an associated author of this study and portions of this 1999 study were utilized for this assessment.

### 4.3 Maly and Maly (2002)

Kepā Maly and Onaona Maly. *He Wahi Mo'olelo No Ka'ina A Me Nā 'Ohana O Waiki'i Ma Waikōloa (Kalana O Waimea, Kohala), A Me Ka'ina Mauna: A Collection of Traditions and Historical Accounts of the Lands and Families of Waiki'i at Waikōloa (Waimea Region, South Kohala), and the Mountain Lands, Island of Hawai'i (TMK Overview Sheet 6-7-01)*, Kumu Pono Associates LLC, 2002.

Kepā and Onaona Maly are associated authors of this study and portions of this 2002 study were utilized for this assessment.

### 4.4 Maly (2005)

Kepā Maly, *A Collection of Native Traditions, Historical Accounts, and Oral History Interviews for: Mauna Kea, the Lands of Ka'ohe, Humu'ula and the 'Āina Mauna on the Island of Hawai'i*, Kumu Pono Associates LLC, March 30, 2005.

Kepā Maly is an associated author of this study, and significant portions of this 2005 study—particularly the background research—were utilized for this assessment with permission from Maly.

### 4.5 McCoy and Orr (2012)

Patrick McCoy and Maria Orr. *Final Report: Ethnographic Study of Pōhakuloa Training Area and Central Hāmākua District, Island of Hawai'i, State of Hawai'i*. Prepared for Dawson Group Inc. November 2012.

This is the only identified ethnographic or traditional cultural property study commissioned by the Army for study and/or assessment of traditional cultural properties (TCPs) within PTA. The report provides a figure defining the project area and place names (**Figure 14**).

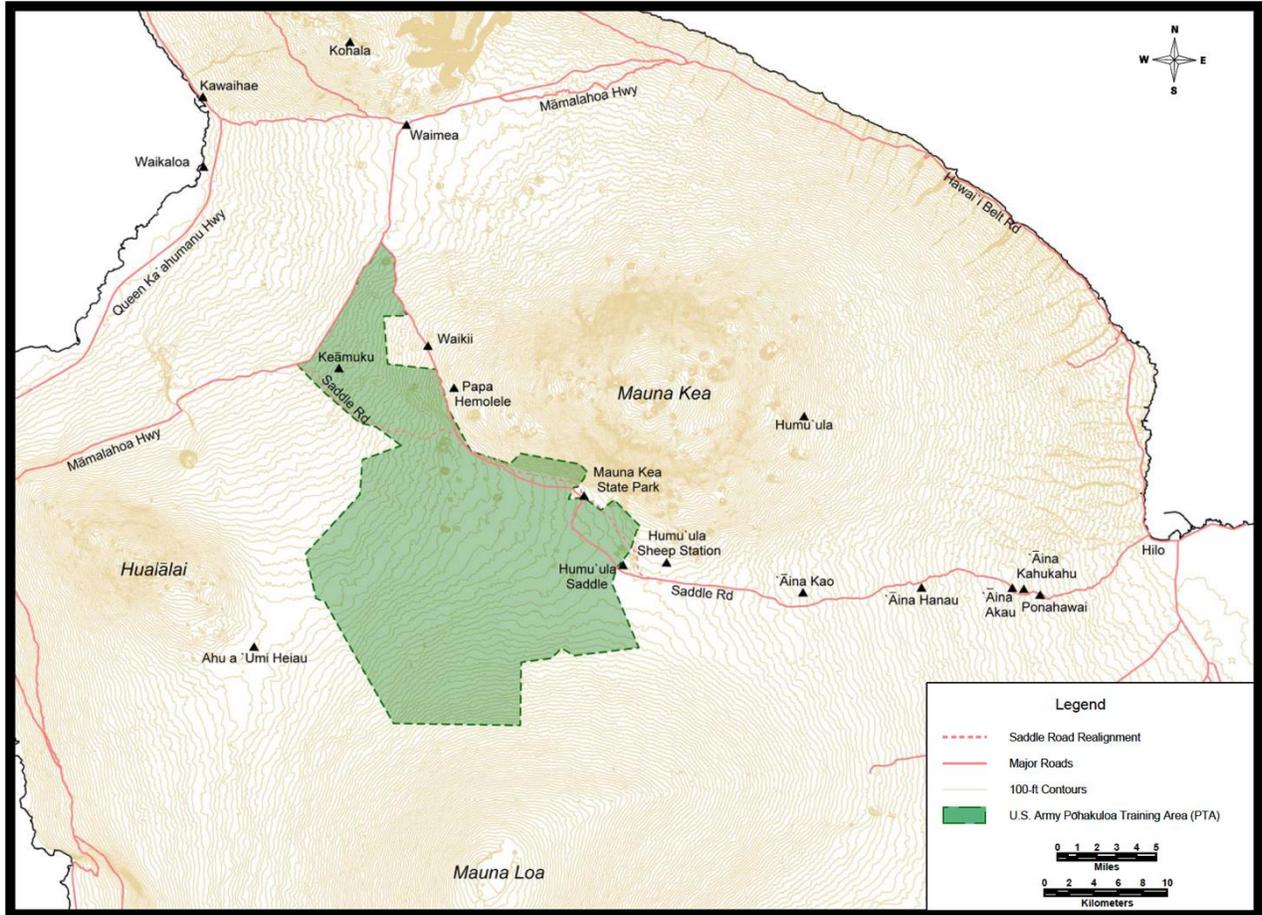


Figure 14. Project area and place names used for the 2012 Ethnographic study. Photo: McCoy and Orr (2012)

Table 2. Place Names from 2012 Ethnographic Study in Project Area Map

| Place Names from McCoy and Orr (Figure 1) <sup>15</sup> |
|---------------------------------------------------------|
| Kohala                                                  |
| Waimea                                                  |
| Māmalahoa Hwy                                           |
| Kawaihae                                                |
| Waikōloa                                                |
| Queen Ka'ahumanu Highway                                |
| Hualālai                                                |
| Keāmuku                                                 |
| Waikī'i                                                 |
| Papa Hemolele                                           |

<sup>15</sup> The spelling of the place names in this table reflects “Figure 1” above. It is important to note that the spelling seen here will differ from other references to those place names, especially in the updated list provided for this document.

| <b>Place Names from McCoy and Orr (Figure 1)<sup>15</sup></b> |
|---------------------------------------------------------------|
| Mauna Kea                                                     |
| Humu'ula                                                      |
| Mauna Kea State Park                                          |
| Humu'ula Saddle                                               |
| Humu'ula Sheep Station                                        |
| Saddle Road                                                   |
| 'Āina Kao                                                     |
| 'Āina Hanau                                                   |
| 'Āina Akau                                                    |
| 'Āina Kahukahu                                                |
| Ponahawai                                                     |
| Hilo                                                          |
| Ahu a 'Umi Heiau                                              |
| Mauna Loa                                                     |

Building from this list,<sup>16</sup> place names were researched and a revised and updated list for the purpose of this study is presented in **Section 5.2.3**.

A summary of the findings of this study is provided in **Table 3**.

*Table 3. Summary of Findings Made by McCoy and Orr Regarding TCPs at PTA*

| <b>Traditional or Contemporary Practice</b> | <b>TCP Determination</b>                                                                                                                                                                                                                                                                                                                                             |
|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Quarrying and Stone Tool Manufacture        | Properties associated with practice not considered eligible for consideration as TCPs (McCoy and Orr 2012: 10)                                                                                                                                                                                                                                                       |
| Bird Hunting                                | Past associations with bird hunting do not provide adequate justification of associated locations as TCPs (McCoy and Orr 2012: 11)                                                                                                                                                                                                                                   |
| Human Burial Practices                      | “Although human burial practices apparently have occurred within the boundaries of PTA, there is no indication that it was a common practice in the area. Further, modern human burials have not occurred within PTA during present times, and no active community traditions relating to burials at PTA have been identified. For these reasons, the possibility of |

<sup>16</sup> It should be noted that Appendix A of the report included additional place names provided by interviewees that are not incorporated into the body of the report.

| Traditional or Contemporary Practice                  | TCP Determination                                                                                                                                                            |
|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                       | pre-Contact burial practices is examined for in any area of PTA being considered eligible for consideration as a TCP” (McCoy and Orr 2012: 12)                               |
| Ceremonial and Ritual Practices and Religious Beliefs | Do not appear to qualify for consideration as TCPs                                                                                                                           |
| Journeying ( <i>Huaka’i</i> )                         | “There does not appear to be sufficient reason to consider areas within PTA used during <i>hauka’i</i> (sic) as eligible for consideration as TCPs” (McCoy and Orr 2012: 15) |
| Hunting of Feral Ungulates                            | Not warranted to consider properties within PTA as potential TCPs                                                                                                            |
| Scattering of Cremation Remains                       | Practice not known to have occurred prior to 50 years ago and individually are not significant events in the broad pattern of history                                        |
| Ranching Activities                                   | Not eligible for consideration as TCPs                                                                                                                                       |

The study concludes:

The focus of this ethnographic analysis was to evaluate whether any portions of PTA would qualify for nomination as TCPs under NRHP. The results of the analysis indicate that traditional Native Hawaiian cultural practices, as well as contemporary cultural practices, did occur within the boundaries of PTA in the past. However, none of the areas within PTA appear to qualify for consideration as TCPs under established National Park Service (NPS) criteria used to determine eligibility for listing in the NRHP (McCoy and Orr 2012: 5-6).

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## 5.0 ETHNOHISTORY AND LANDSCAPE ETHNOECOLOGY

This section includes an analysis of traditional Hawaiian resources as related to ethnohistory, ethnopedology, and landscape ethnoecology. This section includes a discussion of place names and physical features of the project area. These are important to the report in that they establish the foundation for the cultural elements to follow and demonstrate the connectivity between Native Hawaiians and the land in the project area. This section incorporates diverse facets of history from the ahupua‘a within the project area, and to an appropriate extent, the geographic extent. The cultural-historical narratives herein reveal a legacy of place-based knowledge and stewardship that provide access to information that can be used to guide the project in its compliance with applicable laws and regulations.

Ethnohistory is the “interdisciplinary approach to indigenous, colonial, and postcolonial culture and history that developed as a coherent scholarly field in the United States in the 1950s. Combining the approaches of history, cultural anthropology, and archaeology, ethnohistory centers on reconstructing the history of non-European peoples, including their experiences of colonization and resistance” (Strong, 2015: 1).

Landscape ethnology is particularly important in this assessment, as it serves to help identify cultural resources from an ecological perspective as well as a cultural one. Landscape ethnoecology studies the partition of “subsistence space” “into patches, “such that every point of that space will fall either within a patch or on a boundary between adjacent patches. Such boundaries may be sharply drawn or diffuse. These patches are tokens of types [which can also be referred to as] ecotopes” (Johnson and Hunn, 2012: 15). This landscape ethnoecology, specifically the identification of subsistence spaces and patches (or ecotopes), is directly applicable to Hawaiian traditional knowledge, including the extensive use of wao within Hawaiian ethnoecology.

When aggregated across numerous historic sources, there are many wao that were identified by traditional Hawaiians (Watson, 2017:60) which served as evidence of the extensive understanding Hawaiians had of their ecology. The narratives in this section focus on a collection of many notable traditions and histories as well as the diverse history of the land and people for the subject ahupua‘a, including the period of early Hawaiian residency to the modern day. The nature of Hawaiian history makes it necessary that accounts from neighboring ahupua‘a, larger regions, and even cross-island be cited as well. This narrative starts first with the history of the Native Hawaiians from antiquity to the present-day, and then integrates the layers of history following Western contact. Much of the research presented in this section was previously compiled and published by Maly (2005).

## 5.1 Associated Traditional or Customary Practices

Over the centuries, Hawaiians, and other ethnic groups, have interacted closely with the study area and the resources within it. The physical boundaries and perimeter fencing that exist today did not historically exist to control movement of travelers or animals, although restrictions did regulate management of animals. While ahupua'a boundaries were present and denoted by stone boundary markers, if travelers heeded local governance and custom, travelers were largely allowed to move respectfully, but freely, throughout the different ahupua'a.

Most of the historic information available in written form today comes from the collective narratives of these travelers, who are of Native Hawaiian descent and members of other ethnic groups. These stories are part of a larger ethnohistory that speaks to a Hawaiian-focused historic narrative. Also, through these ethnohistories, an understanding of how Hawaiians and early settlers saw this landscape. Through these individuals and their writings, the following traditional or customary practices were identified:

- Mo'olelo – storytelling or oral histories
- Alanui – trail usage
- Quarrying
- Stone tool manufacturing
- Hōlua – sledding
- Habitation

### 5.1.1 Mo'olelo

Mo'olelo is the practice of storytelling and developing oral histories for the purpose of transmitting knowledge information and values intergenerationally. Mo'olelo are particularly critical in protecting and preserving traditional culture in that they are the primary form through which information was transmitted over many generations in the Hawaiian Islands and particularly in the Native Hawaiian community.

Storytelling, oral histories, and oration are widely practiced throughout Polynesia and important in compiling the ethnohistory of the area. The Native Hawaiian newspapers were particularly valued for their regular publication of different mo'olelo about native Hawaiian history. Were it not for the newspapers having the foresight to allow for the printing and publication of mo'olelo, far less information about the cultural history of the Hawaiian people would be available today.

Mo'olelo were largely dependent upon place. As mentioned in the earlier section about mele and oli, the land often served as muse for traditional Hawaiians, as it was places that regularly inspired the mo'olelo that created the foundation for oral histories, which in turn were critical to Hawaiian epistemologies (systems of knowledge) and pedagogies (teaching methodologies). This section highlights mo'olelo that take place within or near to the project area and shows how the practice has been employed to contribute to the ethnohistory of the area.

### 5.1.1.1 *Ōlelo No'eau*

'Ōlelo no'eau are another source of cultural information about the area and a form of mo'olelo, as they are oral traditions passed down through Hawaiian pedagogy. 'Ōlelo no'eau literally means "wise saying," and they encompass a wide variety of literary techniques and multiple layers of meaning common in the Hawaiian language. Considered to be the highest form of cultural expression in old Hawai'i, and still celebrated as such today, 'ōlelo no'eau bring us closer to understanding the everyday thoughts, customs, and lives of those that created them.

The 'ōlelo no'eau presented here relate to land divisions near the project area that may give insight to knowledge about and Hawaiian cultural value and perspectives regarding the location. These 'ōlelo no'eau are found in Pukui's *'Ōlelo No'eau: Hawaiian Proverbs & Poetical Sayings* (1983).

#### **Poli'ahu, ka wahine kapa hau anu o Mauna Kea ('Ōlelo No'eau # 2687)**

*Poli'ahu, the woman who wears the snow mantle of Mauna Kea*

Poli'ahu is the goddess of snows; her home is on Mauna Kea

#### **Mauna Kea, kuahiwi ku ha'o i ka mālie ('Ōlelo No'eau # 2147)**

*Mauna Kea standing alone in the calm*

#### **E ho'i na keiki oki uaua o na pali ('Ōlelo No'eau # 288)**

*Home goes the very tough lads of the hills*

These lads of the hills were the cowboys of Pu'uwa'awa'a and Pu'uana'hulu, who were well known for their endurance

**Hele a 'ilio pī'alu ka uka o Hāmākua ka lā. ('Ōlelo No'eau # 728)**

Like a wrinkled dog is the upland of Hāmākua in the sunlight.

An uncomplimentary remark about an aged, wrinkled person. Line from a chant.

**Ka ua kihene lehua o Hāmākua. ('Ōlelo No'eau # 1568)**

The rain that produces the lehua clusters of Hāmākua.

**5.1.2 Alanui (Trail Usage)**

As traveling through traditional trails was the primary means by which people traveled on land throughout most of Hawaiian history, the traditional trail system is particularly important throughout the Hawaiian Islands. Throughout the islands, there were numerous trails that allowed for people to access different locations. This trail system was critical not only for maintaining a healthy population and managing this population, but it was also essential for the traditional economic system of bartering. The trail system allowed for different localized communities to engage and interact. This also allowed for the trade of goods throughout island communities. If one community had an abundance of resources like quarrying material, traditional communities would be able to trade those resources for other things they may not have in their area but existed in a neighboring community.

Langlas et al. found: "Caves and trails dominate the archaeological sites in the PTA" (1999: 17). It was also established in the 2012 Ethnographic Study that trails played an important role in the distribution of quarried materials in the region, allowing for communities from around the island to utilize and benefit from this natural and cultural resource (McCoy and Orr, 2012: 28).

One trail that ran through the state-leased land is Alanui Kui, which was part of the Alanui 'Aupuni trail system. For a more detailed history of the extensive trail system that ran throughout all Hawai'i Island, see Mills, 2002.



*Figure 15. Tī leaf sandals found in a lava tube habitation site (SIHP -19490), within the PTA area. Photo: Archaeologists find, preserve cultural resources at Pōhakuloa Training Area [Image 12 of 12], by Eric Hamilton, U.S. Army Garrison Pōhakuloa Training Area (2015)*

### **5.1.2.1 Road Constructed Across the Mountain Lands (1834)**

In December 1834, Goodrich again wrote to the mission headquarters about his duties, including his trip to the mountain lands to hunt for bullocks. He also observed that Governor Kuakini had ordered the construction of a road through the mountain lands in order to facilitate travel across the island. The letter also alerts the reader to troubles in the mission station itself, among the brethren, and informs the headquarters of the death of naturalist David Douglas.

#### **Byron's Bay, Hilo, Hawaii**

**December 8th, 1834**

**Joseph Goodrich; To Rufus Anderson:**

As the mission have complied with your directions in respect to myself, perhaps it is not necessary for me to enlarge, as their proceedings will doubtless be received long before you will receive their recommendation. Agreeable to Mr. Bingham's request & suggestion, I may be allowed to make some statements to which may serve in some measure to explain what is past.

What I have done as a missionary it may be difficult to relate all. When this station was first taken it was some time before schools could be set in operation...

...When schools became numerous it required an unserviceable portion of my time to select teachers, & examine them, give them proper directions to give out books & receive such compensation as they make, & turn it to the Depository. Wood, *kapa*, & arrowroot, were the principal, such was the state of things & they continued increasing till the fall of 1831, when the scholars amounted to 7,587 that exhibited at the last examination that I had before I left for Oahu...

Respecting bullock hunting only in one instance have I been for that object only & that was when this station was first taken & that was with the appropriation of those who were with me; the main object then was to take a young calf & bring it down & raise it that we might have a cow at some future time. I succeeded in taking a calf, it did not live a great while, all the other times that I have been about not exceeding half a dozen times, & always had some other object in view either to go through Hilo & preach going & returning are to go up directly through the woods from here in order to find out a suitable place to make a road to Waimea, as it is now & has been heretofore to go from here there. I also acted in compliance with Gov.'s request, so that a road is now making through the woody region from here to Waimea which when it is done it will only be a days journey from here to W. Now it is 3 or 4 days journey between us...

You will doubtless have heard of the lamented death of Mr. David Douglas, a distinguished naturalist sent out by the horticultural society of London who has been exploring the North West regions of America. He came to these islands last fall & spent about 3 months here in my family, after which he went to Oahu but not finding an opportunity to leave the islands he set out to return here in July and in crossing over Mauna Kea he by some fatal step, fell into a pit in which was a wild bull, & was soon killed, as he was found dead shortly after by some natives passing that way. There was no person with him when he fell into the pit, that is we have no knowledge of any person being with him, as he parted with his guide a few hours previous... (Goorich, 1834:1-14)

### **5.1.2.2 Narratives from Trips to Mauna Kea (1840-1841)**

In 1840, J.J. Jarves, editor of the Hawaiian government newspaper, *The Polynesian*, accompanied "Mr. Cushingam," a lead member of the United States Exploring Expedition on

a journey to the island of Hawai'i. On June 26, Jarves, Cushingam, and another associate landed at Kailua, Kona, on the *Clementine*. After procuring the assistance of Governor Kuakini, the party traveled from Kailua to Kawaihae, then on to Waimea. Guided by "Honoa," who was reported as knowing all of the trails of the island, the party departed from Waimea (passing Kemole Gulch, by description of the landscape) and traveled up the slopes of Mauna Kea to Waiau, which he described as appearing "green and slimy." From the summit, the party then descended to Humu'ula, crossed the Humu'ula plains to Keawewai at Keauhou, which would have required traversing directly through the project area and geographic extent, to Ka'ū, and then went on to Kīlauea.

In July and August 1840, Jarves published detailed notes describing the sites and experiences while along the way. The following narratives are excerpted from the larger series of articles written by Jarves.

### ***The Polynesian***

#### **July 25, 1840**

...[At Waimea] It was with great difficulty that men could be procured for our route, which was to ascend Mauna Kea, Mauna Loa, thence to the volcano, new streams of lava and Hilo. After considerable negotiation, twelve were procured from the headman, and a guide named Honoa, who professed to know every path and route upon the island... The trip to occupy fourteen days... By twelve o'clock the thirtieth day of June, we were mounted and on our way, for we had taken horses to ascend the mountain as far as it was practicable to go with them. The plain remained quite level for twelve miles, broken occasionally into crater-like hills; our course at first was E.S.E., then diverged to S.E. by E. until we reached the mountain. The first portion of the ascent was gradual; through scanty forest. At sunset, we stopped at a cave, about seven thousand feet up, where we were to pass the night... Scarcely had we set food within its precincts, before we were literally felled alive. Our clothing was immediately lined with them, and such stout ones; their very kick was painful...

July 1. – Started early, our course being directly for the summit, the shortest but steepest way. After a few hours of slow progress, we passed the line of vegetation, excepting a species of fern, and few stunted grasses, and came upon a bed of scoria, and rough lava. This led to a large crater, apparently the great terminal one of Mauna Kea. The side towards the N.W., through which we entered was torn away, and here the lava apparently had discharged itself. Including the numerous sand and scoria conical shaped chimnies, which have an elevation of from five hundred to one thousand feet, and appear to have

been as it were blown up, by the expansive force beneath, its circumference was not less than six miles. The basin was broken up into lakes, crested waves, cones, and all the distorted shapes of an active crater, rendering traveling exceedingly rough; our men giving out every few rods. On these chimnies, were herds of bullocks which scampered off at our approach, and plunged down their rugged sides with a rapidity that defied pursuit. Their only object in frequenting this region, where there is no trace of vegetation, is to avoid the pursuit of the hardy hunters, or to lick the snow. After pushing out way until within two thousand feet of the summit, our horses gave out and were sent back. This was the bed of a large lava lake at the south eastern extremity of the crater. Here we found a series of minerals, such as we had not noticed before. They were augite, hornblende, olivine, etc. Leaving the lava, we struck upon volcanic gravel, loose and slippery to the footing. At this height, my respiration was sensibly affected, lips cracked, eye balls inflamed, with a dizzy, swimming sensation in my head. Some of the natives were similarly attacked. By the time we had reached the foot of a sand hill, about three hundred feet above us, which the guide insisted was the highest peak of the mountain, these symptoms had increased to such a degree, accompanied, by faintness, that I could not walk without assistance, and but a few rods at a time. Some peppermint and brandy, mixed with water, relieved me a little. My companions were not so much affected. It was now sunset, and we were on the highest visible point but one, surrounded by a scene of infinite grandeur. To the south lay Mauna Loa, with its dome summit, on which we could distinctly trace the great crater of Douglas, now at rest, for no smoke was visible; Mauna Hualalai rose precipitously on our right, and such was the clearness of the atmosphere, that they both appeared close upon us, though thirty miles distant.

On this side we had an adequate conception of our elevation; thirteen thousand feet. The great plain between the two mountains, which is two days walk across, appeared but a mere valley, while immediately beneath us, Mauna Kea descended so precipitously that its base could not be seen. The sky was cloudless, and of the most perfect transparency. Looking back, from whence we had ascended, our gaze rested upon an ocean of clouds, piled in gorgeous and dense masses, or lying like drifts of the whitest snow. The last rays of the sun played upon this airy sea with the most dazzling brilliance, giving it those ethereal shades, which are beyond description and no artist can catch. This belt of clouds shrouded all beneath from our view, but in the background, sixty five miles distant, rose in bold relief, like some ocean island, the dark blue peaks of Maui; for they had that tinge. Their apperance, at once drew from all,

one sympathizing burst of delight and astonishment. Though they were actually three thousand feet below us, with more than two thirds of their height enveloped in vapor, there they were, seemingly rising for miles in perpendicular height above, and with a proximity that appeared fearful...

Here we were on the summit of one of the sublimest of God's own works, shut out from earth, and around us the mighty pinnacles of nature's glorious temple; the beautiful, grand, terrific and sublime commingling in most perfect harmony... The shades of night, caused us to leave, and we hurried our reluctant steps downward, and after a descent of about eight hundred feet, we found an overhanging rock, just large enough for three to creep under, affording some slight protection from the keen mountain air. This was to be our couch. From the dampness of the ground it was evident that the snow had not been melted long from here... Thermometer 40°. Mauna Loa bore s.w. true from us.

We found it impossible to sleep, the rarification of the atmosphere still causing faintness, until we drew our blankets over our heads. Up at sunrise, Thermometer 30°, and a fine bracing morning it was. My companions, not having seen the snow, disbelieved the guide's statement the evening previous, and started themselves to seek the summit. Having ascended the hill which the guide had pointed out, they found another arising two hundred or more feet above that, which after great labor they scaled. These hills are composed of loose sand, into which one slips knee deep at every step. The second one was frozen hard. This they found to be the highest point; it was composed of slag, lava, and gravel. The snow or rather ice lay in the chasms, in spots in masses ten feet deep, fourteen wide, and three hundred long. About five hundred-feet down, in a southerly direction, lay the pond of water [Waiau], the existence of which has been often doubted. It lies in the basin of a small crater, and at a distance appeared green and slimy. Having piled a cairn as a monument to their success, they returned in all haste to the camp.

Jarves continued his description of the trip to Mauna Kea in a later issue, discussing the varying accounts regarding the elevation of the summits of Mauna Kea and Mauna Loa, including the letters of Dr. David Douglas from 1833-1834. Jarves then described his party's descent to the Humu'ula Plains. It appears by the description of the route taken that the party descended along Waikahālulu Gulch, as they describe a spring visited on the way down the slope of Mauna Kea.

## *The Polynesian*

### **August 1, 1840**

Travelers have differed greatly in their estimates of the elevation of Mauna Kea. Some raising it even to 18,000 feet, while others reduce it to 13,615. Capt. Wendt, in 1831, makes it 14,055 feet. Considerable discrepancy seems to exist in regard to Dr. Douglas's measurements. In a letter to a friend in London, dated May 6, 1831, and published with his journal, he gives Mauna Kea an altitude of 13,851 feet. Mauna Loa 13,517 feet... Being unexpectedly disappointed in obtaining a barometer, we were not able to add any scientific measurements to the list given, and here as at other places on our route, were obliged to depend upon the dicta of others, or upon calculations as could be obtained from simple calculation pacings, lines, &c., which was a source of great vexation to us...

Douglas speaks also of the "apparent non diminution of sound," as being a matter of astonishment to him. The cast and distinctness with which we heard voices, and even conversation at long distances, was frequently noticed by us, also, the rapidity with which sound was transmitted.

Before my friends reached the camp, I had started with our men, to descend the mountain, zigzagging in a southerly direction. They were quite benumbed with cold, and it was not until the sun had been up some hours, that they became sufficiently thawed to proceed with any vigor. The descent was exceedingly steep and toilsome. This side of the mountain was nothing but a vast pile of compact volcanic rocks, of all sizes, broken in every variety of shape, all presenting sharp sides, and jagged points, and thrown at random into a loose, sliding bed of gravel, which slipping from under our feet at every step, endangered our limbs by avalanches of rocks which hit carried with it. After a few miles of such slope, the men discovered a spring [perhaps at Waikahalulu] of clear, cold water gushing out of the mountain to which we all hastened, having been upon an allowance of that article for the last twenty-four hours. Here the missing ones rejoined our party. Mr. C. had brought with him a handkerchief filled with snow, with which we turned too, and had a fine snow balling, while it lasted, pelting each other right merrily. Our Honolulu friends, puffing and panting with heat and dust, no doubt, would have envied us the occupation. The declivity proved equally steep, the whole way down, with soil enough to bear a few grasses, and a small species of *cassia* with a yellow blossom. Herds of bullocks were frequently seen, some of which were quite tame, and did not run until we approached within pistol shot. Before

reaching the plain we were exceedingly annoyed by a strong wind suddenly springing up, which drove the sand in dense clouds before it, cutting our faces and blinding our eyes by its violence. The plain, bounded by Mauna Kea on the north, Mauna Loa on the south, and Mauna Hualalai on the west, and embracing nearly a third of the superficial extent of the whole island, appears to have been to most persons a “terra incognita.” On some of the earlier charts a swamp or morass is delineated as occupying much of this area, and even to this day it is but seldom visited, except by bullock-catchers. It is mostly a table land, gradually swelling from both sides of the island, until it attains an elevation of four thousand feet. On the south and east it is cut up by streams of lava, apparently of not very ancient date, which have flowed from the adjacent mountains. Numerous small conical craters of exceedingly regular shape, and composed of slag and sand, dot these streams. As they approach Mauna Kea, vegetation commences, on a soil composed of sand and ashes, through which the volcanic layers occasionally show themselves, but not frequently enough to prevent a tolerable cart-road from running along by the base of the mountain. On this side, the plain, hills, and small craters, for many miles are beautifully diversified with groves of an elegant laurel, which we noticed nowhere else on the island, or indeed on any other of the group. It grew in clusters of from thirty to forty feet in height, with small dark green leaves, delicate white blossoms, and branches that nearly swept the ground. Their foliage formed a graceful dome, impervious to the sun; while beneath was a green sward, free from all underbrush. Upon the whole they were decidedly the prettiest trees that we met on the island. The plain is too dry ever to become fertile, or of any value to the agriculturist, being like a sponge, so porous that water cannot remain upon it.

After leaving the mountain we traveled at a rapid rate for nine miles, the latter part through a driving rain, until we reached a bullock-catchers hut. It was a mere temporary shelter, thrown up by them while in their hunting excursions, but it proved a welcome haven to us. Having built a fire, dried our clothes, and supped on pork, which by this time had become quite lively, we laid down upon a bed of leaves, and enjoyed a sound night’s rest.

July 3. – Rose at five o’clock. Thermometer 48°. Started our natives immediately. A mile’s more traveling and the s.s.e., carried us clear of the laurel trees, and we found ourselves upon one of those mc’adamized tracts of Hawaii, yeleft “clinkers,” or in other words, volcanic streams, which in cooling have slit, cracked, tumbled, and burst into every jagged and irregular shape of which nature is capable. Here came the tug of war for our shoes, which soon gave out,

but having four pair apiece in our baggage, we reshod ourselves, and hastened on. The native wore sandals made of raw hides, which requiring continual renewing, greatly delayed our progress. However, the “clinkers” were interspersed with some tracts of smoother lava, which at any other time we should have thought bad enough, but now proved a most agreeable change from their rougher neighbors. We occasionally came upon wild geese, which were very tame, and met with abundance of rain water in the hollows of the rocks. At one o’clock we reached a tract of “clinkers,” two miles across which was the very “blackness of desolation” itself. Just imagine the slag from all the forges and glass factories which have been in existence since the commencement of time, dropped in masses from the size of a small house to that of a marble, upon a plain like this; every mass being all points, every point sharp and cragged, and all uppermost, and you can form some faint idea of this highway. After pitching, twisting and tumbling over it, for two hours, to the eminent danger of our necks, and dislocation of our ankles, we came to better footing. We were now crossing the eastern spur of Mauna Loa, through a forest of dwarf *ohia* trees. The rain, which had been lowering all the morning, now began to pour, and soon thoroughly drenched us. At four o’clock we passed on our left, quite a lake of water, but owing to the storm could not stop to examine it. At five having found a cave, we concluded encamp for the night, having been on foot twelve hours, though owing to the badness of the road, we had not advanced more than fifteen miles. The cave was but three feet high, and a couple of roads in depth...

### **5.1.2.3 Ascent of Mauna Kea in Records of the United States Exploring Expedition**

In 1840–1841, Charles Wilkes, Commander of the United States Exploring Expedition, traveled around the islands documenting various aspects of the natural and cultural landscape of Hawai‘i. In 1841, members of Wilkes’ party traveled to the summits of both Mauna Loa and Mauna Kea. The following narratives describe the approach to Mauna Kea via the trail from Hilo, passing through Pi‘ihonua, to the upper reaches of the Wailuku River, across Humu‘ula, and to the summit of the mountain. Wilkes’ narratives also include observations made by the traveling party about the nature of the forest at various elevations, native practices associated with bird catching on the mountain lands, the danger presented by wild cattle on the mountain lands, the residence of cattle hunters in the Humu‘ula-Keanakolu vicinity mountain lands, and the saw mill of James Castle, formerly situated at Kapahukeya in the Pi‘ihonua forest near the boundary with Humu‘ula:

...During the time of our residence on Mauna Loa, Dr. Pickering and Mr. Brackenridge volunteered to make the ascent of Mauna Kea. They were

furnished with guides, among them Sandwich Jack, our bullock-driver, whose true name I believe was Dawson, though he went by the sobriquet of Billy Lilly. They set out on the 8th of January, attended by natives from Hilo, belonging to Kanuha, having agreed to pay each of them fifty cents a day. Their first stage was to the sawmill erected on the Wailuku, distant about seven miles from Hilo, and three miles within the verge of the forest: here they stopped for the night with a man by the name of Simons, who is the occupant of the mill, which belongs to a Mr. Castle. The mill, as I understand, had proved but a bad speculation: it is not out of repair, and there is not sufficient demand for boards to make it all profitable...

...On the 10th of January they resumed their journey, and followed the "Long Road" for about two miles, which is the whole distance to which it extends; the removal of the chief who was engaged on it had put a stop to its further progress. They were now fairly in the forest, which was thought by our gentlemen to be a fine one; it consisted altogether of two kinds of trees, the *ohea* (*Callistemon*), and *koa* (*Acacia*); they also met with several species of the tree-fern, which seem to vie with each other in beauty. Many of these were of genera and species that had not before been met with, one of which afforded the silky down before spoken of, and another, the edible fern, a drawing of which will be seen at the end of this chapter. On reaching the bed of the stream, which is one of the routes through the wood, the guides led them upon it. As they proceeded, they overtook one of the boys who had preceded them, endeavoring to catch a large bird. He had armed with bird-lime one of the pendent branches of a small *ohea* tree that overhung the stream and was in full flower. As they were passing, the bird was seen hovering about, while the boy was slyly watching its movements. When they had passed it a short distance they heard the scream of the captured bird, but by some mishap it afterwards escaped.

Their encampment was under an *ohea* tree, where the natives built a hut for them with boughs and the fronds of ferns. From the prevalence of heavy rain they found all the wood wet, and could not succeed in making a fire: they consequently passed a miserable night; for in almost any climate, when encamped in the open air at night, a fire seems to be necessary for comfort, particularly when the weather is wet.

Conglomerates were the most frequent rock in the bed of the stream. This rock had no been met with on the trip to Mauna Loa; and on diverging from the stream, the compact rock of that mountain seemed to prevail.

Their guide, Dawson, during the morning showed much alarm at their starting some young cattle, lest the old cows should be near, who he thought might be troublesome: the cattle, however, were discovered afterwards to be tame. At the forks of the stream they took the left branch, and after a walk of two miles, came to some huts occupied by natives who had been bullock-hunting. In this illegal practice they seem to have been extensively engaged, judging from the quantities of jerked meat they had on hand.

The cattle have been tabooed for five years, from the year 1840, in consequence of the slaughter that had been made among them. Upwards of five thousand hides, I was told, had been procured in a single year, and when this became known to the government, it interdicted the hunting of the animal. I heard no estimate of the number of the wild cattle, but they are believed to be very considerable, and all from the stock left by Vancouver in 1795.

From these natives they procured some jerked beef, and were told that ice had formed there the night before. The effects of frost on the foliage was evident, and yet the elevation did not exceed five thousand feet.

They encamped at night in an open space in the woods, near some shallow pools called the Duck-Ponds [Wai-koloa], from the quantity of these birds frequenting them. The ground was chiefly covered with tufts of a small *Carex*. The trees now began to appear gnarled and covered with moss, resembling oaks in habit. The ground had become much drier, and the brushwood was gradually disappearing.

On the 12th, they started at sunrise, and by eleven o'clock found they had cleared the forest. Their altitude was about six thousand feet. The woods had become for some time previously much scattered. They passed also a distinct lava stream, of no great size. The ground was frozen, and the pools of water were covered with a thin ice.

This upper part of the forest afforded a greater variety of trees, though of smaller dimensions: here they met with the false sandalwood (*Myoporum*); the *koa* was, however, still the principal tree.

To the forest succeed the plains; but why this region should be so termed, our gentlemen were at a loss to conceive, for there is an ascent, although gradual, towards the base of the higher peaks; and there are, besides numerous conical hills, varying in height from two to eight hundred feet: even between these the surface is undulating, and cut up by ravines.

This district is famous, according to report, for the number of wild cattle found on it, and from the circumstance would be supposed to produce fine pasturage; but this is far from being the case, for there is nothing but a few scattered tufts of grass, and a species of *ranunculus*, which is of so acrid a nature that the cattle will not eat it. The prevailing feature of the country is aridity, and concealed rocks cover a great part of it. Shrubs seem to be almost absent, but the scattered *mamane* trees are every where conspicuous.

It was now evident that their guide had taken a wrong route, having pursued that leading across the island; they therefore changed their course, and took a direction to the northwest, crossing the country for an eminence, where Mr. Castle, (the proprietor of the mill,) formerly had a station. When they reached it, they enjoyed a fine view over the distant forest, with the bay of Hilo and the sea beyond; the day being clear, the whole extent was distinctly visible; even a small vessel, which had sailed for Oahu, was seen going out of the bay.

They chose their encampment just above this eminence, under a projecting ledge of lava: close by there were several pools of water. Such pools form in the compact lava; and where this rock occurs, water is to be met with at intervals, while in the porous lava none is to be found.

On the 13th, they set out at an early hour, and passed a belt where the vegetation became very rich, and the variety of great, particularly on the sheltered banks of the ravines. Among the plants were several Compositae, two or three with decussate leaves, *Pelargonium Douglasii*, five or six species of ferns several *Rubiaceae*, grasses and other small plants.

About three miles beyond this, they reached a cave, where they intended to leave the natives and baggage. It was difficult to induce the former to come up even thus far, on account of the cold; but being here in the vicinity of wood, they enabled to have a fire to keep themselves warm; water was also at hand. This cave was a convenient rendezvous, and sufficiently near the top to allow them time to reach it and return in a day. Some of the natives had gone down to a larger cave, three quarters of a mile below.

A few wild cattle were to be seen in the distance; but, according to the report of Dawson, their guide, they ought to have heard from this position cattle lowing in every direction.

On the 14th, one of their guides was sent off after a bullock, Kanuha, the chief, having granted permission to the party shoot one.

Dr. Pickering, Mr. Brackenridge, and Billy Lilly, set out for the summit. When about three miles above their rendezvous, and having the high hill of red scoria to the south, they entered upon a plain, of many miles in extent. On reaching this, the vegetation of temperate climates almost at once disappeared, and an Arctic flora succeeded. This plain is made desolate by stones, gravel, sand, scoria, and boulders; a few scanty blades of two sorts of grasses (*Aira* and *Panicum*), and one or two stone-mosses, were all the verdure, if such it may be called, that was seen. The whole plain resembled the dry bed of some great river over which the water had passed for ages. There was no appearance of lava streams or clinkers, as on Mauna Loa. In the distance rose six peaks, around whose bases were rough blocks of lava, while towards their tops scoria of red colour, with gravel, prevailed.

On their way, they passed through a gap to the southeast of the three terminal hills, where stood the stone pen, said to mark the place where the Rev. Mr. Bingham was once lost. The terminal peaks were found steep and very fatiguing to ascend; and when they reached the summit, they took shelter under a pile of stones – the same that Douglas speaks of...

The highest peak of Mauna Kea is the southernmost; but our gentlemen did not visit it, proceeding to the western side of the mountain, until they obtained a view of the slope to the northwest and north. The lake spoken of by Mr. Goodrich, which lies in the direction of the highest peak, was not visited.

Mauna Loa and Mauna Kea differ essentially, both in form and apparent composition. Mauna Loa, as has been seen, is one mass of lava streams for the distance of four or five thousand feet from its summit; while Mauna Kea is found to consist almost entirely of scoria without any craters, unless the conical hills spoken of can be so considered; which is probable, for they are represented as cup-shaped on top. Vegetation on the one ceases at about seven thousand feet; while on the other it is continued to twelve thousand, and a few scattered plants may even be found within a few hundred feet on the top of Mauna Kea. The plants also differ; the *mamane* occupies a belt eleven thousand feet high, while none of this plant is to be found on Mauna Loa.

On their return, they determined to proceed to the lower cave, where the natives had taken refuge.

On the 15th, they concluded to descend, after making a tour on this same level, where they found the ground as barren as on the route by which they had ascended. Small herds of cattle were seen, but at a great distance apart; these

have now become shy, from having been hunted by Spaniards with horses from California, which were imported for the express purpose of carrying on systematically the business of killing the cattle for their hides. These hunters would soon have exterminated them.

The golden plover is very abundant on the plain, as every where else; but is said to quit the islands in the breeding season. No geese were seen on this mountain; but many small birds appeared as high up as the mamane trees. They also saw hawks, which, by a perversion of language, are called “crows.”

They then went towards “Ned’s House” (now deserted), and took the path leading in a southeast direction, along the margin of the woods. This was the route that Douglass followed, when he left Ned’s House, on the morning of his death. In about three quarters of an hour, they arrived at the pits; in one of which he was found dead. They are situated in an open clearing, in the centre of which is a low marshy spot, sometimes containing water, which the cattle come in search of. ...These pits are covered with raspberry and other fragile bushes; which are covered again with soil, and the hoofs of cattle imprinted on them, to deceive...

The locality of these pits is in a dell, with banks sloping on both sides; the one to the northwest is about twenty feet high, while that to the southeast is about thirty feet. On each side, both above and below, thickets close the dell.

These pits are about seven or eight feet long, and four feet wide, and are walled up; they are placed broadside to the water.

There were many circumstances attendant upon the death of Douglass, leading to the suspicion that he had been murdered by Ned, at whose house he had breakfasted. The general character of Ned gave rise to a feeling that such was the fact, he having been a runaway convict from New South Wales. It seems somewhat singular that Mr. Douglass should have laid down his bundle and returned after passing the pits; and it is remarkable too that his servant, who had parted from him the same morning, should also have perished.

Ned’s conduct afterwards was not a little suspicious, for he mentioned he had warned Mr. Douglass against the dangers of these pits, and had accompanied him to within a short distance of them. So strong were the suspicions against him, that a post-mortem examination took place by Drs. Judd and Rooke; but nothing could be elicited, for all the woulds were such as Mr. Douglass might

have received from the animal. Few deaths could be more awful than that which he is supposed to have suffered.

Bullock-hunting seems to partake somewhat of the dangers of the chase of wild beasts, and has much of its attraction. Many stories are related of natives having been tossed, gored, and carried on the animal's horns for hours, and from these reports the natives are easily alarmed with the appearance even of a half-tamed animal, as we had abundant reason to observe on our way up Mauna Loa.

A story was related of a native, who, having prepared a pit, succeeded in entrapping a large bull, but became so excited at his success, that he slipped and fell in himself; however, being amused with a knife, he succeeded in killing the animal; when discovered both were dead.

Mr. Castle had three ribs broken, and Ragsdale, our old guide, a leg fractured, while hunting, and many other rencontres, partaking too much of the marvelous to be repeated here, were told me.

They encamped for the night in an old bark hut, in the line of woods. The 16th was rainy, but they continued their way down the mountain in a north-northeast direction, passing through the woods. The path was wretched, and full of mud and mire. The last part of the way the trees became more numerous, and consisted, besides the *ohea* and *koa*, of the *Ilex*, *Aralia*, *Myoporum* (false sandalwood), several *Compositae*, a *Silene*, and four or five species of *Lobelias*, with handsome flowers, mostly blue. Lower down, near a deserted hut, they unexpectedly found a mamane tree, which they were told had been painted for the purpose of enticing the birds.

From scrambling over roots and through mire, they were much fatigued before they reached Puahai [Puuohai]. This village contains a few straggling houses on the table-land; it is distant about two miles from the sea and twenty-five miles to the northwest of Hilo. The natives here appeared to be much more primitive than they were in other places, and had had but little intercourse with strangers. It was with some difficulty that provisions could be procured; a dollar was demanded for a turkey, and four needles for a chicken. No more than three of the latter could be found in the village. Their guide met with considerable delay in getting the necessary quantity to supply the party. At Puahai they were permitted to occupy the school-house, and remained over Sunday... (Wilkes, 1970:199-206)

#### **5.1.2.4 The Mauna Loa Eruption (1843)**

Titus Coan, who replaced Joseph Goodrich at the Hilo mission station, traveled across the mountain lands between Mauna Kea and Mauna Loa in 1843 and visited the Mauna Loa eruption vent. The following letter provides a description of the region:

**April 5, 1843**

**Hilo, Hawaii**

**Titus Coan; to Bro. Armstrong;**

...I am touring in these days & have little time to write. Just returned from Hilo & am off day after tomorrow to Puna, if the Lord will.

I have also been to Mauna Loa with Bro. Paris, & explored the new eruption. We went up through the forest, directly in rear of our station, and came out at the foot of M. Kea. The eruption has flowed from the summit of M. Loa to base of M. Kea, where it separates into two broad streams, one flowing towards Waimea & the other towards Hilo. Another great stream has flowed along the base of M. Loa towards Hualalai in Kona. These streams are still flowing, & their progress is 25 or 30 miles from the crater on the top of the Mt. The quantity of lava, is immense. Many miles wide and the whole scene is wonderful. We followed the stream to the top of the Mt. through cold, snow etc. etc. Two great active craters in close contiguity – near the summit. Lava does not flow over these craters now, but is conveyed down the side of the mountain in a subterranean duct from 50 to 100 feet below the surface at the swift rate of 15 or 20 miles an hour. We saw this awful river of fire by looking down through openings in the surface. We also crossed & redressed it several times & travelled up the mountain directly over it for a long distance, like ascending a river on the ice. Peril exposure & indescribable fatigue attended our way, and I go slip-shod, carrying the mark of the journey in my body to this day, 3 weeks later. But what we saw amply renewed us for all & to God be ascribed the promise of our safe return. I have only hinted at the matter here. Cannot describe it now... (Coan in A.B.C.F.M. Collection:2-4)

#### **5.1.2.5 Ascent of Mauna Kea and Travel Across the Mountain Lands (1845-1848)**

In 1845 and 1848, Titus Coan again wrote to the mission headquarters, providing them with detailed descriptions of travel to Mauna Kea on his way from Waimea to Hilo and the nature of the landscape on the adjoining mountain lands. Through his accounts of the views of Waimea, Kawaihae, Hualalai, and Hilo Bay, Coan seems to have been truly inspired by the natural beauty of the land, the grandeur of the scene from the summit of Mauna Kea, and he

provided significant descriptions of the forests, travel through the various regions of the mountain, and the growing presence of wild cattle.

**April 17, 1845**

**Hilo Sand. Islands**

**Titus Coan; to Rev. D. Greene;**

Yours of Apr. 29, 1844 is before me... My last report to your Committee, was embodied in a letter of 4 sheets, addressed to yourself, & dated May 3, 1844. An unual length of time lapsed between my last & the present date; but I have been so fully & pressingly occupied during the year as hardly to mark "the flight of time," and it is only by a recurrence of dates, that I can be persuaded that so long time has past since I last wrote you...

During the last 10 months I have made six tours among the people of my charge, all of which have been blessed, & some of them richly so. My former practice of frequently calling the role of the Chh. & of enquiring after each individual member, has been continued with profit. Besides these tours I have visited the stations of Waimea & Kohala in company with Brothers Paris & Hunt, who, with their families spent a few weeks with us at Hilo. On returning from this tour we passed over the summit of Mauna Kea, making a straight line from Waimea to Hilo. Our first day from Waimea brought us 2/3 of the way up the mountain, where we slept in a gorge among the rocks, the precipices sheltering us from the winds. On our way we saw numerous wild cattle roaming on the sides of the mt. We also, in addition to the bones which lay every where bleaching in the sun, saw many dead carcasses of bullocks which had fallen & perished in the ravines while searching for water among the gorges of the mountain. These carcasses were strewed all the way from the foot of the mt. to its snow clad summit, far from the region of vegetable or animal life. On the second day we reached the summit & surveyed the sublime & boundless prospects which opened around us. At our feet lay the high & broad plain of Waimea sprinkled with its plantations & villas. Just rear of this, rose the green wooded mountains of Kohala, & still farther north & over topping the latter swelled the dark & lofty dome of East Maui. On the west slept the quiet waters of Kawaihae Bay, and while we were looking down upon them, a little schooner spread her white wings to the zephyr & moved off like a swam upon an unruffled lake. On the south the towering summit of Mauna Loa, rose in majestic & peerless grandeur mantled at its base in a drapery of fleecy clouds, from whose undulating & convolving folds, it lifted its lofty elongated, curvated & ebonised summit, like a vast whale from the bosom of the deep. A little to the right of this, & like a stripling beside his hoary sire,

stood Hualalai, the loftiest mountain of Kona. On the east, & just under our feet, slept the quiet waters of Hilo Bay, with the little mirroring lakes, the silvery creeks & the dashing cascades, sparkling like so many gems amidst the dark, the soft, the bright green foliage, & adding fresh charms to the inimitable beauties of this brilliant landscape. Encircling us on every side, as with a silver girdle, were the wide waters of the ill-suitable sea.

Upon these lofty heights, under the vaulted heavens & amidst these awful & eternal solitude, unbroken except by the moaning winds, the howling tempest or the roaring thunder, when the cloudy chariots of Jehovah roll sublimely over these mountain tops. I say, here we stood, & gazed upon the awful, the sublime & the over-powering grandeurs above, beneath & around us. Here we stood, and amidst these inspiring scenes, contemplated the wonders of that skill & the majesty of that power whose right hand spanned & garnished the heavens, laid the foundations of the earth, reared up the everlasting mountains & measured the waters of the great deep. Here we stood, amidst these eternal snows & these everlasting solitudes, untrampled by the foot of any living thing, & unbroken by the voice of song, & surveyed the wondrous works of Him who is mighty in Power, and felt how impotent, how insignificant is man.

But an oppressive headache, a labored respiration & an almost insupportable languor, arising from the great rarity of the atmosphere, admonished us to seek a lower place among the works of our Creator, & reminded us of the folly & danger of attempting to climb too giddy heights, and also of the calm, severe joy, & the true wisdom of the lowly minded.

The summit & sides of this mountain are thickly studded with conical hills from 100 to 600 feet elevation. On the sides of the mountain, below the line of snow, these hills are covered with vegetation & animated with wild cattle & birds. On the summit they are naked & composed of scoria, sand, pumice stone & earthy matter, mostly of a red color, & under the rays of a morning sun appearing as if highly ignifed. Besides the various volcanic productions of the mountain, such as scoria, slog, ashes, cinders, sand, pumic stone, earth, vitrifications &c. &c., we also saw considerable quantities of primitive rock on its very summit.

At evening we descended a little distance on the eastern side of the mountain & slept upon the rocks in a ravine, once occupied for the same purpose by the enterprising & lamented Douglass. Here we found a little wall built by Mr. D. to break the wind, & also a quantity of wood which had been carried to this height of the mt. for his use, & which was a cheering sight to us, as it enabled

us to keep up a good fire all night, which added greatly to our comfort in this region of bitter cold. The next morning we had a splendid view of the valley of Hilo, covered at first with fleecy clouds, & appearing like a sea of foam, which, as the sun rose upon it, glowed with prismatic tints. Near the base of the mountain we regaled ourselves with delicious strawberries, ohelos, & what I had not before seen since leaving America, genuine N. England whortleberries. Leaving the mountain, we entered the forest, & following the bed of the stream by which Bro. Paris & myself ascended to view the great eruption of Mauna Loa in 1843, the next day at 8 P.M. we arrived safely at Hilo... (Coan in A.B.C.F.M. Collection, 1845:31-34)

### **March 15, 1848**

#### **Hilo Sand. Islands**

#### **Titus Coan; to Rev. R. Anderson;**

...In my last I gave you some account of the recent volcanic eruption on Mauna Loa. The present communication, is designed as a continuation of the same subject; as a subsequent visit to the mountain, & a pretty thorough exploration of the scene described, will furnish some additional facts of interest. On Mond. the 6th Bro. Paris & myself, set off for the mountain at 3 P.M. We did not take the usual rout, taken by Capt. Wilkes & others, via Kilauea, but bent our course directly for the stream of lava, as it was seen flowing on the high plains between Mauna Loa & Mauna Kea. Our general course was W.S.W. and our path lay through a mighty forest, so interwoven with jungle as to render it impenetrable in most places.

As the season was peculiarly dry we chose for our path the rock bed of a river, called the river of destruction [Wailuku], from the quantity & the fearful rage of its water, during seasons of great rain. The stream was now so low that we could pass up its bed & under its banks by leaping from rock to rock, frequently crossing from side to side, & now & then, ascending its banks & beating our way for a short distance through the brush wood, to avoid deep water, perpendicular precipices, or the accumulated masses of drift wood, consisting often of majestic trees, which had been torn violently from their places, & with roots, trunk & branches, carried down the stream to some narrow pass, where their progress was arrested by the approaching banks, by vast rocks or by a sudden bend in the stream, and thus leaving them as impregnable *chevaunx defrise* against the traveller. On the first day of our journey we advanced but 7 or 8 miles as we started near evening and slept in the out skirts of the forest.

On the second day we entered the bed of the stream and pursued our romantic course along its serpentine and rocky channel & between its precipitous & often overhanging banks which sometimes presented frowning battlements of dark, naked lava, and sometimes retreated in graceful hopes of luxuriant soil, adorned with trees, shrubs, vines, & parasitical plants, or spread with a splendid carpet of soft velvet moss. In this lofty & deep forest, & amidst these everlasting solitudes, unbroken except by the gurgling of the watered stream the dashing of the cascade, or the mighty rush & the deep thunder note of the mountain torrent, and I should add, by the enchanting notes of the ten thousand songsters whose jocund strains, seemed to fill every leaf, & shrub & tree with animated joy. I say, in these deep & spirit soothing solitudes, we pursued our quiet way, till the out stretching shades of evening admonished us, to prepare for repose. Our whole party consists of nine, viz. 7 natives, Mr. Paris & myself. We halted, &, on a little terrace or niche in the bank of the river, we soon formed a boothe of branches & ferns, where, after partaking of our welcome repeat and blessing Him who is ever present, ever felt...

...Early the next morning which was Wednesday, we pursued our way up the stream, and at noon ourselves fairly out of the forest with the lofty summit of Mauna Kea, rising in hoary grandure before us. We were now at its base, & in the high open country occupied by herds of wild cattle. We now went our course S.S.W. over a beautiful rolling country, sprinkled here and there with clumps of low, spreading trees, which looked like orchards in the distance. Our way was along the upper skirts of the forest, having Mauna Kea, with its numerous peaks and lateral craters, on our right. At evening we came in full view of Mauna Loa, bearing S. by W. from us. We pitched our tent under an ancient crater, 400 feet high & now covered with trees & grass. Here we had a splendid view of the great terminal crater on the summit of the mountain, about 25 miles distant, and also, of the vast flood of lava which had flowed down the northern side of the mountain to the plains below, some part of which, lay burning at our feet, say distant 4 or 5 miles.

We were now 7000 or 8000 feet above the level of the sea, and, as we stood upon these elevated hills, we could see the dark clouds gather & the lightening blaze below us, while the deep toned thunder rolled at our feet. At the same time a storm of hail spread along the shore, & fell upon the station at Hilo. This was the first hail seen at our station since we have been at the islands. The same evening, at twilight a smart shock of an earthquake, which lasted 30 seconds, added to the sublimity of the scenes around us, while a blazing comet hung over us in the vaulted sky. As darkness gathered around, the lucid fires

of the volcano began to glow with fervid heat, & to gleam upon us, from the foot of Mauna Kea, over all the plain between the two mountains, and up the side of Mauna Loa to its snow covered summit exhibiting the appearance of vast and innumerable furnaces, glowing with intense vehemence, & throwing out a terrible radiance around them.

During the night we had thunder & lightening, and in the morning both mountains, were beautifully mantled in snow, from their summits nearly to their bases. It was now Thursday, and we left our encampment & proceeded 3 or 4 miles toward the new stream of lava, and again pitched our tent on the side of an old crater 200 feet high, & covered with trees & shrubbery to its summits but surrounded at its base by a vast field of naked scoria of the most jagged character, the deposit of some former eruption which had flowed around the little fertile hill, & left it like an island in the ocean, or like an oasis in the desert. Leaving our natives, to prepare our encampment & to collect fuel, water &c. we set off for the nearest stream of active lava, distant about 2 miles. Our road was over through jagged lava, thrown up in tumultuous confusion, but we soon made our way to the molten stream, & thrusting our steps into the viscid mass, took out & cooled specimens which we brought home with us.

You will understand that we were now on the great plain between Mauna Loa & Mauna Kea, about 7000 feet above the level of the sea, not having yet commenced the direct ascent of the mountain. On this plain, between the bases of the two mountains, we spent the day in traversing, & surveying the immense streams of fresh scoria & slag which lay smouldering in wild confusion farther than the eye could reach. Some cooled, some half cooled, & some still in a state of igneous fusion. The scoriform masses, which formed the larger portion of the flowings, lay piled in mounds, & extended in high ridges of from 30 to 60 feet elevation above the subterranean on which it rested, & forming a barrier so indescribably jagged & rough as to be nearly intraversable. It seems as if this vast sea of earthy & rocky fusion, had been suddenly solidified while in a state of the most tumultuous action. Besides these high & broad ridges of scoria, there were parallel streams of slag, solidified on the top like ice on a river. This was smooth, of lustrous black, & in visuscent state, forming the superincumbent crust to a river which rolled beneath, and which betrayed its burning course at innumerable cracks & seams & blow holes in which their fiery fluid was seen, or through which it was vomited in gory jets. We spent the whole day in exploring this vast sea of lava, and were astonished at its immense area. In rolling down the side of the mountain, one broad stream, had that off in a westerday direction towards Kona. Another might river had

flowed northward till intercepted by the base of Mauna Kea, when it divided into two branches, one flowing in a north west direction towards the plains of Waimea, & the other arm, stretching N.E. & flowing towards Hilo. These three main branches united, would probably form a river 5 or 6 miles broad, & the most extended of them cannot I think, have progressed less than 25 or 30 miles. they are all still flowing, but their progress, at present, is slow, as they are on a vast plain, and as their velocity is retarded by fissures & caverns & by fields of old scoria which covers those high regions... (Coan in A.B.C.F.M. Collection, 1848:1-5)

### **5.1.2.6 The New Mountain Road Being Constructed in 1849-1850**

In 1849, Coan informed the mission headquarters that improvement on roads of the island were being made, including construction on a road that would more directly connect Hilo to Kona.

**August 4, 1849**

**Hilo, Hawaii**

**Titus Coan; to Rev. Anderson;**

...On my last tour I was delighted to see the improvements recently made in the roads. In Hilo, steep, rugged & almost impassable precipices, have been cut into zigzag roads that may be safely traveled on horse back. The sides of nearly all the ravines in the district (70 or 80) are thus wrought and the comfort of travelling is thus greatly increased. But bridges are yet wanting in times of great rain, the rivers still rush madly on defying in the passage of horses and challenging man to attempt it at his peril.

Roads have also been constructed through some parts of Puna. When completed as is contemplated the whole line of villages on the shore may be visited on horse back, a thing which has never yet attempted to do. Other roads are being opened in different parts of the island. Besides these above labors, a grand road is contemplated across and commenced, leading directly from Kona on the west, to Hilo on the east side of the island. On passing over the high regions between Mauna Kea and Mauna Loa, a distance of about one hundred miles. When these public improvements will be completed we cannot predict but we rejoice to see them commence with a good degree of zeal & energy.

A beautiful volcanic eruption took place in April in one of the deep craters on the summit of Mauna Loa. For a long time it rose from the top of the mountain, "a pillar of cloud by day & a pillar of fire by night." From its great depth &

amplitude of the crater the fumes never rose above its rim and consequently did not flow off. It is not nearly extinct. Old Kilauea also, has been restive of late. For several months the fire goddess slumbered but it was only to renew her strength. There has been times during the past months when her awful throes shook the earth; when her burning mouth & nostrils vomited forth fiery streams; when her deep mutterings & infernal hissings, startled the passing traveler, & when her explosive thunders, were heard at the distance of 15 miles...

August 7th. The King which has been at Hilo several days. They have been touring on the island for a number of weeks, have visited Kona & Kau, Kilauea & the summit of Mauna Loa, & they will spend two or three weeks at Hilo. A large concourse of people assembled today & were addressed by the King, the Minister of finance & the governor of Hawaii. Admirals Tromeline & Suit were present on the occasion, attended by his whole Band of musicians who entertained the company with "God save the King," "Hail Columbia," and a number of such airs... (Coan in A.B.C.F.M. Collection, 1849:11-14)

### **May 6, 1850**

#### **Hilo Sand. Isl.**

##### **T. Coan; to R. Anderson;**

...It is encouraging to witness the progress which is being made in the construction of roads throughout the islands. A high way, is now being brought from Kailua to Hilo across the centre of the island, the greatest elevation of which will be some 10000 feet. A horse road, encircling the island is also being constructed near the shore.

Besides these, local & shorter roads, are being made or improved at many points in and around villages etc. Comparatively easy roads have been cut, zigzagging, or on the principle of includes places united by angles, up and down nearly all the precipitous banks of our gorges in Hilo. This work has greatly lessened the toil & the danger of travellers in passing through our district. The improvement of the old, tortuous, rough, precipitous, slippery, exhausting & dangerous foot paths, is truly great & cheering. But the rivers! These still remain. And they often rush, & roar, and rage & leap their awful precipices as fearfully as ever. Four bridges – all which had been constructed in Hilo – were totally swept away by a recent freshet with their abutments & all that pertained to them. This is an unpropitious beginning. Whether any but suspension bridges, can be made to stand over our main streams, is a question... (Coan in A.B.C.F.M. Collection, 1850:6-7)

### **5.1.2.7 The Mountain Lands Visited During the Eruption of 1852**

In 1852, another eruption broke out on Mauna Loa. Titus Coan visited the lava flow and eruption site and provided graphic descriptions of the activities and changes in the landscape resulting from the lava flows. Coan's accounts are of particular interest as he described the route taken to the uplands and observed that he was in the company of several native guides, whom he named. The foremost guide, Kehau, was an old bird catcher and bullock hunter who frequently traveled in the uplands. Coan also described the plateau lands between Mauna Kea and Mauna Loa and experiences with bullocks on the trail.

**March 3, 1852**

**Hilo, Hawaii**

**Titus Coan; to Rev. R. Anderson;**

You will be patient with my repeated communications. On the 30th of Jan. I wrote you 2 sheets & on the 12th of Feb. 2 sheets more.

Another theme will accompany this.

The trumpet again calls our attention to the mountains.

At ½ past 3 on the morning of the 17th Ult. a small beacon light was discovered on the summit of Mauna Loa. At first it appeared like a solitary star, resting on the apex of the Mt. In a few minutes its light increased and shown like a rising moon. Seamen keeping watch on deck in our harbor, exclaimed, "What is that? The moon is rising in the west!" In 15 minutes the problem was solved. A flood of fire burst out of the mountain & soon began to flow in a brilliant current down its northern slope from the same points in the same line with the great eruption which I visited in 1843. In a short time immense columns of burning fusion were thrown up apparently 300 or 400 feet heavenward, flooding the summit of the mountain with light and gliding the firmament with its radiance. Streams of light came pouring down the Mt. flashing through our windows & lighting up our apartments, so that we could almost see to read fine print. When we first awoke so dazzling was the glare on our windows, that we supposed some building near us must be on fire, but as the light shined directly into our dormitory & upon our couch we soon perceived that it proceeded from a volcanic eruption. In two hours the molten stream had rolled down the side of the mountain, as we judged about 15 miles. The eruption was one of terrible activity & surpassing splendor. But it was short, in about 24 hours all traced of it seemed extinguished.

While it was in action, I felt intense desire to visit it & was actually making arrangements to that effect but when it stopped all my interest left with it.

Our slumbers however were soon broke. At day break on the 20th were again startled with a rapid eruption bursting out laterally about half way down the mountain, & exactly facing Hilo, so that we could again see it through the windows of our dormitory. This crater seemed equally active with one on the summit, and in a short time we perceived the molten river flowing from its orifice direct towards Hilo.

The action became more & more fierce from hour to hour; floods of molten lava were poured out of the orifice in the side of the mountain, & burning river soon reached the woods at its base, a distance some 20 miles. Clouds of smoke ascended & hung like a vast canopy over the mountain, or rolled off upon the wings of the wind. These clouds were murky blue, white, purple or scarlet as they were more or less illuminated from the fiery abyss below. Sometimes they assumed the figure and the hue of a burning mountain inverted with its apex pointing to the orifice over which it hung; & sometimes after shooting up several degrees vertical the illuminated pillar made a graceful curve & swept off like the tail of a comet farther than the eye could reach. The whole atmosphere of Hilo assumed a lucid appearance, & the sun's rays fell upon us with a yellow silky light. Clouds of smoke covered over the ocean, carrying with them ashes, cinders, etc. which fell upon the decks of ships approaching our coast. Ashes & filamentous vitrifications, called "Pele's Hair" fell thick in our streets & upon the roofs of our houses; while I write the atmosphere is in the same sallow & dingy state, & every object looks pale & sickly. As the vibescent filaments are falling around us, & our children & the natives are gathering them up.

So soon as this second eruption broke out I determined to visit it. Accordingly, arrangements having been made & Dr. Wetmore having consented to go with me, we set out at 5 P.M. on the 23rd of Feb. and went up to a little village 5 miles distant, & in the outskirts of the great forest which separates Hilo from the mountains. This we did in order to take an early start on the next morning. Our party consisted of Dr. W. & myself, and 4 natives, viz. Kekai (the Sea), Makuaole (no parent), Hau (Dew, snow, iron, or robbery) & Puaa (swine) alias Keakuamanaole (God not Almighty). Kehau was an old fowler in the woods & bullock hunter in the mountains. Accordingly he was our guide. We took a track different from the one we pursued in 1843 and one which I never travelled before. It was through a dark and dense forest of 30 miles breadth

and so completely intertwined with ferns, vines, brambles, and every species of tropical jungle that no animal but now had ever attempted to penetrate it & he only by cutting & beating his way, yard by yard with axes, long knives & clubs. In former years a winding Indian trail had been beaten through this thicket, but by 12 or 15 years neglect it had grown up with jungle so that most traces of the old path were nearly obliterated.

However, early on the morning of the 24th we plunged into the thicket with sword knife, hatchet, clubs etc. and with incredible labor & fatigue we beat our way about 12 miles during the day, or about one mile an hour. Though wearied & retarded we were nevertheless delighted with the variety & luxuriance of vegetable life in these wild regions. Many of the trees were enormous, & the shrubs & plants were of gigantic size among their species. One fern measured nine feet in circumference & we judged it to be 40 feet high & holding its size remarkably to the height of 30 feet. But we must beat the bush & not stop to describe it. At night we made a little vault of bushes & ferns & slept; the roar of the distant & now invisible volcano constantly sounding in our ears.

On the 25th we were early on our feet beating our way through jungle & dell, & amidst by a break all distant prospect being shut out by the lofty & dense forest.

At noon we joined a narrow elevated ridge from which we could overlook a portion of the woods, & to our surprise saw that the igneous river from the Mt. had already swept half through the forest towards Hilo, & was now exactly opposite us on the left, distant about 6 miles. The fiery food was rolling steadily on sweeping the forest before it & sending up volume after volume of lucid smoke. Like an immense fiery serpent it moved relentlessly along its sinuous way, overcoming all obstacles & devouring all forms of life in its track. We halted – deliberated, Dr. W. determined to return immediately to the station, chiefly on account of Mrs. W. who was in feeble health... Taking one native with him, & leaving 3 to proceed with me, the Dr. returned, while I pushed my way through the thicket, sometimes mounting a jagged & crested ridge whose top was not wider than a horses back, & again plunging into a deep dell or dark gorge into which day light could hardly penetrate. At night we again slept in the forest but on an eminence where we could distinctly see the light of the volcano & listen to its awful roar and startling detonations.

At noon on the 26th we emerged from the forest into a more open country some 20 miles from the proper base of Mauna Loa; but the whole country was engulfed in fog so that no object could be seen at the distance of a few rods. We

moved on however toward the Mt. until evening & encamped on a rough bushy hill, where our guide said the mountains might be seen in clear weather. A little before sundown the fog rolled off & both Mauna Kea & Mauna Loa stood out in bold and sublime grandeur. The former in a heavy mantle nearly to its base, & the latter vomiting our floods of fiery fusion with noises which might shake an iron nerve. All night long we watched the fantastic play of these fires & listened to these unearthly sounds with the exception of an occasional doze which nature would have. We were now about 20 miles from the crater.

We left our mountain abode early on the 27th, determined if possible to reach the seat of the eruption on that day. Taking the pillar of fire & smoke as our mark, & having the great river of fire on our left, we pushed onward...

[Having visited the eruption site, Coan then reported] At day break on the 28th we retraced our steps down the Mt. rejoined the two men we had left behind, & by a forced march, reached the confines of the forest at 4 P.M. It was Saturday, where we determined to rest on the Sabbath according to the commandment there being an abundance of wood & water in this place.

There are vast rough plains lying around the bases of these mountains, traversed only by herds of wild cattle & dogs. Tens of thousands of [illegible] dotted by the foot prints & checkered with the paths of these cattle. As we passed over the plains we started up numerous droves of these bullocks, numbering from 5 to 30 in a drove. On our return on Saturday we were overtaken in a thick fog; & coming suddenly upon a herd, as they were lying in a sheltered place under the lee of a forest, they all started & flew before us except one enormous, black bull which roared like a lion from his lair, roared upon us like a strong bull of Bashan, shook his head in defiance & stood firm in our path. Even our old bullock hunters were intimidated at the bold front, the lofty horns & the determined aspect of this lord of the hills. We approached within pistol shot of the monster, but he remained firm though alone, every bullock of the herd having fled. We had no arms, & what could we do? To flee would provoke pursuit. At length we armed ourselves with stones and advancing boldly in [illegible], we shouted upon him & let go our volley of stones. Upon this he turned, slowly trotted off about 2 rods, & then faced boldly about with a defiant look, as if determined to dispute every inch of ground. We moved steadily forward, repeated our shout & assault, he again retreated two or three rods, faced about, took up his position & again offered battle. This he did three times; when he, with a low grunt turned, trotted slowly before us in

our path, & at length was lost in the fog... (Coan in A.B.C.F.M. Collection, 1852:1-7)

**5.1.2.8 *Kalai'eha-Humu'ula-Ka'ohē and the Mauna Kea Mountain Lands described in Letters of Charles De Varigny (1855-1868)***

Charles De Varigny, Secretary of the French Consulate, resided in Hawai'i for 14 years (1855–1868) and made at least two trips to Mauna Kea. On November 18, 1857, De Varigny passed through Humu'ula on the Launai'a side of Mauna Kea; upon reaching the 7,000 foot elevation, he reported the following:

Here the atmosphere of these uplands plateaus has an exception power to carry the sound of the human voice, making ordinary tones audible a mile away; but there are no traces of inhabitants. Only some great wild cattle, recognizable by their curly hair, trouble the silence of these solitudes when during their wanderings a dead branch is broken... Halemakule [the native guide] was struck by the unfortunate idea of testing the effects of his Hawaiian chanting as it reverberated among the mountain echoes.

Still one more point on which we failed to agree. We preferred the song of the native birds to his slow, monotonous melopoeia... (De Varigny in Korn, 1981:86)

De Varigny later wrote about arrangements made between himself and Jack Purdy, known to be very knowledgeable about the trails and mountain region of Mauna Kea, for a trip to the summit from Kalai'eha. The following excerpts from De Varigny's narratives describe the journey and offer an explanation of the depletion of nēnē population and high numbers of introduced feral animals that roamed the mountain:

...As dawn was breaking, we left for Kalaieha, situated between Mauna Kea and Mauna Loa. From that approach the ascent of the mountain presented less difficulty. Our horses were fresh, the plain was level...

The cloudless sky and the clear, transparent atmosphere made objects appear so close that our undertaking seemed an excursion for a party of children... At five o'clock in the evening we reached Kalaieha, where we were planning to camp. Kalaieha is neither a town, nor a village, nor even a huddled corral of grass huts. It is an immense plain which sprawls between two mountains. At certain periods of the year, especially in July and August the plain abounds in wild geese attracted by the ohele, small red berries with a rather insipid flavor. The shrub bearing this fruit is more plentiful at Kalaieha than anywhere else.

More over, during the period of our excursion, sportsmen and amateur hunters looking for game pay frequent visits to Kalaieha for the pleasure of shooting.

Unfortunately, the wild geese begin to spoil very quickly and cannot stand being shipped to Honolulu... The plain was entirely deserted and the bushes were stripped of their fruits. In compensation, though the geese was missing, the wild bullocks, boards, and stray dogs who had reverted to a state of nature were present in hoards. The place swarmed with wild boards... (De Varigny in Korn, 1981:90-91)

De Varigny also provided a significant account of the vegetation and environment at higher elevations:

...As we continued to climb, the trees became more scarce, more thin and stunted, until finally they ceased altogether. Bushes took their place, at first vigorous and close-growing, later puny and sparse. The ground was carpeted with strawberry plants covered with their fruit, which our horses crushed at every step, sending up a perfume that reminded us of Europe. Grass became rare and short; after it appeared the *Ranunculi* [*Ranunculus hawaiiensis*, the native buttercup, makou]. Our horses sank down in to the cindery soil or stumbled upon small stones that rolled under and behind them... We climbed and continued to climb. At 10,000 feet we began to note the first tufts of *Ensis argentea* [‘Āhinahina, the silversword (*Argyroxiphium sandwicensis*)], a last but marvelously hardy vestige of plant life. This spectacular creature which I have never observed elsewhere except on the high mountain tops of Hawaii, is a veritable miracle. Clinging to the ground by its very deep roots, in form it resembles the aloes. Its sword-shape leaves are whitish gray, covered with light down. They glitter brilliantly as they catch the rays of the sun. From the center rises a stalk reaching as much as ten feet high, which bears a silky plume similar to that of sugar cane during its blossoming period.

At last we sight snow. The summit seems to retreat before us, to escape all our efforts. But we are climbing, always climbing, and snowfield follows upon snowfield. At last we reach the final plateau. The glare of the sun reflected on that great white expanse dazzles us. The solitude and silence – how deathlike everything is! No sound is heard, no living creature stirs... (De Varigny in Korn, 1981:91-93)

The party departed from Kalai'eha at 5 a.m. and arrived at the summit plateau at 2 p.m. After eating lunch and resting a couple of hours, De Varigny, Purdy and party returned to Kalai'eha (De Varigny in Korn, 1981:93).

### **5.1.2.9 A Trip to the Mountain Lands of Hawai'i (1859)**

*The Pacific Commercial Advertiser* published a series of letters in 1859, penned by an individual who wrote under the pen name of "Hualalai." Hualalai described the mountain lands of Hawai'i, the work of bullock hunters, and his journey across the slopes of Hualālai Mountain, across the 1859 lava flow of Mauna Loa, and then across the plateau lands toward Waiki'i. The party then traveled to and camped at Pōhakuloa, then continued on to Kalai'eha. The accounts of this journey past Ke Ahu a 'Umi, Waiki'i, Pōhakuloa Gulch and Waiki'i describe such areas related to the project area. The first two of Hualalai's narratives provide an early description of the Kalai'eha environs and the party's subsequent attempted trip to the summit of Mauna Kea (thwarted by a heavy fog); the third letter provided an eyewitness account of bullock hunting, the round-up of wild cattle and pigs, and the hunter's camp on the slopes of Mauna Kea. The following narratives are excerpted from Hualalai's accounts:

#### ***The Pacific Commercial Advertiser***

#### **July 21, 1859**

Mr. Editor – Having just returned from a trip to Mauna Kea, it has occurred to me that in this dull season of the year, a short account of our jaunt might perhaps prove sufficiently interesting to find a place in your journal.

Our party consisted of six, on horseback, with blankets and guns, followed by three natives with pack bullocks, carrying a canvas tent and the provisions and other necessary outfits for a ten days' absence from the haunts of civilization. We were also provided with a cook, in the person of a dapper little Chinaman, who was by no means an unnecessary part of the inventory. One of our party, whom I shall call "The Mountain" – he being an old ranger among the wilds of Hawaii and fond of relating his adventures – started early on Monday morning, June 27, for the lava flow, in order to ascertain whether it was passable for animals, while the rest were to follow on Thursday... At 8 o'clock on Tuesday morning, we were aroused by "The Captain," and saddling up in the dark, cold morning, we were well into the woods which extend from the base of Hualalai before daylight...

Just before emerging into the open plain we passed a number of young sandalwood trees, with their oval, bright-green leaves, standing amongst a young growth of koa, while here and there were seen the charred remains of

huge trees lying scattered about. In reply to our inquiries, “The Captain” said, a number of years ago, when sandalwood was in great demand and the chiefs forced the people to work like slaves in gathering it, here it grew very abundantly. The people at last rid themselves of the burden by setting fire to the forest, which was mostly consumed – sandalwood and all. These half burned trunks were once stately koa trees. The old story of the goose that lay the golden egg, thought I. About nine o’clock, we got sight of the smoke rising through the still air in a perpendicular column from the crater, whence issued the late eruption of Mauna Loa. Pele had apparently exhausted her materials, or was resting herself, and the comparatively small show of smoke led us to argue that there was but a small supply of fire.

At noon, after a long ride over a sandy plan, barren of everything but stunted ohelos, and past the old heiau or heathen temple called “Ke Ahu a Umi,” we came to Waikapee, where we halted and lunched... After resting our animals an hour, we started again and soon came up with the late flow or rather flows, for there have been two... We crossed the flow in a northeast direction instead of going straight over, and thus we traveled five miles over the flow instead of three, which is about its breadth... It was quite sundown when we reached the farther edge of the flow and touched again what we felt was terra firma. Here we camped for the night on the old pahoehoe, - perhaps hundreds of years old, - and were fortunate in finding in a little hollow plenty of pili grass for our animals and wood for a fire. Scarcely had we halted, when the “honk” of a goose was heard and we shot three fat fellows, which made us a delicious supper. Building up a rousing fire, more for the cheering light than for warmth, we spread blankets on the ground and with out saddles for pillows; slept soundly till daylight...

### **July 28, 1859**

...The next day was a hard day’s travel for our animals, over about fifteen miles of clinkers, until we came to the rolling hills above Puakou [being in the Waikii vicinity]. A worse piece of road it would be hard to imagine. Fancy that distance of country terribly cut up into ravines and gullies, and the only path or semblance of a road made of equal parts of broken bottles and slag from a blacksmith’s forge, and you will get some idea of the plain between Mauna Loa and Mauna Kea. All these beds of clinkers – for we passed four of five – have come from the former mountain, while Mauna Kea appears to have discharged scarcely anything, latterly, but sand and ashes. On reaching the open ground we found our horses were much cut up and bleeding about the feet, while one bullock was so exhausted and worn down that we were obliged to take off his

load and leave him to shift for himself. Pushing along, we arrived at sundown at our camping ground in “the big gulch” [Pōhakuloa] among the hills which form the base of Mauna Kea. This was a beautiful spot, the grass growing luxuriantly in the valleys, and the ravines being lined with mamani trees. Wild hogs were plentiful; we disturbed a drove of forty or fifty as we entered the gulch, and they went scampering up the mountain. Cattle too, were seen in drove, but very shy. Unfortunately, however, there was no water in the gulch, and, after stopping one night, we started on Thursday morning for Kalaieha, an elevated point on the east side of Mauna Kea, where report said that water and game were to be found in plenty.

From the “big gulch” to Kalaieha, a distance of some fifteen or twenty miles, the road lays over a beautiful rolling country, made up of wash from the conical hills which so frequently occur along the base of Mauna Kea, with here and there patches of sand. This would be a magnificent country for sheep farms, or for wheat growing, but for one drawback – the want of water. There is ample evidence, however, in the numerous water courses with which the face of the country is seamed, that at times there is “too much of water.” Huge boulders are seen scattered about, brought from the hills and carried far out on the plains by the streams; but at the time of our visit not a drop of water could be found in any of the gulches or ravins. We reached our camping ground [Kalai‘eha] a little after noon, and pitched our tent at the foot of a hill in a magnificent grove of koa and mamani trees. We found the country here equally parched up with that on the other side, there having been no rain for months. Here the clinkers from Mauna Loa came up within a short distance of the base hills of Mauna Kea, and just on the edge of these ragged rocks, in the last place one would have thought of looking for it, we found a hole, just large enough to insert a quart pot, containing about half a barrel of delicious water, as cold as if it had been iced. This was the first supply of water, we had obtained since leaving Kona, and as our kegs were quite empty, it came just in time. The long ride from the big gulch was made without water and our throats were well parched. Those who have never known the actual want of water cannot appreciate the blessing of a constant supply. I found the sense of thirst, much alleviated by carrying one or two small pebble stones in my mouth.

At Kalaieha we remained until Tuesday, the 5th instant, employing the time in rambling about the country, shooting wild hogs, geese and ducks. The latter were not very plentiful, but the hogs were in countless numbers. The ground for miles about our camp was ploughed up in every direction by them in their search after the roots upon which they feed. Our party consumed sometimes

four or five small pigs of a day, such as you could buy in Honolulu for \$1.50 each, besides a proportionate quantity of taro, crackers and butter, pickles and coffee. Our appetites, however, in this keen mountain air, (about 7000 feet above the sea,) were prodigious, and digestion never failed to “wait on appetite.” Two of us demolished a whole goose at a sitting, besides et ceteras – one was a supposed sick man, who six weeks before in Honolulu could scarcely walk, and was sent up to Kona by his physician as a last hope of recovery. He is now as strong and hearty as could be desired. On Monday the 4th, we essayed the ascent of Mauna Kea, and would doubtless have succeeded but for an envious fog – farther down it would be called cloud – which completely enveloped us, and the fear of getting lost, turned us back to grope our way to camp...

### **August 11, 1859**

...The imported vaqueros of Hawaii have disappeared before the march of time, and their perilous adventures in pursuit of the wild cattle among the gulches and over the hills and plains of Mauna Kea are only remembered and rehearsed by some of the old residents. In their place has sprung up a class of Hawaiian mountaineers, equally skilled as horsemen as their foreign predecessors, but leading a vagabond sort of life, alternating between hardships and privation on the mountain and plenty of lavish expenditure on their return to the settlements. During a recent trip to Mauna Kea, I came across a camp of some thirty of these bullock hunters, and accompanying them on one or two of their expeditions, was no little interested in their somewhat romantic and exciting mode of life.

The government conjointly with the King, I believe, are the owners of the unmarked wild cattle on Hawaii, and have sold or leased the right to slaughter to private parties, upon what precise terms I am unable to say. An agent resides at Waimea, who engages the hunters, agreeing to pay them at the rate of \$1.25 for each bull hide and \$1 for each cow’s hide, properly dried and delivered at a certain point on the mountains. From thence they are conveyed to Waimea in carts, salted and shipped on Honolulu. During the first half of 1859, 222,170 lbs. of hides were exported, mostly, I presume, to the United States, where a fair quotation per last mail, would be twenty-five centers per lb., giving us an export value of \$55,542, wherewith to help pay our debts in New York and Boston...

The wild cattle are now hunted almost solely for their hides, and they possess the advantage over those of the tame herds for the purposes of commerce that

they are not mutilated with the branding iron. Under the present indiscriminate and systematic slaughter of these cattle, by which young and old, male and female, are hunted alike for the sake of their skins alone, they have greatly diminished in numbers, and a few years only will suffice to render a wild bullock a rare site where they now flock in thousands.

The country through which they roam is in many parts composed of fine grazing lands. Thousands of acres could be devoted to wheat growing, being composed, to a good depth, of a light, sandy soil, capable of being plowed with facility. The only drawback to this as an agricultural country, would be, - first, the great scarcity of water, second, the depredation of the wild hogs. As to the first, water no doubt could be found in plenty by digging; and the hogs would have to be exterminated. I wonder that some one has not, ere this, purchased the government right in these hogs, and set up a lard factory on the mountain. Why would it not pay at 12 ½ cents per lb., - or even for soap grease?

But I started to tell you something about the life of the hide-hunters. First, for their camp. This was situated on a side hill, in a grove of koa trees, that sheltered them somewhat from the trade winds, which here blow fresh and cold, and furnish them with firewood - no small consideration at this elevation. The hut was built of three walls of stone, open to the south, the roof formed of koa logs, plastered on the outside with dry grass and mud. The floor was the ground covered with hides for a flooring, and perfectly swarmed with fleas of enormous size and bloodthirsty dispositions. In front, within a few feet of the sleeping places, a large fire was constantly kept burning, and all around, for an acre or so, the ground was covered with drying hides.

In the hut, within a space of about 15 by 20 feet, some twenty-five or thirty native vaqueros found a sleeping place by night, and a place to play cards in by day when not engaged in the chase. Near by was their "corral," and enclosure of sticks and hides, containing some sixty horses, all owned by natives, and which had been collected for a grand "drive in," to take place on the morrow... The pen which generally encloses a half an acre, is built square of strong posts and rails, and from the narrow entrance of a long line of fence gradually diverges like the upper half of the Y, extending its arms out towards the mountain from which cattle are to be driven...

...We spied a great cloud of dust some three or four miles up the mountain side, and here came at a full gallop several hundred head of cattle of all sizes, closely pursued by semicircles of vaqueros, driving the game right down for the corral. As they rapidly approached the arms of the trap, the ground shook

beneath their hoofs, and they wedged crowded each other into a compacy body to avoid the dreaded horsemen...

...Mixed up with the cattle, and driven along with them, were probably not far from a thousand wild hogs, who, disturbed in their interior haunts, had got into the trap designed for nobler game. Their piercing squeals as, kicked and tossed by the frantic cattle, they rolled over in the dust, added no little to the amusement of the scene...

#### **5.1.2.10 Waimea and the Mountain Lands Described by Isabella Bird (1873)**

Isabella Bird, a nineteenth century English explorer, writer, photographer and naturalist, traveled both solo and in the company of native and local guide about Hawai'i, exploring many of the remote regions of the Island (Bird, 1964). Her narratives are filled with important descriptions of landscape, practices, and conditions on the island. Bird's narratives include descriptions of Waimea and travel past Waiki'i, via the Waimea-Waiki'i Trail coming out near Pu'u Lā'au, to the Pu'u Ke'eke'e-Pōhakuloa flats, then on to Kalai'eha and up to the summit of Mauna Kea.

Bird included important descriptions of the sheep and cattle industry in 1873 and observed that the mountain lands were remote and unpopulated in all but a couple of areas. She also observed the conditions and operations of Kalai'eha and discussed the adze quarries situated a short distance below the summit of Mauna Kea.

Having arrived in Waimea Village, Bird described her approach to, and reception at, the home of Francis Spencer<sup>17</sup> and her journey across the plains to the 'āina mauna:

...Mr. S[pencer] is a Tasmanian, married to a young half-white lady... Sheep are the source of my host's wealth. He has 25,000 at three stations on Mauna Kea, and, at an altitude of 6000 feet they flourish, and are free from some of the maladies to which they are liable elsewhere. Though there are only three or four sheep owners on the islands, they exported 288,526 lbs. of wool in 1872. Mr. S – has also 1000 head of cattle and 50 horses.

The industry of Waimea is cattle raising, and some feeble attempts are being made to improve the degenerate island breed by the importation of a few short-horn cows from New Zealand. These plains afford magnificent pasturage as well as galloping ground. They are a very great thoroughfare. The island, which is an equilateral triangle, about 300 miles in "circuit," can only be

<sup>17</sup> The Spencer House at Pu'uuloa still stands today.

crossed here. Elsewhere, an impenetrable forest belt, and an impassable volcanic wilderness, compel travellers to take the burning track of adamant which snakes round the southern coast, when they are minded to go from one side of Hawaii to the other. Waimea also has the singular distinction of a road from the beach, which is traversed on great occasions by two or three oxen and mule teams, and very rarely by a more ambitious conveyance. There are few hours of day or night in which the tremulous thud of shoeless horses galloping on grass is not heard in Waimea.

The altitude of this great table-land is 2500 feet, and the air is never too hot, the temperature averaging 64° Fahrenheit. There is mist or rain on most days of the year for a short time, and the mornings and evenings are clear and cool. The long sweeping curves of the three great Hawaiian mountains spring from this level. The huge bulk of Mauna Kea without shoulders or spurs, rises directly from the Waimea level on the south to the altitude of 14,000 feet, and his base is thickly clustered with tufa-cones of a bright red colour, from 300 to 1000 feet in height.

Considerably further back, indeed forty miles away, the smooth dome of Mauna Loa... Nearer the coast, and about thirty miles from here, is the less conspicuous dome of the dead volcano of Hualalai... To the south of these plains violent volcanic action is everywhere apparent, not only in tufa-cones, but in tracts of ashes, scoriae, and volcanic sand. Near the centre there are some very curious caves, possibly "lava-bubbles," which were used by the natives as places of sepulture... (Bird, 1964:132-133)

### **Journey to Mauna Kea**

...A few days ago I was so fortunate as to make the acquaintance of Mr. W. L. Green (now Minister of Foreign Affairs), an English resident in Honolulu... He asked me to make the ascent of Mauna Kea with him, and we have satisfactorily accomplished it to-day.

The interior of the island, in which we have spent the last two days, is totally different, not only from the luxuriant windward slopes, but from the fiery leeward margin. The altitude of the central plateau is from 5000 to 6000 feet, there is not a single native dwelling on it, or even a trail across it, it is totally destitute of water, and sustains only a miserable scrub of mamane, stunted ohias, pukeawe, ohelos, a few compositae, and some of the hardiest ferns. The transient residents of this sheep station [Kalai'eha], and those of another [at Kealapū'ali] on Hualalai, thirty miles off, are the only human inhabitants of a

region as large as Kent. Wild goats, wild geese (*Bernicla sandvicensis*), and the *Melithreptes Pacifica*, constitute its chief population. These geese are web-footed, though water does not exist. They build their nests in the grass, and lay two or three white eggs.

Our track from Waimea lay for the first few miles over light soil, destitute of any vegetation, across dry, glaring, rocky beds of streams, and round the bases of numerous tufa cones, from 200 to 1500 feet in height, with steep, smooth sides, composed of a very red ash. We crossed a flank of Mauna Kea at a height of 6000 feet [around Pu'ū Lā'au], and a short descent brought us out upon this vast tableland [the Pu'ū Ke'eke'e-Pōhakuloa region], which lies between the bulbous domes of Mauna Kea, Mauna Loa, and Hualalai, the loneliest, saddest, dreariest expanse I ever saw.

The air was clear and the sun bright, yet nothing softened into beauty this formless desert of volcanic sand, stones, and lava, on which tufts of grass and a harsh scrub war with wind and drought for a loveless existence. Yet, such is the effect of atmosphere, that Mauna Loa, utterly destitute of vegetation, and with his sides scored and stained by the black lava-flows of ages, looked like a sapphire streaked with lapis lazuli. Nearly blinded by scuds of sand, we rode for hours through the volcanic wilderness; always the same rigid mamane (*Sophora Chrysophylla*) the same withered grass, and the same thornless thistles, through which the strong wind swept with a desolate screech.

The trail, which dips 1000 feet, again ascends, the country becomes very wild, there are ancient craters of great height densely wooded, wooded ravines, the great bulk of Mauna Kea with his ragged crest towers above tumbled rocky regions, which look as if nature, disgusted with her work, had broken it to pieces in a passion; there are living and dead trees, a steep elevation, and below, a broad river of most jagged and uneven a-a. The afternoon fog, where serves instead of rain, rolled up in dense masses, through which we heard the plaintive bleating of sheep, and among blasted trees and distorted rocks we came upon Kalaieha.

I have described the "foreign residences" elsewhere. Here is one of another type, in which a wealthy sheep owner's son, married to a very pretty native woman, leads for some months in the year, from choice, a life so rough, that most people would think if a hardship to lead it from necessity. There are two apartments, a loft and a "lean-to." The hospitable owners gave me their sleeping-room, which was divided from the "living-room" by a canvas partition. This last has a rude stone chimney split by an earthquake, holding

fire enough to roast an ox. Round it the floor is paved with great rough stones. A fire of logs, fully three feet high, was burning, but there was a faulty draught, and it emitted a stinging smoke. I looked for something to sit upon, but there was nothing but a high bench, or chopping-block, and a fixed seat in the corner of the wall. The rest of the furniture consisted of a small table, some pots, a frying-pan, a tin dish and plates, a dipper, and some tin pannikins. Four or five rifles and “shot-guns,” and a piece of raw meat, were hanging against the wall. A tin bowl was brought to me for washing, which served the same purpose for everyone. The oil was exhausted, so recourse was had to the native expedient of a jar of beef fat with a wick in it.

We were most hospitably received, but the native wife, as is usually the case, was too shy to eat with us, or even to appear at all. Our host is a superb young man, very frank and pre-possessing looking, a thorough mountaineer, most expert with the lasso and in hunting wild cattle. The “station” consists of a wool shed, a low grass hut, a hut with one side gone, a bell-tent, and the most substantial cabin in which we are lodged. Several saddled horses were tethered outside, and some natives were shearing sheep, but the fog shut out whatever else there might be of an outer world. Every now and then a native came in and sat on the floor to warm himself, but there were no mats as in native houses. It was intolerably cold. I singed my clothes by sitting in the chimney, but could not warm myself. A fowl was stewed native fashion, and some rice was boiled, and we had sheep’s milk and some ice cold water, the drip, I think, from a neighboring cave, as running and standing water are unknown.

There are 9000 sheep here, but they require hardly any attendance except at shearing time, and dogs are not used in herding them. Indeed, labour is much dispensed with, as the sheep are shorn unwashed, a great contrast to the elaborate washings of the flocks of the *Australian Riverina*. They come down at night of their own sagacity, in close converging columns, sleep on the gravel about the station, and in the early morning betake themselves to their feeding grounds on the mountain.

Mauna Kea, and the forests which skirt his base, are the resort of thousands of wild cattle, and there are many men nearly as wild, who live half savage lives in the woods, gaining their living by lassoing and shooting these animals for their skins. Wild black swine also abound.

The mist is usual disappeared at night, leaving a sky wonderful with stars, which burned blue and pale against the furnace glare on the top of Mauna Loa,

to which we are comparatively near. I woke at three from the hopeless cold, and before five went out with Mr. Green to explore the adjacent lava. The atmosphere was perfectly pure, and suffused with rose-colour, not a cloud-fleece hung round the mountain tops, hoar-frost whitened the ground, the pure, white smoke of the volcano rose into the reddening sky, and the air was elixir. It has been said and written that there are no steam-cracks of similar traces of volcanic action on Mauna Kea, but in several fissures I noticed ferns growing belonging to an altitude 4000 feet lower, and on putting my arm down, found a heat which compelled me to withdraw it, and as the sun rose these cracks steamed in all directions. There are caves full of ferns, lava bubbles in reality, crust over crust, each from twelve to eighteen inches thick, rolls of lava cooled in coils, and hideous a-a streams on which it is impossible to walk two yards without the risk of breaking one's limbs or cutting one's boots to pieces.

I will not weary you with the details of our mountain ascent. Our host provided ourselves and the native servant with three strong bullock-horses, and accompanied us himself. The first climb is through deep volcanic sand slashed by deep clefts, showing bands of red and black ash. We saw no birds, but twice started a rout of wild black hogs, and once came upon a wild bull of large size with some cows and a calf, all so tired with tramping over the lava that they only managed to keep just out of our way. They usually keep near the mountain top in the daytime for fear of the hunters, and come down at night to feed. About 11,000 were shot and lassoed last year. Mr. S – says that they don't need any water but that of the dew-drenched grass, and that horses reared on the mountains refuse to drink, and are scared by the sight of pools or running streams...

The actual forest, which is principally *koa*, ceases at a height of about 6000 feet, but a deplorable vegetation beginning with *mamane* scrub, and ending with withered wormwood and tufts of coarse grass, straggles up 3000 feet higher, and a scaly orange lichen is found in rare patches at a height of 11,000 feet.

The side of Mauna Kea towards Waimea is precipitous and inaccessible, but to our powerful mountain horses the ascent from Kalaieha presented no difficulty.

We rode on hour after hour in intense cold, till we reached a height where the last stain of lichen disappeared, and the desolation was complete and oppressive. This area of tufa cones, dark and grey basalt, clinkers, scoriae, fine

ash, and ferruginous basalt, is something gigantic. We were three hours in ascending through it, and the eye could at no time take in its limit, for the mountain which from any point of view below appears as a well defined dome with a ragged top, has at the summit the aspect of a ridge, or rather a number of ridges, with between 20 and 30 definite peaks, varying in height from 900 to 1400 feet. Among these cones are large plains of clinkers and fine gravel, but no lava-streams, and at a height of 12,000 feet the sides of some of the valleys are filled up with snow, or a purity so immaculate and a brilliancy so intense as the fierce light of the tropical sun beat upon it, that I feared snow-blindness. We ascended one of the smaller cones, which was about 900 feet high, and found it contained a crater of nearly the same depth, with a very even slope, and lined entirely with red ash, which at the bottom became so bright and fiery-looking that it looked as if the fires, which have not burned for ages, had only died out that morning.

After riding steadily for six hours, our horses, snorting and panting, and plunging up to their knees in fine volcanic ash, and halting, trembling and exhausted, every few feet, carried us up the great tufa cone which crowns the summit of this vast, fire-flushed, fire-created mountain, and we dismounted in deep snow on the crest of the highest peak in the Pacific, 13,953 feet above the sea. The summit is a group of six red tufa cones, with very little apparent difference in their altitude, and with deep valleys filled with red ash between them. The terminal cone on which we were has no cavity, but most of those forming the group, as well as the thirty which I counted around and below us, are truncated cones with craters within, and with outer slopes, whose estimated angle is about 30°. On these slopes the snow lay heavily. In coming up we had had a superb view of Mauna Loa, but before we reached the top, the clouds, had congregated, and lay in glistening masses all round the mountain about half-way up, shutting out the smiling earth, and leaving us alone with the view of the sublime desolation of the volcano.

We only remained an hour on the top, and came down by a very circuitous route, which took us round numerous cones, and over miles of clinkers varying in size from a ton to a few ounces and past a lake the edges of which were frozen, and which in itself is a curiosity, as no other part of the mountain "holds water." *Not far off is a cave, a lava-bubble, in which the natives used to live when they came up here to quarry a very hard adjacent phonolite for their axes and other tools.* While the others poked about, I was glad to make it a refuge from the piercing wind. Hundreds of unfinished axes lie round the cave entrance, and there is quite a large mound of unfinished chips.

This is a very interesting spot to Hawaiian antiquaries. They argue, from the amount of the chippings, that this mass of phonolite was quarried for ages by countless generations of men, and that the mountain top must have been upheaved, and the island inhabited, in a very remote past. The stones have not been worked since Captain Cook's day; yet there is not a weather-stain upon them, and the air is so dry and rarified that meat will keep fresh for three months. I found a mass of crystals of the greenish volcanic glass, called olivine, imbedded in a piece of phonolite which looked as blue and fresh as if only quarried yesterday.

We travelled for miles through ashes and scoriae, and then descended into a dense afternoon fog; but Mr. S is a practiced mountaineer, and never faltered for a moment, and our horses made such good speed that late in the afternoon we were able to warm ourselves by a gallop, which brought us in here ravenous for supper before dark, having ridden for thirteen hours... (Bird, 1964:208-212)

#### ***5.1.2.11 Report of the Royal Commissioners on Development of Resources (1877)***

In 1876, King David Kalākaua appointed a commission "to aid in the development of resources in the Kingdom" (Act of September 25, 1876). In 1877, the Commissioners toured the Island of Hawai'i, assessing needs, development potentials, and meeting with residents to discuss the general nature of the resources.

The commission's description of the Waimea plateau and forests and the significant impacts that grazing animals had on the land and community – having overrun residences and agricultural fields and making the land almost impossible to live on – is dramatic, and in some cases proved to be prophetic. The primary concerns for which action in 1877 was called centered around reducing the herds of wild cattle on the Crown and Government Lands of Ka'ohe and Humu'ula, protection of forests and watersheds, the already noticeable shifts in climatic conditions, and occurrence of droughts.

The commissioners landed at Māhukakona and visited North Kohala, praising its resources and potential. Departing from Pu'uhue, the commission then traveled to Waimea and offered the following report:

#### ***The Pacific Commercial Advertiser***

**May 5, 1877**

The route lies around the slopes of the Kohala mountains through Kawaihae-uka. The forests on the Kohana mountains are dying rapidly. The land is mostly

for grazing purposes, though on the mountain, potatoes of fine quality can be raised in large quantities. In sheltered places, coffee would doubtless grow, but owing to the sparseness of the population and the superior attractions to other parts of the district, this part will hardly soon be settled. The once fertile and populous plain of Waimea looked sterile and desolate when visited by the Commission – a painful contrast to Kohala loko on the other side of the mountain.

The complaint of the people is well founded. The water they use is fouled in many places by cattle, horses and other animals, and as the stream is sluggish it has no chance to free itself of impurities, and the water used by the people in their houses must be a cause of disease and death, especially to the children... It is little wonder that with his crops trodden out by the sheep or cattle of his stronger neighbors, his family sickened perhaps to death by the polluted waters, that the small holder should yield to despair, and abandoning his homestead seek employment in some other district, usually without making another home...

The plains of Pukapu and Waimea are subject to high winds, aggravated by the loss of the sheltering forests of former days. The soil however is very good in many places for sugar cane and other products. To develop its best resources, effort must be made to restore the forests and husband the supply of water at their sources to furnish a supply for agricultural purposes. At present the lands are used almost exclusively for grazing purposes. Although the proprietors and lessors are probably not averse to the establishment of agricultural enterprises, it is to be feared that the denudation of the neighboring mountains and plains of the forests will render the climatic conditions unfavorable to success.

It would seem that a wise appreciation of the best interests of this district, even of the grazing interests themselves, would lead to the decrease of the immense herds which threaten not only Waimea but even Hamakua with almost irreparable disaster. It is to be feared that they will in time render a large part of the land of little value even for grazing purposes. Owing to the increasing frequency and severity of droughts and consequent failure of springs. Some thousands of cattle are said to have died this last winter from want of water, and the works erected in Waimea for the purpose of trying out cattle have been idle for months for want of water.

The commission do not propose here to discuss fully the vexed questions of the causes of the diminution of the forests, but in view of the fact that they are

diminishing and the streams and springs diminishing at corresponding rations, also that with the cattle running upon the lands as at present, any effort to restore them must be futile and any hopes of their recuperation vain, the Government, if it would wish to preserve that part of the island of Hawaii from serious injury, must take some steps for reclaiming the forests.

In this connection we could say that it is unfortunate that large tracts of Crown and Governmentlands have been lately leased on long terms for grazing purposes, without conditions as to their protection from permanent injury, at rates much lower than their value even as preserves for Government purposes or public protection. The commission deem this a matter of grave importance, challenging the earnest attention of the Government, and involving the prosperity of two important districts.

There are large quantities of fallen trees in the forests, whose removal would doubtless be of benefit to the forests and it would seem could be profitably taken to Honolulu for sale as firewood...

#### **5.1.2.12 George Bowser's "Directory and Tourists Guide" (1880)**

George Bowser, editor of *The Hawaiian Kingdom Statistical and Commercial Directory and Tourists Guide* (1880) wrote about various statistics and places of interest around the Hawaiian Islands. In the following excerpts from "An Itinerary of the Hawaiian Islands...", Bowser described the Waimea region, ranching interests, and the journey between Waimea, Kalai'eha, and the summit of Mauna Kea. From Waimea, Bowser went to Kalai'eha, traveling via the Waiki'i route. His narratives describe springs on the side of the mountain – presumably Houpo o Kāne (Hopukani) and Wai hū a Kāne, the lake of Waiau, and Kaluakāko'i. Bowser also reported that Francis Spencer had "made" the road from his sheep station at Kalai'eha to Waiau:

...On my road returning to Waimea [from a visit to North Kohala] I had before me at every turn of the road the great White Mountain of Hawaii, for such is the translation of the native name, Maunakea. From all appearances, as described by those who have ascended it, this mountain has ceased to be an active volcano long before the more southern ones began to show signs of expiring efforts. Its surface is not composed of lava, as is the cast to so great an extent with Maunaloa and Maunahualalai, but is almost exclusively of scoria, deposited, no doubt, in the last final effort of the volcano. High up on Maunakea there is a singular lake, to which a road has been made by Mr. F. Spencer through his sheep station of Kalaieha. This gentleman and a party of friends, when visiting this lake, upon one occasion made an attempt to fathom it,

without success. They had no proper appliances for sounding, but, having tied their horse-ropes together, they succeeded in constructing a line fifty-five fathoms long. With this, however, they found no bottom. The excursion to this lake is well worth making, and can be accomplished by ladies as well as gentlemen, on horseback, the incline of Maunakea being exceptionally gradual for so high a mountain. A day will have to be devoted to the trip, as it takes about five hours to reach the lake from Waimea, although three will suffice for the return. From the elevation thus reached a wide expanse of country and of ocean can be seen, including the distant Haleakala on Maui. On the way between Waimea and Kalaieha the traveler will be able to refresh himself with the water of a spring which bursts out just at the base of Maunakea, beautifully clear and cold, as if it came direct from the ice. There is another inducement to make this journey. It is on Maunakea that the silver sword plant, peculiar to these islands, grows in the greatest perfection. It is to be found also on Haleakala, and on Maunaloa and Maunahualalai, but not so fine as on the southern side of Maunakea. This plant grows to the height of from four to six feet; its leaves being arranged so as to resemble a fan of silver, each blade separate from its fellows. At the top of the stem it branches out in a circular form, each branch producing an egg-shaped flower of a delicate dove color. It is in full flower in the month of November. The tourist will also be well repaid for making a visit to a place called Kaluakakoi, which is not far from the lake. Here there is a quarry, whence all the stone axes which used to be in use among the natives were procured from time immemorial, until their intercourse with the foreigner taught them the use of iron. This is the only place in the islands where this black flint-like stone has been procured.

The district surrounding Waimea is capable of producing most of the ordinary crops of a temperate climate, such as wheat, barley, oats, maize, beets, turnips, mangel-wurzel, onions, potatoes and all sorts of vegetables. In the neighboring district of Hamakua, coffee, tobacco and cotton may be grown. In no part of the Kingdom does the guava grow to such perfection as in the Hamakua district. Its fruit is there quite as large as an orange. Three varieties of it are grown – the sour, the sweet and the strawberry guava.

No better opportunity can present itself throughout my journey than when speaking of these rich districts of Kohala and Hamakua, to enumerate for the benefit of the tourist the different fruits that grow wild in the Hawaiian Islands, and give some account of them, and of the seasons at which they ripen. I must give the first place to the mountain strawberry, which is very plentiful all round the three lofty mountains of Hawaii and on Haleakala. It is ripe in June,

July and August. The mountain apple grows all over the Islands, at about 800 feet from the sea level... To this list I have to add the more familiar forms of the mango... the orange, lime, citron, lemon and bananas, in great variety. Add to these the bread-fruit, tamarind and the rose-apple...

...I returned to Waimea before finally setting out on my journey through Kona and the southern portions of the island. I made my start from the house of Mr. Frank Spencer, leaving the Kohala district, I must say, with much regret. Fifteen miles of a miserably rough and stony road brought me to Puako, a small village on the sea-coast, not far from the boundary between the Kohala and Kona districts. There was nothing to be seen on the way after I had got well away from Waimea except clinkers; no vegetation, except where the cactus has secured a scanty foothold... (Bowser, 1880:544-546)

### **5.1.2.13 Surveyor's Ascent of Mauna Kea (1889)**

E.D. Baldwin, Kingdom surveyor and author of the Mauna Kea and central Hawai'i mountain lands Register Map No. 1718, traveled from Hilo, across Pi'ihonua, to Halealoha and Pua'ākala, then across Humu'ula, and past Kaupakuhale (identified by typographical error in the *Hawaiian Annual* as "Kaupaloihale"), to the summit of Mauna Kea in August 1889. Other place names Baldwin mentioned include Pu'u 'Ō'ō, Puakala, 'A'ahuwela, Waiau, Kalai'eha, and Laumai'a. In the *Hawaiian Annual of 1892*, he provided an account of the journey, including interesting descriptions of the mountain lands, vegetation, and the occurrence of wild cattle:

#### **A Trip to the Summit of Mauna Kea (1889)**

Mauna Kea, so seldom visited by any one, yet claiming universal admiration, as it looms up gradually and beautifully decked in its shroud of snow is truly named the "White Mountain." What wonders there were to be seen thereon, amongst its numerous cones, which looked like so many mole hills from the distance, could only be ascertained by actual ascent. Thus, with expectation rife to aid the arduous duties of an advance surveying party – consisting of six – we left Hilo at eight o'clock A.M. of August 6th, 1889. We followed the Hitchcock road to near Bougainville – a distance of about four and one-half miles – where the road enters the woods. They call it a mile and three-quarters by measure through the woods. We believed the distance correctly measures; but some of the party through it the longest mile and three-quarters ever traveled. We sympathized, however, with them and wondered if it could be possible for the chain to have stretched. Evidently the road through the woods had not been used very lately. The oi bushes and ferns had interlocked across

the road, hiding from view the numerous mud holes. Our animals were not very fond of mud, or of pushing through the oil and fern jungle – though some of them came from Hilo. But for all that they plunged bravely through the oil, only to land in a “slough of Despond;” into one of such places one of our pack mules became so firmly imbedded that we had to unload him, and pull him out by main force. Many quizzes about this time came from down along the line, “Was there any end to the woods?” “Were we ever going to get out?” But the woods suddenly ended, and what a contrast! As we emerged from those beautiful Hilo woods, where the ieie and iiwi vines vie with each other in their attempt to wreath the trees with beautiful garlands. Before us lay a bleak waste.

We were at the end of the 1855 flow, at a point where the 1881 flow had overlapped it a little. To our left, the 1881 flow stretched out like a huge glossy black monster. To our right, thinly covered with stunted ohia, ferns and numerous ohelo bushes, stretched the great 1855 flow. After refreshing ourselves on some boiled eggs, which one of the party had considerately brought, and resting the animals a little, we proceeded on our trail over this older flow. For about half a mile it was very narrow; from thence it had banked up fully between 200 and 300 feet above the surrounding country, and spread out over two miles in width. One could only imagine what consternation this great flow, directly above and only seven miles from Hilo, must have caused its residents as month after month it banked itself up here, extending even to the Wailuku river; then broke out near the center of the embankment with a sudden rush, and made directly for Hilo, but only to reach a distance of about a half mile, where it ended its mad career.

Our advance over the flow was slow and tedious. The trail, marked every few hundred yards by piles of stones, being very rough and hardly visible in places. Bleaching bones of many poor animals lay strewn all along the trail. Night overtook us before we reached a suitable camping place, but as it was moonlight we pressed on to the aa part of the flow, some twenty miles from Hilo. The flow at this point is not more than a mile in width. Our trail then turns to the right and enters the woods again, where a short distance brings us, about eight o’clock P.M., to Halealoha, our camp for the night. Our barometer gave this point an elevation of 4,050 feet, being nearly the same elevation as the Volcano House.

The next morning two of the party started on ahead with the rifles. The trail leaves the woods about two miles from Halealoha, thence skirts along over

pahoehoe, mostly near the edge of the woods. Many sheep paths cross and recross this section of the trail, making it very difficult at times to keep the right trail. We are now nearing the main base of Mauna Kea, which looms up in its full majesty before us. A sudden turn in the trail to the right carries us off from the Mauna Loa lavas through a narrow belt of woods to Hitchcock's camp, Kipukahina [Kīpuka-'āhina], about five miles from Halealoha. We are now on the slopes of Mauna Kea. The whole character of the surrounding country has changed. Instead of a bleak waste of lava there are open fields of fine pasture land. A short way below Kipukahina two wild young bulls were shot, which gave us plenty of meat for several days. Leaving Kipukahina we stayed off on a sheep trail, but headed for Puu Oo, where we found the trail leading around the mountain towards Waimea, which we followed, reaching Puakala – Hitchcock's mountain house – at five o'clock P.M. This house is sixteen and a half miles in a direct line from Hilo, but about thirty-five by the trail. The Hitchcocks had kindly invited us to make this point our headquarters. What a surprise it was to find, at this distance, such a large comfortable house, built of solid koa, all of which had been sawed out by hand! It was surely a mountain luxury to lay off in comfortable rocking chairs before the large, open, old-fashioned fireplace. The elevation at this point is 6,325 feet.

The rest of the week was spent getting out poles for the Aahuwela trigonometrical point. A fire had evidently passed through the woods some time ago, killing all the ohia, so that we had to go about a mile below Puakala for suitable poles. These we dragged up the hill with our mules, setting up a large tripod signal which was clearly seen from Hilo later. We lived high and well at Puakala; neither did our six cooks spoil the broth; but a specialty from each one helped to swell the bill of fare each meal. One made such fine biscuit, another such soup, another veal pies, another oyster fritters, and another still hit the climax by making akala (wild raspberry) pies.

Monday was set as the day for making the ascent of the mountain. We all rose before daylight, but found some of the horses gone, which were not found until noon. This necessitated our giving up the trip for that day.

Tuesday, after an early breakfast, four of the party made the start of the summit. Two of the party were rather overcome by too high living, and did not feel well enough to make the ascent. There is no regular trail to the top. Numerous cattle trails traverse up the flanks of the mountain. We followed some of these main trails up to two sand cones called Kaupalohale [Kaupakuhale]. To this point the ascent is very gradual, passing mostly

through a scattering grove of mamane trees, which, with the exception of a few koa trees, seems to be the only tree that grows above the regular forest line. Numerous small gulches cut the sides of the mountain. The soil is very sandy, the sides of the mountain being made up mostly of disintegrated aa flows and sand cones, the latter being especially numerous. Leaving Kaupaloihale the cattle trails soon terminate and vegetation grows very scarce, the tree limit ending at the foot of Kaupalohihale. We now had to pick our way over loose blocks of scoria, which were more or less rounded, and in many places the blocks had been packed in smooth even layers by the action of the snow.

Over such places the animals easily picked their way. On reaching the top plateau, the ascent became much more gradual. About three miles from the top one of our mules gave out; so left him behind, securely tied to a large rock, with a feed of oats near by. We headed for a group of cones, which seemed to be near the center of the plateau. The last part of the climb, up between two of these cones, was very steep and rough. The texture of the scoria is somewhat different here, being of a light bluish gray color; rings when struck and splits in regular smooth layers; the feldspars being present in large quantities. Looking toward the space between Mauna Loa and Mauna Kea, a grand sight presented itself to our view; this space was filled in with immense banks of spotless white clouds, which we looked down upon from our elevated point of view.

Passing the cones we pressed on some two miles further west, in hope of finding lake Waiau. Camp was pitched in a sand hollow while two of the party further looked for the lake, which was found quite a distance above us, among the central cones. Our camp was fully 13,000 feet in elevation, and distant from Puakala about ten miles. The air at this elevation becomes very rare, and any over-exertion is liable to tell on one not used to it, to which two of the party can well testify. The wood for our use was packed up in bags from Puakala. The animals were very uneasy during the night, clawing up large holes in the sand, chewing off and breaking their ropes. One mule persisted in hanging around the tent all night, barking all of our wood and tearing up a horse blanket and enamel cloth.

Shortly after daylight we struck camp and started back, visiting the lake on the way, which we found to be about 200 feet long by 150 feet wide. It occupies a small crater between two sand cones, about half a mile directly west from the central cone. The shores of the lake are composed of sand and rock, the sand being very compact. The water was muddy and very stagnant. Selecting the

cone which looked the highest we made the ascent, packing the four-inch transit and a flag pole up on horseback. The transit level showed this cone to overtop all the others considerably. This cone is fully 800 or 900 feet higher than the main plateau, and composed of sand and cinders, with here and there masses of loose slag cropping out. The view from this elevation of 13,805 feet above the sea level was grand beyond description. Mauna Loa's smooth outline was only broken by the view into its crater, its side towards Mauna Kea, blackened and streaked by the numerous eruptions, was desolate in the extreme; the later flows could be easily traced down the mountain side by their shining surfaces, and through the woods toward Hilo. These flows are very narrow on the steeper slopes of the mountain, where the lava has run with great speed. On reaching the plateau between Mauna Kea and Mauna Loa the flows have turned, some to the right toward Hilo, and others to the left toward South Kohala. The speed of the flows, being retarded they have spread out in width, in many places covering immense tracts of country.

The central group of cones consists of four; about three miles further to the north another group of several very prominent cones stands on the northeastern edge of the main plateau; also, at the same distance south towards Kalaieha there are a large number of sand cones. With the exception of a few the cones had small craters at their summits, having the appearance of being cut off on top and being very regular in shape. Their state of regular preservation is owing to the loose character of the cinder and lapilli that form them, which slide and roll, quickly filling up any crevices which may be formed in their sides. The top plateau slants gradually in all directions from the central cones; its greatest width, about eight miles, extends in a north-east to south-west direction. It has a very desolate appearance, and with the exception of a very few clumps of a hardy grass there is nothing growing. The whole formation and texture of the mass of Mauna Kea is very aged, there being no signs of any late volcanic action.

Our descent was slow and tedious. We found our played-out mule gone. Fog set in thicker and thicker as we descended; only a short distance was visible around us. We pressed steadily on down, crossing our Puakala trail several times without recognizing it. Night set in, but the fog did not leave; it became intensely dark, and we almost despaired of finding the house, when all of a sudden our headway was stopped by a fence. Recognizing it as the inclosure of the Laumaia pasture, and that we were on the lower side of it, we followed the fence back – about a mile – to the road, and trusted the rest of the guidance

to our animals, who carried us safely back to the house, which we reached at eight o'clock P.M.

A trip to the top of the mountain can not be said to be one of very great pleasure. The rarity of the atmosphere takes away one's energies in a most surprising manner, but the after effects of the trip are very exhilarating. As you descend from the summit life seems to come back again, slowly at first, but at about 10,000 feet elevation you feel almost like a new man, and as hungry as a bear.

The intention of the party was to make a rapid topographical survey of the summit plateau with the stadia. This was given up for the present; but it is hoped that such a survey can be made in the near future with the assistance of photography (Baldwin in *The Hawaiian Annual of 1892*, 1892:54-58).

#### **5.1.2.14 "The Ascent of Mauna Kea, Hawaii" – Report of W.D. Alexander on the Mauna Kea Trip of 1892**

In *The Pacific Commercial Advertiser*, Alexander published an important account of the Mauna Kea survey trip. The narratives identify the locations of several significant cultural features on the mountain landscape. These features include trails on Mauna Kea, an "axe maker's cave" (location from where the wooden image found by Dr. Hillebrand in 1862 came), a possible heiau and burial site; the ahu "pillar" erected to commemorate the trip made by Queen Emma to Mauna Kea and Waiau in 1882, named localities, and the landscape of Waiau (crater and lake). Alexander also reported that gorse had been identified as an undesirable weed on lands of the Humuula Sheep station by the time of the 1892 survey.

Field Book No. 429 (in the collection of the state Survey Division), kept by Alexander and his assistant, J.M. Muir, includes several important sketches depicting the sites described in the following article:

#### ***The Pacific Commercial Advertiser* The Ascent of Mauna Kea, Hawaii.**

#### **September 14, 1892 (page 1)**

Although the ascent of Mauna Kea present no great difficulty and has often been described, yet a brief account of a late scientific expedition to its summit may be of interest to your readers.

The results of Mr. E.D. Preston's work on Haleakala in 1877 were so highly appreciated by scientific men, that the American Academy of Sciences

recommended that a similar series of observations should be made on Mauna Kea. It was also decided to include in the plans a series of magnetic observations at a number of important points in the islands.

The U.S. Coast and Geodetic Survey agreed to grant Mr. Preston leave of absence for the purpose, and to lend the necessary instruments, while the trustees of the Bache fund of whom Prof. Dana is one, offered to apply its income to the same object... The party left Honolulu for Kawaihae June 25th, consisting of Mr. E.D. Preston, astronomer, Mr. W.E. Wall, his assistant, Prof. W.D. Alexander, surveyor and quartermaster for the party, and Messrs. W.W. Chamberlain and Louis Koch.

The first station occupied was in the village of Kawaihae, near the sea, in a lot belonging to His Ex. S. Parker, to whom as well as to his agent, Mr. Jarrett the party are indebted for many repeated kind and generous acts... Our next move was to the grassy and wind-swept plain of Waimea, 2600 feet above the sea, where we enjoyed a complete change of climate, and had glorious views of the three great mountains of Hawaii... Here we engaged our guide, hired our horses and part of our pack mules, and had our freight, ("impedimenta," as Caesar appropriately called it,) carted thirty-five miles farther, half-way around the mountain to the Kalaieha Sheep Station. We made this our base of operations in attacking the mountain, in order to dispense as much as possible with the use of pack mules, on account of the heavy and costly instruments which we were obliged to carry. A wagon road made by the owners of the Humuula Sheep Ranch leads from Waimea around the western and southern sides of Mauna Kea. On the western side of the mountain it passes through a region which only needs more rainfall to make it a superb grazing country. The ancient forests here, as at Waimea, have been nearly exterminated, but a fine grove of mamane trees still survives at the Auwaiakeakua Ranch.

The manienie grass is gradually spreading and will in time add immensely to the value of the land. At the half-way station, called Waikii, water tanks and a rest house have been provided for teamsters. After turning the corner we skirted the desolate plain studded with volcanic cores that lies between the giant mountains of Hawaii, riding through loose volcanic sand amid clouds of dust. Occasional flocks of quails or pigeons were the only living creatures to be seen.

At length the vegetation began to be more dense, the patches of piipii grass and the groves of the beautiful and useful mamane or sophora tree more frequent, as we approached the Hilo district. Barbed wire fences showed that

we were approaching civilization, and at last we came in sight of the Kalaieha Sheep Station with its neat buildings, its water tanks and telephone lines, and general air of thrift, all testifying to the energy and foresight of its manager, A. Haneberg, Esq.

Nearly every afternoon this region is enveloped in dense fog which pours in from the east, driven by the trade wind. At night, during our stay, the thermometer generally fell below 40° Fahr., and frost is not uncommon. The elevation, according to the barometer, is about 6700 feet.

Quails abound, and the mountain geese and wild ducks are found in the "Middle Ground." The mongoose has not yet arrived there. Wild cattle and boars are still numerous on the slopes of Mauna Kea, and the former supplied the best beef we have tasted in these islands. The present manager has been at much labor and expense in extirpating two pests, which are said to have been accidentally introduced from New Zealand, viz., the Scotch thistle and the gorse.

Here Mr. Preston established an astronomical and pendulum station, and made a complete series of observations, as as Kawaihae, while surveys were made to connect it with the primary triangulation. The party was then joined by Mr. E.D. Baldwin, from Hilo, who brought two pack animals and a muleteer, and by Mr. J.J. Muir, from Mana. Mr. Baldwin had visited the summit in 1890, and had afterwards made a valuable map of the central part of Hawaii [Register Map No. 1718].

[From the base camp at Kalaieha Sheep Station – July 20th]... The fog cleared early, and a finer day for the ascent could not be imagined. Mr. Haneberg now took command of the pack train, and had the caravan loaded and set in motion by 7:45 a.m., the guide riding in front, followed by eleven pack mules and as many men on horse back. One sturdy brute carried the pendulum receiver, weighing about one hundred pounds, on one side, balanced by bags of cement on the other.

After riding nearly two miles due east from the ranch, we turned to the north, gradually ascending through a belt of country thickly covered with groves of mamane.

We crossed a shallow crater just east of a conspicuous peak called "Ka lepe a moa," or cock's comb, and began to ascend the mountain proper. After climbing a steep ridge through loose scoria and sand, the party halted for lunch

at an elevation of 10,500 feet. The upper limit of the mamane tree is not far from 10,000 feet. The *Raillardia, apiipii*, extends a thousand feet higher. The beautiful Silver Sword (*Argyroxiphium*), once so abundant is nearly extinct, except in the most rugged and inaccessible localities.

The trail next turned to the east, winding around an immense sand crater called "Keonehehee," 11,500 feet in elevation, which stands on the edge of the summit plateau. Further to the southeast we were shown a pillar of stones which was raised to commemorate Queen Emma's journey over the mountain to Waimea in 1883 [the trip was made in 1882].

The summit plateau which is perhaps five miles in width, gradually slopes up from all sides toward the central group of hills. It is studded with cones (most of which contain craters), composed of light scoria, like those in the crater of Haleakala. The surface of the plateau is strewn with blocks of light colored, fine grained, feldspathic lava, interspersed with patches of black sand.

The rarity of the air was now felt by both men and animals, and it required forcible arguments to make the laggards keep up with the column. At last, about 3 P.M., we clambered over the rim of a low crater west of the central cones, and saw before us the famous lakelet of Waiau, near which we camped. It is an oval sheet of the purist water, an acre and three quarters in extent, surrounded by an encircling ridge from 90 to 135 feet in height, except at the northwest corner, where there is an outlet, which was only two feet above the level of the lake at the time of our visit. The overflow has worn out a deep ravine, which runs first to west and then to the southwest. A spring on the southern side of the mountain, called "Wai Hu," is believed by the natives to be connected with this lake. The elevation of Waiau is at least 13,050 feet, which is 600 feet higher than Fujiyama. There are few bodies of water in the world higher than this, except in Thibet or on the plateau of Pamir. No fish are found in its waters, nor do any water-fowl frequent its margins. Its depth was not sounded, as it was proved by experiment that we had not adequate means for navigating it. Small tufts of grass and delicate ferns were found growing among the rocks around the lake.

After the pack train had been photographed, the large tent was pitched close to the shore of Waiau, and all the animals were sent back to the ranch except for one unfortunate mule, which was to be treated to a feed of oats and blanketed for the night... During each of the six night which we spent on the summit the temperature fell much below the freezing point, registering 25 deg., 18 deg., 14 deg., and even 13 deg., Fahr., and considerable ice formed

around the margin of the lake. During the day the maximum of the thermometer in the shade was generally 60 deg., and 63 deg., but when exposed to the sun on the rocks it rose to 108 deg....

A solid pier of masonry was built for the meridian circle, and a flat rock moved into position to serve as a stand for the pendulum apparatus. Such was the clearness of the air that star observations were usually commenced before 5 p.m. Contrary to expectation we found the trade-wind blowing as strong on the summit as it did below at Kalaieha.

Of Mr. Preston's work it may briefly be said that it was entirely successful. The opportunity was great and he made the most of it. Complete series of magnetic, latitude and pendulum observations were made, besides the observations of the barometer and thermometer, and a large number of interesting photographs were taken from different points of view. In the meantime a topographical survey of the summit plateau, in which Mr. J.J. Muir's assistance was most opportune and valuable. On the 22nd a short base line was measured with a steel tape and minute survey made of the lake and its neighborhood. On the same day two of our men came up with two pack mules, bringing the Honolulu mail, a load of fire-wood and some fresh provisions.

The next day, the 23rd, Mr. Mui and the writer together with the guide ascended the central hill, about a mile and a half from our camp and 800 feet higher. It encloses two small craters. The scramble up that huge pile of cinders in the rarefied air is a severe strain on weak lungs. The pulse rose in one case to 120, and in another to 150 per minute. The old trig. Station, which had formerly been sighted from several points below, was now occupied with an instrument for the first time. The difference in height between this station and the next summit was found by leveling to be about 45 feet, as it had been estimated in 1872. The highest point is probably not less than 13,820 feet above the sea.

The view from the summit was sublime beyond description, embracing, as it did, the three other great mountains of Hawaii, and the grand old "House of the Sun," 75 miles distant, looking up clear and distinct, above a belt of clouds. Mauna Loa was perceptibly a trifle lower than the point where we stood. Without casting up any loose heaps of sand and scoria, its majestic dome has risen within 150 feet of the highest point reached by its rival. Its surface was streaked by numerous recent lava streams, while a deep cleft, which breaks the smooth curve, gave us a glimpse into the vast terminal crater of Mokuaweoweo.

On the windward side of the summit ridge and in the craters were several large patches of snow, two or three feet thick, composed of large crystals, like coarse salt. While eating our lunch on the summit, we were surprised to see carrion flies at that altitude, attracted by it.

After surveying and sketching at several stations, we returned, sliding down a steep slope of sand and cinders, 700 feet in height, to our camp, where a repast awaited us, that reminded one of the Hamilton House. It is enough to say that our worthy chef de cuisine was Louis Koch, well known to former guests of the Hamilton and later of the Volcano House.

During the following night the thermometer fell to 13 deg. Fahr. We did not, however suffer from cold, although the confinement of the blanket bags became rather irksome. A small kerosene stove was kept burning all night, which no doubt helped somewhat to keep up the temperature of the air within the tent.

On Monday, the 25th, the thermometer stood at 20 deg. at sunrise. Messrs. Muir and Alexander ascended the second highest peak on the northwest, overlooking Waimea, 13,645 feet in height to continue their survey. In the cairn on the summit a tin can was found, which contains brief records of the visits of five different parties from 1870 to the present time, to which we added our own. A party of eight girls from Hilo, "personally conducted" by Dr. Wetmore and D.H. Hitchcock, Esq., in 1876, must have been a merry one. Capt. Long of H.B.M.'s Ship Fantorne had visited this spot in 1876, and Dr. Arning with several Kohala residents in 1885.

The same afternoon the surveyors occupied the summit of Lilinoe, a high rocky crater, a mile southeast of the central hills and a little over 13,000 feet in elevation. Here, as at other places on the plateau ancient graves are to be found. In the olden time, it was common practice of the natives in the surrounding region to carry up the bones of their deceased relatives to the summit plateau for burial.

During the following night the thermometer fell to 14° and stood at 18° at sunrise. After breakfast the surveying party ascended a third peak, east of Lake Waiau, and about 420 feet above it, where they took the closing sets of angles, and connected the latitude pier with the scheme of triangulation.

On their return the tents were struck, and instruments packed up in readiness for the pack train, which arrived about 11 a.m. Soon afterwards the fog closed

in around us, and lasted till nightfall. We bid farewell to the lake about 1:30 p.m., and arrived at the Kalaieha Station before 6 p.m., without any mishap, having stopped half an hour at “Keanakakoi,” the Axe-makers’ cave. This is situated about a mile south of Waiau, and a hundred yards west of the trail, in a ledge of that hard, fine grained kind of rock, which ancient Hawaiians preferred for their stone implements. Here we saw the small cave in which the axe-makers lodged, their fire place, and remains of the shell fish which they ate. In front of it is an immense heap of stone flakes and chips some 60 feet across and 20 or 30 feet high. Near by several hundred unfinished axes are piled up just as they were left by the manufacturers, when the arrival of foreign ships and the introduction of iron tools had ruined their trade. Around the entrance of the cave the native dandelion or pualele (*Sonchus oleraceau*) was growing at an elevation of 12,800 feet. It was here that the late Dr. Hillebrand found a curious idol, which is still in the possession of his family.

On arriving at Kalaieha we learned that the pack mules had preceded us, and were already unloaded. None of the costly and delicate instruments employed had received the slightest injury. All the objects of the expedition had been successfully attained. I know of but one other instance on record when gravity measurements of precision have been made at so great a height.

Mr. Preston’s final report will be looked for with interest by the scientific world, and will add another laurel to his well-earned reputation as a physicist and astronomer.

#### ***5.1.2.15 Trails of Mauna Kea and the ‘Āina Mauna Originally built in the Time of ‘Umi***

In October 1912, Sol. Sheridan wrote again of a journey taken by the mountain trails around the island of Hawai’i and included an account related to him by Eben Low of the adze makers who traveled to Mauna Kea, following trails from the lowlands of Kona to the summit region. In the following excerpts, Sheridan described the section of the trail crossing from Mauna Kea, over the Pōhakuloa flats, and across the 1859 lava flow to Ahu-a-‘Umi:

The road by which we went down into Kona from our dry camp in the lava is a road that has been traversed by few men now alive. Long ago, before the history of these Islands began to be written, it is said that the natives went that way to get stone forms for their adzes from the hard rock of Mauna Kea, but that is a tale only.

All that is known is that the natives did get their rock from there for their stone implements – and there are in places in that wild region that lies between the

peaks of Mauna Loa and Hualalai the traces of a trail so old that in some parts it has been covered by lava flows whose date is forgotten, and in other places trees have grown up in it that are as large as the body of a robust man.

“Umi’s Trail,” they call this road. How few white men in these islands have ever even heard of Umi’s Trail, although most may have read the story of Umi as it is told in Alexander’s history...

Eben Low and a native assistant went that way once, and marked the way. It was by this marked way that Rawhide Ben led us out again... We had traveled several hours from our dry camp when we struck Umi’s trail, plainly marked across an old a-a flow upon which a forest had grown up. The trail was plain, and showed that much work had been done upon it. Like all Hawaiian roads of the olden time – or most of them – it ran straight away toward the point that it was desired to reach, regardless of the topography of the country. Umi was a trail builder, up to this date. Where the a-a was level, his men marked their way across it by smooth going. Where there were depressions in it, they were filled up to the general level, much as a modern engineer would fill them. Where there were hillocks to be crossed, they were cut away if not too high and passed over in a straight line if their altitude forbade grading.

And this road, as smooth and as easy as though built yesterday, was constructed so long ago that in the center of it, through the rotten lava, lehua trees had grown up, having the girth of a strong man. Umi’s slaves marched this way to the quarries of Mauna Kea, and his couriers went this way and his armies marched this way, it is probably, to battle with the men of the Waimea and Kohala country... This road, or maybe another, ran from Kailua, straightaway to Hilo, and old tales are that the kings living at Kailua would have millet caught for them in the ponds of Waiakea in the morning, and would eat them at night, relays of swift couriers carrying them across the island.

We lost Umi’s road, as went on, a little before we reached the great flow of 1859... Over this flow Eben Low and his native man had marked the road with dabs of white paint upon the smooth surface of the black lava, and for miles we went by these white disks – not crossing the flow directly but following it down so that we might made the point for which we were aiming on the table land of Umi... (Sheridan, 1912:331-333)

### **5.1.2.16 A Visitor's Guide to the "Mountain Country" (1913)**

In 1913, H.W. Kinney prepared a visitor's guide for the island of Hawai'i. His guide included a short section on the "Mountain Country" of the island and described the various approaches to Mauna Kea, Mauna Loa, and Hualālai. Notably, at the time of writing, the Hilo-Pu'u 'Ō'ō route was the primary one used and the Pu'u 'Ō'ō Ranch served as the base camp for those wishing to travel to the summit of Mauna Kea:

The mountains of Mauna Kea, Mauna Loa and Hualalai and the highlands surrounding them are comparatively seldom visited, as the journeys to the summits are attended with difficulties, unless the traveler can depend on the ranch stations for assistance. The map shows the trails and stations. The Puu Oo ranch is ordinarily the starting place for the summit of Mauna Kea, though this mountain may be ascended from almost any side. From Hilo or the Volcano House to the ranch is a good day's ride. From Hilo one follows the Kaumana road to the end of the wagon road at the big flume. Here one should take the first trail left of the last house on the road and take the trail across the lava flow. At about 3500 feet elevation is a cave at the left of the trail with drinking water. The last part of the trail is across grass. From Puu Oo one must take a guide to the summit, the trip from that point to the top and back being made in a day. Near the summit is a lake, as well as a quarry where the old Hawaiians made stone implements. Snow is generally found near the top.

The ascent of Mauna Loa is more seldom made as it is more arduous, and as the top can be gained only from a few directions. At this writing the Volcano Stables Co. is preparing a trail, with a camp, which will start near the gate which crosses the Volcano-Kau road east of Kapapala. When this is finished, the trip can be made by autoing to the camp in an afternoon, making the trip from camp to summit and back to camp in a day, returning the following day. It is also possible to make the trip from the Pualehua Station, in Kona, to the summit and back to the station in a day.

The Hualalai mountain is more accessible. The Judd road, which was intended to lead in a straight line from Kona into Hilo, but was abandoned, leads to the Ahua o Umi, where King Umi held the first census. He had the population from each district make a pile of stones, each person depositing a stone, the size of the piles indicating the relative size of the population of the districts. A better trail to this point leads from the Pualehua station. It was formerly a wagon road, used for carting wool to the beach. A short distance below the ahua, N. of the Judd road, is a cave with an unfailing water supply. Another trail leads from Kainaliu, crossing the Judd road a few miles mauka of the upper road, to the

Hualalai summit. It passes several craters. On the N. side of the summit is a blowhole, known as the “bottomless pit.” Still another trail runs from the Judd road to the summit. It passes a sandy plain which was used by the old Hawaiians for races and other sports. A trip covering all the points mentioned, can be made in a day. Hawaiian guides can be had at Kainaliu, from \$2.50 to \$3 a day. All the summits offer splendid views of the entire island, as well as of the other islands in the distance (Kinney, 1913:15-16).

### **5.1.2.17 “Large Party Makes Mauna Kea Climb” (1915)**

#### ***Hilo Tribune***

#### **Eighteen Persons, Including A.M. Cabrinha and E. Vierra, Enjoy Ascent.**

**June 29, 1915 (page 1)**

Probably the largest number of persons to make the ascent together of Mauna Kea since the days when troops of Hawaiian warriors went there to hew out battle axes climbed to the summit of the mountain on Monday, June 24. In the final stage of the ascent the party numbered eighteen.

Superintendent A.M. Cabrinha and Deputy Auditor E. Vierra planned and organized the party, which was guided by Ikua Purdy, one of Hawaii’s champion ropers, who is now manager of the Keana Kolu ranch.

Leaving Pauuilo Sunday afternoon, Cabrinha and Vierra rode to Kukaiau, accompanied by John de Ponte, where joined by J.S. Ramos and Manuel Nikola. From Kukaiau the first stage of the climb was started. In one hour and a half, they reached Umikoa ranch where Joaquin Pistona and five cowboys joined the mountain climbers. at 8:30 o’clock Sunday evening the party started for Keana Kolu ranch, making the ride by 10 o’clock. Here they remained over night until 4:15 o’clock the next morning when the steepest and last part of the mountain climb began.

Before leaving Keana Kolu the original party was added to by Purdy and six of his cowboys who he permitted to make the ascent. Six hours were required to make the climb from Keana Kolu to the extreme summit which was reached shortly after 10 o’clock Monday morning. As the day was an especially clear one, the mountain climbers were able to get a good view, it is possible to see the ocean in the direction of Ookala. When the party left the summit they rod down to the lake where a stop was made for lunch. While there was much snow on the mountain and traces of ice in the lake most of those in the party were more inclined to complain of the heat than cold.

One of the diversions of the trip was the rounding up of a number of sheep which had strayed up as far as Makanaka. Although there were eighteen horsemen in the party the sheep were so wild that it took all of them to get the sheep back within the range of Keana Kolu ranch.

Besides Purdy, there were only two others in the party who had ever been to the summit of Mauna Kea before, although all of them had been raised on this island and most of the cowboys have been making their living for years above the 8,000 foot level.

One of the surprises of the trip to the members of the party from sea level was the vast acreage of level, rich soil, which in the form of tableland, from ten to twelve miles wide and thirty-five to forty miles long, lies between the lava land above the plantation cane fields and the beginning of the steep slopes of the mountain. Like many who have never made the ascent they had supposed that the mountain sloped up from the sea to the summit as it does through the coast cane fields.

All of the party were enthusiastic about the beauty, and fertility of the land, much of which is covered with good timber or grazing grass. They believe that on account of its elevation this land will produce almost any fruit or vegetable raised in the temperate zone, if only some means of getting produce to market could be devised in order to make cultivations of the high tableland profitable. As it is now, the only possible method of transportation is by horse or mule back.

Both Cabrinha and Vierra were much pleased with their mountain trip and expect to make the ascent again, if for no other reason than to get the change of climate.

#### ***5.1.2.18 "Ke Alanui Mawaena o Na Mauna" (1915)***

##### ***Ka Hoku o Hawaii***

##### **Proposal to Build a Road between Hilo and Kona, Across the Mountain Lands**

**September 30, 1915**

In these days, there is much talk about building a rest house a little below the summit of Mauna Loa, as a benefit to those people who ascend and sightsee on the mountain, it will indeed be a good thing, but only for a few. Perhaps as a result of this conversation, there has arisen again talk of opening a road

between the two Mountains, beginning in Hilo and going to Kailua, in North Kona. This road being spoken of these days, would not only be of benefit to the people who ascend the mountain, but also a great benefit to the people of the County of Hawaii, and a benefit to the people who come here from around the world to sight-see. It would be a road on which all visitors would travel.

But that is not the main reason that we support the idea of opening this road, it is that the road will lie between several thousand acres of Government Land, very good lands for the cultivation of excellent crops for our markets. There are only a few years remaining to the lease on the land from Piihonua to Puuoo, and such a road across the mountain should be opened, then these fine lands could be made ready for homesteading, and they could plant the crops that will do well in such a place with the cold air.

We learned that someone knowledgeable about soil came to look at the land, and as he looked at the different soils between these Mountains, he reported that the soil was very good for planting the ailiki sweet potatoes, strawberries, corn, and the grass eaten by horses; that is the grass that's brought in for the feeding pens from other lands. There are between twenty and forty thousand acres of good Government Land in these places, that is in the Government Land of Humuula, and if these lands are opened up for those people adept at cultivating, then the money shall be returned for the construction of this road across the mountain. This road across the mountain shall carry the produce of the planters to the market in Hilo which can also perhaps sent it to Honolulu, and if it is also taken to Kailua, then there will be two good ports at which to take the goods grown on these fine lands. Thus the County of Hawaii shall move forward. Deputy County Attorney Heen has said that there are several simple ways to seek money to build this road without putting great pressure upon those who pay the taxes to the County of Hawaii. We shall speak again with Deputy County Attorney Heen about this and explain it to you further (Maly, translator).

**5.1.2.19 “On Arctic Peaks ‘Neath Tropic Skies Afoot Over Mounts Hualalai, Mauna Kea and Mauna Loa on Hawaii’s Largest Isle” (1922)**

***Paradise of the Pacific***

**December 1922 (pages 80-90)**

[From the summit of Hualālai] ...Far down the slope toward Kaalapuali ranch house, the cones stood forth beneath the mottling clouds, a rare and splendid

vista, never to be forgotten. In the distance stretched the far-reaching groves of sandalwood, carpeted with nodding, golden-eyed flowers, far a field from their mainland home.

That afternoon we descended through this realm of sylvan beauty and solitude, to camp at Kaalapuali. Long before the first golden rays of the sun crept over the north flank of Mauna Loa, a bovine chorus, with a mynah bird obligator from a monster eucalyptus, performed the part commonly done by the alarm clock. Many mama cows and a like number of their healthy offspring were the causes of all the “confusion worse confounded.” The outcome of it all was, perhaps, a fortunate early start into the realm of the unknown.

Bidding our solicitous friends aloha, with packs aback, we proceeded, Indian style, single file, up the Judd trail, to the land of fascination and adventure. Some five miles toward the rising sun, out on the arid southeast slope of Hualalai, we beheld Ahua Umi, standing a half-mile to our right, lonely and forsaken in all its ancient, although somewhat dissipated glory.

### **Story of the Good King Umi**

Here, it is said, Umi, the good King of Hawaii, about the year 1500, had a great heiau or temple built. It was then his pleasure to have called together all his people from Kau, Puna, Hilo, Hamakua, North and South Kohala, and North and South Kona districts, that a census might be taken and a great festival might be held. The people from the various districts piled stones, each one a rock according to his or her strength. Eight great ahus or pyramids were erected thus, each oriented from the central temple or heiau in the direction of the several districts of the Island of Hawaii. In the midst of his heiau, sat the good King Umi and his high chiefs and priests, viewing the taking of the strange, first census of Hawaii.

To this day the place is called “Ahua Umi” (rocks heaps of Umi or Temple of Umi, as you like), and people speak of the place as the “Plain of Numbering.”

But strange, sad things have happened to this ancient “Plain of Number.” The central heiau fell in time, no one seems to know just when or how, to the lowly estate of a goat corral; thus the genus capra came with profane bleatings to the place made sacred in the days of old, by Umi and his followers. “How have the mighty fallen!”

But we must hasten, for both time and water are fleeting. To our left rose Hualalai, just conquered; to our right, with deceptive easy curves, Mauna Loa loomed in all its majesty; straight ahead, in the blue and hazy distance, Mauna Kea beckoned. All about us was a barren waste of lava gravel.

### **The Region of the Waterholes**

A little way up the Judd trail, perhaps a quarter of a mile, we branched off to the left and a thousand paces brought us to Waikapae, the region of the luawais or waterholes, deep down in the pahoehoe. We had been told of this place and the guiding ahus or tiny rock heaps. A little searching brought us to a deep cleft in the pahoehoe, the bottom of which was covered with thin, flat rocks – true evidence of the work of Hawaiian hands. Beneath these slabs we found the cool, sweet water – the only water in a forty-mile strip of lava desert, sparsely clad with trees. Here we ate our lunch by the luawai beneath the thin shade of a friendly lehua. Absorbing all the water we could, we filled our canteens (two quarts) to the brim, and four tin buckets, holding a quart or more each, used for cooking, were also requisitioned – most fortunately.

Then we returned to the Judd trail, with heavy packs on our backs, canteens about our necks, and each carrying a bucket of water into the region of the unknown and perhaps never before traversed by the feet of men. The Judd trail ended as suddenly as it began – about two miles farther on. We were then in a low forest of lehua and decided to go on in the general direction of the trail, toward two reddish hills in the dim distance – Na Puukulua – with the Waimea-Humuula road at the base of Mauna Kea beyond.

Soon we came out on the black, shiny, fresh surface of the 1859 lava flow from Mauna Loa. It was not difficult going here, although the pahoehoe (smooth lava) was somewhat shelly and brittle. Two miles of this brought us on to old lava. Then it was that mile after mile we crossed these ancient fields, practically following the 6,000-foot contour. Here were mingled inextricably aa and pahoehoe in utmost and uncharted confusion. We passed through many oases-like kipukas, with their friendly trees and unfriendly brush – ohia lehua and puukeawe [pukiawe], mostly. We qualified as first class balancers with our burdens – never spilled our precious water.

That night we camped in a little sink in the pahoehoe, where a tiny bit of soft earth, rootage for the puukeawe, was found. Goats and birds were our only neighbors. Reduced to the water in our canteens, we proceeded on our way

with the early dawn, ever 20 degrees north of east by our compass, when landmarks failed.

In mid afternoon, we passed a strange lava platform, some hundred feet in length, six feet through, and five feet in height. It stood on an open plain of smooth lava, three or four miles to the southwest of Na Puukulua, ever looming bigger in the foreground.

We ate our lunch, with our fast vanishing water, beneath a fine lehua, growing apparently from pure ancient lava. What soil it had for rootage was visible. We were then beside the last of the twin Na Puukulua.

### **Walking on Jagged Glass-Rock**

By early afternoon, after crossing some extremely rough ancient lava, we came to the edge of the real nightmare of the land of great adventure – the Mauna Loa lava flow of 1843. Before us, in mighty ten-twenty-thirty foot windows extended, it seemed in endless confusion, the gray black horror of loose, clinkery, glass-edged aa. To step on a large piece of the stuff was hazardous in the extreme. Light in specific gravity, the wobbly mass slipped and slid, ever threatening to throw us down the glassy slopes in the lava ravines. Here was a place to make shoemakers happy, for the jagged glass-rock virtually cut our shoes to pieces.

It was a wonderful experience, however, navigating over the wobbly, clinkery field of aa; but the most delightful part of it was the finale, when we arrived in the midst of a transient shower at a group of red-gray hills, the home of many wild sheep, in the midst of a kipuka. The devilish 1843 lava seemed to spread in an endless stream beyond the hills, toward Keamuku, in the direction of the sea. McGuire, happily, climbed up on of the sheep hills, looked out toward Mauna Kea, and, blissful joy! – ancient lava lay just around the turn of the hill – the right arm of the 1843 flow had reached here and gone no farther – only the left branch had proceeded on its way to Keamuku.

Two miles walking through delightful bunch grass over heavenly soft earth now brought us to the Waimea-Humuula road. We now had about a quart of water, and eleven more miles to go along the dusty road. But that was nothing. The earth was soft and the approaching night air cool on the shoulder of Mauna Kea. Resting and eating a dry supper, we hurried on to Kalaieha, the ranch house of the Humuula Sheep Ranch.

The wonderful red, crimson, and purple colors of the sunset glow that evening awoke some of the waning enthusiasm for the wonders of nature. There seems to be always a system of balances in this old world – for every great effort we make there seems to come some compensation. In the last light, Mauna Kea and Mauna Loa seemed to glow like happy beacons to us, their struggling devotees far below.

### **Hilo's Lamps, Like Stars Below**

That night, rather late to be sure, Henry Kahalewai, the best cook on the slopes of Mauna Kea (it seemed to us) brought forth hot biscuits, hot tea, stewed wild pig, and gallons and gallons of the finest mountain water for our edification and refreshment in the sheltering kitchen of Kalaieha, thanks to the wonderful hospitality of the ranch management. That was Saturday night and the next day, being Sunday, and we being tired, we rested at the foot of our shrine – Mauna Kea. At night we could see the glowing lights of Hilo to the southeast, twinkling like myriad stars, far down on the long slope of Mauna Kea and Mauna Loa.

The morning found us trekking upward through great open groves of splendid mamani trees, with round, handsome crowns, like huge apple trees, the south slope of Mauna Kea ever growing steeper and rougher as we ascended.

Timberline was passed in mid-afternoon at an elevation of over 9,000 feet. Down below us stretched a long series of cones and groves of lehua and mamani trees. In the distance, like a tiny oasis, the cypress-lined square of Humuula sheep station ranch house – Kalaieha – smiled up to us from the gray plain. The trade wind, coming in from the Hilo coast, soon brought in the white cumuli, which drifted lazily below us across the plateau between Mauna Loa and Mauna Kea. Far to the southwest, the tips of other white clouds nosed over the horizon, forerunners of the Kona clouds, that never quite met the trade wind clouds over the plain below.

### **Terminal Glacier Moraines**

Climbing over much old aa lava, we came out at last on the weathered and eroded side of the old volcanic mountain, with its multitude of cones. Between 10,000 and 11,000 feet, we arrived in a field of thousands of rounded boulders, all size and shapes, arranged in tiers and phalanxes, true terminal glacier moraines. Another thousand feet up, we found great polished table-like rocks,

over which the ancient glaciers had ground their way, leaving striations as indelible hieroglyphics – Nature’s writing made by passing glaciers.

In this same zone of thin, cool air, we found our first pile of adze chips—thousands of them heaped where the ancient adze makers had worked and made their implements of stone at the mouth of their sleeping cave in some forgotten time.

The next thousand feet or more was tedious going in the extreme, through the sliding, weathered lava and cinders, to the pass to the right of the summit cone, and down the slope of the shoulder of the mountain wherein nestles the surprise of Mauna Kea – Lake Waiau. Here, as the sun dipped behind the blue waters of the Pacific, curving up to meet it, we gazed with astonished eyes upon a tiny emerald gem, glacier made in some past time, set in a niche in the arid side of Mauna Kea.

### **In an Arctic Zone Under Tropic Skies**

We pitched our tent hurriedly by the green, cold lake, built a fire in the whipping trade wind, with its chilly bite, ate an early supper, and retired like packed sardines between our blankets. We were in an arctic zone under a tropic sky. Taking our last look across the lake, we saw the image of fair Venus, streaming in white and shimmering light across the tiny, rippling waves. A thousand jewels glittered in the reflected phantom light of our neighbor planet.

The next morning, ice over a half-inch thick was found in the gravel bar about the lake. Above us, just a little way, snow banks lay, chilled and white and permanent. Reaching the summit, at 13,825 feet, we found great drifts of frozen whiteness, two hundred yards or more in length and thirty or more in width. Here we indulged in Mauna Kea pie, composed of frozen cakes of snow and chocolate bars.

But Mauna Loa, across the vast abyss of lava plateau, beckoned us onward. Hence we rambled down the wild, strange slope of volcanic pile, stopping that night in the bunk house in the midst of the tall, nodding cypress trees, to continue to the next day, over the Puu Oo-Volcanic trail, to Keawewai. This is an old cattle trail across many lava flows, including the 1880-81 flow that nearly reached Hilo. Many delightfully cool kipukas rested our weary feet from the hard lava, and when we reached the forests of great koas, we knew that

rest and water were near. Here it was we rested for the night, refreshed for the great climb of the next day... (Daingerfield, 1922:82-87)<sup>18</sup>

### 5.1.3 Quarrying

Traditionally, quarrying has occurred throughout the Pacific for various purposes (Burton, 1984). Quarrying for basalt and volcanic glass has already been documented within the greater region, including North Kona near Pu'u Wa'awa'a. McCoy et al. conducted an archaeological study published in 2011 that demonstrated the relationship between localized traditional communities and the resource, which those inhabited within the immediate surrounding vicinity of the quarried through having regular access to the resource. Also important is the conclusion that this resource would be bartered with neighboring communities through inter-community exchange, demonstrating that access to resources which may exist in surplus for a localized community became a critical commodity for that community to use for bartering and trading for resources that may be otherwise unavailable or scarcely available to a particular community (McCoy et al., 2011).

The practice of quarrying was previously established in McCoy and Orr (2012). Of this practice they wrote, "Some areas of PTA, as well as surrounding lands, were heavily quarried by pre-Contact Hawaiians to extract materials for stone tool manufacture" (9). McCoy and Orr identified two types of stone quarried at PTA: volcanic glass and basalt.

Quarrying existed extensively throughout the pae 'āina of Hawai'i. The Mauna Kea region contained an exceptionally high amount of basalt, and to access this valuable resource, people would travel from across Hawai'i Island. Based on its size of nearly 8 miles, it is believed that the Mauna Kea adze quarry was the primary source of quarried basalt for the entire island.

The adze quarry region can be considered its own cultural landscape and has been identified by practitioners as an important cultural site (Langlas et al., 1999). Radiocarbon dating shows the quarry being utilized by Hawaiians over 1,000 years ago (1000 AD), with use increasing over the next few centuries. The quarry is generally considered to be located between 8,600 and 13,000 feet in elevation on the slope of Mauna Kea. The quarry area includes surface quarries, subsurface quarries, religious and ceremonial shrines, work areas, and habitation areas or shelters. The Mauna Kea quarry is considered unique among basalt quarries throughout the Hawaiian Islands and an important cultural resource.

The 2012 Ethnographic Study noted that the Pōhakuloa Chill Glass Quarry Complex "is comprised of over 500 quarry features in a 170-hectare area on the k4 lava flow" (McCoy

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<sup>18</sup> Trip made by Lawrence H. Daingerfield, T.R.L. McGuire, Max H. Carson, and William (Willie) "Let's Go" Meinecke.

and Orr, 2012: 27, citing Williams, 2004). They further note “The k4 flow is dated to AD 1650-1750. The largest site, Site -21666, is about 146.5 ha and contains 388 features.” (McCoy and Orr, 2012: 27, citing Williams, 2004). The study also states that only 810 of the 4,050 hectares of the Mauna Loa k4 flow had been surveyed. It is unclear if additional surveys of this area have been undertaken since this time.

### **5.1.3.1 Warriors Traveled the Mountain Paths and Met in Battle on the ‘Āina Mauna**

Among Kamakau’s traditions are found the history of Keawe-nui-a-‘Umi and his brother Ke-li‘i-o-Kaloa, who shared the rule over Hawai‘i. When it was learned that Ke-li‘i-o-Kaloa was abusing his people, Keawe-nui-a-‘Umi determined to depose Ke-li‘i-o-Kaloa. The warring parties traveled across the mountain lands, with Keawe-nui-a-‘Umi’s war parties marching from Hilo, Puna, and Ka‘ū across the plateau between Mauna Kea and Mauna Loa, towards ‘Ahu-a-‘Umi, the temple built by his father. Kamakau reported:

When Keawe-nui-a-‘Umi learned of the unjust rule of Ke-li‘i-o-kaloa and the burdening of the common people, he was filled with compassion for the chiefs and commoners of Kona. Therefore he made himself ready with his chiefs, war lords, war leaders, and warriors from Hilo, Puna, Ka-‘u to make war on Kona. The war parties [met] at the volcano (pit of Pele) before going on to battle along the southern side of Mauna Kea and the northern side of Mauna Loa. The mountain road lay stretched on the level. At the north flank of Hualalai, before the highway, was a very wide, rough bed of lava – barren, waterless, and a desert of rocks. It was a mountain place familiar to ‘Umi-a-Liloa when he battled against the chiefs of Hilo, Ka-‘u, and Kona. There on that extensive stretch of lava stood the mound (ahu), the road, the house, and heiau of ‘Umi.<sup>19</sup> It was through there that Keawe-nui-a-‘Umi’s army went to do battle against his older brother, Ke-li‘i-o-kaloa.

When the chiefs of Kona heard that those of Hilo were coming by way of the mountain to do battle, Ke-li‘i-o-kaloa sent his armies, but they were defeated by the armies from Hilo. The armies of Kona were put to flight. When the armies of Hilo reached the shore of Kona the war canoes arrived from Ka-‘u and from Hilo. The battle was [both] from the upland and from the sea. Ke-li‘i-o-kaloa fled and was killed on a lava bed. The spot where he was killed was

<sup>19</sup> It is reached “by a fourteen mile journey from Holualoa up the old Judd trail, or by an eighteen or twenty mile trip from Kealakekua, via Pu‘ulehua and Kanahaha... It is on the slope of Hualalai, at between 4,500 and 5,000 feet elevation, with Mauna Kea and Mauna Loa towering snow-clad, much farther away.”

called Pu'u-o-Kaloa (Kaloa's hill), situated between Kailua and Honokohau...  
(Kamakau, 1961:35-36; M.K. Pukui, translator)

In the next generation, Lono-i-ka-makahiki, grandson of 'Umi-a-Liloa, was also called upon to battle, this time against the invading forces of the Maui chief, Kama-lālā-walu. Once again, the warriors of Hawai'i made use of the mountain land trails to meet the final challenge on the plains of Waimea. The warriors from Ka'ū, Puna, and Hilo districts passed by Mauna Kea to join in the battle below Pu'u 'Oā'oaka, in Waimea:

Kama-lala-walu, the heedless chief, paid no attention, but followed the advice of two old men of Kawaihae who counseled falsely. One of them was name Puahu-kole. They said, "Pu'ua'oaka is a good battlefield and will be a great help to the chief. All the canoes should be taken apart because the warriors may desire to run back to the canoes and depart in secret for Maui. The best thing to do is to cut up the canoes and outriggers, for there are canoes enough in Hawaii. When it is conquered, there will be many canoes from Kona and Ka-u. There will be much property and wealth for the Maui chiefs." The chief, Kama-lala-walu, listened to the advice of Puhau-kole and his companion. Their suggestions were carried out, and the canoes were broken up. Then Kama-lala-walu's fighting men went up to the grass-covered plain of Waimea.

After Kama-lala-walu's warriors reached the grassy plain, they looked seaward on the left and beheld the men of Kona advancing toward them. The lava bed of Kaniku and all the land up to Hu'ehu'e was covered with the men of Kona. Those of Ka-u and Puna were coming down from Mauna Kea, and those of Waimea and Kohala were on the level plain of Waimea. The men covered the whole of the grassy plain of Waimea like locusts. Kama-lala-walu with his warriors dared to fight. The battlefield of Pu'oa'oaka was outside of the grassy plain of Waimea, but them of Hawaii were afraid of being taken captive by Kama, so they led to the waterless plain lest Maui's warriors find water and hard, waterworn pebbles. The men of Hawaii feared that the Maui warriors would find water to drink and become stronger... (Kamakau, 1961:58; M.K. Pukui, translator)

### **5.1.3.2 He Moolelo Kaa Hawaii no Laukaieie (1894)**

"He Moolelo Kaa Hawaii no Laukaieie..." (A Hawaiian Tradition of Laukaieie) was published in *Nupepa Ka Oiaio* between January 5, 1894, and September 13, 1895. The mo'olelo was submitted to the paper by Hawaiian historian Moses Manu. The story is a rich and complex account with island-wide references to places, descriptions of place name origins, history,

and mele, interspersed with accounts from other traditions and references to nineteenth century events.

The following narratives – translated by K. Maly – have been excerpted from the mo’olelo and include an overview of the tradition and those narratives which recount the travels of Pūpū-kani-‘oe, an elder of Lau-ka-‘ie‘ie:

***Nupepa Ka Oiaio***

**He Moololo Kaa Hawaii no Laukaieie.**

**January 5-19, 1894**

Kaholokuaīwa [wahine] and Koa‘ekea [kāne] lived at Ulu in Waipi‘o Valley on the island of Hawai‘i. They were descended from the chiefly and godly lines of Kahiki and Hawai‘i. Their first child was Lauka‘ie‘ie. But because she was born in an ‘e‘epa (mysterious) form, looking more like a plant than a child, she was wrapped in līpoa seaweed and set in the stream. Without her parents knowledge, Lauka‘ie‘ie was retrieved by a mountain goddess and nurtured. Later, two other children, boys, were born to Kaholokuaīwa and Koa‘ekea. One was named Hi‘ilawe and the other was Makanikeoe (who was also a wind deity).

Koa‘ekea’s sister was Pōkāhi and her husband was Kaukini. Though they had been married for a long time, they were childless, and because of their prayers and offerings, the forest goddess, Hinaulu‘ōhi‘a, approached Pōkāhi while she was gathering seaweed, and told her that she would have a girl child to raise as her own. The condition was that no one, not even her brother and sister-in-law, were to know about this child. Because Pōkāhi and Kaukini lived on the mountain ridges between Waipi‘o and Waimanu, it was easy for her to keep the secret. It was in this way that Lauka‘ie‘ie came to be raised by her own aunt and uncle. As a youth, Lauka‘ie‘ie’s companions were the spirits of the plants and animals of the forest. When she matured, she was very beautiful and thoughts of finding an acceptable mate for her began to grow. One night, when Lauka‘ie‘ie was sleeping, she dreamed of flying past the valley lands of Hawai‘i and across Maui, Moloka‘i, O‘ahu, Kaua‘i, Ni‘ihau, Ka‘ula, and on to Lehua<sup>20</sup>, where she saw a handsom young chief named Kawelonaakalāilehua. It was the

<sup>20</sup> The lengthy narratives include site descriptions and traditional accounts for various locations on each of the named islands.

chief that was destined to become her husband, and who was fetched to Hawai'i by her elder relative, Pūpū-kani-'oe...

### March 9, 1894

Pūpū-kani-'oe and her companions from Lehua and Ka'ula sailed in their canoe, passing Kaho'olawe, guided by the sharks of those waters. They entered the channel of 'Alenuihāhā and her companions, who had never before seen Hawai'i, saw the mountains of Mauna Kea, Maunaloa and Hualālai rising above. Ka-welone-a-ka-lā-i-Lehua inquired of Pūpū-kani-'oe the names of those places on Hawai'i. She answered, telling them that they were the mountains on which dwell the women who wear the kapa hau (snow garments) and who covered the lands down to where the woods were found. Pūpū-kani-'oe then chanted:

|                                                                 |                                                                                        |
|-----------------------------------------------------------------|----------------------------------------------------------------------------------------|
| Ma'ema'e i ka hau ka luna o Mauna<br>Kea,                       | Pure as the snows atop Mauna Kea                                                       |
| Ōpū iho la iluna o ka hinahina,<br>Ka pua luhiehu a ka māmane,  | Little clumps settled upon the hinahina<br>Adorned with the blossoms of the<br>māmane, |
| He lama wale ala no ke ike aku,<br>Aloha mai nei hoi ka Aina... | It looks like a light when seen,<br>There is such love for the land...                 |

She then called out, describing Haleakalā:

|                                                                                                                                    |                                                                                                                                         |
|------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| Aia ho'i ke kuahiwi kaulana o Maui,<br>Ke kunihi a'e la i ka makani,<br>Akāka wale no Haleakalā,<br>Ka 'uwē a ke kini o Ko'olau... | Behold the famous mountain of Maui,<br>Standing boldly in the winds,<br>Haleakalā is clear,<br>And the multitudes of Ko'olau cry out... |
|------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|

The party then passed Kohala, and arrived at Waipi'o, where they landed.

#### 5.1.3.3 Travel Across the 'Āina Mauna in the Time of Kamehameha

Stephen Desha, Sr., editor of *Ka Hoku o Hawaii*, and a group of his peers published many historical accounts for the education of Hawaiian readers in their native history. One account, "He Moololo Kaa no Kekuhaupio, Ke Koa Kaulana o ke Au o Kamehameha ka Nui" (A Tradition of Kekuhaupio, the Famous Warrior in the time of Kamehameha the Great), describes the time leading up to Kamehameha's securing his rule over the island of Hawai'i and was published from December 16, 1920, to September 11, 1924, in *Ka Hoku o Hawaii* (Desha, 2000; Frazier, translator). When Kamehameha (Pai'ea) inherited the god Kūkā'ilimoku from Kalani'ōpu'u, there was dissension among some of the chiefs. Fearing that

treachery might arise, Kekūhaupi'o traveled with Kamehameha from Ka'ū towards Kīlauea, to Ōhaikea, and then went on to Mauna Kea and Lake Waiau, where Kamehameha made a ceremonial offering:

...When Pai'ea had completed the ceremonial offering, Kekūhaupi'o encouraged them to go, as it was not known what secret harm might come after them, as some of the chiefs had treacherous thoughts. Because of this thought by Kekūhaupi'o he directed them to leave the customary pathway, and to travel where they could not be followed. They climbed straight up from that place to a certain part of Mauna Loa and came down seaward at a certain part of Ka'ū named Ōhaikea. They spent the rest of that night in a cave called Alanapo. The next morning, after Kamehameha had made his ceremonial offering and prayer to Kūkā'ilimoku, they left that place and climbed up another mountain trail till they reached the summit of Muna Kea. At a place close to Lake Waiau, Kamehameha again made an offering. They were unable to remain there for long because of the cold, and so they descended to Waimea at a place called Moana by the ancients, going straight down to the wide plain of Waimea... (Desha, 2004:93-94)

Following the battle of Moku'ōhai ca. 1782, reference to travel across the 'āina mauna was again made. Kamakau reported that the sacred chief, Keawemauhili, his wife, Ululani, and their daughter, Kapi'olani, traveled from Kona to the uplands, across Mauna Kea, and down to Pā'auhau (1961:122). Desha (2000) elaborated on the account, by which the small party traveled for safety, to the mountain lands, passing the slopes of Mauna Kea and continued on the mountain trail to Hilo.

After the battle ended at Moku'ōhai, Keawemauhili and his family were held captive and transported to the Kaumalumu section of Kona. Then, with the help of faithful friends, they escaped, traveling to the uplands of Kona, past Mauna Kea, and on to Hilo. It was reported:

...Keawemauhili, Ululani his wife, and their small daughter Kapi'olani were secretly helped to flee. They were taken to Kaumalumu, North Kona, by Kaleipaihala as ordered by the ilāmuku Kanuha. When Keawemauhili went ashore at that place of North Kona, he sought escape for them by a mountain trail which ascended to the gap between Hualālai and Mauna Kea, taking that path in order to arrive at their home in Hilo. The pathway was very tangled with forest growth. There were five of them on this journey, with Keawemauhili choosing the way, and Ululani following her husband, and the kahu [servants] who were carrying Kapi'olani. There were many impediments in the path but the important thing was to survive. The chill and bitter rain and entanglement of ferns and other obstructions were disregarded. At times

Ululani carried her beloved daughter because their personal servants were heavily burdened with their bedding which was carried in calabashed on carrying sticks. While they were patiently ascending, Kapi'olani cried because of the strageness of this mountain way. This grieved the parents of the beloved child but they were unable to help. When they entered into the fern wilderness, Kapi'olani wailed loudly because of this troublesome pathway, causing them to have qualms, because when Kīwala'ō's forces were put to flight, many people had fled into the forest and were being widely sought by the victorious warriors of Kamehameha's side. At this time they were climbing in darkness because they had fled at nightfall. However dawn was breaking at the time they entered the fern wilderness and were pushing through it. When it was full daylight and while they were moving on the mountain trail, the wailing of Kapi'olani was very loud which burdened the minds of Keawemauhili and his wife. At this time, the wails of Kapi'olani guided some of Kamehameha's warriors who were Kohala people, and they met the escapees. The leader of these warriors saw this distinguished man of noble stature, and the thought came to him that this must be the ali'i Keawemauhili of whom they had only heard. The leader said to Keawemauhili: "Stand and speak! Are you perhaps Keawemauhili, the ali'i of the Hilo districts...?" (Desha, 2000:153)

The account is continued with the eventual safe return of Keawemauhili mā to Hilo, and little other mention of the journey over the mountain lands.

#### **5.1.3.4 Kūkahau'ula and Lilinoe**

An undated account from the archive collections of the Bernice Pauahi Bishop Museum (BPBM), translated by Mary Kawena Pukui, provides further details regarding Lilinoe and her husband Kūkahau'ula (Kukahaula). The narrative also records that Kauikeaouli (King Kamehameha III) visited the graves of Lilinoe and Kūkahau'ula (Kukahaula) and tells that Pōhe'epali, a descendant of the retainers of Kūkahau'ula, hid their bodies following the visit of Kamehameha III.

#### **A Tale of a Royal Couple who Froze on Mauna Kea**

Kukahaula was a chief of Waimea, So. Kohala. He took to wife, Lilinoe of Kau and because his people resented her, chief Kukahaula went to dwell of Mauna Kea, above Lake Waiau. They died there and their bodies were wrapped for burial.

When King Kauikeaouli (Kamehameha III) reigned, he went there to visit them and was the last ruler to see these chiefs who had practically turned to stone because they were frozen and so remained. It was believed that they were a good likeness of themselves when they were alive, except that their bodies were so stiff.

After this visit of King Kamehameha III (Kauikeaouli) the bodies of Kukahaula and Lilinoe were hidden by the attendants of Kukahaula, Poheepali, who was the very last of the family of retainers who upheld their chiefs. It is said that these chiefs lived in a cave and it was in this cave that their bodies remained until Poheepali hid them away.

It is said that when these chiefs lived on Mauna Kea, two strangers went up there on a visit. They became thirsty and discovering a woman wrapped in several layers of tapa, they asked where they could get some water to drink. The woman answered, "There is no water now." The sun was shining brightly at the time and they saw the reflection of water on the woman's chest. They said, "There is the water you are hiding, reflected on your chest." The woman was Lilinoe and the water she was hiding was the water of Poliahu (BPBM, Hawaiian Ethnological Notes; Legends Vol. II: 149).

#### **5.1.3.5 Lilinoe and Nuu**

Abraham Fornander, a prominent foreign historian, was married to a Hawaiian woman of chiefly rank from the Kāne'alai line of Moloka'i. During his residence in the Hawaiian Islands (c. 1830–1887), Fornander compiled a great collection of Hawaiian history, much of it directly from native informants. While he worked closely with prominent native historians like Kamakau and Kepelino, he also had contact with many individuals from remote areas, who retained personal family accounts and knowledge. Over the years, it has also become clear that some of the work that Fornander did, also incorporated knowledge of concepts that were foreign to the native Hawaiian experience – his accounts would sometimes link Christian and other religious philosophies into Hawaiian lore and genealogies.

Among the accounts that blended Christian concepts with Hawaiian tradition is a narrative about Lilinoe, her husband Nu'u, and their children, in the time of a great flood. Fornander wrote:

Nuu, by command of his god, built a large vessel with a house on top of it, which was called and is referred to in the chants as He Waa-Halau-Alii o ka Moku, "the royal vessel," in which he and his family, consisting of his wife Lili-noe, his three sons, and their wives, were saved. When the flood subsided, "Kane," "Ku,"

and “Lono” entered the “Wa’a Halau” of Nu’u and told him to go out. He did so and found himself on top of Mauna Kea (the highest mountain on the island of Hawaii), and he called a cave there after the name of his wife [Lili-noe], and the cave remains there to this day... (1973:91)

Fornander’s narratives were in part constructed from texts recorded previously by native historians, although he added details which none of the earlier versions of the account included. Malo (1951:234-237) and Kamakau (1964:13-14)<sup>21</sup> refer to a great flood caused by the rising sea (not an inundation of rainfall). Neither of the earlier narratives mention Mauna Kea or sites known to be associated with the mountain. The account collected by Ellis conforms with the early Hawaiian accounts, and in reference to Mauna Kea, may reflect localized embellishments to the account.

### 5.1.3.6 *The Love of Poli’ahu and Kūkahau’ula*

In 1931, Emma Ahu’ena Taylor (Ahu’ena), a Hawaiian historian of royal lineage, published an account of the gods Poli’ahu and Kūkahau’ula (Ahuena Taylor in *Paradise of the Pacific*, July 1931). Descended from the Hoapili-Beckley line (the chiefess Ahiakumaikalaniki’eki’e and Geo. Beckley), she had a direct genealogical relationship to the Waimea lands that were nestled on the slopes of Mauna Kea. Indeed, while introducing her account, she recalls her youth and a beloved kahu hānai (guardian), who told her stories of ancient times (Ahu’ena, 1931:13). In this particular narrative, Ahu’ena speaks of the sacred nature of Poli’ahu and describes the various attributes of Waiau, Lilinoe, and Kūkahau’ula. She also reports that a mo’o (a deity of ponds, capable of taking human and other forms), named Mo’o-i-nanea, was placed at the pool of Waiau, by Kāne, as a guardian of Poli’ahu and Waiau.

Poliahu, the snow goddess of Mauna-kea, was reared and lived like the daughter of an ancient chief of Hawaii.

She was restricted to the mountain Mauna-kea by her godfather Kane. She had a nurse Lihau (the chilling rain) who never left her for a moment.

Kane created a silvery swimming pool for his daughter at the top of Mauna-kea. The pool was named Wai-au. The father placed a supernatural guard at that swimming pool so that Poliahu could play at leisure without danger of being seen by a man... (Ahu’ena, 1931:13)

<sup>21</sup> It is noted here that in his “Na Hunahuna no ka Moolelo Hawaii,” Hawaiian historian John Papa ‘Ī‘Ī made no direct references to Mauna Kea (cf. ‘Ī‘Ī, 1959).

Ahu'ena explains that the god Kū-ka-hau-'ula ("the pink tinted snow god") had been selected as a husband for Poli'ahu, and that he appeared:

...every morning with the rising of the sun and again every afternoon with the setting of the sun. He saw the secluded water pool Wai-au and the lovely Poliahu... Each day he became more fascinated and made every effort to reach her abode and win her for his bride.

Poliahu's attendants drove him away. Lili-noe (fine mist rain), Lihau (chilling frost) and Kupu'upu'u (the hail) drove him from the mountain... (Ahu'ena, 1931:13-14)

As the story continues, Mo'o-i-nanea determined that Kūkahau'ula's love was true and she allowed the god-chief to embrace Poli'ahu. To this day, "Ku-kahau-ula, the pink snow god, and Poliahu of the snow white bosom, may be seen embracing on Mauna-kea" (Ahu'ena, 1931:14-15).

#### 5.1.4 Stone Tool Manufacture

The traditional Hawaiian ko'i, an axe or adze, was an important tool for traditional or customary practices. The ko'i was a widely utilized tool by Hawaiians, as it was used for carving, cutting, and other purposes (**Figure 16**). Hawaiians primarily made their ko'i from basalt because the hardness of the material made it suitable for cutting and carving.

Ko'i were fashioned first by identifying a suitable piece of basalt. A haku kako'i (hammerstone or other pieces of hard stone used to shape the ko'i) would then be used to begin shaping the head of the ko'i. Malo (1951: 51) wrote of the Ax-makers (known as po'e kākō'i):

1. The ax [adz] of the Hawaiian was of stone. The art of making it was handed down from remote ages. Ax-makers were a greatly esteemed class in Hawaii nei. Through their craft was obtained the means of felling trees and of cutting and hewing all kinds of timber used in every sort of woodwork.

Ko'i were critically important tools in the traditional Hawaiian culture. Ko'i of all sizes were regularly used through the islands. Large ko'i were used in canoe making and for felling trees, whereas Hawaiians used small ko'i as a tool to carve items for traditional cooking and habitation.



Figure 16. Ko'i (hafted adze), 1700s, Hawai'i, maker unknown. Gift of Lord St Oswald, 1912. CC BY-NC-ND 4.0. Te Papa (FE000334) <https://collections.tepapa.govt.nz/object/145329>

#### 5.1.4.1 “Skiing on Snow-Capped Peak of Mauna Kea” (1948)

##### *Paradise of the Pacific*

##### **March 1948 (page 4)**

The Majestic slopes of Mauna Loa and Mauna Kea, volcanic mountains on the Big Island of Hawaii, are covered with snow during the winter months. Mauna Kea, the highest island mountain in the world (13,825 feet), this year has had snow reaching down to the 9,000 foot level. (Her record snow fall came down to the 7,500 foot level in 1936).

Island residents and visitors climb Mauna Kea for the novelty of seeing snow in a sub-tropical area and to enjoy skiing and sledding. In ancient times Hawaiian adze makers climbed the slopes to obtain a valuable hard stone for their tools. An adze-making pit, Ka lua ka loi, lies on top of Mauna Kea. Even when the trip was made in the summer months the men wore ti-leaf cloaks, or ahu ua, to keep out the chilly mountain winds. They also brought several extra pairs of ti leaf sandals to protect their feet from the sharp lava rocks on the tortuous climb to the top.

These sandals were tied around the waist and were used as each pair wore out.

Present-day climbers frequently find valuable relics of the adze-making era.

#### **5.1.4.2 *Adze Quarries, a Wooden Image, and Artifacts Found Near the Summit of Mauna Kea (1862)***

*The Pacific Commercial Advertiser* of Honolulu reported on the findings of Dr. William Hillebrand, who was the director of the Queen's Hospital and personal physician to the royal family. Hillebrand was also an avid botanist and he traveled around the Hawaiian Islands collecting plant specimens. In October 1862, he conducted a tour of the island of Hawai'i, which also included a trip to the summit of Mauna Kea. The article is of particular importance, as it described the adze quarries, the presence of cultural remains, documenting extensive visitation to the summit region of Mauna Kea by ancient Hawaiians, and that he found a carved wooden image at the front of a cave in an adze quarry workshop. Artifactual materials were also removed from the cave, including the wooden image of Dr. Hillebrand.

#### ***The Pacific Commercial Advertiser* "Notes of the Week"**

#### **October 23, 1862 (page 2)**

Hawaiian Antiquities. – On a recent tour around Hawaii, Dr. Wm. Hillebrand ascended to the summit of Mauna Kea, in company with Charles Hall and Capt. Cumings. About 1500 feet below the top, on a side of the mountain seldom visited by either foreigners or natives, they discovered an ancient manufactory of stone implements. It consists of a cave, in front of which was a pile of stone chips 25 feet high, which had evidently accumulated from the manufacture of stone adzes, maika ball, &c. &c., which lay scattered about in an unfinished state. In front of the cave was found a wooden idol, in good preservation, which with the pedestal attached to it, measures nearly five feet high. In form the image very much resembles that picture in Jarves' History, page 27. Bones of pigs and dogs, kapa, pieces of cocoa-nut shells, fragments of hewn wooden implements, sea shells, and many other curiosities were also found. The Party loaded their guide and themselves with as many of these curiosities as they could carry, and returned to Waimea. On reaching Rev. Mr. Lyons' residence, the discovery soon became noised abroad among the natives, who flocked to the mission premises to learn the truth of the report.

On inquiry among them, no person appears ever to have heard of the existence of the manufactory, - even the oldest natives were ignorant of it. From this it is inferred that its antiquity must date back beyond the present generation. On reaching Kona, Dr. H. learned from Capt. Cumings that an old native was living

there, who in his younger days had heard the place spoken of by his fathers, but nothing definite can be learned regarding it. The discovery forms and interesting incident in Hawaiian History, and may lead to further searches and perhaps discoveries regarding the ancient customs of this people.

While the above article implies that almost no one knew of the adze quarries, native witnesses hailing from the Humu'ula region testified before the Boundary Commission in 1873 that they had traveled to the quarries and that their elders had previously worked in the quarries (see testimonies of the Boundary Commission in this study).

Two days later, the native language *Ka Nupepa Kuokoa* carried news of Hillbrand's "discovery:"

***Ka Nupepa Kuokoa***

**KOENA O KA WA KAHIKO.**

**'Okakopa 25, 1862**

Eia Kauka Hilebarana (Hillebrand) i hele aku nei i ke Kaapuni ma ka mokupuni o Hawaii, ua loa ia ia ma Maunakea, he kii o ka wa kahiko, a me kekahi paila pahoā e waiho ana mawaho iho o ka waha o kekahi ana. He elima kapuai ka loihi o ua kii'ia. He nui no paha na mea o ia ano e waiho huna mai nei iloko o ko kakou mau awaawa uliuli a me na kuahiwi no hoi a pau.

**REMNANT OF ANCIENT TIMES.**

**October 25, 1862**

Doctor Hillbrand went around the island of Hawaii, and on Maunakea he obtained an image of ancient times, and a large pile of adzes situated outside the mouth of a cave. The image is five feet long. There are perhaps many things of this kind hidden in our green valleys and all the mountains.

W.D. Alexander reported that in 1892, the carved wooden image was still in the possession of his family (Alexander, 1892).

**5.1.4.3 "The Adz Makers of Mauna Kea" (1938)**

***Paradise of the Pacific***

**The Adz Makers of Mauna Kea**

**April 1938 (pages 21-22)**

In the bare and silent regions where Mauna Kea rises above the trade-wind clouds, thick ledges of compact basalt, warmed through the day by their southern exposure, follow the 12,500-foot contour for several miles. Before

canvas sails formed white puffs on the sea far below, bringing to these shores the iron which took the place of the hard stone of the Hawaiian cutting tools, a maker of stone adzes wandering into this region must have been driven by the penetrating wind to seek shelter under the ledges. Here he would have found natural caves large enough to shelter himself and several companions. Building a wall to deflect the wind, he would have observed that the loose stones which lay about in such abundance were mostly in thin pieces such as he had sought far and wide when he had occasion to replace a broken adz or make a new one for exchange purposes. From the time of their discovery until the coming of the white man these ledges of compact basalt on Mauna Kea, shedding under the action of nightly frost an excellent grade of fine-grained basalt in a most convenient form for working, drew adz makers into this solitude. The number of generations this went on can only be guessed by the immense quantity of chipped stone.

When the air is clear and still at this altitude, words spoken in an ordinary tone are audible for several hundred yards. How the air must have rung with the blows of the hammer stones and the clink of broken pieces of bell-like rock sliding down the talus slopes of flakes! A person passing by on an August day in the year 1750 would probably have heard hallooing across from one work shop to another and, if he had come close enough, the banter and laughter with which the Hawaiians made light any tedious task.

Visiting this region in the summer of 1937, we located seven caves, and seven shelters formed by the overhanging of bluffs and protected from the wind by stone walls erected by the ancient Hawaiians. Here the adz makers turned out adzes in the rough, that is, finished except for grinding and polishing. Alongside the present main trail from Humuula to the summit cones is located the most important of the work shops known as Ke-ana-ka-ko'i (the cave of the adzes). The chips and unfinished adzes at this site cover an area of roughly fifty feet long by twenty feet broad, and the thickest part of the other piles are nearly as large. Nowhere else in Polynesia are there such accumulations of chips and rejects. So far as I am aware, these are the largest, so far recorded, anywhere in the world. Several hundred nearly finished adzes ranging from two to twelve inches in length, and a few chisels, lay on the pile of chips at Ke-ana-ka-ko'i site. The ordinary discoidal hammer-stoned, which we saw scattered about, were not more numerous than spherical stones of the same vesicular basalt, flattened slightly on one side. These spherical stones puzzled us until we discovered that a number of the rejected adzes had been smoothed and shaped by pecking so as to be gripped comfortably in the hand. We figured

that these shaped rejects must have been gripped in the left hand like a stone chisel, one end placed on a stone block to be chipped, and the other end struck a smart blow with the flat face of the spherical stone mallet held in the right hand. Such a method has not before been described but no other has been suggested which would explain these two tools certainly employed in the manufacture of the adzes. The use of the mallet-stone and of the chisel-stone, would be effective in the first rough chipping of a large block, but the discoidal hammer-stone would be necessary for the final chipping.

Large slabs and blocks of stone had been carried to the work shops from the quarries nearby. The quarries are simply places along the ledges of hard rock where quantities of slabs have been broken off by the scraping of the glacier which once covered Mauna Kea and by the freezing of water penetrating into cracks. There is evidence that the Hawaiians broke some of the stone from the bluffs themselves but generally they simply broke loose slabs into pieces to be carried to the work shops. Acres of ground are strewn with the dark blue, freshly broken rock contrasting with the dull brown surface of the weathered stone. In many places, the rock of the ledges is quite reddish, owing to the oxidation of its iron minerals, and this has led to the supposition that the Hawaiian built fires against the bluffs to split off the stone. But this redness is equally marked on inaccessible parts of the ledges, and is therefore due to weathering.

The floors of the caves and shelters contain grass-paddings and some fragments of sea shells, but no accumulation of shells or bones such as would indicate use as living quarters. On calm nights the temperature drops well below freezing. On rainy and windy nights, water drips through the roofs of the caves. During the winter months, snow frequently covers the ground, and the bitterly cold winds sweeping over the work shops would be unendurable to the workers. In two hours of easy walking one may reach the work shops from timber line. So, it is my conclusion that the adz makers lived at warmer altitudes, walking daily to their work during favorable weather in the summer months.

In the immediate vicinity of the work shops and quarries we discovered shrines consisting of single upright stones, and lines of upright stones planted in a low platform. Dr. T.A. Jaggar, in 1919, photographed on the west slope of Mauna Loa, an alignment of upright stones, which he called Umi's altar, near the head of the Alike lava flow, at 7,800 feet elevation. Such structures have much in common with the prehistoric altars, or shrines, of Lonely Necker Island, about three hundred miles northwest of Kauai, and belong to the

earliest type of sacred structure in the Tahitian region of Polynesia from which we are quite sure the Hawaiians came. The adz makers, clinging to the ancient form of shrine at which to approach their patron gods, have preserved a most important link with their ancestral home. Each upright stone at a shrine probably stood for a separate god. The Hawaiian dictionary describes, 'eho as "a collection of stone gods" and this is the term which the Tuamotuans, the neighbors of the Tahitians, used to designate the alignment of upright stones on the low and narrow platforms at their maraes, or sacred places.

The shrines at the adz quarries of Mauna Kea indicate that the work carried on here was in the hands of a group of skilled adz makers. They were able to create a stone-tool industry on a scale of unequalled in the stone-age because of their superior social organization of the Hawaiian people.

### 5.1.5 Hōlua

Traditional sledding, known as hōlua, was a favorite pastime, particularly of chiefs. It has been stated that "Athletic games, sports and festivals among the ancient Hawaiian were highly ritualistic, acted as transmitters of culture and exercised a constraining effect on social behaviour" (Howell, 1993: 2). Howell notes that hōlua, a traditional sport involving sledding, was particularly important to the culture. A traditional hōlua, sled is shown in **Figure 17**



*Figure 17. Detailed view of a traditional hōlua sled. Photo: BPBM, available at the U.S. National Library of Medicine (n.d.)*

#### **5.1.5.1 The Rivalry between Poli’ahu and Pele**

One of the prominent late historic writers was W.D. Westervelt, who resided in Hawai’i between 1889 and 1939. Westervelt wrote of the conflicts between Pele and Poli’ahu and told them how Poli’ahu came to gain control over the northern portion of Hawai’i, while Pele retained dominance over the arid and volcanically active southern part of Hawai’i. In his tradition of “Pele and the Snow-Goddess,” Westervelt reported an eruptive event that took place after Hawaiian settlement (contrary to geological research) of the island group, explaining how Laupāhoehoe and Onomea Arch were formed:

Poliahu... loved the eastern cliffs of the great island of Hawaii – the precipices which rise from the raging surf which beats against the coast known now as the Hamakua district. Here she sported among mortals, meeting the chiefs in their many and curious games of chance and skill. Sometimes she wore a mantle of pure white kapa and rested on the ledge of rock overhanging the torrents of water which in various places fell into the sea... (1963:55)

Westervelt then wrote that once, Poli'ahu and her companions were competing in the sport of hōlua (sledding) on the slopes of Mauna Kea, south of Hāmākua. There appeared among them a beautiful stranger, who was invited to participate in the sport with them. However, the woman instead:

...threw off all disguise and called for the forces for fire to burst open the doors of the subterranean caverns of Mauna Kea. Up toward the mountain she marshaled her fire-fountains. Poliahu fled toward the summit... Soon she regained strength and threw the [snow] mantle over the mountain... the lava chilled and hardened and choked the flowing, burning rivers... The fire-rivers, already rushing to the sea, were narrowed and driven downward so rapidly that they leaped out from the land, becoming immediately the prey of the remorseless ocean.

Thus the ragged mass of Laupahoehoe was formed, and the great ledge of the arch of Onomea, and the different sharp and torn lavas in the edge of the sea which mark the various eruption of centuries past (Westervelt, 1963:61-63).

Through these mo'olelo, the practice of hōlua becomes associated with both the project area and larger geographic extent. The project area, geographic extent, and adjacent lands are closely associated with the deities of the area (i.e., Pele, Poli'ahu, Lilinoe, Kahoupokane, Waiiau) and their associated activities.

### 5.1.6 Habitation

While the environment within the Saddle Region was not suitable for permanent habitation, there is clear archaeological evidence and oral histories that indicate the area was used for short-term habitation and shelters for Hawaiians traveling through the area. Lava tubes, in particular, made suitable shelters (**Figures 18 and 19**).

It was previously established in the 2012 Ethnographic Study and in previous studies that the area “were not inhabited on a permanent basis prior to European contact.... Instead, there is a wealth of data pointing to temporary but repeated uses for different purposes” (McCoy and Orr, 2012: 27, citing McCoy 1991). Langlas et al. also identified “late-prehistoric and historic period occupation caves and trails” (1999: 17, citing Rosendahl, 1977). Langlas et al. also noted “habitation caves in the western portions of the PTA” that were dated in the ranges of AD 900–1700 (1999).



*Figure 18. "Habitation Cave" located within PTA. Photo: Archaeologists find, preserve cultural resources at Pōhakuloa Training Area [Image 12 of 12], by Eric Hamilton, U.S. Army Garrison Pōhakuloa Training Area (2012)*

**Figure 18** is described as follows: “Ana, a member of USAG-PTA's Cultural Resources team, is at Bobcat Trail Habitation Cave. PTA's Cultural Resources staff conduct archaeological surveys of sites on the Island of Hawaii. They wear helmets, flak vests and other personal protective equipment to guard against several risks: sharp lava rocks and rough terrain, as well as rare possibility of encountering unexploded ordnance (UXO)” (Hamilton, 2012). Concerns regarding UXO impacting historic and cultural sites were regularly raised by stakeholders and practitioners. **Figure 20** provides a photo of a gourd found in a lava tube.



*Figure 19. Lava tube that was likely used by Hawaiians as a shelter. Photo: Archaeologists find, preserve cultural resources at Pōhakuloa Training Area [Image 11 of 12], by Eric Hamilton, U.S. Army Garrison Pōhakuloa Training Area (2015)*



*Figure 20. Gourd found in a historic site located in a lava tube within the Infantry Platoon Battle Course within the PTA area. Photo: Archaeologists find, preserve cultural resources at Pōhakuloa Training Area [Image 10 of 12], by Eric Hamilton, U.S. Army Garrison Pōhakuloa Training Area*

#### **5.1.6.1 “Hua Hekili” – A Hail storm on Mauna Kea (1830)**

In 1830, Goodrich again returned to the summit of Mauna Kea, this time in the company of natives. On the trip, they experienced a hail storm, the hail being called “hua ke hekili” (fruit of thunder). Goodrich searched for, but did not find, Waiau pond, though they did find a stream fed by the melting snow. Goodrich also reported that on the flat lands between Mauna Kea and Mauna Loa, they found many huts formerly used by the sandal wood cutters.

**Byron’s Bay, Hawaii**

**December 30, 1830**

**Joseph Goodrich; to Jeremiah Evarts:**

Being favoured with an associate Mr. Andrews & wife who came up here to spend a season in labouring for the good of souls here, having had a previous

request to visit the brethren at Waimea. I thought it desirable to improve the earliest opportunity to comply with their request. I left home the latter part of May in company with 7 or 10 natives. We went directly up the mountain till we reached the upper region of vegetation, then turning to the left of the mountain, as we were passing along to the south east of the summit being probably 12000 feet above the level of the sea, we can in contact with a hail storm. Being the first that I had seen since passing Cape Horn. Here it was quite amusing to see the natives to use their endeavors to catch it as it fell, some with their hats & some with the tops of their calabashes held out to catch it, but they were disappointed for some time saying that it went into their hats or calabashes but that it flew directly out again. At last having collected soem they commenced eating them or here they expressed surprise, exclaiming, "huihui eha loa ka niho" it was very cold & hurt the teeth. They call hail stones, hua ke hekili, a fruit/eggs of thunder. One asked me, "No ke aha la e noho wale no ke anuanu maluna o ka mauna?" Why does cold dwell or stay only upon the top mountain? One says that he has no hands, another that his feet are thick, another that his nose is numbed. We descended again into the valley between the mountains, having Mauna Kea on our right, Mauna Loa on the left. Some part of the way is sandy, interspersed with trees & shrubberies & many huts of the sandal wood cutters, though these inhabitants have previously left them. Their present occupant disputed our entrance and we much preferred to recline out in the sun, than to contend with so many formidable oppressors.

The valley between the mountains is probably 8,000 or 10,000 feet above the level of the sea. Mauna Loa presents a most appalling aspect scarcely any is to be seen but black & wearily looking lava; currents of rough & black looking lava commenced at the top of Mauna Loa, & I should think after running a distance of 50 miles or more, fell into the sea Kawaihae. We arrived at Waimea & found all comfortable; after the sabbath we commenced our return. Designing to ascend the summit in search of the pond of water of which I had frequently heard, we followed the same route very nearly that I pursued the first time that I ascended the mountain. When a tour of the island was made by a deputation from the mission. We discovered nothing very special except a beautiful stream of water murmuring from the mountain, it was occasioned by the melting of the snow & had its head in the pond of water for which I was looking, but having no guide we passed within about a half a mile of it as I afterward was informed we have since seen it. It is 40 or 50 rods in circumference as Mr. Bingham has been up there & seen it, I presume that he has given a particular account of it, it is therefore unnecessary for me to do it. I also saw as below fragments of granite imbeded in lava, this cohesion of

almost all of it was very feeble which was probably destroyed by the action of volcanic fires. In traveling on the loose masses & fragments of lava, the sound under foot would very nearly resembles that of traveling over plates of iron; solid mound precipices slags, cinder, scoria & sand compose the principal part of the summit of Mauna Kea, while Mauna Loa is composed almost entirely of black compact lava of a hard infused mass of jet black appearance, while some inclines to an ebony colour. I find it very interesting to ascend the summit being afflicted with a severe pain in the head. The natives also complaining of the same, several times, while in the upper regions. I have been attacked with violent vomiting of bilious matter, all these complaints to subside as we descend the mountain... (A.B.C.F.M. Collection, Houghton Library, Harvard:1-3)

### ***5.1.6.2 Gerrit P Judd's Account of a Visit to the Summit of Mauna Kea and Travel Across Plateau Lands Between Mauna Kea and Mauna Loa (1830)***

Gerrit P. Judd, a doctor attached to the Sandwich Island Mission Station at Honolulu, was frequently in the company of the ali'i and made tours around the islands because of his medical expertise. In April 1830 while on a visit to Waimea, Judd and a native guide, John Honolii, walked to the upper region of Mauna Kea (not reaching the summit). On his return, he brought back snow and gave it to Governor Kuakini, the first touched by the governor. In June and July of the same year, Judd again traveled across the mountain lands. His narratives describe travel around the Hāmākua-Laupāhoehoe trail to Hilo Bay, skirting the upper forest lands, and travel across the saddle lands between Mauna Kea and Mauna Loa, from the upper region of Keauhou, Ka'ū.

#### **Honolulu, August 19th, 1830**

**Gerrit P. Judd; to Jeremiah Evarts, Esqr.**

**Missionary Rooms, Handover St., Boston:**

...[March] 19th. Gov. Adams arrived with all his train, he intends spending some months with us, to catch wild cattle...

...[April] 4th Sabbath. Gov. Adams having commenced his buildings at Aalii for the sake of being near the wild cattle, & erected large Ranai proposed to hold public worship there. Mr. R. attended today he reports a congregation in the forenoon of 4,000.

[April] 23. Yesterday morning the weather being clear and inviting I set off in company with John Honolii and other natives to visit the top of Mauna Kea. I rode a mule furnished me by the Governor. We ascended until about 2 P.M.

when we were overtaken with a violent thunderstorm. We were compelled to take shelter in a cave and the storm continuing to rage, we remained all night. Arose early this morning, left the mule & proceeded on foot. The atmosphere was clear, we had a delightful view of the scenery below, which certainly surpasses anything I have seen before. Clouds soon obscured our sight for the rest of the day. Reached the snow about noon, ascended a short distance, but found myself too much fatigued to ascend the summit. There was indeed little inducement, the prospect was so obscured by clouds. I therefore descended bringing with me a large bundle of snow. Arrived at the cave at 5 P.M. bestrode the mule & reached home about 9 o'clock in the evening. There is little vegetation on this side of the mountain except coarse grass which is plenty, two thirds of the distance. The ascent is not difficult, the cattle ascend to the snow in search of water.

24th. Sent the bundle of snow to Gov. Adams who had never before seen any except on the distant mountain top, he appeared much gratified with tasting & handling it...

...[July] 3rd. Returned from my visit [to Kilauea]. I left home early on the morning of the 24th travelling towards the eastern side of Mauna Kea, my route the two first days was through thick woods frequented only by sandalwood cutters & wild cattle until I arrived at Laupahoehoe. I then proceeded along the sea shore to Hilo a distance of about 20 miles. The country here is extremely fertile, but rather unpleasant, on account of the almost incessant rains, that is well watered you will believe when I tell you that I crossed more than 50 streams with banks from one to five hundred feet high on each side. I was forced to ford many that were 2 or 3 feet in depth at the most shallow part that could be found. In one instance was ferried across in a canoe...

...[June 31; departing from Kilauea] Parted with Mr. & Mrs. Andrews about noon on Thursday in order to return to Waimea by a direct rout over the unfrequented country between Mauna Roa & Mauna Kea. *I found this journey excessively fatiguing. We travelled over rough lava without a path sleeping on the ground & in the huts of sandal wood cutters, without much food or water. The south & western sides of Maunea Kea are altogether unlike the North & East.* The former dry and barren, the latter rich with wooded & susceptible of cultivation one third of the distance upwards... (A.B.C.F.M. Collection, Houghton Library, Harvard:4-10)

## 5.2 Cultural Resources: Hawaiian Settlement, Population Expansion, and Evolution of Land Management in the ‘Āina Mauna of Hawai‘i

The following narratives include discussions on Hawaiian settlement, population expansion, evolution of the traditional land management practices, and attachment to place. The ancient Hawaiian system of land management is rooted in the beliefs, practices, traditions and values of the people, and that these formed the basis of the sustainable relationship shared between the Hawaiian people and the land. As this system evolved, the ahupua‘a of Ka‘ohe and Humu‘ula were established as the largest lands of the Mauna Kea region. There are also some 75 additional ahupua‘a in the Hilo District; 82 ahupua‘a in the Hāmākua District; and one ahupua‘a and several large ‘ili divisions in the Kohala District, that rest upon the slopes of, and are enriched by, the tangible and intangible resources of Mauna Kea. These traditional land divisions defined the rights of access of people to the resources necessary to life and culture; they were intricately tied to the lifeways of the people; and are reflected in the on-going cultural attachment<sup>22</sup> of Hawaiians to Mauna Kea.

### 5.2.1 Sequence of Hawaiian Settlement

Archaeologists and historians describe the inhabiting of these islands in the context of settlement which resulted from voyages taken across the open ocean. For many years, archaeologists have proposed that early Polynesian settlement voyages between Kahiki (the ancestral homelands of the Hawaiian gods and people) and Hawai‘i were underway by AD 300, with long distance voyages occurring fairly regularly through at least the thirteenth century. It has been generally reported that the sources of the early Hawaiian population – the Hawaiian Kahiki – were the Marquesas and Society Islands (Emory in Tatar, 1982:16-18).

For generations following initial settlement, communities were clustered along the watered, windward (ko‘olau) shores of the Hawaiian Islands. Along the ko‘olau shores, streams flowed, rainfall was abundant, and agricultural production was established. The ko‘olau region also offered sheltered bays from which deep sea fisheries could be easily accessed. Also, near-shore fisheries, enriched by nutrients carried in the fresh water running from the mountain streams, could be maintained in fishponds and coastal fisheries. It was around these bays such as at Hilo, that clusters of houses where families lived could be found (see

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<sup>22</sup> “Cultural Attachment” embodies the tangible and intangible values of culture – how a people identify with, and personify the environment around them. It is the intimate relationship (developed over generations of experiences) that people of a particular culture feel for the sites, features, phenomena, and natural resources etc., that surround them – their sense of place. This attachment is deeply rooted in the beliefs, practices, cultural evolution, and identity of a people. The significance of cultural attachment in a given culture is often overlooked by others whose beliefs and values evolved under a different set of circumstances (cf. James Kent, “Cultural Attachment: Assessment of Impacts to Living Culture.” September, 1995).

McEldowney, 1979). In these early times, the residents generally engaged in subsistence practices in the forms of agriculture and fishing (Handy et al., 1972:287).

Over several centuries, areas with the richest natural resources became populated and perhaps crowded, and by ca. AD 900 to 1100, the population began expanding to the Kona (leeward side) and more remote regions of the island (Cordy, 2000:130). Kirch reported that by ca. AD 1200, there were small coastal settlements at various areas along the western shoreline of Hawai'i (1979:198). In this system of settlement and residency, the near-shore communities shared extended familial relations with those of the uplands.

By the 1400s, upland regions to around the 3,000 foot elevation were being developed into areas of residence and a system of agricultural fields. By the 1500s to 1600s, residency in the uplands was becoming permanent, and there was an increasing separation of royal class from commoners. During the latter part of this period, the population stabilized and a system of land management was established as a political and socio-economic factor (see Kamakau, 1961; Ellis, 1963; Handy et al., 1972; Tomonari-Tuggle, 1985; Cordy, 2000).

The lowlands of Ka'ohē, Humu'ula, and the other neighboring ahupua'a, extending from the shore to around the 3,000 foot elevation, supported residential, agricultural, and subsistence activities, spanning the centuries of Hawaiian residency. The upper mountain lands of the Ka'ohē-Humu'ula region were frequented by travelers, collectors of natural resources, and for a range of cultural practices (see Kamakau, 1961; Boundary Commission Testimonies, 1865–1891).

Traditions and historical records show that the deification and personification of the land and natural resources, and the practices of district subdividing and land use as described above, were integral to Hawaiian life, and were the product of strictly adhered to resource management planning. In this system, the people learned to live within the wealth and limitations of their natural environment, and were able to sustain themselves on the land and ocean. It is in this cultural system that illustrates the significance of the lands of Ka'ohē, Humu'ula and the neighboring 'āina mauna.

### **5.2.2 Traditional Land Uses and Management**

In the generations that followed initial settlement, the Hawaiians developed a sophisticated system of land use and resource management. By the time 'Umi-a-Līloa rose to rule the island of Hawai'i ca. 1525, the mokupuni (island) was divided into six districts or moku-o-loko (cf. Kamakau, 1961; and Fornander, 1973 – Vol. II:100-102). Hilo, extending from the sea to the mountain slopes of Mauna Kea, and on to the summit of Mauna Loa – through the land division of Humu'ula – is one of those six major districts. The land division of Ka'ohē in the district of Hāmākua, another of the six major district on the island of Hawai'i, shares a

common boundary with Humu'ula, running across Mauna Kea, and up to the summit of Mauna Loa.

The large moku-o-loko like Hilo, and sub-regions ('okana and kalana) were further divided into manageable units of land. These smaller divisions or units of land were tended to by the maka'āinana (people of the land) (see Malo, 1951:63-67). Of all the land divisions, perhaps the most significant management unit throughout the islands was the ahupua'a. Ahupua'a are subdivisions of land that were usually marked by an altar with an image or representation of a pig placed upon it (thus the name ahu-pua'a or pig-altar). In their configuration, the ahupua'a may be compared to wedge-shaped pieces of land that radiate out from the center of the island, extending to the ocean fisheries fronting the land unit. Their boundaries are generally defined by topography and geological features such as pu'u (hills), ridges, gullies, valleys, craters, or areas of particular vegetation growth.

The ahupua'a were also divided into smaller manageable parcels of land – such as the 'ili, kō'ele, mahina 'ai, māla and kīhāpai – that generally run in a mauka-makai orientation, and are often marked by stone wall (boundary) alignments. In these smaller land parcels the native tenants cultivated crops necessary to sustain their families, and supplied the needs of the chiefly communities with which they were associated. As long as sufficient tribute was offered and kapu (restrictions) were observed, the common people who lived in a given ahupua'a had access to most of the resources from mountain slopes to the ocean, needed to sustain life and culture. These access rights (pono) were almost uniformly tied to the residency on a particular land, and earned as a result of taking responsibility (kuleana) for stewardship of the natural environment, and supplying the needs of ones' ali'i (see Malo, 1951:63-67 and Kamakau, 1961:372-377).

Entire ahupua'a, or portions of the land, were generally under the jurisdiction of appointed Konohiki or subordinate chief-landlords, who answered to an ali'i-'ai-ahupua'a (chief who controlled the ahupua'a resources). The ali'i-'ai-ahupua'a in turn answered to an ali'i 'ai moku (chief who claimed the abundance of the entire district). Thus, ahupua'a resources supported not only the maka'āinana and 'ohana who lived on the land, but also contributed to the support of the royal community or regional and island kingdoms. In the Hilo District, the primary chiefly center extended from the lowlands of Pi'ihonua to the shore of Waiākea. In Hāmākua, the chiefly center was focused around Waipi'o, while in South Kohala, the center was in the Waimea section, the 'ili of Pu'ukapu and Pu'ukalani (Maly 2005: 12-14).

Curtis J. Lyons, one of the foremost surveyors of the Hawaiian Kingdom, authored a paper on "Hawaiian Land Matters" (Lyons, 1875). In his discussion, he provided important references to the rights of native tenants on the ahupua'a of Humu'ula and Ka'ohē. He also discussed their relationship with the neighboring mountain lands on the slopes of Mauna Kea:

The ordinary ahupuaa extends from half a mile to a mile into this [forest] belt. Then there are large ahupuaas which are wider in the open country than others, and on entering the woods expand laterally so as to cut off all the smaller ones, and extend toward the mountain till they emerge to the open interior country; not however to converge to a point at the tops of the respective mountains. Only a rare few reach those elevations, sweeping past the upper ends of all the others, and by virtue of some privilege in bird-catching, or some analogous right, taking the whole mountain to themselves... The whole main body of Mauna Kea belongs to one land from Hamakua, viz., Kahohe, to whose owners belonged the sole privilege of capturing the ua'u, a mountain-inhabiting but sea-fishing bird. High up on its eastern flank, however, stretched the already mentioned land of Humuula, whose upper limits coincide with those of the mamane, a valuable mountain acacia, and which starting from the shore near Laupahoehoe, extends across the upper ends of all other Hilo lands to the crater of Mokuaweoweo... (Lyons, 1875:11)

### 5.2.3 Places Names in the Vicinity of the Project Area

The traditional knowledge imbedded in place names reveals the history of place, people, and the depth of their traditions. Although fragmented, the surviving place names describe a rich culture. On these lands are found many place names that have survived the passing of time. The occurrence of place names demonstrates the broad relationship of the natural landscape to the culture and practices of the Hawaiian people. In "A Gazetteer of the Territory of Hawaiian," Coulter observed that Hawaiians had place names for all manner of features, ranging from "outstanding cliffs" to what he described as "trivial land marks" (1935:10). In 1902, W.D. Alexander, former Surveyor General of the Kingdom (and later Government) of Hawai'i, wrote an account of "Hawaiian Geographic Names." Under the heading "Meaning of Hawaiian Geographic Names" he observed:

It is very difficult, if not impossible, to translate most of these names, on account of their great antiquity and the changes of which many of them have evidently undergone. It often happens that a word may be translated in different ways by dividing it differently. Many names of places in these islands are common to other groups of islands in the South Pacific, and were probably brought here with the earliest colonists. They have been used for centuries without any thought of their original meaning... (Alexander, 1902:395)

History further tells us that named locations were significant in past times and it has been observed that "Names would not have been given to [or remembered if they were] mere worthless pieces of topography" (Handy et al., 1972:412).

In ancient times, named localities served a variety of functions, telling people about: (1) places where the gods walked the earth and changed the lives of people for better or worse; (2) heiau or other features of ceremonial importance; (3) triangulation points such as ko'a (ceremonial markers) for fishing grounds and fishing sites; (4) residences and burial sites; (5) areas of planting; (6) water sources; (7) trails and trail side resting places (o'io'ina), such as a rock shelter or tree shaded spot; (8) the sources of particular natural resources/resource collections areas, or any number of other natural phenomena or features; or (9) notable events which occurred at a given area. Through place names knowledge of the past and places of significance was handed down across countless generations. There is an extensive collection of native place names recorded in the mo'olelo (traditions and historical accounts) published in Hawaiian newspapers. The following narratives provide access to a rich collection of place names from the region (Maly et al. 2013).

Honua Consulting developed a list of place names from the study area, focusing primarily on the project area, which includes but is not limited to the following places and terms, to help guide research and analyses (**Tables 4** through **6**). The development of this list stemmed from extensive research into a wide range of documents related to the project area. What became clear is that at the time of the Māhele 'Āina, few kuleana land applications were submitted by native tenants. In many cases, land divisions would be referred to as both ahupua'a and 'ili (land section, usually a subdivision of an ahupua'a), depending upon the document. It was also unclear from documents where land was identified as 'ili and if the 'ili were simply a subdivision of larger ahupua'a or if they were 'ili kūpono (distinct land areas unto themselves). From the historical land records, there appeared to be little concern for specific boundaries, as foreigners, many of them missionaries who converted to businessmen, eagerly maneuvered their relationships with the new formalized government to acquire themselves strategically located parcels of land that proved valuable on Hawai'i Island.

This process also identified names, locations, and resources gathered from historic maps that are known to be or could potentially be PTRCI. Naming itself is a traditional practice that provides important insight into Hawaiian epistemology, ontology, and axiology, particularly within a landscape ethnoecological context. Therefore, by a place simply having a name, that unto itself already indicates a level of cultural importance. This study utilizes these traditional names as a baseline. If a place or resource has a name, it is identified as potentially being a PTRCI.

In the Preface to the 1974 edition of *Place Names of Hawaii*, historian Samuel H. Elbert wrote:

The Hawaiian names ... usually have understandable meanings, and the stories illustrating many of the place names are well known and appreciated. Pele, the

volcano goddess who turned so many luckless people into stones, is still feared and revered; sharks are sometimes considered protective; and the mischievous, sexually insatiable pig-man, Kama-pua'a, delights and amuses. Most places on the Mainland seem, by comparison, barren and bereft of traditions older than those introduced by the European and African immigrants. Whereas the Indians were considered savages and were slaughtered for their land, the Hawaiians were respected as people. Hawaiian kings and queens maintained their sovereignty almost until the present century. Intermarriage was and is extremely common. Not only does the Hawaiian past still live, it dates back a thousand years or more, whereas on most of the Mainland, traditions go back only a few centuries or even less. The land there seems lacking in history. Who were the Indians? What was their culture? Most persons do not know.

One of the pleasures of living in Hawai'i is the presence of Hawaiians, with their ancient language and traditions. The place names provide a living and largely intelligible history (Elbert, 1974: xii).

Therefore, when place names present on historic maps revealed a known definition or associated history, those sites were noted as PTRCI.

*Table 4. Place Names and Properties of Traditional Religious and Cultural Importance Identified from 1929 USGS Map*

| Inoa                    | PTRCI           | Translation                                                                                                                                                                                                                                                                        | Description            | Quadrant |
|-------------------------|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|----------|
| (Upper) Pā'auhau        | Yes             | Village, gulch, and land section. site of an indecisive battle between Ka-mehameha and Ke-ō-ua; site of a Maui battle (near Ka-lae-o-ka-īlio) in which Ka-mehameha distinguished himself and saved the life of Ke-kū-hau-pi'ō (Pukui et al. 1974).<br>Lit., Tribute enclosure.     | Gulch and land section |          |
| Kamakoa Gulch           | Yes             | Son of war gulch                                                                                                                                                                                                                                                                   | Gulch                  | 4        |
| Hāmākua District (Moku) | Yes (landscape) |                                                                                                                                                                                                                                                                                    | Place                  |          |
| South Kohala District   | Yes (landscape) |                                                                                                                                                                                                                                                                                    | Place                  |          |
| Auwaiakeakua Gulch      | Yes             | Ditch of the god                                                                                                                                                                                                                                                                   | Gulch                  | 2, 3, 4  |
| Pu'ū Nā'ū               | Yes             | Hill and gulch, Mauna Kea qd., Hawai'i. Lit., yellow.                                                                                                                                                                                                                              | Hill                   | 4        |
| Pu'ū Lā'au              | Yes             | Hill, Hāmākua, Hawai'i. Lit. Wood/forest                                                                                                                                                                                                                                           | Hill                   | 4        |
| Ka'ohē                  | Yes             | Quadrangle; land sections in Hāmākua, Humu'ula, Ka'ohē, and Wai-ki'i qds.; homesteads, Kala-pana qd.; tract and ranch, Hōnaunau qd., Hawai'i. Lit. The bamboo Ka'ohē ahupua'a may reference a species of kalo (taro) that might have been common in the region (Pukui et al. 1974) | Place                  |          |
| Pu'ū 'Ula'ula           | Yes             | Hill, Mauna Kea qd., Hawai'i. Hill (3,078 feet high), lit. Red                                                                                                                                                                                                                     | Hill                   | 10       |
| Pu'ū Manao              | Yes             | Mana'o - concept, idea (no entries on place names)                                                                                                                                                                                                                                 | Hill                   | 10       |

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| Inoa                      | PTRCI                                                      | Translation                                                                                                                                                                                                                                 | Description             | Quadrant      |
|---------------------------|------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|---------------|
| Pu'ū o Kau                | Yes                                                        | Place between Wai-ōhinu and South Point, Ka'ū, Hawai'i. Lit., to place.                                                                                                                                                                     | Hill                    | 11            |
| Pu'ū Kauha                | Yes                                                        | (No entries, spelling may be incorrect) pu'ū = hill                                                                                                                                                                                         | Hill                    | 11            |
| Ahumoa                    | Yes                                                        | Land section, Wai-ki'i qd., Hawai'i. Lit., gathering [of] chickens                                                                                                                                                                          | Hill                    | 10            |
| Pu'ū 'Iwa'iwa (adj.)      | Yes                                                        | Maidenhair Fern, (no entries on place names)                                                                                                                                                                                                | General geographic area | 1             |
| Pu'ū Pā (adj.)            | Yes                                                        | (No Hawai'i Island Entry) Land section and cones, Kō-loa district, Kaua'i. Lit., dry, rocky.                                                                                                                                                | Hill                    | 2             |
| Pu'ū Kahekili             | Yes                                                        | Kahekili Pu'ū                                                                                                                                                                                                                               | Hill                    | 3             |
| Kipuka Kalawemauna (adj.) | Yes                                                        | No entries                                                                                                                                                                                                                                  |                         | 7, 14         |
| Keamuku Lava Flow         | Undetermined (specific sites within the flow may be PTRCI) | Lava flow, Wai-ki'i and Ka-ōhe qds., Kona, Hawai'i. Lit., cut-off lava. Another explanation is that women, children, and the aged hid in caves here during wars; they had to stifle any burning ('ā muku) fire if an enemy appeared.        | 19th century lava field | 7, 15, 16, 35 |
| Waiki'i                   | Yes (landscape)                                            | Village, quadrangle, and gulch, north central Hawai'i. A spring here was believed formed when a legendary hero, Ka-miki, carried water in a calabash from another spring (Ka-wai-hū-a-Kāne, the hidden water of Kāne). Lit., fetched water. | Place                   | 3, 8          |
| Popo'ō Gulch              | Yes                                                        | (No entries) Po'ō = Ancient surfing areas, Kapā'a and Wai-mea districts                                                                                                                                                                     | Gulch                   | 9             |
| Pu'ū Kanaiopakaou (sp?)   | Yes                                                        | (No entries, spelling may be incorrect)                                                                                                                                                                                                     | Hill                    | 9             |
| Pu'ū Heanai (sp?)         | Yes                                                        | (No entries, spelling may be incorrect)                                                                                                                                                                                                     | Hill                    | 8             |

| Inoa                                   | PTRCI                                                      | Translation                                                                                                                                                   | Description    | Quadrant       |
|----------------------------------------|------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|----------------|
| Mauna Kea Forest Reserve <sup>23</sup> | No                                                         |                                                                                                                                                               | Forest Reserve | 5, 6           |
| Ka'ōhe                                 | Yes (landscape)                                            | Quadrangle; land sections in Hāmākua, Humu'ula, Ka-ōhe, and Wai-ki'i qds.; homesteads, Kala-pana qd.; tract and ranch, Hōnaunau qd., Hawai'i. Lit. The bamboo | Place          | 10, 21, 29, 31 |
| Pu'u Anahulu                           | Yes                                                        | (No Hawai'i Island Entry) Stream, Wai-'alua, O'ahu. (li 98.) Lit., ten days.                                                                                  | Place          | 13, 19         |
| Pu'u Mo'au                             | Yes                                                        | (No place entries) lit. Stretched or spread out.                                                                                                              | Hill           | 16             |
| Pu'u Pauahi                            | Yes                                                        | Land section and gulch, Waipi'o qd.; land section, Kailua qd.; pit crater, Puna qd., Hawai'i. Also a name of a star.                                          | Hill           | 16             |
| Humu'ula                               | Yes (landscape)                                            | Quadrangle; land sections, sheep station (6,700 feet elevation), road, and trail—all mostly in Mauna Kea and Humu'ula qds., Hawai'i. Lit., jasper stone.      | Place          | 17             |
| Wa? Springs                            | Yes                                                        | (Spelling?)                                                                                                                                                   |                | 18             |
| Hapukani (sp?)                         | Undetermined                                               | (No entries, spelling may be incorrect)                                                                                                                       |                | 18             |
| No Pu'u                                | Undetermined                                               | Possibly Nā Pu'u? (No place entries)                                                                                                                          |                |                |
| Pōhakuloa Gulch                        | Yes                                                        | Lit. Long stone.                                                                                                                                              | Gulch          | 18             |
| Pu'u Kuluo (sp?)                       | Undetermined                                               | (No entries, spelling may be incorrect)                                                                                                                       | Hill/mountain  | 20             |
| Lava Flow 1859 <sup>24</sup>           | Undetermined (specific sites within the flow may be PTRCI) |                                                                                                                                                               | lava flow      | 25             |

<sup>23</sup> While Mauna Kea itself is an ATI, the reserve as a construct of modern policy would not be.

<sup>24</sup> While lava flows were important to cultural practices, like agriculture or bird hunting, they may not be ATI unto themselves. No traditional names for specific flows were identified with the exception of Ke'āmuku flow, although that name is likely based simply on geography.

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| Inoa            | PTRCI           | Translation                                                                                                                                                                | Description | Quadrant |
|-----------------|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|----------|
| Pu'u 'Ō'ō       | Yes             | (No Hawai'i Island Entry) Lit. Black honeyeater (its yellow feathers were used for feather work)                                                                           | Hill        | 30       |
| Keauhou-2       | Yes (landscape) | Land sections, Hilo, Hōnaunau, Humu'ula, Kailua, Ka'ohe, Kīlauea, Mauna Loa, and Puna qds. Lit., the new era or the new current.                                           | Place       | 31       |
| (Pu'u) Kokoolau | Yes             | Hill (also called Pu'u-ko'oko'olau), Mauna Kea qd.; land section, Puna; crater, Kīlauea qd., Hawai'i, named for the plant ( <i>Bidens</i> spp.) used by Hawaiians for tea. | Place       | 35       |
| Pu'u Koli       | Yes             | (No place entries) lit. Meteor                                                                                                                                             | Hill        | 36       |

*Table 5. Place Names and Properties of Traditional Religious and Cultural Importance Identified from 1954 and 1961 USGS Maps*

| Inoa                                             | PTRCI                                         | Translation                                                                                                                                                                                                                                 | Description |
|--------------------------------------------------|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| Po’o Kānaka                                      | Undetermined                                  | (No place name entries)                                                                                                                                                                                                                     | Hill        |
| Mānā (Written as Mana, which changes definition) | Yes (landscape, or home may be historic site) | Land division, Ka’ū, Hawai’i; land divisions and home of the owners of the Parker Ranch, Wai-pi’o qd., Hawai’i. Lit. Arid                                                                                                                   | Place       |
| Holoholokū                                       | Yes (landscape)                               | Hill, Wai-ki’i qd., Kohala, Hawai’i. Lit., to run [and] stand.                                                                                                                                                                              | Hill        |
| Kemole Gulch                                     | Yes                                           | Hill and gulch, Wai-ki’i qd., Hawai’i.                                                                                                                                                                                                      | Gulch       |
| Kamakoia Gulch                                   | Yes                                           | (No entries)                                                                                                                                                                                                                                | Gulch       |
| Auwaiakeakua Gulch                               | Yes                                           | (No entries)                                                                                                                                                                                                                                | Gulch       |
| Popo’o gulch                                     | Yes                                           | (No entries) Po’o = Ancient surfing areas, Ka-pa’a and Wai-mea districts                                                                                                                                                                    | Gulch       |
| Keamuku                                          | Yes (landscape)                               | Lava flow, Wai-ki’i and Ka-’ohe qds., Kona, Hawai’i. Lit., cut-off lava. Another explanation is that women, children, and the aged hid in caves here during wars; they had to stifle any burning (’ā muku) fire if an enemy appeared.       | Place       |
| Waiki’i                                          | Yes (landscape)                               | Village, quadrangle, and gulch, north central Hawai’i. A spring here was believed formed when a legendary hero, Ka-miki, carried water in a calabash from another spring (Ka-wai-hū-a-Kāne, the hidden water of Kāne). Lit., fetched water. | Place       |

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| Inoa                                 | PTRCI                                                      | Translation                                                                                                                                                                                                                           | Description |
|--------------------------------------|------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| Keamuku lava flow                    | Undetermined (specific sites within the flow may be PTRCI) | Lava flow, Wai-ki'i and Ka-'ohe qds., Kona, Hawai'i. Lit., cut-off lava. Another explanation is that women, children, and the aged hid in caves here during wars; they had to stifle any burning ('ā muku) fire if an enemy appeared. | Lava flow   |
| Ahumoa                               | Yes (landscape)                                            | Land section, Wai-ki'i qd., Hawai'i. Lit., gathering [of] chickens                                                                                                                                                                    | Hill        |
| Pōhakuloa                            | Yes (landscape)                                            | Lit. Long stone.                                                                                                                                                                                                                      | Place       |
| Pōhakuloa Gulch                      | Yes                                                        | Lit. Long stone.                                                                                                                                                                                                                      | Gulch       |
| Na Pu'ukūlua                         | Yes                                                        | Cones on the northeast rift of Mauna Loa, Hawai'i. Lit., two standing.                                                                                                                                                                | Hill        |
| Humu'ula Sheep Station <sup>25</sup> | No                                                         | Quadrangle; land sections, sheep station (6,700 feet elevation), road, and trail—all mostly in Mauna Kea and Humu'ula qds., Hawai'i. Lit., jasper stone.                                                                              | Place       |
| Ahu A 'Umi Heiau                     | Yes                                                        | 'Umi = Caverns, Mauna Loa qd.; peak, Wai-pi'o qd., Hawai'i. Lit., strangle.                                                                                                                                                           | Heiau       |
| Lehua Ranch                          | No                                                         | (No Hawaii Island entries)                                                                                                                                                                                                            | Ranch       |

<sup>25</sup> While the hunting stations are important to facilitate modern hunting, they would not be considered ATI.

*Table 6. Place Names and Properties of Traditional Religious and Cultural Importance Identified from 1975 USGS Map*

| Inoa                                             | PTRCI                                                      | Translation                                                                                                                                                                                                                          | Description    | Quadrant |
|--------------------------------------------------|------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|----------|
| Waikoloa Stream                                  | Yes                                                        | Land section, development area, and stream, Pua-kō and Wai-ki'i qds.; Lit., duck water. (This may be Wai-kō-loa, the name of a wind.)                                                                                                | Stream         | 1, 2     |
| Waimea-Kohala                                    | Undetermined                                               |                                                                                                                                                                                                                                      | Town           | 3        |
| Holoholokū                                       | Yes                                                        | Hill, Wai-ki'i qd., Kohala, Hawai'i. Lit., to run [and] stand.                                                                                                                                                                       | Hill           | 3        |
| Mānā (Written as Mana, which changes definition) | Yes (landscape, or home may be historic site)              | Land division, Ka'ū, Hawai'i; land divisions and home of the owners of the Parker Ranch, Wai-pi'o qd., Hawai'i. Lit. Arid                                                                                                            | Place          | 4        |
| Kamakoa Gulch                                    | Undetermined                                               | Gulch in the Waikoloa ahupua'a.                                                                                                                                                                                                      | Gulch          | 6, 7, 8  |
| Unnamed gulch                                    | Undetermined                                               |                                                                                                                                                                                                                                      | Gulch          | 7        |
| Kemole Gulch                                     | Yes                                                        | Hill and gulch, Wai-ki'i qd., Hawai'i.                                                                                                                                                                                               | Hill and gulch | 8        |
| Kaikipau'ula                                     | Yes                                                        | Cinder cone in Hāmākua, possibly also known as "Pu'u Kapola" (cinder cone itself) and "Keikipa'ula" (flat area above the pu'u)                                                                                                       | Hill           | 9        |
| Hanaipoe                                         | Yes                                                        | Land section, Hāmākua.                                                                                                                                                                                                               | Place          | 10       |
| Nā'ū Gulch                                       | Yes                                                        | Gulch, Mauna Kea qd., Hawai'i. Lit., yellow.                                                                                                                                                                                         | Gulch          | 10, 15   |
| Keamuku                                          | Undetermined (specific sites within the flow may be PTRCI) | Lava flow, Wai-ki'i and Ka'ohe qds., Kona, Hawai'i. Lit., cut-off lava. Another explanation is that women, children, and the aged hid in caves here during wars; they had to stifle any burning ('ā muku) fire if an enemy appeared. | Lava Flow      | 11       |
| Popo'o Gulch                                     | Undetermined                                               | (No entries) Po'o = Ancient surfing areas, Ka-pa'a and Wai-mea districts                                                                                                                                                             | Gulch          | 12, 13   |

Ethnohistory and Landscape Ethnoecology

| Inoa              | PTRCI                                                      | Translation                                                                                                                                                                                                                                 | Description | Quadrant       |
|-------------------|------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|----------------|
| Waiki'i           | Yes (landscape)                                            | Village, quadrangle, and gulch, north central Hawai'i. A spring here was believed formed when a legendary hero, Ka-miki, carried water in a calabash from another spring (Ka-wai-hū-a-Kāne, the hidden water of Kāne). Lit., fetched water. | Place       | 13             |
| Ahumoa            | Yes (landscape)                                            | Land section, Wai-ki'i qd., Hawai'i. Lit., gathering [of] chickens                                                                                                                                                                          | Place       | 13             |
| Mauna Kea         | Yes (landscape)                                            |                                                                                                                                                                                                                                             | Mountain    | 15             |
| Pu'u M.           | Yes                                                        |                                                                                                                                                                                                                                             | Hill        | 15             |
| Keamuku Lava Flow | Undetermined (specific sites within the flow may be PTRCI) | Lava flow, Wai-ki'i and Ka-'ohe qds., Kona, Hawai'i. Lit., cut-off lava. Another explanation is that women, children, and the aged hid in caves here during wars; they had to stifle any burning ('ā muku) fire if an enemy appeared.       | Lava flow   | 12, 17, 18, 24 |
| Bradshaw          | No                                                         |                                                                                                                                                                                                                                             | Modern site | 19             |
| Pōhakuloa Camp    | No                                                         | Lit. Long stone                                                                                                                                                                                                                             | Modern site | 19             |
| Waikalalulu Gulch | Yes                                                        | Gulch, Mauna Kea, Hawai'i. Lit. Water of the roaring                                                                                                                                                                                        | Gulch       | 19, 20         |
| Sheep Station     | No                                                         |                                                                                                                                                                                                                                             | Modern site | 20             |
| Camp              | No                                                         |                                                                                                                                                                                                                                             | Modern site | 25             |

Historic maps provide important information regarding place names. As shown on these maps from the beginning of the 20<sup>th</sup> century, aggregated data from different sources show consistency across historic narratives about places and place names and the surveyed maps (**Figures 21 and 22**).

### 5.3 Summary

The inventory of histories and data provided in this section shows how Native Hawaiians and foreigners documented practices and resources throughout the region. Specifically, documentation shows how the area was regularly used for trail usage, including the use of caves or other sheltered areas for temporary habitation. The area also served as the setting for numerous traditional stories and historical events, although the frequency of such stories or events is lessor in this region than in other locations throughout the islands.

The region served as an important quarrying site and resource. The history of quarrying and stone tool making in this area is substantially documented. It is also possible, in consideration of traditional stories about the area and the frequency of pu‘u in the area, that activities like sledding may have occurred in the area, although such activities are not well-documented.

**Project Area:** Within the project area (i.e., the ahupua‘a of Ka‘ohe Mauka in the moku of Hāmākua with a small portion of the eastern area the western portion of the Humu‘ula ahupua‘a in the moku of Hilo) traditional or customary practices associated with mo‘olelo (including naming practices), trail usage, and resource management occurred. The use of caves for shelter or temporary habitation are associated with these practices. Similarly, cooking and other subsistence activities would have been part of these practices.

**Geographic Extent:** Within the larger geographic extent (i.e., located largely in the ahupua‘a of Ka‘ohe Mauka in the moku of Hāmākua, with the eastern portion of PTA being located within the western portion of the Humu‘ula ahupua‘a in the moku of Hilo, the northwestern portion of PTA being within the southern portion of the Waikoloa ahupua‘a in the moku of (South) Kohala covering areas south and west of Mauna Kea, and the southwestern portion of PTA being within the ahupua‘a of Keauhou and Pu‘uanahulu in the moku of (North) Kona immediately east of Mauna Hualālai and north of Mauna Loa) much of the same practices that occurred in the project area would have also taken place. Additionally, quarrying and stone tool making practices would have more closely associated with areas within the larger geographic extent.

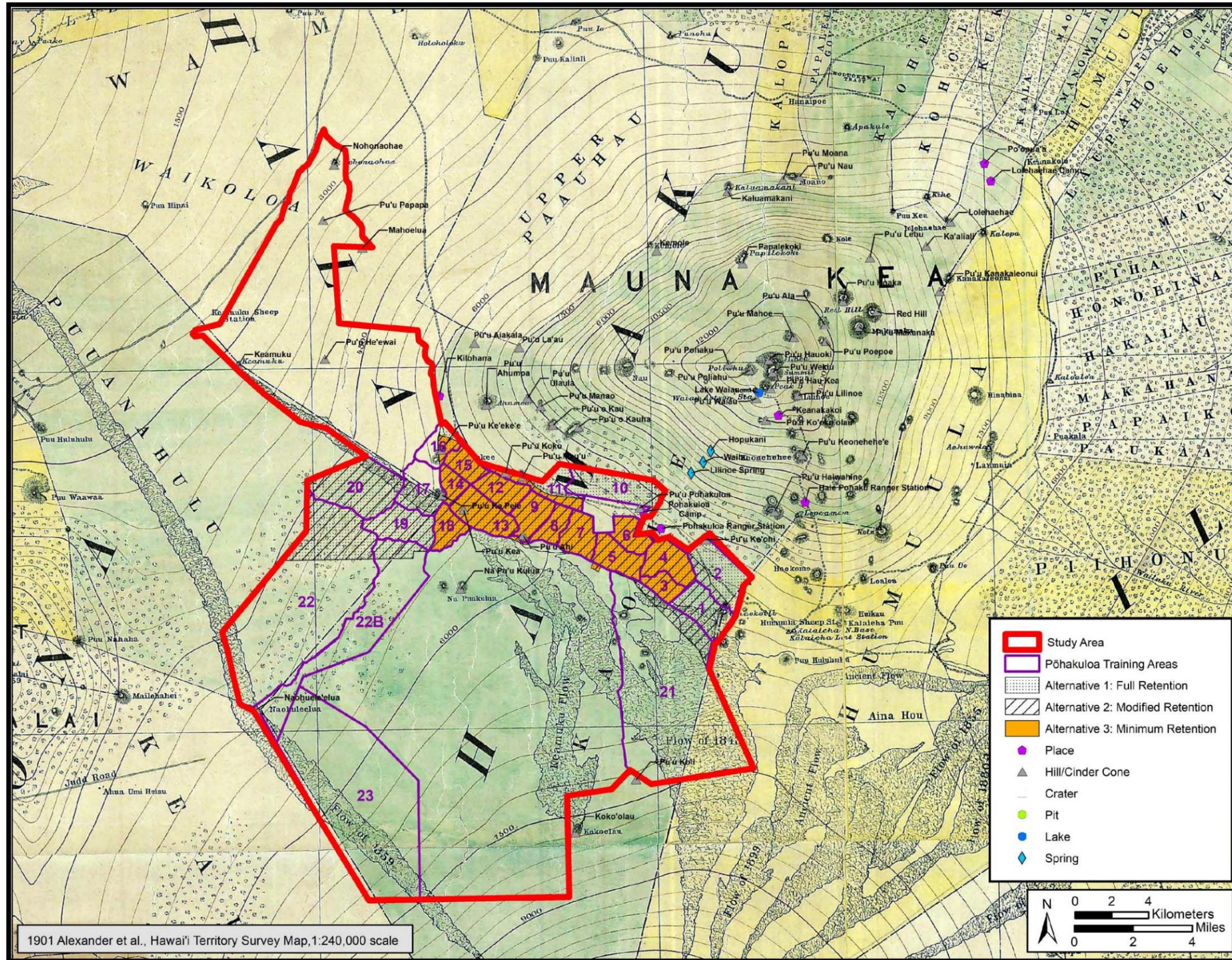


Figure 21. 1901 Alexander map of the project area and geographic extent.

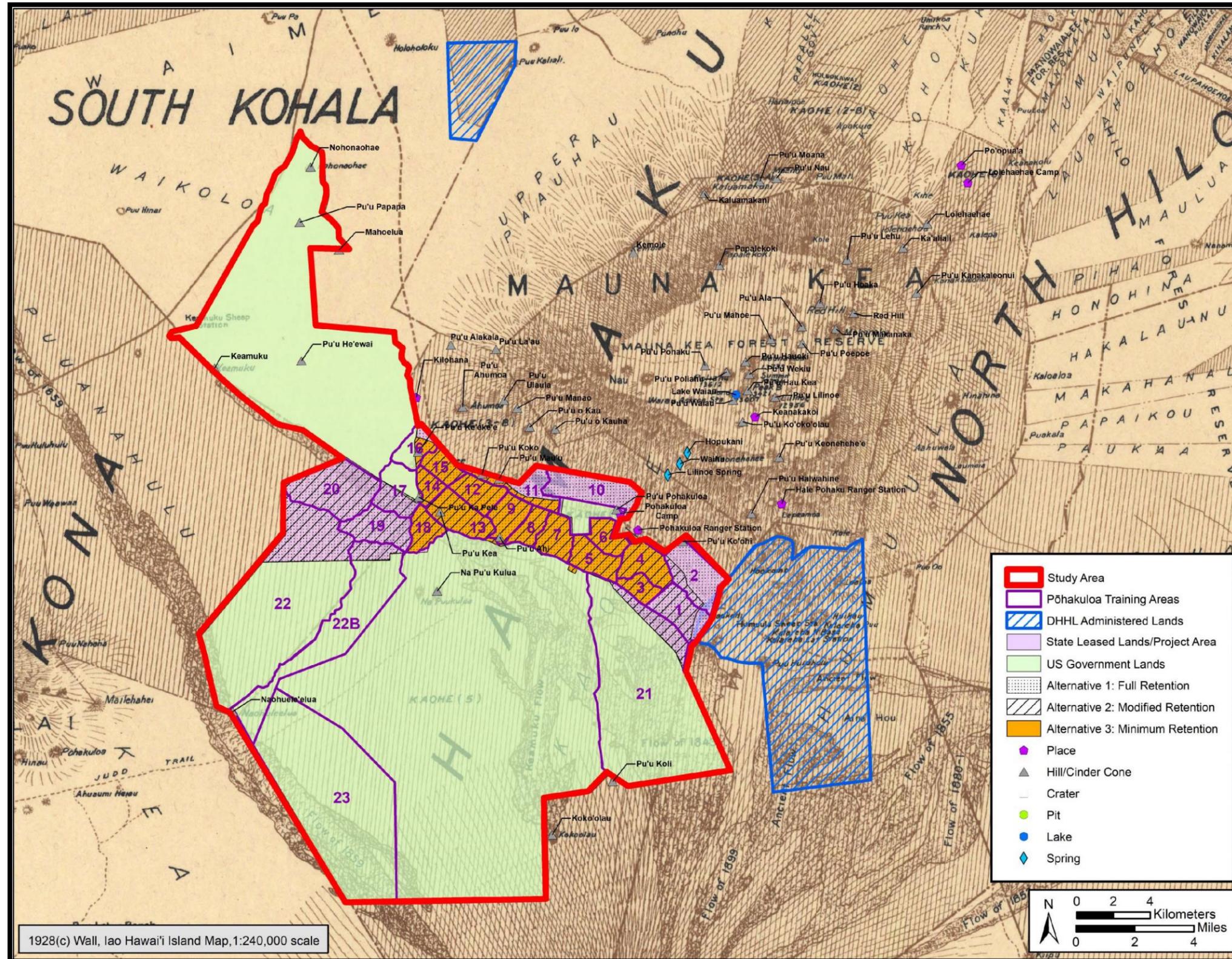


Figure 22. 1928 Wall map of the project area and study area

The following table details how cultural practices in the area changed over time throughout different historic eras. The traditional pre-contact era would include traditional practices that were exclusively regulated by regional chiefs. The historic era identified customary practices and would have been subject to regulation by the Kingdom and, after changes to land ownership, private landowners.

*Table 7. Ethnohistory and Landscape Ethnoecology Practices Associated with the Project Area and Frequency over Historic Eras*

| <b>Cultural Practice</b>                                | <b>Traditional Pre-Contact Era (prior to 1778)</b>         | <b>Historic Post-Contact Era (1778-1943)</b>                                        | <b>Contemporaneous Era (1943 – current)</b>                                                         |
|---------------------------------------------------------|------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| <b>Mo'olelo (Story-Telling and History Recordation)</b> | Regularly practiced                                        | Regularly practiced                                                                 | Practice in project area limited by Army control of land regularly practiced in surrounding region  |
| <b>Alanui (Trail Usage)</b>                             | Regularly practiced                                        | Regularly practiced, and facilitated by Kingdom to aid access, travel, and commerce | Practice in project area limited by Army control of land; regularly practiced in surrounding region |
| <b>Quarrying</b>                                        | Regularly practiced                                        | Practice declined due to introduction of foreign goods                              | Not actively practiced                                                                              |
| <b>Stone Tool Manufacture</b>                           | Regularly practiced                                        | Practice declined due to introduction of foreign goods                              | Not actively practiced; limited information about current practice                                  |
| <b>Hōlua</b>                                            | Limited information about practice, frequency undetermined | No evidence of practice in region                                                   | No evidence of practice in region                                                                   |
| <b>(Temporary) Habitation</b>                           | Regularly practiced                                        | Regularly practiced                                                                 | Practice in project area limited by Army control of land; limited practice in surrounding region    |

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## 6.0 ETHNOBOTANY, ETHNOBIOLOGY, AND ETHNOMEDICINE

Chapter 3 of the EIS defines “biological resources” as “vegetation or wildlife, either native or nonnative, and the habitats or communities they occur on PTA and the surrounding areas. Biological resources are divided into five major categories: (1) terrestrial vegetation, (2) terrestrial wildlife, (3) threatened, endangered, or other special status species, (4) areas of special concern and (5) threats and concerns.” This section of the CIA, as well as Section 8 of the CIA which focuses on fauna or wildlife, addresses the way Hawaiians utilized these resources in order to sustain themselves and the practices associated with these activities. The resources present in the area supported the following traditional or customary practices:

- Lā’au Lapa’au
- Life Cycle Practices
- Disposition of Cremated Remains

Ethnographic information collected for this assessment also identified the following practices: lei making and dyeing (of clothing).

### 6.1 Associated Traditional or Customary Practices

This section discusses Hawaiian traditional or customary practices and associated sciences related to traditional knowledge and practices related to the use of plants for various traditional purposes. This section also looks at the ways in which Hawaiians related to their biological environment. It also includes analysis of Hawaiian ethnomedicine, known as lā’au lapa’au, which were traditional Hawaiian practices of wellness, health, and healing. Other traditional or customary practices within the study area associated with biological resources are life cycle practices and the disposition of cremated remains.

Plants, along with other lifeforms, were also widely considered to kino lau. These were the many forms that deities could take. Understanding the various kino lau and their relationships to spiritual entities was fundamental to a full appreciation of Hawaiian beliefs and ceremonial practices. As described in Handy, Handy, and Pukui:

According to the theory underlying Hawaiian natural philosophy, all natural phenomena, objects, and creatures, were bodily forms assumed by nature gods of nature spirits. Thus rain clouds, hogs, gourds, and sweet potatoes were “bodies” of the god Lono. Taros, sugar cane, and bamboo were bodies of the god Kane. Bananas, squid, and some other forms of marine life were bodies of Kanaloa. The coconut, breadfruit, and various forest trees were bodies of Ku.

The Hawaiian term which we here translate as “bodies” was kino lau, literally “myriad bodies” (1972: 23).

The concept of kino lau is particularly important to the project area, geographic extent, and surrounding lands. The goddesses, and their associated kino lau, most closely associated with the region are as follows:

- Pele
- Poli‘ahu
- Waiau
- Kahoupokane
- Lilinoe

#### **6.1.1 Lā‘au Lapa‘au**

Lā‘au lapa‘au is the practice of traditional Hawaiian medicine. For centuries, native Hawaiians relied upon the environment around them to provide them medicine. It is still actively taught and practiced today. Medicinal experts or healers have intimate knowledge about plants and other resources to cure ailments illnesses and sicknesses. Traditional medicine is practiced by native peoples and local communities around the world. Similarly, Native Hawaiians, over many generations, have learned how to properly care for, utilize, and prepare plants to maintain the community’s health.

It was important to not only have plants and have access to plants but to ensure that these plants were healthy and in good condition. In the list of biological resources, plants with medicinal capacity and components are identified. These resources are cultural resources. They are critical to the ongoing practice of traditional medicine and healing within the Native Hawaiian community. There are still many traditional medicine practitioners in the Hawaiian community and throughout the Hawaiian Islands today. It is a practice that is still taught to the younger generation, and it is a practice that is still honored and utilized in many Hawaiian households throughout the state.

It was important that medicinal plants existed throughout the Hawaiian Islands so that when people traveled throughout different places on in the islands, they would always have access to the medicine they needed. In some cases, some plants were extremely rare, and, in those cases, it was particularly important to make sure that these populations were well protected and well cared for. An identification of plants of cultural value for medicinal purposes that grow naturally within the project area is included in **Section 6.2.1**.

There were also numerous gods associated with health, healing, and medicine. They are listed in **Table 8**.

*Table 8. Hawaiian Gods Associated with Health, Healing and Medicine*

| Hawaiian gods associated with health, healing, and medicine (Pukui, 1971) |
|---------------------------------------------------------------------------|
| <i>Hi'ikaikapolioPele</i>                                                 |
| <i>Lonopūhā</i>                                                           |
| <i>Ma'iola</i>                                                            |
| <i>Hi'ikaikapua'ena'ena</i>                                               |
| <i>Hauwahine</i>                                                          |
| <i>Hina</i>                                                               |
| <i>Hina'ea</i>                                                            |
| <i>Hinalaulimukala</i>                                                    |
| <i>Kamakanui'ahu'ilono</i>                                                |
| <i>Kanaloa</i>                                                            |
| <i>Kū</i>                                                                 |
| <i>Kūkeolo'ewa</i>                                                        |
| <i>Mauliola</i>                                                           |
| <i>'Ōpeluhuikauha'ailo</i>                                                |

### 6.1.2 Life Cycle Practices

Custom and ritual around conception, gestation, and birth have been documented extensively (Pukui, 1942; Handy, Pukui, and Livermore, 1934). Practices associated with life cycles as well as traditional medicine was both physical and spiritual.

Based on previously conducted oral histories (see Section 11.2.1 for Ritual Sites Previously Identified by Henry Auwae), it is possible, although not definitive, childbirth took place within this area. While childbirth is certainly not currently taking place in the project area, efforts to restore traditional birthing practices throughout the islands have led to contemporaneous births occurring at sites of traditional importance, like Kaho'olawe.

A 1934 article details some of the associated practices:

Midwifery is practiced by men as well as women, just as in modern medicine we have male and female obstetricians. Experts are said to be able through external palpation to make precise prognosis of the time when labor may be expected to set in; through gentle and skillful massage to adjust the fetus when it is in a transverse position in the womb; and, after delivery, to assist the extrusion of the placenta. The breaking away of the placenta from the fundus of the womb is accomplished also in the

following way. The woman being seated on the floor, or squatting, a man with long legs kneels before her, and while pressing her sides with his hands, bears in hard at the pit of her stomach with the point of one knee; or external pressure may be applied manually. This procedure, which my Hawaiian friends insist comes down from ancient times, applies the principle of what in modern obstetrics is commonly termed “Crede’s Method”, adopted in European obstetrics only since the French surgeon of that name popularized its use in 1853, substituting external manipulation for internal manual traction. Nothing could better illustrate the fact that modern medical science may still derive much previous knowledge from the procedures of nature folk like the Hawaiians (Handy, Pukui, and Livermore, 1934: 9-10).

There are numerous spiritual practices associated with ensuring health and well-being. Many of these practices are still widely practiced by Native Hawaiians today. Hawaiians are particularly cautious with how the ‘iewe (also ēwe) and piko are cared for – the ‘iewe being the afterbirth or placenta and the piko being the umbilical cord. Langlas et al. (1999) identifies the sacred site, ‘Āina Hānau, reserved for birthing with the region in the adjacent lands outside the project area and geographic extent.

### **6.1.3 Disposition of Cremated Remains**

As noted in McCoy and Orr (2012) the scattering of ashes was not a traditional practice, but it has been well established that this practice takes place in the area. It is not uncommon for families to still have a designated place, often a pu‘u, where ashes of family members are scattered. Often, this tradition began with the pu‘u as a designated burial site prior to western contact.

## **6.2 Cultural Resources**

For the purpose of this assessment, cultural resources include biological resources that may have cultural use or purpose. As shown in historic maps, lava flows resulted in less use and habitation of the area in comparison to other areas (**Figure 23**). This lesser use did not mean a lack of use.

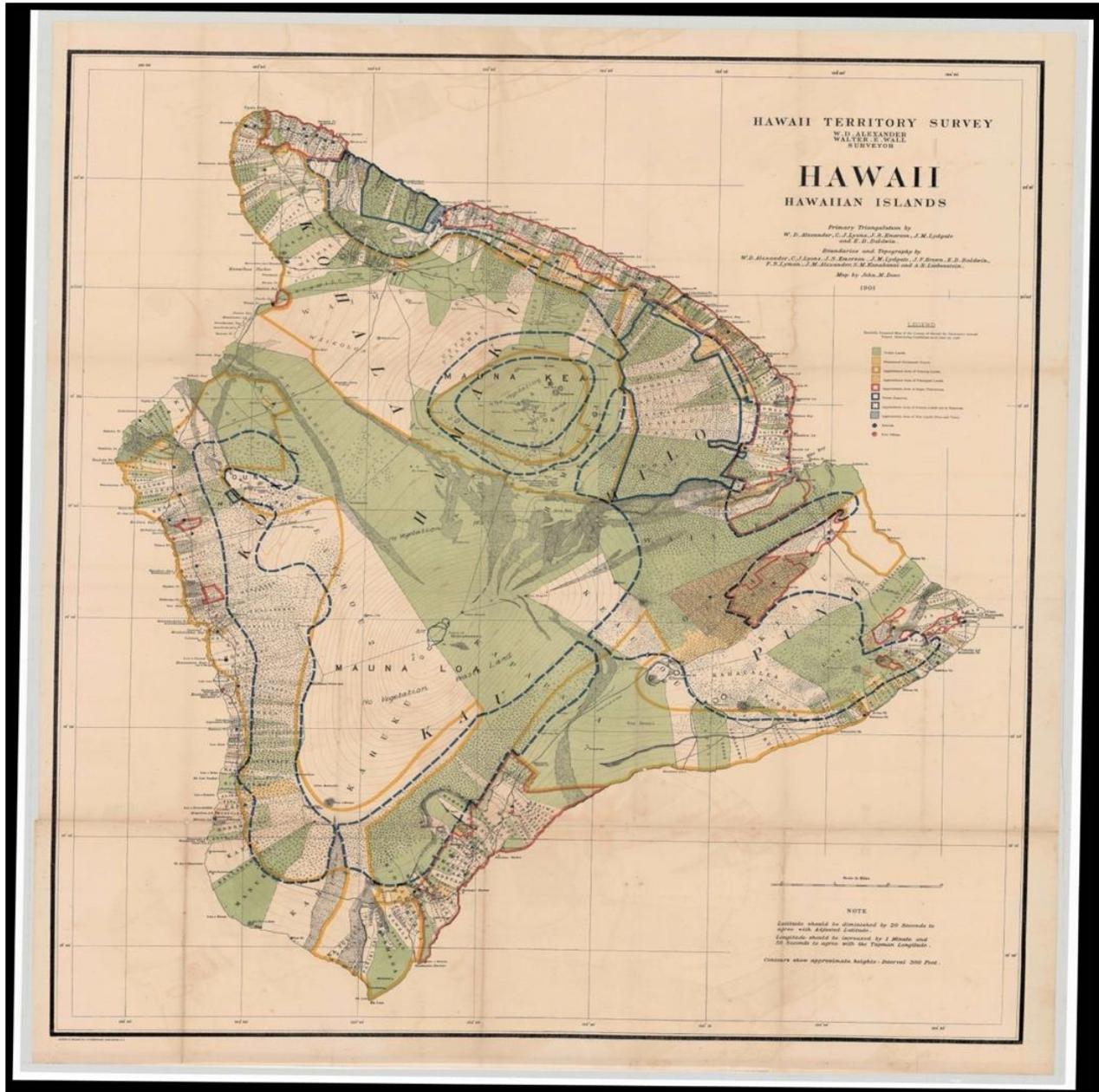


Figure 23. 1901 W.D. Alexander Map that illustrates a survey of the vegetation in the project area

### 6.2.1 Flora

Both oral histories and previous studies note the cultural value of flora resources in the area. McCoy and Orr (2012: 24-25) provide the following relative information:

Plant resources, which may have been procured as food sources, include: ‘ohelo (*Vaccinium* spp.), ‘ulei (*Osteomeles anthyllidifolia*), and pōpolo (*Solanum sandwicense*) (Williams et al. 2002; Williams 2002). The berries from the endemic

‘ohelo shrub were known to have been “eaten for refreshment on journeys” (Krauss 1993:16). The berries from the indigenous shrubs ‘ulei and pōpolo also may have been eaten, but they have other uses – ‘ulei berries were used for dye and the hardwood of the shrub was used in tool-making; pōpolo berries were also used as a dye and the juice from pōpolo leaves was used for medicinal purposes (Krauss 1993; Abbott 1992). Other shrub and tree species available from the Saddle Region included ‘ākia (*Wikstroemia* spp.), pūkiawe (*Styphelia tameiameia*), ‘a‘ali‘i (*Dodonaea viscosa*), naio (*Myoporum sandwicense*), kōlea (*Myrsine* spp.), ‘ohia lehua (*Metrosideros acropus*), māmane (*Sophora chrysophylla*), and ‘iliahi (*Santalum* spp.), which were used traditionally in Native Hawaiian culture for the manufacture of wooden tools, dyes, and poisons (Krauss 1993; Abbott 1992). However, because these species also grow at lower elevations and closer to population centers, it is unlikely that these resources were harvested from the Saddle Region for the purposes listed above. It is more likely that these plants were collected for firewood or tool maintenance and repair (i.e., strong levers for quarrying stone, bird-catching poles, etc.) in the event of travel into the Saddle Region to harvest other resources, like birds and lithic materials (Williams et al. 2002; Williams 2002).

This list provided in the narrative above is a valuable partial list of the extensive flora found in the region (McCoy and Orr 2012: 24-25).

**Table 9** provides a listing of the native plants on State-leased land found within the project area that are considered rare and have federal status as candidate or endangered species based on the EIS.

The narrative that follows provides information on any of the plant resources with identified cultural uses. While many of the flora do not have known cultural uses, Hawaiians were highly resourceful and made use of both native and foreign plants. Of notable use were plants brought by Hawaiians to ensure successful, permanent settlement during the first settlement era when they migrated to the Hawaiian Islands from other Polynesian Islands.

*Table 9. Protected Plants Documented on Pōhakuloa Training Area*

| Scientific Name                                           | Common Name     | Federal Protection |
|-----------------------------------------------------------|-----------------|--------------------|
| <i>Asplenium peruvianum</i> var. <i>insulare</i>          | fragile fern    | E                  |
| <i>Exocarpos menziesii</i>                                | ---             | E                  |
| <i>Festuca hawaiiensis</i> *                              | Hawaiian fescue | C                  |
| <i>Haplostachys haplostachya</i> *                        | honohono        | E                  |
| <i>Isodendron hosakae</i>                                 | aupaka          | E                  |
| <i>Kadua coriacea</i><br>(Syn. <i>Hedyotis coriacea</i> ) | kio‘ele         | E                  |

| Scientific Name                                                                                   | Common Name           | Federal Protection |
|---------------------------------------------------------------------------------------------------|-----------------------|--------------------|
| <i>Lipochaeta venosa</i><br>(Syn. <i>Melanthera venosa</i> )                                      | nehe                  | E                  |
| <i>Neraudia ovata</i>                                                                             | ma'aloa               | E                  |
| <i>Portulaca sclerocarpa</i> *                                                                    | 'ihi makole           | E                  |
| <i>Portulaca villosa</i> *                                                                        | ---                   | E                  |
| <i>Schiedea hawaiiensis</i>                                                                       | ---                   | E                  |
| <i>Sicyos macrophyllus</i>                                                                        | ---                   | E                  |
| <i>Silene hawaiiensis</i> *                                                                       | Hawaiian catchfly     | T                  |
| <i>Silene lanceolata</i> *                                                                        | lance-leaf catchfly   | E                  |
| <i>Solanum incompletum</i> *                                                                      | popolu ku mai         | E                  |
| <i>Spermolepis hawaiiensis</i>                                                                    | Hawaiian parsley      | E                  |
| <i>Stenogyne angustifolia</i> var. <i>angustifolia</i> *                                          | creeping mint         | E                  |
| <i>Tetramolopium arenarium</i> var. <i>arenarium</i> *                                            | Mauna Kea<br>pamakani | E                  |
| <i>Vigna o-wahuensis</i>                                                                          | no common name        | E                  |
| <i>Zanthoxylum hawaiiense</i> *                                                                   | a'e                   | E                  |
| Federal Status: E = Endangered, C = Candidate, T = Threatened<br>*Documented on State-leased land |                       |                    |

### ***Asplenium peruvianum* var. *insulare***

No associated cultural uses identified.

### **Heau, 'iliahi (*Exocarpos menziesii*)**

This particular species of heau or 'iliahi of the *Exocarpos* genus is found on Mauna Loa on Hawai'i Island within the project area. 'Iliahi is a native evergreen shrub or tree which is known for its alluring scent. The leaves of this tree are feather-veined, approximately four inches long and are either dark and glossy or pale green. The flowers bloom in the form of panicles at the end of branches or in the axils of leaves. The powder derived from the heartwood of 'iliahi was used by traditional Hawaiians to scent hand-beaten kapa. It has also been noted that Native Hawaiians gathered materials from the 'iliahi tree were used for musical instruments (Krauss 1993). Late in the eighteenth century, it became known across the oceans that 'iliahi was growing in the islands, and Hawaiian sandalwood became a commodity amongst traders, so much so that Kamehameha Nui placed a kapu or protective order on the 'iliahi in order to conserve the tree and its forests. However, as more foreign trade came through Hawai'i, the numbers of 'iliahi trees dwindled and such foreign impact on both the 'āina and Native Hawaiians, between the grueling work of harvesting the wood and focus shifting from traditional livelihood to the trade of this natural resource (Abbott 1992).

***Festuca hawaiiensis***

No associated cultural uses identified.

***Honohono (Haplostachys haplostachya)***

Honohono is an endemic plant belonging to the mint family. Once found on Kaua'i, Maui, and at Pu'ukapele and Waiki'i on Hawai'i Island, it is now only known to live on Kīpukakālawamauna at 5,200 feet on Hawai'i Island. A herbaceous plant, either medium or tall at mature height, its leaves range from a light to medium green and are characterized by white flowers. The name honohono has also been given to introduced plants including *Commelina diffusa* and *Oplismenus hirtellus*. It has been noted that the endemic honohono was rare even upon the arrival of Captain Cook to the Hawaiian islands, and therefore since that time, collection and study of this plant has not been extensive. However, it can be inferred that, due to its rarity, Native Hawaiians had practical uses for such a plant either for medicine or other daily life (Krauss 1993).

***Aupaka, wahine noho kula (Isodendrion hosakae)***

No associated cultural uses identified.

***Kio'ele [Kadua coriacea (Syn. Hedyotis coriacea)]***

No associated cultural uses identified.

***Nehe [Lipochaeta venosa (Syn. Melanthera venosa)]***

No associated cultural uses identified.

***Ma'aloa (Neraudia ovata)***

Ma'aloa, also known as 'oloa, is one of the plants that was used by Native Hawaiians to make kapa cloth. Its bark was harvested and beaten in a specific manner to create the cloth used for clothing, household items, and other important materials for daily life (Buck 1957). According to scholars Malo and Kamakau, kapa made from ma'aloa is a superior white material. While the practice of making kapa from ma'aloa does not seem to be as common as the production of kapa from the wauke plant, such 'oloa kapa was associated with religious ceremonies, especially in the consecration of a heiau luakini. A very long piece of 'oloa kapa was made by females of the ali'i or chiefly rank, and decorated the ki'i of the heiau, a representation of the god Kū (Abbott 1992). Ma'aloa has also been used in traditional Hawaiian medicine to cure constipation. Its flowers, leaf bud and tap root were mixed with that of the hapue along with the leaves of the 'akoko and the kō kea. The liquid was then strained with 'ahu'awa and mixed with pia. The sick individual drank the liquid and then

ingested broiled lū'au and 'uala (Chun 1994). Ma'aloa is a spreading, climbing, or erect low native shrub, a dioecious plant with small flowers, the male and female of which is found on separate plants. Its fruit is red with leaves that grow to be between 1 and 7 inches long and 0.75 inch wide with three prominent veins (Krauss 1993).

### **'Ihi Mākole (*Portulaca sclerocarpa*)**

The 'ihi mākole was used medicinally by Native Hawaiians. The entire plant of the 'ihi was mixed with the 'awikiwiki vine and the bark of the 'ōhi'a 'ai (mountain apple). The mixture was then pounded, water was added, and the entirety was strained and heated. Upon cooling, it was applied as a salve to treat itchy skin or skin disorders (Krauss 1993). This plant is only found on the island of Hawai'i at high elevations between 3,300 and 5,300 feet. It is a creeping variety of the 'ihi that is characterized by its red stems and yellow flowers.

### **'Ihi (*Portulaca villosa*)**

The 'ihi, related to the 'ihi mākole above, is an endemic plant, and a member of the Purslane family, variants of which were used medicinally with other lā'au to treat asthma, PMS, and joint pain (Leonard, 1998). This plant is uncommon, usually found in dry, rocky, clay, lava, or corraline reef sites. The 'ihi has succulent leaves, usually a pale grayish green with yellowish brown hairs, and colorful flowers. A mature 'ihi plant will typically be between 1 foot and 2.5 feet tall and spread approximately feet wide.

### **Mā'oli'oli (*Schiedea hawaiiensis*)**

No associated cultural uses identified.

### **Lance-leaf catchfly (*Silene lanceolata*)**

No associated cultural uses identified.

### **'Ānunu (*Sicyos macrophyllus*)**

No associated cultural uses identified.

### **Hawaiian catchfly (*Silene hawaiiensis*)**

No associated cultural uses identified.

### **Pōpolo Kū Mai (*Solanum incompletum*)**

The pōpolo kū mai is an endemic plant, listed as an endangered species. Today, pōpolo kū mai is found on the islands of Maui, Lāna'i and Hawai'i. It is a woody shrub that grows up to

10 feet tall and is characterized by its prominent reddish prickles located on its stems and leaves. Its leaves are oval and has white, star-shaped flowers and fruits orange berries. The species was thought to be extinct until six plants were found on the island of Hawai'i. It lives in dry and mesic shrublands, and particularly on Hawai'i Island, thrives on cinder cones or on older lava flows. Native Hawaiians traditionally used the berries of the pōpolo kū mai to make a dark purple dye (Krauss 1993). As traditional practices are revived, many practitioners of the fiber arts use pōpolo today to dye their kapa and other materials.

**Hawaiian parsley (*Spermolepis hawaiiensis*)**

No associated cultural uses identified.

**Creeping mint (*Stenogyne angustifolia* var. *angustifolia*)**

No associated cultural uses identified.

**Mauna Kea Pāmakani (*Tetramolopium arenarium* var. *arenarium*)**

No associated cultural uses identified.

**Nanea, mohihihi (*Vigna o-wahuensis*)**

No associated cultural uses identified.

**A'e (*Zanthoxylum hawaiiense*)**

No associated cultural uses identified.

### 6.3 Summary

While there is an extensive body of literature on the traditional uses of plants by Native Hawaiians, the volcanic terrain of the project area created natural limitations on the flora that could survive in such a harsh environment. Nonetheless, the plants present within the project area would have allowed for practices associated with the gathering of plants for food, medicine, and spiritual practices.

PTA runs a natural resource program that aims to conserve the area's endangered floral species. There is no allowance for cultural access or use associated with these conservation activities. Additionally, access to the plant resources would likely be impacted by existing state and federal laws that protect endangered species, which would place limits on cultural practices even if the Army did not control the area. Depending on the regulations in place under state or federal laws, these laws may prohibit the use of, or taking, of protected species.

Project Area: Within the project area (i.e., the ahupua‘a of Ka‘ohe Mauka in the moku of Hāmākua with a small portion of the eastern area within the western portion of the Humu‘ula ahupua‘a in the moku of Hilo) traditional or customary practices associated with lā‘au lapa‘au through the use of ‘ihi mākole and/or ‘ihi; the making, dyeing, or scenting clothing (i.e., kapa) with ma‘aloa, pōpolo kū mai, or ‘iliahi; cooking with honohono; or making instruments with ‘iliahi. Lei making was also identified through ethnographic data and may have occurred in the project area. Ethnographic data also reflected a knowledge by practitioners as to the location of plant resources, but there was no information as to whether or not associated practices have contemporaneously taken place making use of these flora resources.

Geographic Extent: There is a far greater number of plant resources within the larger geographic extent that are not documented in this assessment (i.e., located largely in the ahupua‘a of Ka‘ohe Mauka in the moku of Hāmākua, with the eastern portion of PTA being located within the western portion of the Humu‘ula ahupua‘a in the moku of Hilo, the northwestern portion of PTA being within the southern portion of the Waikoloa ahupua‘a in the moku of (South) Kohala covering areas south and west of Mauna Kea, and the southwestern portion of PTA being within the ahupua‘a of Keauhou and Pu‘uanahulu in the moku of (North) Kona immediately east of Mauna Hualālai and north of Mauna Loa. A full inventory of these resources is available in the INRMP.

Prior to contact, lā‘au lapa‘au was widely practiced, but the introduction of foreign medicine would contribute to the decline of the practice. The tradition has nonetheless survived and continues to this day. Lā‘au lapa‘au practitioners are found throughout the islands and Hawaiian families continue to employ these practices to contribute to their overall health and well-being. The frequency of practice across the different eras is captured in **Table 10**.

*Table 10. Ethnobotany, Ethnobiology, and Ethnomedicine Practices Associated with the Project Area and Frequency over Historic Eras*

| <b>Cultural Practice</b>                                        | <b>Traditional Pre-Contact Era (prior to 1778)</b>       | <b>Historic Post-Contact Era (1778-1943)</b>                            | <b>Contemporaneous Era (1943 – current)</b>                                                         |
|-----------------------------------------------------------------|----------------------------------------------------------|-------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| <b>Lā‘au Lapa‘au</b>                                            | Regularly practiced                                      | Practice declined due to introduction of foreign medicine and practices | Practice in project area limited by Army control of land; regularly practiced in surrounding region |
| <b>Life Cycle Patterns (i.e., burying of ‘iewe, piko, etc.)</b> | Regularly practiced                                      | Regularly practiced                                                     | Practice in project area limited by Army control of land; regularly practiced in surrounding region |
| <b>Disposition of Cremated Remains</b>                          | Not yet introduced (modern cremation not yet introduced) | Limited information about practice, frequency undetermined              | Practice in project area limited by Army control of land; regularly practiced in surrounding region |

## 7.0 ETHNOZOOLOGY

Ethnozoology analyzes the relationship between cultures and animals. The historic relationship between Hawaiians and fauna was one of utility. Hawaiians made thorough and respectful use of all lifeforms in their environment. Animals were widely used for food, but they were also used for other purposes. They, like plants, were widely considered *kino lau*. Gods were known to have associated animal body forms.

### 7.1 Associated Traditional or Customary Practices

Traditionally, Hawaiians made extensive use of the animals that shared their environment. It is well-established that bird hunting occurred in the area, but past studies have often combined bird hunting for sustenance and bird hunting for feather collection. These are distinct practices, and it is erroneous to combine the two activities. The practice of feather collecting was a sustainable practice whereby experts would carefully capture valued birds for the purpose of removing a few features needed for cultural purposes. These birds were thereafter released alive. Whereas hunting resulted in the death of the animal and its consumption.

The wide range of animal related practices in the area, both prior to foreign contact and post-foreign contact, including the following:

- Bird catching
- Agriculture, cooking, and food traditions
- Ranching
- Paniolo
- Modern Hunting

Additionally, pig hunting, which can be considered part of a modern hunting custom, was identified through the ethnographic data.

#### 7.1.1 Bird Catching

Among those people who would have most often frequented the uplands of the *‘āina mauna*, being both the forested region and the upper plateau and mountain slopes, were the *lawai‘a manu* or *kia manu* (bird catchers). Their knowledge of the mountain lands, trails, shelters, and resources was widely valued throughout the nineteenth century, and the bird catchers were often sought out as guides and for their expertise in matters of land.

### 7.1.1.1 *Po'e Lawai'a Manu: Bird Catchers in Old Hawai'i (1895)*

Several traditional accounts describe the arts of the class of people who caught native birds to collect their feathers or birds which were considered delicacies in the Hawaiian diet. Several methods of bird catching were widely practiced by Native Hawaiians, in which Maly (2005:32-38) aggregates and presents an extensive body of resources illustrating this widely-employed practice. The practices of the *kia manu* were also dictated by *kapu* and a code of conduct. Accounts from the later period in the life of Kamehameha I reported that, as a result of growing commercial activities in the islands, traditional methods of harvesting resources and catching birds were changing (Kamakau, 1961; Emerson, 1895). Regarding these changes and the response of Kamehameha I to careless collection of bird feathers, in which the birds were killed, Kamakau wrote:

...Troubles that arose were not of his [Kamehameha's] making, and those that had to do with disputes about religion came after his time. He ordered the sandalwood cutters to spare the young trees and, not to let the felled trees fall on the saplings. "Who are to have the young trees now that you are getting old?" he was asked and he answered, "When I die my chief and my children will inherit them." He gave similar orders to bird catchers, canoe makers, weavers of feather capes, wood carvers, and fishermen. These are the acts of a wise and Christian king who has regard for the future of his children, but the old rulers of Hawaii did the same... (1961:209-210; M.K. Pukui, translator)

In 1895, N.B. Emerson published an article pertaining to bird catchers of old. The article notes the importance of the Hilo region forest lands for the favored honey creepers, which were sought after by the *kia manu*. The following narratives describing the arts and practices of the *kia manu*, and the nature of the forest and birds therein, were collected by Emerson from native practitioners:

...Bird-catching, while of great fascination, was a most exacting profession, demanding of the hunter a mastery of bird-craft and wood-craft attainable only by him who would retire from the habitations of men and make his home for long periods in the wooded solitudes of the interior.

The kings of Hawaii constantly had men in their service who followed the vocation of bird-catching, called *kia-manu*. It is related of one of the ancient kings that at a critical juncture in his affairs he led off his warriors into the mountains with the purpose or pretext of engaging in bird-catching for plumage. But this is not a business in which a multitude can successfully engage in close proximity to each other. The *kia-manu* needs room; he must do his work in solitude, with the field to himself.

The feathers of Hawaiian plumage-birds may be divided, as to color, into several classes:

1. Pure yellow. The yellow feathers were taken either from the *o-o* or from the coat of the still rarer *mamo*. Those of the *mamo* were of a deeper tint, but of shorter staple than the former, and as the bird was shy and difficult of capture, they were greatly coveted for the richest articles for feather-work, cloaks, capes and necklaces. It is a question still in dispute whether this rare bird is not extinct.

The *o-o*, though a proud and solitary bird, was more prolific than the *mamo*. Its coat was of deep black, set off with small tufts of clear yellow under each wing and about the tail and in some varieties about the neck and thighs. Those from the axial were called *e-e* and were the choicest, and being of a longer staple were in the greatest demand for the *lei*.

No swan's down can surpass, in delicacy of texture, the axillary tufts of the *o-o*.

2. Red. Scarlet, or red feathers were obtain from the body of the *i-iwi* and the *akakani* (*akakane* or *apapane*). It may be disputed whether one or the other of these is not to be designated as common. The color-tone of the feathers varies. They were song-birds, and when on the wing, displaying their plumage of black and scarlet, were objects of great brilliancy. There was, I am told, another red-feathered bird called *ula-ai-hawane*, a beautiful thing in scarlet, wild and shy, a great fighter, a bird very rarely taken by the hunter. Its plumage would have been a welcome addition to the resources of Hawaiian feather-workers had it been obtainable.
3. Green. Feathers of an olive green were obtained from the *o-u*, and from the *amakihī* those of a greenish-yellow. Though of less value than some others, the green feathers were an important resource in adding variety to Hawaiian feather-work. This color, however, was not used in the richest and most costly cloaks and capes.
4. Black. Feathers of black were obtained from the *o-o*, *mamo*, *i-iwi* and *akakani*, not to mention numerous other sources, including the domestic fowl, which also contributed feathers of white.

While this list is not intended to be exhaustive, mention should be made of the *koa'e* (bosen, or tropic bird), which furnished two long feathers from its tail used in making kahilis. Although this bird took its prey from the ocean, its nest was in the face of the steep mountain palis and in the cliff of the small, rocky island, Kaula, Nihoa, Lehua, and Necker. There are two varieties of this feather.

The methods used by one hunter in the capture of the birds differed from those used by another. They also varied somewhat, no doubt, in different district, on the different islands, at different seasons of the year and seen in the different islands, at different hours of the day.

There could be nothing stereotyped in the way the hunter of birds practiced his art. While the method might remain essentially the same, it was necessarily subject to a wide range of modification, to suit the skill and ingenuity of each hunter in his efforts to meet the habits and outwit the cunning of the birds themselves.

For the purpose of observing more closely the manner of life and methods of the bird-catcher, let us transport ourselves in imagination to the interior wilderness of Hawaii, and live for a time amid the stretches of forest with which the climate of rainy Hilo clothes the volcanic debris of active Kilauea and extinct Mauna Kea.

There were two seasons of the year favorable to the operations of the hunter; first, during the months of March and April, extending into May, and second, during August, September and October.

These two bird-seasons corresponded with the two flowering seasons of the *lehua*. The *lehua* of the lower woods flowered in the earlier season, that of March, April and May, at the same time with the *ohia-ai*, (the fruit-bearing *ohia*), commonly known as the mountain-apple.

The upland *lehua*, situated in a more temperate climate, flowered during the later season, that from about the beginning of August till the last of October or into the early part of November.

The birds in general moved from upland to lowland, or vice versa, to be in at the flowering season, and many of the hunters moved likewise.

In the early season (*kau mua*), the birds, except the *mamo*, who was a true highlander and despised the lowlands, migrated to the lower levels, *makai*.

Later in the year, during the second season, the birds were to be found in the more interior uplands.

The yellow-green *amakihī*, and the *elepaio*, famous in legend and poetry, were exceptions to this rule. These two birds were insectivorous, in addition to being honey and fruit-eaters.

A bird-hunting campaign was not an affair to be lightly entered upon. Like every other serious enterprise of ancient Hawaii, a service of prayer and an offering to the gods and aumakuas, must first be performed... ..Having selected a camp, he erects the necessary huts for himself and his family. His wife, who will keep him company in the wilderness, will not lack for occupation. It will be hers to engage in the manufacture of *kapa* from the delicate fibers of the *mamake* bark, perhaps to aid in plucking and sorting the feathers.

The early morning, when the vapors are beginning to lift is the favorite time for most of the birds to visit their aerial pasturage. A few hours later, when the sun has had time to dull the edge of the sharp morning air, and to clear away the fogs, the aristocratic *o-o* will come to his more fashionable breakfast. Necessity makes the hunter an early riser, that he may repair to his chosen ground before the morning sun has begun to illuminate the summits of Maunakea and Maunaloa.

Behold him then setting forth at dawn from his rude thatched cottage, with the implements of his craft in hand. The bag, or wallet, hanging at his side contains, besides food for himself, fine lines twisted from tough *olona* fiber, to be used in making snares, also a supply of tenacious bird lime carefully wrapped in leaves of the ti plant.

This important article was made in several ways. The sticky gum of the breadfruit tree was sometimes used but that of the *papala*, and of the *oha* were more highly esteemed. Sometimes a compound of two or more was made, being mixed and purified while gently boiling with the water over a fire.

The most important implements of the hunter's craft were his spears, called *kia*, or *kia-manu*, a name often used to indicate his vocation. They were long, slender, well polished poles, like fishing rods, made sometimes of dark spear wood, *kauila*, also of tough *ulei* wood from Kona. Bamboo was sometimes used, but for some reason or other it was not a favorite. The birds did not take to it.

And as they were the ones whose tastes were most to be considered, that settled the question.

There were different styles of dressing the *kia*, and no one can assume to be acquainted with them all. One method is that illustrated in the cut.

The hunter himself must remain concealed beneath the shelter of the foliage, or, if that be too scanty, under a covert extemporized from material at hand, fern leaves, or *i-e-i-e* fronds. If the day is a good one and the charm of his prayer works well, the birds will presently make their appearance, singly, or by twos and threes. Anon a struggling and a fluttering of wings announces to the watchful hunter that the little creatures have alighted on his poles and are held fast by the sticky gum.

It would seem as if the alighting of one bird on the limed fork or cross-piece of the hunter's pole did not deter others from seeking to put themselves in the same plights. At the right time the hunter cautiously withdraws one pole after another, and using care that no bird escapes, transfers the captured birds to the bag that hangs at his side, or to a cage of wicker work that is kept at hand.

It seems unaccountable, almost incredible, that any wild thing of the air should prefer alighting on the limed twig of the hunter's pole to seeking refreshment elsewhere from the scarlet honey-flowers of the *lehua* which at this season abound. The explanation given me by the hunter was that he depended entirely upon the efficacy of his incantations to draw the birds to his *kepau* (birdlime). Sometimes instead of this formal arrangement of fork and cross-piece, a small branch with several twigs, attached, the whole plentifully smeared with gum, was bound to the tip of the pole and displayed as before.

The hunter often made his pole attractive to the birds by baiting it with their favorite honey-flowers. This was done in a variety of ways, but always with an effort to imitate nature, appreciating that the highest art is to conceal art. With this intent he sometimes attached to his pole a flowering branch artfully smeared with gum, or the *kepau* would be applied directly to some part of the tree where the hunter's judgment told him the bird would alight to feed.

Another ingenious plan was the use of the decoy, called *maunu* (literally bait). For this purpose the gay *i-iwi*, or *akakani*, were among the favorites, perhaps because they were likely to be captured earliest in the day. The decoy, still alive, was tied in a upright position to the prong at the tip of the pole, together with an arrangement of flowers. It was necessary to smear the gum at such a

distance from the decoy as not to be within reach of its wings, if extended in an effort to fly. It was a common practice to preserve alive in special cages certain birds to be used as decoys, feeding them daily with their nectar-flowers. The *o-o*, *i-iwi* and *akakani* were thus treated. In time these wild things became quite domesticated and were of great service.

The *o-o*, with his suit of jetty black touched with points of gold, was of a jealous and domineering spirit that would allow no other bird to enjoy a meal peacefully in his presence. He no sooner espied the hunter's decoy, though of his own species, in quiet possession of a flowery perch that he would alight to dispute with him its tenancy and seek to drive him away, thus himself becoming a captive. The note of the *o-o* is one that no one who has heard it can ever forget; it may be properly described as "most musical and most melancholy."

It delights to sound it forth from the topmost branch of some over-looking forest-tree, either as a call to its mate, or in pure joy of existence, as a token that its delicate tastes have been satisfied.

The *mamo*, from the richness and brilliancy of its coat, as well as from the pride and audacity of its nature, was often spoken of as the prince, or king, of Hawaiian plumage-birds. If one is not to distrust the enthusiasm of a Hawaiian writer on birds, its actions and manners entitled it to that distinction. To quote from this writer: "The *mamo-kini-oki* was the king of the small birds of the uplands. This bird was most ostentatious in its bearing, proud and lordly. Look at it perched on its tree prinking and preening and displaying itself, turning this way and that, disdainingly the *o-o*, *i-iwi* and other birds that approach, attacking and driving away any bird that comes to alight upon its tree," etc., etc. In addition to its mixture of pride and vanity the *mamo* had a reputation for great shrewdness and for being full of alert suspicion and watchfulness. The hunter had to use all his wits to compass its capture.

While the *o-o* haunted the depths of the forest and ranged equally the lower as well as the higher forest-regions, the *mamo* made his home principally in the upper borders, where the forest-vegetation is seen to have changed from its dense massing into a more open and park-like arrangement. Here the *lehua* no longer reaches its full height as the lord of the forest, and, becoming somewhat more branching and scrubby, yields its supremacy to the still more imposing *koa*.

The means generally employed for the capture of the *mamo* was the snare, *pahele*, baited with flowers or fruit.

The flowers of the *ke'a*, *oha*, *lehua* and *mamane* were often used, also the flowers and fruit of the banana, and the fruit (*kokole*) of the parasitic *i-e-i-e*, of which the *mamo* was very fond. The *hawane*, a palm that grew in the protection of the upland forests of Hawaii, had a flower, the nectar of which the *mamo* was said to esteem as a food and the hunter sometimes succeeded in capturing this bird by means of gum applied directly to its flower-stalk.

The greatest art was necessary in arranging the snare and bait for the *mamo*. The bird was most shrewd and observant, and if he detected any traces (*meheu*) of the hunter's work, from breakage or trampling his suspicions were aroused and he would take his leave at once. Having baited his trap and fixed in position his snare, which was a simple noose at the end of a fine line, fifteen or more yards long, the hunter placed himself in hiding, with his line in hand, and began to call the bird with an imitation of its penetrating whistle.

If the *mamo* was within hearing and pleased with the hunter's call, he would answer, and soon be on the wing in that direction to make acquaintance of the siren that had called him. At the bird's approach the hunter modulates his tone, only piping forth an occasional reassuring note, to lead the *mamo* still nearer, relapsing into silence and motionless quiet soon as the bird has come within sight of the baited trap. Having made his reconnaissance and satisfied himself that all is right, the bird alights and, warily cocking his head to one side and the other, to observe more closely, he moves forward to taste the hunter's bounty, in doing which he must set his foot within the reach of the nicely placed snare; - on the instant the bird-catcher pulls his line and the bird is his.

One old bird-catcher aroused my incredulity by the surprising tale, which I recommend the readers of this article to take with as many grains of salt as are necessary for the attaching of a bird, that so long as the hunter remained rigidly motionless and kept his features hidden from the sight of the *mamo*, by bending his head forward upon his chest, not even venturing to open his eyes, lest their flash betray him, the little creature took no offense, and would even go so far as to perch unsuspectingly upon the hunter's head and shoulders. "*Credatiste Juaeus! Non ego.*"

The plumage-birds, like everything else in Hawaii, were the property of the *alii* of the land, and as such were protected by *tabu*; at least that was the case in the reign of Kamehameha I, and for some time before. The choicest of the

feathers found their way into the possession of the kings and chiefs, being largely used in payment of the annual tribute, or land tax, that was levied on each *ahupuaa*.

As prerequisites of royalty, they were made up into full length cloaks to be worn only by the kings and highest chiefs. Besides these there were capes, *kipuka*, to adorn the shoulders of the lesser chiefs and the king's chosen warriors, called *hulumanu*, not to mention helmets, *mahiolo*, a most showy head-covering. The supply needed to meet this demand was great, without reckoning the number consumed in the fabrication of lei and the numerous imposing *kahili* that surrounded Hawaiian royalty on every occasion of state.

It is, therefore, no surprise when we learn that in the economic system of ancient Hawaii a higher valuation was set upon bird feathers (those of the *mamo* and *o-o*) than upon any other species of property, the next rank being occupied by whale-tooth, a jetsam-ivory called *palaoa pae*, monopolized as a prerequisite of the king.

While the plumage-birds were of such diminutive size and so difficult of capture that it would not have been profitable to hunt them for food, they were in reality such delicacies for the table, that the hunters were quite willing to use them in that way.

And, in truth, it is difficult to see what better disposition could have been made of them in many cases. In the case of the *mamo*, *i-wii*, *akakani*, *o-u* and *amakihii* the extent of skin-surface left bare after stripping the plumage from the bird was so considerable that it would have been an act of cruelty, if not of destruction, to have set it loose in such a condition. It was entirely different with the *o-o*. In its case the injury done was trifling and consisted no bar to its being immediately released.

Kamehameha I is said to have reproved his bird-catchers for taking the life of the birds. "The feathers belong to me, but the birds themselves belong to my heirs," said the considerate monarch.

It was the practice of some hunters to release the first bird caught, unplucked, as an offering to the gods.

The greatest care was always used to keep the feathers from becoming ruffled or wet in rainy weather.

The *mamo*, *i-iwi* and such birds as were destined to be eaten after being plucked, were, as soon as caught, killed by pressure over the thorax and then wrapped in the outer dried parchment of the banana-stalk, and packed in the hunting bag. The *o-o* and birds destined to be released were secured in cages.

As a means of accomplishing the double purpose of protecting himself and of preserving the plumage of his birds from injury by the wet, the hunter was provided with a long, hooded cloak that encased him from his head to his knees. The basis of this garment was a net-work, into the meshes of which were looped strips of dried ti-leaf that hung point down on the outside. The method was almost identical with that used in roofing a grass hut. The garment might with propriety be termed a thatched cloak. Its water-shedding power is said to have been most excellent, of which it had opportunity to give ample proof in the fierce, tropical, down-pours of the region.

Hooded and encased in this unique garment, the hunter must have presented a fantastic resemblance to a Capuchin monk.

The days of the bird-catchers of ancient Hawaii are over. Their place has been taken by those who know not *Ku-huluhulumanu* and the other gods of the craft. In their hands, instead of the snare and the pole, with its gum, its flowers and decoy, there is the deadly shot-gun.

The birds that were once the pride of Hawaii's woods have to contend for their existence under conditions imposed by the marauding mynah and thievish sparrow, that seem to have been imported for their destruction (Emerson, 1895:102-111).

#### **7.1.1.2 “Ahele Manu” – Bird-Catching Techniques on the Mountain Lands**

While researching various ethnographic records on the Bernice Pauahi Bishop Museum (BPBM), Maly (2005: 38-40) reviewed Hawaiian language papers (handwritten and typed) collected by island historian, Theodore Kelsey. Kelsey was born in Hilo in the late 1800s and spent his entire life speaking with elderly Hawaiian people, collecting their stories, and translating their writings. Among his papers found at the Bishop Museum (BPBM Archives – SC Kelsey; Box 1.5) are notes on various aspects of Hawaiian culture, including bird catching. Kelsey's informant was the elder Reverend Nālimu, who shared his account of bird catching, both as a means of providing feathers used for making Hawaiian emblems of royals and as a food source with other birds. The account specifically references localities in the uplands of the Hilo District and is a first-hand description of traditional or customary practices which had broad application in the mountain regions.

The following Hawaiian texts are presented as recorded by Kelsey in c. 1921, including his use of diacritical marks. The English translation of the Hawaiian narratives was prepared by Kepā Maly and reflects the basic tenor of the Hawaiian narratives. It should be noted that in the Hawaiian language, occurrences of certain words naturally imply a specific action or statement, which is reflected in the translation.

**“Ahele Manu.” by H.B. Nalimu**

Po’e kia manu o Laa, oia ka po’e ahele manu, kekahi me ka laau a kekahi me ka lehua. O ka mea ahele manu ma ka lehua malaila ka puka e hanai kokoke i ka lehua, he puka paa ke-ia. Kekahi piko o ke kaula ma ka la-la o ka ‘ohi’a e paa ai. Elima, eono paha anana ka loihi o ke aho mai ka puka mai a hiki i ka lima o ke kanaka e paa nei i ka piko o ke aho. A o ka puka aia ma kahi kokoke i ka lehua e kiko aku ai ka manu i ka lehua. I ka wa e lele mai ai ka manu lele no a ku maluna o ke-ia puka e kiko aku i ka lehua. A ia manawa e huki ai ke kanaka i ka piko o ke kaula a paa ka wawae o ka manu. Pii ke kanaka iluna a lawe i ka manu a hana hou aku i kela puka malaila. O ka akakane a me ka ‘iwi, a me ka ‘o-o’ iluna o ka pua lehua. Ahele me ke aho oloma’ makalii. Maluna o ka mai’a pala e ahele i’ ai ka manu o-i’.

**“Kāwili Kēpau.”**

O ke kepau oia ke kohu o ka ‘ulu. E ‘oki-oki ai i ka ‘ulu a kahe mai i ke kohu ke’oke’o, a i ka wa e maloo ai ua kohu ‘la i ke ahiahi alaila ua paa a’e ua kohu la.

**Bird Snaring (or Trapping)**

Bird catchers of ‘Ōla’a were people who snared birds. Some with branches and others with lehua blossoms. The individual who snared birds among the lehua made a snare close to the lehua flower, the snare was secured there. One end of the line was securely fastened on the branch of the ‘ōhi’a. The cord of perhaps five or six fathoms long, extended from the lasso (on the branch) to the man’s hand where the end of the line was held tightly. The snare was placed close to a lehua blossom, where the bird would step to the lehua. At that time, the man would then pull the end of the cordage and secure the feet of the bird. The man then climbed the tree, took the bird, and he would make the snare there again. The ‘akakane, the ‘iwi, and the ‘ō’ō were caught up in the lehua, snared with fine olonā cordage. The ‘ō’ū bird was snared while it was on the ripe banana fruit.

**Preparing Bird Lime to Kāwili, or Ensnare Birds.**

The bird lime is made from the sap of the breadfruit. Cut the breadfruit bark and the white sap flows, and when the sap is dry, say in the evening, the sap is hardened.

Hele oe e ho-ulu-ulu ke-ia koku a pau. Ho-ulu-ulu a nui, alaila lilo a'e'la ua' koku nei i kepau. Alaila hele oe e 'ohi i hookahi kukui maka a hemo kona iwi 'a 'o kono 'i'o malama 'oe kela'. Hele hou oe i ka' pa-ihi ku-kepau (kind of clover) he pa-ihi 'ele-ele ia, a hohui me ke kukui maka, alaila nau a wali ke kukui maka me ka pa-ihi. Hookomo iloko o ke kapa wauke (he mea uaua ia), alaila 'uwi' i ka wai o ke kukui a me ka pa-ihi iloko o ka 'opihi, oia ka "ipuhao" e kupa 'ae iluna o ke kapuahi. I ka wa e hoomaka ai e paila alaila 'oki-oki i ke kepau a liili a hookomo iloko o ke-ia wai kukui me ka pa-ihi i paila ia. Kii elua ni-au ai 'ole ia, mau laau liili paha e koali ai iloko o ke-ia wai paila. Pela e hanai a pau kela' wai a mo'a kela' kepau. Hookomo iloko o ke poho 'opihi a i 'ole he la-i' a wai i ka la-i'. Kāwili 'iuka a'e nei o Mokau-lele. Neenee ke pulu 'ohi'a o ia wahi ilalo o ka pahoehoe.

Ilalo no oe e ku ai o ka pahoehoe a hana oe i ke kepau iluna o ka pua lehua. Ina ekolu, eha' pua lehua au i kāwili ai i ke kēpau alaila i ka wa e pili ai kekahi pua lehua i ka manu alaila alualu a loaa. Pee hou oe iloko o ka pulu 'ohi'a (kāhi o ka lau 'ohi'a e luhe ana ilalo, oia ka pulu 'ohi'a) a pili hou kekahi manu. Opa' ke poo o ka manu a make. Hookomo iloko o kekahi eke. Hola ekolu paha alaila

You go and gather the sap. When enough has been gathered, the cap can be made into bird lime. Then you go and gather some raw kukui, removing the shell, you keep its meat. You then go and get the "clover" for making bird lime ('ihi-ku-kapu, the *Nasturtium sarmentosum*), it is a black pā'ihī, and you mix it with the raw kukui. Then you chew it, and the kukui and pā'ihī become slimy. This is put into a wauke bark cloth (it is a tough piece), then the juice of the kukui and pā'ihī are squeezed into the 'ōpihi, it is the "pot" for cooking the broth over the fire. When it starts to boil, the ('ulu) gum is cut into small pieces and put in the juice of the kukui and pā'ihī so it can boil. Then get two coconut mid-ribs or perhaps little sticks to stir this boiling juice. This is how it is done until the juice is cooked and becomes the birdlime. It is then placed into the empty 'ōpihi or a ti leaf, wrapped up in ti leaves. Kāwili is in the uplands adjoining Mokaulele. Then go to where there is low branching 'ōhi'a (pulu 'ōhi'a), where the pāhoehoe is below.

You are below on the pāhoehoe, and you apply the bird lime above around the lehua flowers. Now you kāwili (twist, i.e. apply) this bird lime in among three or four lehua flowers, then when a bird is stuck by one of the lehua that blossoms, you free it and it is caught. You then hide again among the low 'ōhi'a branches (a place where the 'ōhi'a tops droop down, that is the pulu 'ōhi'a), and catch another bird.

ho'i, nui ka manu, i hookahi kaa, iwakalua, kanakolu paha. A kela manu makalii; ua momona – kuhikuhi kona i'o, momona. Oia ke kāwili kēpau.

### **“Laaui Kia Manu.”**

Ekolu, eha' paha anana ka lo-ihi o ka laau. Kau ia ka pua lehua iluna o ia laau nei mai kekahi 'ao-ao o ka laau a hiki i kekahi poo o ka laau. Hana elua kanaka, kekahi ma kekahi laau a kekahi ma kekahi. Kepau maluna o ka laau a he mau pua lehua mawaena o ke-ia mau kēpau – he laau kia manu ia I\_\_\_\_I. Olaa ka Aina kia manu a me Piihonua. Nui ka manu o-o ma Puu O-o. Malaila ka po'e kia manu e hele ai a loa na lei hulu no na lii. O Pana-'ewa kekahi wahi kia manu.

Huki ka laau kia manu iluna mawaena o na 'ohi'a elua. Hana me ka 'upena kekahi. Huki ia iluna ka 'upena, hookahi laau maluna, hookahi laau malalo. He 'upena 'olona' maka hakahaka, a he kaula 'olona' ma na poo. 'Elima, eha', ekolu paha anana kela' 'upena palupalu. Lele no ka manu, paa ka wawae, paa ka pekekeu. Ina' hookahi, elua manu, waiho no pela', oia na manu e kahea ana i na manu

You squeeze the birds head and it is killed. It is placed into a bag. Returning (home) perhaps around three 'o clock, there are many birds, perhaps forty, twenty, or thirty. Those small birds; when fat – the meat is tasty and sweet. That's how one prepares kawiki kēpau, or bird lime to ensnare birds.

### **Snaring Birds on Branches.**

The (decoy) branch is perhaps three or four fathoms long. Lehua blossoms are placed on this branch, from outside of the branch up to the tip of the branch. Two men do this job, one at one (end of the) branch and one at the other. Bird lime is placed on top of the branch along with many lehua blossoms in between this bird lime – this is a bird catchers (kia manu) branch [drawn] I\_\_\_\_I. 'Ōla'a and Pi'ihonua are lands of bird catchers. There are many 'ō'ō birds at Pu'u 'Ō'ō. It is there that the bird catchers go to get the feathers for adornments (lei) of the chiefs. Pana'ewa is also a place of the bird catchers.

The bird catchers (decoy) branch is pulled in between the 'ohi'a lehua trees. One (person) uses the net. The net is pulled up, one branch is above, one branch is below. It is an open (wide) meshed olonā net ('upena olonā maka hakahaka), and olonā cordage at the tip. It is a soft (pliable) net perhaps five, four, or three fathoms long. As the birds fly their feet are caught, or their wings are caught. Now if there are one or two birds, they are left, these are the

e a'e. Nui ka manu, hookuu ilalo ka 'upena a huki hou iluna. He ulu 'ohi'a ma kekahi 'ao-ao a me kekahi 'ao-ao. Oia ka hana ana o ka po'e lawai'a manu. Ho'i i ka hale e wehe ai ka hulu o ka manu 'o-o'. Piha ke po'i i ka hulu a haku lei. Malalo o ka poe-ae-ae o ka o-o' oia ka hulu a-a', a maluna o ka piapia oia me pue.

(Nalima in Kelsey; BPBM Archives-SC Kelsey; Box 1.5; K. Maly, translator).

birds that call out to the other birds. When there are many birds the net is let down (the birds taken), then the net is pulled up again. 'Ōhi'a growth is all around. So this is the work of the "bird-fishers," or lawai'a manu. They return to the house and then remove the feathers of the manu 'ō'ō. When the container is filled with feathers, a lei is made. Below the wing-pit is where the male 'ō'ō bird feathers are, and above on the back by the tail, are the pale yellow feathers.

### 7.1.2 Agriculture, Cooking, and Food Traditions

Agriculture and food traditions were essential to the survival of the Native Hawaiian population. Hawaiians were both innovative and adaptive in their ability to use the resources available to them for subsistence purposes. Due to the challenging climate and environment of the Saddle Region, Hawaiians who inhabited or traveled through the area had to be particularly skilled in obtaining and preparing the nourishment needed to survive and work in this area.

Archaeological studies have identified habitation sites throughout PTA (Athens and Kaschko, 1989). Avian remains located within these habitation sites, typically caves used for shelter, were identified belonging to the procellariid family, five species of procellariid seabirds existed in the islands prior to contact, including the 'ua'u. The presence of these avian remains offers evidence of the ability of Hawaiians to traditionally inhabit these areas.

Archaeological evidence also illustrates how Hawaiians hunted and cooked in this area. Cooking stones have been identified in historic sites (**Figure 24**). These stones were utilized to prepare meals.



*Figure 24. Cooking stones located in a lava tube habitation site at PTA. Photo: Archaeologists find, preserve cultural resources at Pōhakuloa Training Area [Image 7 of 12], by Eric Hamilton, U.S. Army Garrison Pōhakuloa Training Area (2015)*

### 7.1.3 Ranching

Ranching emerged in the islands with the introduction of cattle. Seen for its potential to create new exports and influence the local economy, ranching would grow over the decades to become a significant cultural influence in Hawai‘i and on Hawai‘i Island in particular. Ranching in Hawai‘i traces its origins to Hawai‘i Island, specifically the late 18<sup>th</sup> century when cattle and sheep were first gifted to Kamehameha I (Desilets et al., 2017: 9). Over the next two centuries, the culture and commerce around ranching would increase significantly with many of the customary practices associated with ranching still practiced today (**Figure 25**).



*Figure 25. Cattle ranching at Parker Ranch (Hawai'i Island). Hawaii State Archives, Paniolo Collection, PP-13-6-006 (ca. 1930)*

### **7.1.3.1 Historic Accounts of Ranching**

Historic newspapers provide numerous accounts of animals being brought to Hawai'i Island for ranching. Horses, sheep, and cattle were all introduced to the islands by foreigners, with concentration of these activities within the geographic extent of the project, primarily in areas that allowed for grazing and herding. The following articles were collected by Maly (2005: 231-243).

## **“Wild Sheep in Hawaii” (1937)**

### ***Paradise of the Pacific***

**by L.W. Bryan, Associate Forester**

**March 1937 (pages 19 & 31)**

Towards the end of the eighteenth century the first sheep were brought to Hawaii by the English and liberated on the different islands. A tabu was immediately placed on them and they were permitted to multiply without interference. In some sections they have been running wild for many years and are now quite plentiful in several sections particularly so on the slope of Mauna Kea on the Big Island. Conditions in Hawaii have been most favorable for the natural development of animals of this kind. Ample forage, few natural enemies (only man and wild dogs), and twelve months grazing season have made these islands a veritable paradise for this species and as a result they have increased enormously and, together with wild goats, have been responsible for considerable damage done to our native forest cover.

Within the Mauna Kea Forest Reserve wild sheep are quite common (estimated population of 40,000) and do much damage to tree growth and prevent any natural reproduction of the native species particularly the native Mamani (*sophora Chyrsophrilla*). In some sections they have prevented any natural reproduction for many years past, and if this state of affairs was allowed to continue it would only be a matter of time before our mountains would be without a protective covering.

Realizing this the Territorial Division of Forestry has been attempting to rid this reserve of these pests in order to assist nature in her program of natural reforestation. This reserve area contains nearly 100,000 acres of rough mountainous country, extending from about 7,000 feet to the top of the mountain, which is nearly 14,000 feet high. The work of eradicating these animals had been proceeding slowly up to two years ago when the Federal Government offered to assist us in our conservation work through the Civilian Conservation Corps. Since then this work has gone ahead more rapidly and is now a recognized project. During the past year a total of 15,875 wild animals have been killed on the Island of Hawaii and of this total 9,167 were killed by the CCC who expended 865 man days on this work project. Many of these animals were shot and the meat utilized in our different CCC camps but by far the largest number have been captured in organized drives which are held in cooperation with adjacent land owners and ranches.

In order to successfully conduct these drives good fences are necessary and during the past year and a half the CCC boys have been busy building a sheep and goat proof fence around the entire boundaries of this reserve area. This fence is now almost complete and when finished will be over fifty miles long. This is the longest fence in the Territory and is well built of woven wire strung on strong posts cut from the native Mamani trees. This wood is very durable and will last for years. With this fence to work with the killing off of these sheep should prove much easier.

Recently a large drive was held above Waimea in cooperation with the Parker Ranch which furnished thirty cowboys and all riding animals needed. This drive covered an area of between ten and twelve square miles along the reserve boundary between Puu Laau and Puu Kemole. About forty men took part with only one lady, Mrs. Ernest H. Podmore of Honolulu, who was the only one of her sex to participate. The cowboys left Waikii at 4 a.m. under the leadership of foreman William Kaniho, and six hours later had driven the last of the sheep into the corral located near Puu Nanahu. Thus the actual drive required only six hours but they were all full hours of hard riding over rough country that only trained men and horses can travel over and still keep up with the sheep. Much credit is due to "Willie" Kaniho and his well trained cowboys for their excellent work. Twice during the drive it appeared as though the animals would break back and once they seemed to succeed but the boys were after them and soon out-flanked them and gradually turned them up hill again towards the corral. And again, just before the last big flock had been driven into the pen, one old ewe became suspicious of her followers behind. However the boys were on the watch and just managed to turn her back and with her went the rest of the flock. Once safely in the corral our troubles were over.

The actual killing of over 3,000 sheep is quite a problem. It must be done quickly and in a humane manner. Shooting is out of the question on account of the expense and danger to those around. It is not a pleasant job at best but a sharp knife, properly handled, is one good method. The animal is captured by driving small numbers into an inner pen, quickly stunned by a sharp blow on the head and then dispatched. Many of the animals are old ewes and rams that are worthless for food and so are thrown away. With the good meat it is different, an attempt is always made to save and utilize the best of it and during the recent drive over three hundred carcasses were saved and given away to such organizations as the Salvation Army, Father Louis' Boys' Home, Waiakea Settlement, W. P. A., Puumaile Home, etc. The skinning and packing out of this meat was done by CCC boys from the Waimea Camp after their usual working

hours. They gave freely of their own time as a donation to those less fortunate than themselves. This drive was conducted under the direct supervision of Mr. A Hartwell Carter, Manager of the Parker Ranch and the killing was done under the direction of Forest Ranger Duke Kawai and the CCC Project Superintendent W. A. Hartman. It took twenty-five boys two long days of 13 hours each to complete the killing and disposal of the dead sheep.

The results of our attempts to rid our forest areas of these injurious animals have been most encouraging in certain sections which we have fenced off and removed all animals. These areas are now growing up with native trees and other plants and indicate what can be accomplished once we rid this reserve of most of the wild animals. Many of the large rivers, which feed the agricultural lands below, rise in this area and it is essential that we have a good forest cover. By getting rid of these animals we can expect considerable assistance from nature in reforesting these slopes.

### **“The Big Fence on the Big Island” (1937)**

#### ***Paradise of the Pacific***

**by L.W. Bryan, Associate Forester**

#### **April 1937 (pages 15 & 30)**

On the 29th of January, 1937, the longest fence in the Territory of Hawaii was completed by CCC boys. It is around the entire boundary of the Mauna Kea Forest Reserve – the second largest reserve in the Hawaiian Islands. This project, which is part of the Territorial Division of Forestry’s conservation program, was done under the direction of Project Superintendent W.A. Hartman. He was ably assisted by foremen Duke Kawai, Manuel Adrian, John Liana, J.J. Ignacio and Manuel Pimental. Much credit is due all these men, and to the enrollees who worked under them, for the fine accomplishment.

This fence is made of extra-heavy galvanized stock wire. It is fifty-five inches high and is stretched tightly on large posts of Mamani wood. All openings are stock proof and it will turn all kinds of stock very effectively.

Actual construction work was started in June of 1935. A total of twenty months was required to complete the work on the fence which has a total length, including necessary corrals, of fifty-five and one-half miles. Eighteen thousand five hundred and thirty-six man-days were expended on all work connection with this project. The total cost, including an allowance of \$2.50 per day for enrollee’s time, amounted to about \$72,000 or \$1,300 per mile.

A great deal of preliminary work was required before the actual construction of the fence began. First, it was necessary to build many miles of horse and truck trails and tractor roads. In connection with the fence line alone nearly sixty miles of horse-trails were constructed. This trail was used to pack in the fence wire and other supplies. It was made permanent for future use in fence patrol and wild animal eradication work.

Most of the fence work was above the eight thousand foot contour. Camp locations had to be selected, shelters constructed, and water tanks installed. These camps were located as close to the fence lines as possible and placed at intervals around the mountain approximately four miles apart. This made the maximum distance from camp to work about two miles each way. At each camp site it was necessary to construct a corral for the work animals. Practically all feed, and part of the water, for these animals, had to be transported to the camp site.

Nine line camps were used. Seven of them had to be constructed in advance. These camps were made on the same plan; one small building with water-tanks alongside in which could be stored between six and eight thousand gallons of water. The building was used as a cook-house and store-room. The boys lived in tents.

During the winter months it becomes quite cold on Mauna Kea and it was found that seven blankets per boy was not too much cover. Frequently the thermometer registered below freezing and at the Puu Loa Camp last February it was necessary to stop work for three days due to an exceptionally heavy fall of snow which covered the ground in that section and prevented work on the fence line. This was the first time most of the boys had ever seen snow close at hand, but in spite of the cold they seemed to enjoy the experience. During the winter months each tent was furnished with a small oil heater that made the evenings more comfortable.

The completion of this fence concludes one of the most important conservation projects attempted by the CCC in the Territory of Hawaii. It completely encloses and protects a reserve area containing approximately one hundred thousand acres. The important Wailuku River – which furnishes the water-supply for the City of Hilo – as well as several other large streams that supply water to Hilo and Hamakua Districts, have their source within this area.

This reserve has, for many years, been overrun with wild sheep, there being an estimated population of about forty thousand. These animals do much

damage and of recent years have effectively prevented any natural reproduction of the predominating tree growth – Mamani. With this new fence completed it is now possible to conduct drives and reduce the number of these animals to a minimum. In a recent drive, held since the fence was completed, over three thousand wild sheep were captured and killed in a single day.

After these animals are exterminated we can expect considerable assistance from nature in our reforestation work. On a small scale this fact has already been demonstrated so we feel assured of ultimate success. In some sections, where seed trees are lacking, it will be necessary to assist nature with reforestation; but where seed trees have been left we can expect to see a new generation of plants occur naturally.

### **“Wild Cattle in Hawaii” (1937)**

#### ***Paradise of the Pacific***

**by L.W. Bryan, Associate Forester**

#### **September 1937 (pages 9 & 30)**

Captain George Vancouver brought the first cattle to Hawaii from California in 1793-1794. They were landed and liberated at Kealahou, South Kona on the Big Island. As with other introduced animals of the same period, a rigid “kapu” was placed on them in order to permit them to multiply. This they did with a vengeance and within a comparatively short span of years they became quite common on all the islands, particularly on Hawaii where they found many hundreds of acres of good pasture lands.

Over a period of many years they were slaughtered by men employed for this purpose by the King, principally for their hides, which at one time formed one of the principal articles of export from Hawaii. Experts were employed by the King to go into the mountains to shoot and rope these animals. Only a small amount of the meat was used, some of it being salted and sold to the whaling ships wintered in these waters at that time. Many of them were trapped in “pitfalls” similar to the one which David Douglas lost his life on the slopes of Mauna Kea in 1834. I have heard old Kamaainas tell of the vast herds of these wild animals that were once so plentiful and of how they used to rope and shoot them not so many years ago.

Within my time however wild cattle have never been plentiful. The last of them were killed on the upper slopes of Mauna Kea about six or eight years ago. There yet remains a few heads on the lower slopes within the heavy rain forest.

Here they live under such wet conditions under foot that their toes grow long and they leave behind them a foot print that gives the impression that some animal of about the size and weight of an elephant has passed that way. They are hard to get and success usually depends upon chance and good dogs.

The last real stand of wild cattle is being made on the southeast slopes of Mauna Loa above the 5,000 foot contour. In this almost inaccessible section, small bands of these animals can still be found and offer thrilling sport to the hunter with either rope or gun. The “Long-horns” of the early Mexican cattle have gradually disappeared until today there are none to be found except as mounted trophies of the past. The present strain of wild cattle is a mixture of practically all the breeds ever introduced here and the result is often a queer looking animal. The Bulls are usually Red or Black and apparently have good blood for they are big fellows and offer plenty of fight when cornered or wounded. Except in dry weather, these animals are usually in good condition and the meat is well worth packing out.

In hunting them it is necessary to stalk them with considerable care and silence. They are easily alarmed and are off at the first sign of danger. They live in a rough, lava strwen area, over which a horse or man makes slow progress and once they start to run it is difficult to catch them even with dogs. We find that a 30-30 is a little too light for these animals particularly the bulls which are very hard to kill. I recall hitting a full grown bull between the eyes with a 30-30, hi-speed bullet and afterward (when he was dead from other shots), picking it out of the hair on his forehead where it had lodged without penetrating his thick skull. I prefer a 45-70 and one of our rangers uses a .405 that kicks like a mule every time it is fired. However these heavy guns are very effective and will usually stop an animal even though it is not hit in a vital spot. Recently we were on the trail of a band of these animals and suddenly came upon them resting in a small “Kipuaka” under some large Koa trees. One fine cow was laying down and apparently did not see us. However a big black bull, who was on watch, must have seen or heard us for he became suspicious and just as the gun was fired the cow arose and the whole band, of eight animals, were off on the run. A second shot failed to stop any of them and we thought they were gone for good when one of the boys noticed blood on the ground at the spot where the cow had been lying and so we knew that the first shot had found its mark. To follow the track was not hard and within a quarter of a mile we found the wounded animal hiding in a dense thicket of ferns. Fortunately we had approached with caution, for a wounded cow, particularly one with a young calf, is dangerous and not to be treated lightly. A third shot was a

complete miss due to lack of breath from running. The fourth shot however did the trick and the animal was soon skinned and cut up and loaded on the mule and we found we had about four hundred pounds of prime beef.

It is estimated that about two hundred of these wild animals yet remain on the slopes of Mauna Loa, where they range, live and die, and seldom see man. Their days are numbered for a new forest fence, eighteen miles long, is being built along the upper boundary of the Kau Forest Reserve by the CCC boys working under the direction of the Territorial Division of Forestry. When completed this fence will aid in confining these animals and eventually they will disappear as they have from other sections of the Island. In the meantime they will furnish many a good, juicy steak and stew for the CCC boys.

#### 7.1.4 Paniolo

The Hawaiian paniolo were the first cowboys in the United States. In 1793, Captain George Vancouver brought cattle to Kamehameha as a gift shortly after Kamehameha unified the Hawaiian Kingdom under his rule. This introduced ranching to the islands. In order to grow the population so Hawaiians could export cattle and use them throughout the islands, Kamehameha first put a kapu on the cattle. The cattle grew sharply in numbers, and soon large numbers of cattle were roaming wild throughout Hawaii Islands (Harrington, 2019).

In order to begin to get the growing population of cattle under control, Kamehameha brought the vaqueros from Mexico, who had the expertise to manage the cattle with horses. Hawaiians could not initially pronounce the term vaqueros, so they would attempt to use the term “españoles” (Spanish speaking males) instead. Unable to pronounce this term properly, the term “paniolo” was created.

The paniolo were regarded with great esteem. While they were not intended to remain in the islands, soon marriages between the paniolo and the local population resulted in Hawaiian paniolo (**Figure 26**). The cowboy lifestyle became a way of life. They were considered particularly masculine and historic record and songs reflect this (M. Sproat, per. comm. 2021).

The paniolo are a distinct cultural group, or folk society, with origins to numerous ethnic groups including Mexicans, Hawaiians, Portuguese, and others (Mills et. al, 2013). Records show that ranching and the paniolo utilized the project area and geographic extent significantly before the lands were acquired by the Army. See Paniolo Hall of Fame Oral History Interviews, O’ahu Cattlemen’s Association.

Ranching still occurs in the adjacent lands, although no ranching activities currently take place within the PTA.



*Figure 26. "Typical Hawaiian Cowboys" - Hawaii State Archives, Paniolo Collection, PP-13-6-015 (n.d.)*

The vaqueros also brought the Spanish guitar with them. It is through this introduction that slack key music was also born. It is said that slack key music came from Mexicans leaving their guitars with local Hawaiians, but for Hawaiians who did not know how to properly tune the guitars, they would “slack the keys” creating tuning that originated in the islands. For many decades, “slack key” music grew and was perpetuated within the paniolo community.

There are also numerous songs written for and by the paniolo. National Heritage Fellow Clyde “Kindy” Sproat, traveled to the Smithsonian Folklife Festival in 1989 to share mele and mo’olelo about the paniolo, slack key music, and falsetto singing. At that festival, when sharing the song “Adios Ke Aloha” by Prince Leleiohoku, the younger brother to King Kalākaua and Queen Lili’uokalani, Sproat said, “Adios Ke Aloha’ was written by Prince

Leleiōhoku, and he wrote this in honor of the Mexicans that came to teach the cowboys how to rope and ride and all of that. That is my heritage, believe it or not. One of my great-grandfathers was one of those Mexicans that came to teach the Hawaiians how to rope and ride” (Harrington, 2019). Hawai‘i Island is known for being the origin of the paniolo culture in Hawai‘i. There are still numerous rodeos held on Hawai‘i Island and this way of life is still practiced today.

### **7.1.5 Modern Hunting**

As noted in Section 3, modern hunting has largely been a product of foreign contact. From the introduction of modern weaponry to the introduction of foreign game, much of the hunting that occurs in Hawai‘i today simply did not exist prior to the arrival of foreigners. Nonetheless, modern hunting is an important practice for many community members and practitioners who rely on hunting for subsistence.

Under State hunting regulations, hunting is open to the public within six designated hunting areas (TAs 1 through 4 and 9 through 16) on weekends and U.S. holidays. The availability of units open for hunting is subject to training schedule compatibility and a permit from the PTA Commander. (**EIS Section 3.2.4.2.**) It is also a requirement that these activities “do not conflict with the military mission.” This allowance for recreational hunting can include, to a limited extent, customary practices associated with modern hunting. While modern hunting is a customary cultural practice, it should be noted that PTA’s hunting program was established for recreational hunting activities.

Requests for any such uses are made through the Deputy Garrison Commander or the Commander at PTA. If approved, this individual will coordinate any request(s) with Range Control and others whose operations may be affected. Appropriate access control procedures are established for each approved outdoor recreation activity. Public recreational activities have been conducted at PTA and include archery in TAs 5 and 6; guided hikes; and hunting for birds, pigs, sheep, and goats within specific areas.

#### **7.1.5.1 The Mauna Kea Hunting Program of the Territory of Hawaii (1948)**

The following information taken from Maly, 2005:217 is a good illustration of hunting that has customarily taken place within the current project area. Ethnographic data shows that pig hunting, as well as other hunting that occurs as part of the PTA hunting program, still occurs in the area.

##### ***Paradise of the Pacific***

##### **Hunting on the big island of Hawaii – Sheep, wild goats and pigs by thousands create hunters’ paradise**

### May 1948 (page 27)

The rugged slopes of Mauna Kea, on the “big island” of Hawaii abound in wild sheep, goats and pigs, making them a hunters’ paradise. Sheep hunters usually gather at Pohakuloa, the lodge maintained by the Hawaiian Board of Forestry and Agriculture. Here they spend the night under piles of blankets (because of the 6,500 foot elevation, the nights are almost always cold) and start out before sunrise for the mountain ridges.

They climb to the ten thousand foot elevation, where wild sheep and goats are in abundance. The Board of Forestry encourages hunting, as the animals have caused serious erosion by eating vegetation, and some authorities believe that the sheep and goats will never be entirely exterminated. In its desire to provide hunting facilities, the Territory maintains not only Pohakuloa lodge, with its bedding accommodations for fifty people, but smaller lodges at Kemole and Kahinahina. The latter is located near the headwaters of the Wailuku river.

There are twenty ranger stations located throughout the vast Hawaii Island forests, which cover an area of some six hundred thousand acres. There are more than three hundred miles of forest fences to be patrolled and maintained by the six Big Island rangers.

Three guides are stationed at Pohakuloa to lead organized parties into the best sheep regions. Hunting parties are expected to bring along their own food and to pay a nominal fee for sleeping facilities and guide service.

## 7.2 Cultural Resources

**Table 11** provides a listing of the animal species of cultural concern found within the project area (State-leased land). The narrative that follows provides information on any of the plant resources with identified cultural uses. Two animal species do not have known cultural uses.

### *’io*

The ‘io, or the *Buteo solitaries*, is the endemic and endangered hawk currently found on the island of Hawai‘i. It is one of two birds of prey native to Hawai‘i. The ‘io generally has two distinct phases of color—the adult dark phase which is usually a blackish brown, and a light phase which is mostly buff with some variations. The adult male ‘io have been measured at 15.5 inches and the adult females at 18 inches. ‘Io nests are large structures built of twigs and sticks, usually secured in low-lying branches of ‘ōhi‘a trees (Munro 1944).

According to multiple sources, the ‘io was considered sacred to some families, perhaps an ‘aumakua or a deified ancestor. The lofty heights to which it would fly made the ‘io a symbol of royalty. For that reason, the name ‘Iolani, or royal hawk, was given to people or places of royal status, including Kamehameha IV Alexander ‘Iolani Kalanikualiholiho. It has been noted that the feathers of the ‘io were used by Native Hawaiians in kähili feather standards, and were likely not eaten (Handy and Handy 1991). It is also believed that the ‘io was associated with the god Kū, who could take the shape of an ‘io (Krauss 1993).

*Table 11. Federally Listed Endangered or Threatened Animals Observed at Pōhakuloa Training Area*

| Scientific Name                                                                                      | Common Name                       | Federal Protection | State Protection | TYPE   |
|------------------------------------------------------------------------------------------------------|-----------------------------------|--------------------|------------------|--------|
| <i>Asio flammeus sandwichensis</i> *                                                                 | Hawaiian short-eared owl, pueo    |                    | E                |        |
| <i>Branta sandvicensis</i> *                                                                         | Nēnē,<br>Hawaiian Goose           | T                  | E                | Bird   |
| <i>Buteo solitaries</i> *                                                                            | ‘Io, Hawaiian Hawk                |                    | E                | Bird   |
| <i>Pterodroma sandwichensis</i>                                                                      | ‘Ua‘u,<br>Hawaiian Petrel         | E                  | E                | Bird   |
| <i>Oceanodroma castro</i>                                                                            | Band-Rumped<br>Storm Petrel       | E                  | E                | Bird   |
| <i>Lasiurus cinereus semotus</i>                                                                     | ‘Ōpe‘ape‘a,<br>Hawaiian hoary bat | E                  | E                | Mammal |
| Federal and State Status Key: E = Endangered, C = Candidate, T = Threatened                          |                                   |                    |                  |        |
| * Observed on State-owned land                                                                       |                                   |                    |                  |        |
| Source: Army Training Land Retention at Pōhakuloa Training Area Draft Environmental Impact Statement |                                   |                    |                  |        |

### **Nēnē**

The nēnē, or *Branta sandvicensis*, is the Hawaiian goose endemic to the Hawaiian islands and is known to be found on both Maui and Hawai‘i Island, especially the northwestern slope of Hualālai in North Kona in the late 1800s. Its Hawaiian name comes from the word nē, the whispering sound of a persistent murmur, calling upon the sound the large fowl makes. The nēnē prefers to forage for its food on the mountains of Hawai‘i Island and Haleakalā, and moves down towards the lowlands to breed. Its breeding season is between August and April, and it is reported that they prefer to return to the same nest year after year. It is purported that the nēnē would migrate between Maui and Hawai‘i, and sometimes stray off course to the other Hawaiian islands (Munro 1944). Nēnē are known to eat ‘ōhelo and pūkiawe berries, and nestle in the pūkiawe (Kepler 1998). These geese were the larger of the Hawaiian birds, and thus its longer feathers were used to make large ceremonial feather standards or kähili. David Malo also documents that nēnē were among the birds used for food in traditional times (Buck 1957). Once listed as an endangered species in 1967, the

success of recovery programs has allowed this rare bird to be taken off the list in 2019 and is now considered a threatened species. Ethnographic data expressed concern for the nearby Keauhou Ii Nēnē Sanctuary located at the base of Hualālai.

### ***‘Ua‘u***

The ‘ua‘u is the *Pterodroma sandwichensis* petrel, an endangered and endemic sea bird. Currently, the majority of known ‘ua‘u nests on Hawai‘i Island are located at Hawai‘i Volcanoes National Park or on the lower slopes of Mauna Loa. From a distance, it appears to have a white head, but its forehead, cheeks and underparts are white and the rest of its head is black. The rest of its body is dark brown, and has been measured at 15.5 inches long. It is likely that the ‘ua‘u did not roam far from the main Hawaiian islands, and has been threatened by mongoose and feral pigs and cats. The ‘ua‘u nests in holes under the roots of trees and stones, usually at elevations of 1,500 to 5,000 feet. Its nesting season is between April and May. Despite some reports that the birds were used as food, there are other accounts of ‘ua‘u as ‘aumākua, considered sacred to particular families.

### ***Oeoe, ‘Akē‘akē, Lupe‘akeke***

No associated cultural uses identified.

### ***‘Ōpe‘ape‘a***

No associated cultural uses identified; only indigenous mammal of Hawai‘i.

## **7.2.1 Food Sources**

Due to the nature of the ecology and landscape of the region, agricultural and food production options were more limited this area than in areas more regularly inhabited by Hawaiians. The 2012 Ethnographic Study identified a historic site considered a “bird catching pit” (McCoy and Orr, 2012: 58, citing Moniz-Nakamura, 1999). It was stated:

Moniz-Nakamura (1999a:224; see also Hu et al. 2001; Moniz-Nakamura et al. 1998) suggests that these pit features aided bird-catching efforts in two ways: (1) they created larger nest openings, which facilitated easier removal of the nesting bird(s) and (2) they “...served to enhance the nesting sites as a kind of artificial habitat” (citing Moniz-Nakamura 1999a:224).

In sum, archival research suggested that the excavated pits in the lowlands of Hawai‘i Island were used for agriculture. Excavated pits in the arid uplands of the Saddle Region (including PTA) and on Mauna Loa were associated with the procurement of birds (citing Moniz-Nakamura (1999a). At PTA, this is supported by archaeological

evidence including several cave sites found to contain abundant bird bone remains identified as dark-rumped petrels (*Pterodroma phaeopygia sandvicensis*, or ‘u‘au), and the presence of nearly a thousand excavated pits located between 4,200 and 8,880 feet above sea level (citing Moniz-Nakamura (1999a:219). These pits are also found on Mauna Loa.

Malo (1951) describes several birds used as food resources and the means by which they were caught by traditional Hawaiians. A selection of these birds and the means by which they are captured are provided in **Table 12**. It is believed that prior to contact, Hawaiians would have hunted these birds in the project area as food resources. Archaeological evidence shows that Hawaiians would dig into the lava flows to create pits or holes that could be used for agricultural purposes or as bird-catching pits (Moniz Nakamura et al., 1998).

*Table 12. Selected List of Bird Species Utilized as Food Resources and the Means by Which they were Traditionally Hunted as Described by Malo (1951)*

| Species                                  | Method of Hunting       |
|------------------------------------------|-------------------------|
| Nēnē                                     | No method specified     |
| ‘Alalā                                   | Pole or snare           |
| Pueo                                     | Pole, covert, or net    |
| Moho                                     | No method specified     |
| ‘Ou (also ‘ou‘ou)                        | Bird lime <sup>26</sup> |
| ‘Ōma‘o                                   | Bird lime or snare      |
| ‘Ō‘ō and mamo                            | Bird lime or pole       |
| ‘I‘iwi                                   | Bird lime               |
| ‘Ula                                     | No method specified     |
| Ua (also ‘Ua‘u)                          | No method specified     |
| ‘Akohekohe                               | No method specified     |
| Mū                                       | No method specified     |
| ‘Amakihi and akihialoa (also ‘akini loa) | Bird lime               |
| ‘Elepaio                                 | No method specified     |

### 7.2.2 Clothing

Traditional bird catchers would also use sap (bird lime) to carefully capture birds prized for their feathers. Malo (1951) wrote: “The feathers of birds were the most valued possession of the ancient Hawaiians. The feathers of the mamo were more choice than those of the o-o because of their superior magnificence when wrought into cloaks (ahu). The plumage of the iiwi, apa-pane and amakihi were made into ahu-ula, cloaks and capes, and into mahi-ole, helmets” (76). **Figure 27** is an image of an ‘ahu‘ula.

<sup>26</sup> Known in Hawaiian as kāwili, this traditional practice involved using sap or a similar substance to capture birds.



*Figure 27. 'ahu'ula (cloak), circa 1800, Hawaii, maker unknown. Gift of Lord St Oswald, 1912. CC BY-NC-ND 4.0. Te Papa (FE006380) <https://collections.tepapa.govt.nz/object/91240>*

### 7.3 Summary

Bird catching and bird hunting are well documented throughout the project area but have been significantly reduced over time due to the critical loss of traditional forest bird populations. Even if access to the areas were open, these practices would likely be prohibited or highly restricted due to existing federal and state laws that protect endangered species. Further, traditional Hawaiian practices relied on maintaining sustainable yields of subsistence resources, and in the face of critically low populations, traditional governance would place restrictions (kapu) on extractive activities until populations were restored to healthy levels.

Bird hunting would have involved hunting and cooking birds within cave habitation areas with cooking stones. While such practices likely decreased as ranching came into the area and as food preservation methods allowed for longer "shelf life" of foods, it is possible such practices continued into the 20<sup>th</sup> century. Today these practices would be limited by federal and state laws that protect endangered species populations. Bird hunting, largely for pheasants, still occurs within the project area. These birds are used for both food and for lei hulu, feather lei woven with traditional techniques.

*Table 13. Ethnozoology Practices Associated with the Project Area and Frequency over Historic Eras*

| <b>Cultural Practice</b>                         | <b>Traditional Pre-Contact Era (prior to 1778)</b> | <b>Historic Post-Contact Era (1778-1943)</b>                              | <b>Contemporaneous Era (1943 – current)</b>                                                         |
|--------------------------------------------------|----------------------------------------------------|---------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| <b>Bird Catching</b>                             | Regularly practiced                                | Practice declined due to introduction of foreign goods                    | Not actively practiced and practice limited by state and federal law                                |
| <b>Agriculture, Cooking, and Food Traditions</b> | Regularly practiced                                | Practice declined due to introduction of foreign goods                    | No evidence of current practice in region                                                           |
| <b>Ranching</b>                                  | Not yet introduced                                 | Regularly practiced, although taking or cattle or livestock was regulated | Practice in project area limited by Army control of land; regularly practiced in surrounding region |
| <b>Paniolo</b>                                   | Not yet created                                    | Regularly practiced, although taking or cattle or livestock was regulated | Practice in project area limited by Army control of land; regularly practiced in surrounding region |
| <b>Modern Hunting</b>                            | Not yet introduced                                 | Regularly practiced, although taking of animals was regulated             | Regularly practiced in project area, subject to existing policies                                   |

PTA manages a game program via a permit system which allows for members of the public to hunt in the area. Permit entitlements are outlined in **Table 14**.

*Table 14. Hunting Permits Available at PTA*

| Permit                                     | Entitlement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Fee (if any)   |
|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| <b>PTA General Hunting Permit</b>          | Allows hunters age 16 to 64 access to hunt on all open PTA lands for all Game Mammal, Game Bird and Spring Turkey hunts. Each permit comes with five (5) game mammal allotments.                                                                                                                                                                                                                                                                                                                                               | \$40           |
| <b>PTA Game Mammal Hunting Permit</b>      | Allows hunters age 16 to 64 access to hunt on all open PTA lands for Game Mammals ONLY. Each permit includes five (5) game mammal allotments                                                                                                                                                                                                                                                                                                                                                                                   | \$25           |
| <b>PTA Game Bird Hunting Permit</b>        | Allows hunters age 16 to 64 access to hunt on all open PTA lands for Game Birds ONLY during the Fall Upland Game Bird Season and the Spring Bearded Turkey Seasons.                                                                                                                                                                                                                                                                                                                                                            | \$25           |
| <b>PTA Lottery Permit</b>                  | Allows hunters access to the current reservation lottery. This permit only allows access into the lottery and does not allow any type of hunting.                                                                                                                                                                                                                                                                                                                                                                              | Free           |
| <b>PTA Youth and Senior Hunting Permit</b> | Youth hunters age 10 to 15, and Senior hunters, age 65 and over, may access all open areas of PTA for Game Mammal, Game Bird, and Spring Turkey hunts.                                                                                                                                                                                                                                                                                                                                                                         | Free           |
| <b>PTA Hunter Assistant Permit</b>         | Allows non-hunting individuals to accompany permitted hunters to assist in the retrieval and processing of game. Non-hunters may not actively participate in any hunting activity, and may not, at any time, possess a loaded hunting weapon or ammunition. This permit is intended for those who will not acquire other hunting permits, or for adults who will accompany youth hunters on designated youth hunts. This permit requires the Background Check and Safety Briefing Validations and must be requested via email. | Free           |
| <b>Special Permit</b>                      | Special permits may be made available to address management needs as they arise.                                                                                                                                                                                                                                                                                                                                                                                                                                               | None specified |

## 8.0 ETHNOCLIMATOLOGY

Ethnoclimatology is generally a subfield of ethnoscience or anthropology that studies how traditional epistemologies formed about climate and weather.

Hawaiians possess a tremendous and complex understanding of their climate. Understanding climate and weather were a necessity in Hawaiian culture, as it impacted fishing practices, navigation, travel, and other activities. A brief discussion of environmental zones and traditional Hawaiian land management practices is necessary to understand the tangible and intangible aspects of the Hawaiian landscape, specifically as to how Hawaiians learned, understood, and observed the world around them. Additionally, it is important to point out once again that in the Hawaiian landscape, all natural and cultural resources are interrelated and culturally significant. Natural unaltered landscape features such as rocky outcrops, cinder cones, intermittent streams, or an open plain can carry as much significance as a planted grove of wauke (*Broussonetia papyrifera*) or a boulder-lined 'auwai (canal).

### 8.1 Associated Traditional or Customary Practices

There are numerous traditional or customary practices associated with Hawaiian knowledge of the climate. One of the most common, but least documented, are practices associated with kilo (observational traditions).

#### 8.1.1 Kilo

Kilo are observational traditions and people who examine, observe, or forecast are identified as kilo and serve as traditional climate and weather experts. Kilo “references a Hawaiian observation approach which includes watching or observing [the] environment and resources by listening to the subtleties of place to help guide decisions for management and pono practices” (‘Āuamo Portal, 2021). The practice of kilo is seeing a resurgence on Hawai‘i Island and in the Hawaiian Islands.

Kilo hōkū are traditional astronomers, or those who study the stars. A hale kilo or hale kilo hōkū were observatories or star observatories respectfully. Kilo makani were those who traditionally observed the winds. Kilo moana were traditionally oceanographers. Kilo ‘uhane were those who observed and communicated with spirits.

Traditionally the practice of kilo or observation was critical to the management of traditional Hawaiian landscapes. This practice is very closely tied to traditional or customary access as observers would require access to specific vistas viewsheds or areas in order to observe environmental phenomenon.

As illustrated in the proceeding section, Native Hawaiians created a wide range of terms for the environment and understanding the ecosystems around them. These terms were often quite specific, and many were tied closely to a specific geographic area. This level of specificity illustrated the close kinship Hawaiians shared to their surrounding environment. The ability to observe and understand all elements of their ecosystem was essential to both the successful care of natural resources and the survival of the Hawaiian people.

The ability to read weather phenomena effectively and accurately was essential to the ability of Hawaiian people who farm, fish, navigate, and conduct any number of practices in a sustainable and successful manner. The knowledge Hawaiians acquired about their environment around them, including weather phenomena were the result of multi-generational observations that comprised an extensive body of information passed down through oral traditions. The following Hawaiian names and their descriptions of weather phenomena include words for clouds, rains, and winds that are utilized by kilo to help guide activities and practices:

ao akua – godly cloud, figurative representative of a rainbow.

ao loa – long cloud or high, distant cloud. Status cloud along the horizon.

ao ‘ōnohi – cloud with rainbow, ‘ōnohi, colors contained within it.

ao pua‘a – cumulus clouds of various sizes piled together, like a mother pig with piglets clustered around her. The Kona coast is famous for ao pua‘a, a sign of good weather and no impending storms.

ao pehupehu – continually growing cumulus typical of summer. Drifting with the tradewinds, these clouds pick up moisture and darken at their base, finally releasing their rain on the windward mountain cliffs.

ho‘omalumalu – sheltering cloud.

ho‘oweliweli – threatening cloud.

ānuenuē – rainbow, a favorable omen.

ua loa – extended rainstorm.

ua poko – short rain spell.

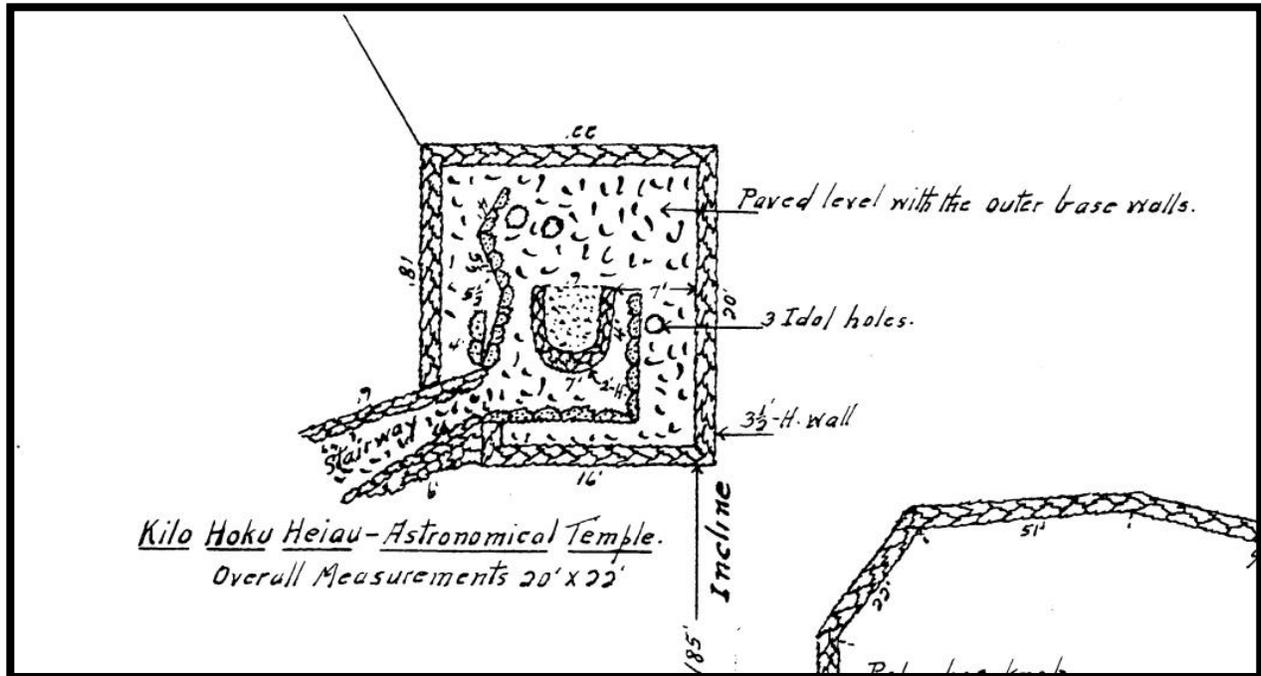


Figure 28. Example of a Kilo Hōkū Heiau (defined as an Astronomical Temple) located in South Kona (outside the study area) from a Map of the Ki'īlae land section, South Kona, Hawai'i, including Koleaka Heiau, Kumu Koa Heiau, Hale 'A'ama Heiau, Puahala Heiau and Kilo Hōkū Heiau from the Henry E.P. Kekahuna Collection (BMArch), BPBM (n.d.)



*Figure 29. This photo taken by the Army shows a portion of the landscape, also shows various pu‘u within the landscape. Photo: Archaeologists find, preserve cultural resources at Pōhakuloa Training Area [Image 3 of 12], by Eric Hamilton, U.S. Army Garrison Pōhakuloa Training Area (2015)*

#### **8.1.1.1 Mauna Kea, Pā i ka Lani (Mauna Kea, Touching the Heavens)**

No specific archival references to kilo hōkū (observing and discerning the nature of the stars) on Mauna Kea were located (Maly 2005: 95). The association of the gods and deity whose forms are seen in the heavens and whose names are commemorated at locations on Mauna Kea is noteworthy and may be viewed as manifestations of the cultural attachment and values places by Hawaiians on the Mauna a Kea, and the kino lani (heavenly bodies). It is very likely that practices of the native practitioners of ‘oihana kilokilo (astronomy) and the kilo hōkū occurred on Mauna Kea, but they were either unwritten or await being brought to light once again.

Today, Mauna Kea is valued as an astronomical center – and this may be rooted in earlier native practices – while the ancient Hawaiian practitioners were mindful of their foundation, the papa honua (earth) upon which they stood. These islands, the children of the native gods and creative forces of nature, also gave birth, a life, to the kōnaka (people). Naturally, one could not look heavenward without first looking down and being mindful of the

responsibility that people have to care for the papa honua. This is a custom which is of value to all who cherish and touch Mauna Kea.

Native lore and the on-going beliefs of cultural practitioners address Mauna Kea (Mauna a Kea) as the piko (in this case, not only the summit, but the umbilical cord) that connects Hawai'i, the first-born child of the creative forces of nature, to the heavens. Mauna Kea is considered to be a kupuna (elder), the first born, and is held in high esteem. In native traditions, Mauna Kea is identified as “Ka mauna a Wākea” (The Mountain of Wākea – traditional god and father of Hawai'i – whose name is also written as “Kea”). Mauna Kea is the source of a high sense of spirituality. It is the 'aha ho'owili mo'o (genealogical cord that ties earth to the heavens) (Maly, 1999).

Kūpuna, interviewed by Kepā Maly between 1999 and 2005, shared the view that Mauna Kea is sacred and that until the development of the observatories, it was a pure and sanctified place tied to the heavens. It was for this reason that the piko of new-born children were taken to the summit region of Mauna Kea. Collectively, the kūpuna lament the changes that have occurred on Mauna Kea since the development of the observatories (cf. interviews with Elizabeth Lindsey-Kimura, Teddy Bell, Elizabeth Ruddle-Spielman, and Irene Lindsey-Fergerstrom).

#### **8.1.1.2 Geologist's Survey of Mauna Kea by Jerome Kilmartin (USGS) in 1925-1926**

In 1926, USGS sponsored surveys in Hawai'i. Jerome Kilmartin of USGS was sent to Hawai'i and spent five months on Mauna Kea. While reviewing records in the Denver collection of USGS, a detailed journal of Kilmartin's work on Mauna Kea was located. The narratives refer to photographs, but they were unfortunately not kept with the handwritten journal and could not be located in the USGS collection. The journal and photographs were published in the *Honolulu Advertiser* on April 18, 1926 (page 9), with a note that the photographs were by L.W. Bryan. The quality of the microfilm does not allow for adequate reproduction and the photographs are not included with the following narratives (Maly 2005:228-231).

The accompanying photographs were taken by J.O. Kilmartin during the course of the detailed topographic mapping of Mauna Kea lasting over a period of five months during the past winter, from early October, 1925, until early March of the present year.

The party consisted of, in addition to the engineer, three Japanese, one Portuguese and one Chinese as assistants. The photograph (No. 1) shows the start from the base camp, Puu Kihe, the use of which was extended through the country of the manager of the Kukaiau Ranch. Puu Kihe afforded the nearest water supply for both mules and men and all water had to be packed by mule back sometimes a distance of 12 miles and a vertical distance of 6000

feet. One mule could pack only 20 gallons of water and once each week the pack train would come to the camp on the mountain to bring water, usually 80 gallons, as a weeks supply and a small quantity of food. Each man was allowed two gallons of water per day and this had to cover all of his uses for water, water for tea, washing, soup and rice, and his dishes. It was often necessary to use dish water several times straining and boiling it until used up. In addition to packing water all of the food, fuel, and equipment had to be transported. In fact every article that was used had to be brought from Kukaiau by pack train.

From Puu Kihe camp the party moved to the summit lake of Mauna Kea, Lake Waiiau, where it camped for almost three weeks. The mules were, of course, returned to the base camp for the region above timber is only a barren field.

On the trail to the summit (No. 2), the sharp peak in the middle foreground is one of the most prominent on Mauna Kea, Red Hill. It has an altitude of 11,854 feet above sea-level. The surrounding country appears to be good for walking or riding over but one traversing it in either manner grows tired easily due both to altitude and the nature of the cinder surface. The country in the immediate foreground is on the lower slope of the glaciated area.

(Kanakaleonui) The crater in the picture No. 3 is the largest on Mauna Kea. Its greatest diameter is about 1800 feet across and its longitudinal distance is approximately one-half mile. It has a depth of about 400 feet in one place. Just at the upper side can be seen a new crater found probably after the main crater became extinct. On the inner side of this new crater there are lateral streaks of a yellow substance so uniform in direction that they appear as the work of a human hand. The lower side of the older crater has a lateral vent which has emitted lava and is yet quite evident.

The name of the hill is Puu Kanakaleonui and according to legend an aged Hawaiian lived in this vicinity and possessed of a very powerful voice, would go to the summit of this crater and speak to his fellowmen in Hilo and villages along the coast. There is ample evidence to support the legend of human habitation in this immediate vicinity for several platforms were found. Two just on the upper side of this crater and several below to the northeast.

The camp at Lake Waiiau is shown in picture No. 4. Contrary to the belief of many the lake is not on the summit of Mauna Kea but about a mile to the southwest and at an elevation of 13,000 feet above sea-level. Mauna Kea does not have the central crater significant of Mauna Loa nor does it possess a single cone as a summit. It does have, however, a series of cones. Also contrary to

general belief the lake is neither very large nor very deep. In shape it is triangular and in color green. Late in the evening it is a beautiful jade-hue. The size is very small being about 360 feet long by about 300 feet wide. It is reported to be of various depths, some infer that it is bottomless and some that it is only about 30 feet deep. Though no actual measurements were made at this time, it is reasonable to infer from measurements made on the depths of all the craters on Mauna Kea, and the deepest crater being about four hundred feet deep, that Lake Waiau is comparatively shallow.

The geological formation of Lake Waiau crater is widely different from anything yet found on Mauna Kea. For instance in this picture just behind the camp and on the crater rim can be seen a distinct line, indicated by a cross, that divides the crater into two entirely different sections geologically. To the left the crater rim is of a heavy basalt lava while to the right is of ash.

The climatic conditions of the summit plateau are varied and reach probably both extremes in temperatures in so far as the Hawaiian Islands are concerned. The lowest thermometer reading for early morning, 6 o'clock, was 13 degrees above zero, Fahrenheit, while the highest reading for afternoon was 103 degrees at about one o'clock. About 4 o'clock the thermometer registers around 90 degrees and immediately after sundown one and one half hours later, about 35 to drop steadily during the night.

The water at Lake Waiau is unfit for continual drinking. The taste is decidedly disagreeable even when used for making tea and coffee.

The only heat to be had in camp was from a small Rayo lamp which afforded more heat than the oil stove. During blizzards one could spend his time comfortably only in his bed roll.

The summit of Mauna Kea in No. 5 as seen from Red Hill. The main top is indicated by a small cross is 13,782 feet above sea level. The summit cones are arranged in a right angular formation, the longest side being in a north south direction. The arrow indicates the old summit of Mauna Kea. At least it is the highest lava outcrop to be found on the mountain. The lava area in the foreground is entirely unlike that to be found on Mauna Kea and travel over it is easy compared to that on Mauna Loa. ...According to the records of an old surveyor, "the skin and bones of a defunct cow." The bones and skin are in a good state of preservation though having been exposed for many years. The cone to the right in the picture bears the skeleton of several wild cows and whether these cows have wandered there and died or were shot by cowboys is uncertain.

Looking down from the summit towards Red Hill which is the second hill from the extreme right of No. 6 picture, as seen in the picture, is literally pitted with cinder cones and when this area was active must have been a very wonderful scene beyond comparison to that which is seen today. In the distance, barely discernable, the fog is slowly coming in. To stand on the summit of Mauna Kea at sunset and see only Haleakala, Mauna Loa and Hualalai with their crests protruding above a solid cloud mass is a pleasure enjoyed by only a few. Colors change so rapidly and in almost a flash of a second they are gone. One evening the writer had the pleasure of seeing one of the most gorgeous sunsets that one could even hope to behold. Twenty craters were counted above the clouds and all were above 12,000 feet, each one a peculiarity in itself and remarkably well cast in relief by the golden accent of a setting sun. Fantastic clouds appear and are blown about by ever shifting winds to be caught in the rays of a dying sun. It all happens in the flash of a second but leaves mental pictures not soon to be forgotten.

Keanakakoi, the cave of the adzes is shown in No. 7. It was here that the Hawaiians obtained the stone (with which) to make their implements. In the foreground can be seen many old adzes discarded probably on account of being faulty. The cave seen in the lower right is where the men lived while fashioning stone. Inside it is very warm as it is well sheltered from the winds. Investigation showed that on their expeditions to the mountains they carried a variety of food, evidences of such being pigs, fowl, banana, coconut, and for light kukui was used. The quarry is at an elevation of 12,400 feet above sea level.

The glacial evidence as shown in photograph No. 8 on Mauna Kea is very striking even though it be only numerous striations made when the ice cap melted to slide down the mountain. The grooved appearance of the rocks in this picture is a fair sample though there are many striations on the south side of the mountain much deeper. This photograph was taken on the northwest side at an elevation of 12,000.

The crater in the foreground of No. 9 is named Papalekeoki and just on the north edge of the summit plateau. To the left is one of the last flows of Mauna Kea beyond the ice cap. On the summit of this crater is the carcass of a wild boar and at the time it was observed last November, it was in apparently good condition, skin and bone well preserved. It is interesting to note the different places and altitudes at which these remains of animals are to be found. Besides the two aforementioned cases there was found on Puu Makanaka (elevation 12,400) the carcass of a tiny mouse and well preserved. On Puu Poliahu,

elevation 13,600, the carcass of a ram, and just below the summit crater on the west side, the skeleton of a mongoose. Wild horses and sheep were seen at an elevation of 13,000 probably going to the lake for water.

General conditions as regard exploration on Mauna Kea are liking of a bed of roses when compared to those of the writer's associate on Mauna Loa where everything used in connection with the work has to be packed by man's back, food, water and blankets being the heaviest items. The above picture No. 10, shows the method of pack transportation on Mauna Kea.

Snow on Mauna Kea, as shown in No. 11, is one of the most beautiful sights to be seen in Hawaii. It lends such a strong contrast to the tropical jungles below. During the past winter there were only two snows. This being the minimum amount in 26 years (USGS, Denver Library Collection, Item No. NO-8248, Folder #1).

## 8.2 Cultural Resources

The physical environment at PTA is described in the 2020 Integrated Natural Resource Management Plan as follows:

The Island of Hawaii is in the humid tropical Pacific, but elevation and orographic processes at PTA result in a climate classified as a cool, tropical dry climate. The installation is more "wet" at lower elevations. The position of the installation is to the west and below the Humuula Saddle and on the leeward side of Mauna Kea. Moisture carried by the summer easterly trade winds is lost as precipitation with the increase in elevation and rarely reaches PTA at higher elevation (Figure 2-5). Much of the installation is situated above the thermal inversion layer and is not influenced by the trade wind-orographic rainfall regime. Occasionally, moist air trapped below the inversion layer rises into the Saddle Region in the late afternoon. Fog is typical in late winter and early spring when trade winds fail. (CEMML, 2020).

The physical environmental of these landscapes are influenced by various lava flows, the remnants of which are more visible on Hawai'i Island than on the other islands. Multiple maps identify the area as "barren" or a "wasteland." The 1890 Hawaiian Almanac, which provides a narrative on "A Trip to the Summit of Mauna Kea," has a brief description: "On reaching the plateau between Mauna Kea and Mauna Loa the [lava] flows have turned, some of the right toward Hilo, and others to the left toward South Kohala. The speed of the flows being retarded they have spread out in width, in many places covering immense tracts of country" (Thrum, 1890).

McCoy and Orr provide a description of the geological landscape of the area:

The geologic landscape of PTA consists of aa and pahoehoe lava flows from Mauna Kea, Mauna Loa, and Hualālai Volcanoes. Most of the lava flows within PTA are Mauna Loa flows that are referred to as Kau Basalts. They consist of pahoehoe or aa flows and commonly both. The PTA area contains many kipuka, or “islands” of relatively older lava flows surrounded by more recent flows. Kau Basalt flows are designated by the prefix “k” and numbered from oldest to youngest. More recent lava flows covering the Saddle Region contain no soil deposits, but older, weathered flows do exhibit various stages of soil development. As a result, vegetative cover is greater in older lava flows, while newer lava flows support little to no vegetative growth. Kipuka are generally more heavily vegetated than the younger lava flows (2012: 24, citations omitted).

As Hawaiians were particularly wise to their surrounding environments, practitioners and experts would have been knowledgeable about the constant potential for volcanic events in the Saddle Region. This, in addition to the accessibility to resources necessary for daily survival and its location within the wao akua, would have dissuaded traditional Hawaiians from developing large or permanent habitation settlements within this area. Any habitation would have been temporary, likely shelters for those traveling through, hunting, gathering natural resources such as sandalwood, or working the quarries.

### **8.2.1 Geological Landscapes**

Several early descriptions of the lands of Humu‘ula and Ka‘ohe describe them as sharing the summit region of Mauna Kea. While final settlement of the boundaries of Humu‘ula and Ka‘ohe, in 1891, took Humu‘ula down to around the 9,300-foot elevation, the land rests on Mauna Kea, and with Ka‘ohe, extends to the summit of Mauna Loa. They are among the largest ahupua‘a in the Hawaiian Islands.

In any discussion of Hawaiian land – ‘āina, that which sustains the people – and its place in culture, it is also appropriate to briefly discuss traditional Hawaiian land terms, as the terms demonstrate an intimate knowledge of the environment around them. We observe once again, that in the Hawaiian mind, all aspects of natural and cultural resources are interrelated. All are culturally significant. Thus, when speaking of Mauna Kea – the first born child of Hawai‘i, abode of the gods – its integrity and sense of place depends on the well-being of the whole entity, not only a part of it.

Native accounts and other historical writings record that the vast regional land divisions of Humu‘ula and Ka‘ohe, and the smaller ahupua‘a and ‘ili which adjoin them on the lower mountain slopes, included a wide range of named environmental zones (wao). Each of these

wao were noted for resources – extending from the sea to the forested lands, and in some instances, to the summits of the two mountains. It was these resources that sustained Hawaiian life, culture and spirituality.

Hawaiian customs and practices demonstrate the belief that all portions of the land and environment are related. Indeed, just as place names tell us that areas of cultural importance, so too, the occurrence of a Hawaiian nomenclature for the wao tells us that there was an intimate relationship between Hawaiians and their environment. Writing in 1869, in his history of Hawai'i, Samuel Kamakau described the various regions and divisions of land. Of the mountains, Kamakau observed:

...Here are some other divisions of the islands, together with their descriptive names.

Heights in the center or toward the side of a land, or island are called mauna, mountains, or kuahiwi, “ridge backs.” The highest places, which cover over with fog and have great “flanks” behind and in front (kaha kua, kaha alo) – like Mauna Kea – are called mauna; the place below the summit, above where the forests grow is the kuahiwi. The peak of the mountain is called pane po’o or piko; if there is a sharp point on the peak it is called pu’u pane po’o; if there is no hill, pu’u, and the peak of the mountain spreads out like the roof of a house, the mountain is described as a kauhuhu mauna (house ridgepole mountain); and if there is a precipitous descent, kaolo [from the peak] to the kauhuhu mauna below this is called a kualo (“block”). If there are deep ravines (‘alu ha’aha’a) in the sides of the mountain it is called a kihi po’ohiwi mauna (“shoulder edge” mountain). A place that slopes down gradually (hamo iho ana) is called a ho’oku’u (a “letting down”); a sheer place is called a pali lele koa’e (cliff where koa’e birds soar), or a holo (“slide”), or a waihi (a “flowing down”). Rounded ridges that extend from the mountains or “ridge backs” or hills are called lapa or kualapa or mo’o – and, if they are large, ‘olapa lapa or ‘omo’omo’o. Depressions between lapa or mo’o are awawa, valleys. (Citation needed)

Historic maps from the 19<sup>th</sup> and 20<sup>th</sup> centuries show how pu’u and other features of the landscape were carefully documented (**Figure 30**). Rarely were all resources aggregated and documented into a single map. Identification of an area’s resources were largely documented through these registered survey maps and other documentation, like newspaper accounts.

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### 8.2.2 Mountain Zones

Here are some names for [the zones of] the mountains – the mauna or kuahiwi. A mountain is called a kuahiwi, but mauna is the overall term for the whole mountain, there are many names applied to one, according to its delineations (‘ano). The part directly in back and in front of the summit proper is called the kuamauna, mountaintop; below the kuamauna is the kuahea, and makai of the kuahea is the kuahiwi proper. This is where small trees begin to grow; it is the wao nahele. Makai of this region the trees are tall, and this is the wao lipo. Makai of the wao lipo is the wao ‘eiwa, and makai of that the wao ma‘ukele. Makai of the wao ma‘ukele is the wao akua, a makai of there the wao kanaka, the area that people cultivate. Makai of the wao kanaka is the ‘ama‘u, fern belt, and makai of the ‘ama‘u the ‘apa‘a, grasslands.

A solitary group of trees is a moku la‘au (a “stand” of trees) or an ulu la‘au, grove. Thickets that extend to the kuahiwi are ulunahale, wild growth. An area where koa trees suitable for canoes (koa wa‘a) grow is a wao koa and mauka of there is a wao la‘au, timber land. These are dry forest growths from the ‘apa‘a up to the kuahiwi. The places that are “spongy” (naele) are found in the wao ma‘ukele, the wet forest.

Makai of the ‘apa‘a are the pahe‘e [pili grass] and ‘ilima growths and makai of them the kula, open country, and the ‘apoho hollows near to the habitations of men. Then comes the kahakai, coast, the kahaone, sandy beach, and the kalawa, the curve of the seashore – right down to the ‘ae kai, the water’s edge.

That is the way ka po‘e kahiko named the land from mountain peak to sea (Kamakau, 1976:8-9).

The native tradition of Ka-Miki, penned by native historians John Wise, Isaac Kihe and a group of their associates (in *Ka Hoku o Hawaii*, 1914–1917), provides readers with a detailed account of Hawaiian land divisions and environmental zones. While competing in a riddling contest at the court of the chief, Palikū-a-Kīko‘oko‘o, Ka-Miki, the hero, sparred with Pīna‘au, the foremost riddler of the district of Hilo Palikū (northern Hilo). The riddles covered topics describing regions from the mountain tips to the depths of the ocean, and descriptions of kalo (taro growth), the ala loa (trail systems), and nā mea lawai‘a (fishing practices). As the contest unfolded, it was seen that each of the competitors were well matched. In one of the riddles, Ka-Miki described the various regions of the island of Hawai‘i, extending from the mountain to the sea. Ka-Miki then told his opponent that if he could rise to the challenge of answering the riddle, his knowledge could be compared to one who has ascended to the summit of Mauna Kea, described as the “mauna o Poliahu” (mountain of Polī‘ahu) (in *Ka Hoku o Hawaii*, September 21, 1916).

Through one of the riddles, the traditional wao of land, districts, and land divisions of the administrators who kept peace upon the land were explained (diacritical marks and numbers have been added to these texts to facilitate correlation between Hawaiian and English narratives). The environmental zones include:

*1-Ke kuahiwi; 2-Ke kualono; 3-Ke kuamauna; 4-Ke ku(a)hea; 5-Ke kaolo; 6-Kawao; 7-Ka wao ma'u kele; 8-Ka wao kele; 9-Ka wao akua; 10-Ka wao lā'au; 11-Ka wao kānaka; 12-Ka 'ama'u; 13-Ka 'āpa'a; 14-Ka pahe'e; 15-Ke kula; 16-Ka 'ilima; 17-Ka pu'eono; 18-Ka po'ina nalu; 19-Ke kai kohola; 20-Ke kai 'ele; 21-Ke kai uli; 22-Ke kai pualena; 23-Kai pōpolohua-a-Kāne-i-Tahiti.*

1-The mountain; 2-The region near the mountain top; 3-The mountain top; 4-The misty ridge; 5-The trail ways; 6-The inland regions; 7 and 8-The rain belt regions; 9-The distant area inhabited by gods; 10-The forested region; 11-The region of people below; 12-The place of 'ama'u [fern upland agricultural zone]; 13-The arid plains; 14-The place of wet land planting; 15-The plain or open country; 16-The place of 'ilima growth [a seaward, and generally arid section of the kula]; 17-The dunes; 18-The place covered by waves [shoreline]; 19-The shallow sea [shoreline reef flats]; 20-The dark sea; 21-The deep blue-green sea; 22-The yellow sun reflecting-sea on the horizon; and 23-The deep purplish black sea of Kāne at Tahiti (*Ka Hoku o Hawaii*, September 21, 1916; K. Maly, translator)

The kuahiwi, kualono, kuamauna, kuahea, kaolo, kawao, wao ma'ukele, waokele, wao akua, wao lā'au, and wao kānaka are all considered part of Mauna Kea. These wao extended from the mountain peaks, down slope through the wao akua – the region where the clouds settle upon the mountain lands, concealing the presence of the gods – to the lower region frequented by mankind, and from which resources were regularly collected and tended (Maly, 2005: 10).

### 8.2.3 Rain and Rain Names

Akana and Gonzalez in *Hānau Ka Ua: Hawaiian Rain Names* explain the significance of the wind and rain in Native Hawaiian culture:

In the mind...of our Hawaiian kūpuna, every being and everything in the universe was born. Our kūpuna respected nature because we, as kānaka, are related to all that surrounds us – to plants and creatures, to rocks and sea, to sky and earth, and to natural phenomena, including rain and wind. This worldview is evident in a birth chant for Queen Emma, “Hānau ke ali'i, hānau ka ua me ka makani” (The chiefess was born, the rain and wind, too, were

born). Our kūpuna had an intimate relationship with the elements. They were keen observers of their environment, with all of its life-giving and life-taking forces. They had a nuanced understanding of the rains of their home. They knew that one place could have several different rains, and that each rain was distinguishable from another. They knew when a particular rain would fall, its color, duration, intensity, the path it would take, the sound it made on the trees, the scent it carried, and the effect it had on people (Akana and Gonzalez, 2015:xv).

To the Native Hawaiians, no two rains are ever the same. Rain can be distinguished based on its intensity, the way it falls, and its duration, among other things.

The following sub-sections contain a selection of known rains or winds associated with the geographic extent that would likely include the project area.

### **8.2.3.1 Hāmākua Rains**

#### **Kīhenelehua** (Akana and Gonzalez, 2015:80)

Rain associated with Hāmākua and Maliki, Hawai‘i, and with the Pūhenelehua rain; Kīhene Lehua means bundle off Lehua blossoms.

Ka ua Kīhenelehua o Hāmākua.

The Kihenelehua of Hāmākua.

A traditional saying from Pukui, ‘Ōlelo No‘eau No. 169, the rain that produces the Lehua clusters.

#### **Lilinoe**, (Akana and Gonzalez, 2015:162-163)

A mist associated with the mountain and cliffs of Hawai‘i Island; also the name of a peak on Maunakea, Hawai‘i, and the goddess of mists.

Rain of the Hāmākua Cliffs, Hawai‘i Island.

Ho‘ea akula lākou nei i Hāmākua. A lail, huli a‘ela ‘o Hi‘iaka a nana a‘ela i na pali hula‘ana, kanaenae a‘ela ‘o ia i keia kau

A ua Lilinoe, ‘ehu wale i na pali

Pōpō ke kapa a pa‘a ma ka lima

They arrived in Hāmākua, at which point Hi'iaka turned, and looked out at the sheer sea cliffs, offered this chant.

O Lilinoe rain, shrouding the cliffs, bundle the kapa and hold it in the hand

Hawaiian source: Ho'oulumahiehe, Ka Mo'olelo 357, English translation: Ho'oulumahiehe, Epic 332

Mist of Maunakea, Hawai'i Island.

Then we have Lilinoe who is the kupua of the mists. And you can see Lilinoe as she comes down over the mountain sometimes. When you're driving from Saddle Road up to Hale Pōhaku, you can look over and see Lilinoe in some of the valleys. She flows up and over, very gently, very soft, like very fine kapa, white kapa. She fills in the valleys and you can see her hands just filtering out very thinly into the valleys.

It's a remarkable sight and it really makes you very aware of the mist, of how mist flows around. And it's obvious that it's very, very beautiful.

From a November 4, 2002, interview with Keawe Vredenburg. Source: Nā Maka o Ka 'Āina.

**Pupūhale** (Akana and Gonzalez, 2015:248)

Rain famous at Hāmākua, Hawai'i. Lit., (rain) remaining (near) house. (Citing Pukui and Elbert, 1986, 357)

**Kēhau** (Akana and Gonzalez, 2015:73)

Same as Tēhau; related to hau. Dew, mist; associated with Maunakea, Hawai'i.

Rain of Maunakea, Hawai'i Island.

E aha 'ia ana Maunakea, kuahiwi 'alo pū me Kēhau

Aloha ia uka puuanu i ka ho'opulu 'ia e ke Kēhau

Ha'ina 'ia mai ana ka puana Pulu'elo i ka wai a ka Nāulu

What is happening with Maunakea, mountain that dwells with the Kēhau mists

Beloved is that lofty highland, every cold and damp wetted, as it is, with the Kēhau mist

Let the tale be known, soaked by the water of the sudden Nāulu rains

**Uhiwai** (Akana and Gonzalez, 2015:254)

Heavy fog; mist that is heavier than the noe, 'ohu, 'ehu, and 'ehu'ehu. Associated with Mānā, Hawai'i Island. "Uhi wai" means "water covering." It is both the of a specific rain and a generally descriptive term; its various usages are determined by the context.

Mist of Mānā, Hawai'i Island.

Mai kekahi hoa aloha mai o Waimea, Hawai'i, 'o ke kākau 'ana mai i ka lā io nei, i loa'a mai ai ka hō'ike ma hope iho no ke kulana o ko Kamāli'i Ka'iulani ma'i. Penei mai nei kēia hō'ike:

"I ka Pō'aono, Feb. 4 iholā, ma luna o ka'auamo 'ā'ā, ua ha'alele akula ke kamāli'i wahine 'ōpio i ka Uhiwai o Mānā no Waimea, no ka ma'i rumatika 'eha'eha loa, no ke ake o Kauka Walaka e loa'a kani mehana."

It is from a friend of Waimea, Hawai'i, who wrote on the 10<sup>th</sup> that we receive the following news on the status of Princess Ka'iulani's illness. This is what was reported:

"On Saturday, Feb. 4, carried on the shoulders, the young princess left the Uhiwai of Mānā for Waimea. Due to the extremely painful rheumatic disease, Doctor Walters wanted her to be in a warm place."

From a report on Ka'iulani's illness. Hawaiian source: "Ke omaimai"

### 8.2.3.2 *Mauna Loa Rains*

**Lana'ula** (Akana and Gonzalez, 2015:133)

Rain associated with Ha'ikū, Hawai'i Island.

Kū ana i Māhoe iā ia, 'O Ha'ikū i Maunaloa.

A ola mai ka ua Lana'ula

Standing at Māhoe towards her, Hā'ikū at Maunaloa

The Lana'ula rain lives on.

From a pule hula, or hula prayer. Source: Nāmakaokeahi, History 164 (Hawaiian section) and 155 (English section)

### 8.2.3.3 Maunakea Rains

**'Ehu** (Akana and Gonzalez, 2015:22)

Or ehu. Similar to 'ehuehu. Spray, foam; mist that is lighter than the Uhiwai, Noe, and 'Ohu, but heavier than the 'ehuehu

Kūkūkū ka 'ehu o ka ua i ka nahele, E kāpapa ana i ke alo o Maunakea

Palalē ka leo o ka ua i luna o ka lā'au, E hiohio haole ana i ke alo o nā pali

Ka ua ho'okina, ho'okinakina, ho'okina

The 'Ehu mist of the rain rises to the forest extending to the face of Maunakea

The voice of the rain on the trees is indiscernible speaking gibberish near the face of the cliffs, The constant, unceasing, persistent rain

**'Ohu** (Akana and Gonzalez, 2015:213)

Fog, smoke, light cloud on a mountain; mist that is lighter than the Uhiwai and Noe, but heavier than the 'Ehu and 'Ehuehu.

A pau lākou i ka hiamoe, pā mai ka makani maika'i ma ka 'āina mai, ho'ololi a'ela 'o Kūapāka'a i nā wa'a a me ka pe'a, a holo pono i Hawai'i. I ia lā a pō, a ao a'e, 'ike akula lākou i ka piko o Maunakea i loko o ka 'ohu, e mā'alo ana me he 'ōpua lā.

When they had all gone to sleep, a favorable wind from the land blew; Kūapāka'a altered the course of the canoes and the sails and headed straight for Hawai'i. It took them all that day and night until the following day before they saw the top of Maunakea rising out of the 'ohu, passing by like a cloud.

From the legend of Pāka'a and Kuāpāka'a. Hawaiian source: Fornander, Fornander 5:125. English trans. by Akana and Gonzalez (2015).

### 8.2.4 Wind Names

Winds, like rains, can be unique and distinctive to an individual location. The most famed of Hawaiian mo'olelo about winds is "Moolelo Hawaii o Pakaa a me Ku-a-Pakaa, na Kahu Iwikuamoo o Keawenuiaumi, ke Alii o Hawaii, a o na Moopuna hoi a Laamaomao" or "The Hawaiian Story of Paka'a and Kuapaka'a, the Personal Attendants of Keawenuia'umi, the Chief of Hawai'i, and the Descendants of La'amaomao." This mo'olelo was translated into the English book *The Wind Gourd of La'amaomao* by Moses Kuaea Nakuina and published in

1902 and has been reprinted many times for the last one hundred years. This effort has assisted in keeping this important mo'olelo within the discourse on Hawaiian history and natural resource management. Many have written about the gourd's mythical properties, as it is said to contain all the winds of Hawai'i. More than myth, the gourd itself exists in physical form and was last owned by King David Kalākaua. Today, it is held in the collection of the Bishop Museum.

According to this mo'olelo, the descendants of La'amaomao, the wind god, used his wind gourd, Ka Ipu Makani o La'amaomao, to control the winds and cause the demise of their enemies (**Figure 33**). Pāka'a and his son Kūapāka'a, La'amaomao's descendants, control the winds by chanting the wind name, which recalls that particular wind from the gourd. Each wind name is associated with a specific ahupua'a or place. Pāka'a passed on his knowledge of the wind names and the gourd to Kūapāka'a, who called on all of the winds to destroy the canoe fleet of Pāka'a's enemies in the Kaiwi Channel separating O'ahu and Moloka'i. This particular mo'olelo is important to the project area because of its association with the high chief 'Umi, who is closely associated with the Saddle Region.

Providing an image of the ipu (calabash) is also important because it emphasizes the relationship between intangible resources like the mo'olelo, in this case the specific story, "Moolelo Hawaii o Pakaa a me Ku-a-Pakaa, na Kahu Iwikuamoo o Keawenuiaumi, ke Alii o Hawaii, a o na Moopuna hoi a Laamaomao") and tangible, material culture (the ipu owned by Kalākaua). It is tangible evidence that in numerous cases, traditional stories are more than "folklore," and were, in fact, historical events, even if the oral histories include supernatural elements.

The following wind names may be associated with the project area and its larger geographic extent. Please note wind names are capitalized and considered proper names, like place names.

**Huehu** – Name of a strong northwesterly wind felt.

**Kiu Inu Wai** – Meaning "waterdrinking Kiu." Name of a wind from the mountains, known to be colder and stronger than the comparable Kēhau wind.

**Kiu** – Name of northwesterly wind, considered to be strong and cold.

**Ho'olua** – Name of a strong north wind. Also, the name of the accompanying rain.



*Figure 33. Ka Ipu Makani o La‘amaomao is a historic calabash in the collection at Bishop Museum that was once owned by King David Kalākaua.*

### 8.2.5 Pu‘u

Particularly important to the landscape for Pōhakuloa are the pu‘u or hills. There are numerous hills with numerous traditional Hawaiian names. The pu‘u are regularly referenced throughout the historical documents,

Pu‘u are significant in the Hawaiian culture and are known to be often used for cultural ceremony or as burial sites. They are also critical in wayfinding, serving as valued landmarks

by which travelers could orient themselves. A list of pu‘u located on the state-leased land is provided in **Table 15**.

*Table 15. List of Pu‘u Within the State-Leased Land*

| Resource                                | Meaning / Interpretation of Name       | Associated Use, if any                                            |
|-----------------------------------------|----------------------------------------|-------------------------------------------------------------------|
| <b>Pu‘u (Hills)</b>                     |                                        |                                                                   |
| Pu‘u Ke‘eke‘e                           | Crooked or deformed hill               | ‘Umi built an ahu or temple here. Also used as a ceremonial site. |
| Pu‘u Ka Pele (also spelled Pu‘u Kapele) | The hill of Pele or volcano hill       | Ceremonial site                                                   |
| Pu‘u Kea                                | White hill                             |                                                                   |
| Pu‘u Mau‘u                              | Grass hill                             |                                                                   |
| Pu‘u Ko‘ohi                             | None identified                        |                                                                   |
| Pu‘u Koko                               | Clot of blood or heart                 |                                                                   |
| Pu‘u Ahi                                | Bonfire or hill of fire                |                                                                   |
| Pu‘u Pōhakuloa                          | Hill of the long stone; Pōhakuloa Hill |                                                                   |

#### **8.2.5.1 “A Christmas Holiday Mountain Trip” (1922)**

The following from Maly (2005: 217) describes the environment of the area, and references the ‘Ōhia in the area, which was also identified in the ethnographic data.

##### ***Paradise of the Pacific***

##### **Ascent of Mauna Kea from Umikoa Ranch; Description of Vegetation and Topography**

##### **December 1922 (pages 73-74)**

Much has been written on the ascent of Mauna Kea, from the time of the early explorers, who sometimes took a week to make the trip, up to the present when it can be made in one day.

As we look over the records of explorers and read their accounts, a century or more old, we find that this country has undergone a radical change. Now, instead of the wet and mud of the jungles that they describe, we pass through, first, about three miles of waving sugar cane, followed by almost open ranch land, which was at one time thick jungle, but the cattle have reduced it to a few scattering groves of Ohia (*Metrosideros polymorpha*) and Koa (*Acacia koa*).

Our actual start, December 29, 1921, is made from the little village of Kukaiau on the Hamakua coast. From here we ride mauka through the cane lands and

part of the ranch to Umikoa, headquarters of Kukaiau Ranch. Umikoa is beautifully located at 3,500 feet, surrounded by tall Blue Gurns, and here we spent the night as the guests of Donald Macalister, ranch manager, who is to accompany us on our trip.

At about three in the morning we are awakened and crawl out of our warm blankets into the cold morning air. For it is quite cold at this season, even as low as 3,500 feet. And to those of us who have been living at sea level it is quite noticeable.

We enjoy a hearty breakfast and by four o'clock we are in the saddle and ready for the climb.

The morning is clear and cold, but there is no moon, and we start off, six of us, hardly yet awake. The horses are used to this country and make good time, so that by sun up we have passed Puu Kihe and are out of the ranch lands into the Mauna Kea forest reserve. The growth here is entirely different. The Ohia and Koa are left behind and we now find ourselves in the Mamani belt (*Sophora chrysophylla*). This reserve of 66,000 acres extends from about 8,000 feet elevation to the top of the mountain.

Our horses have all made this trip several times, as has our cowboy guide, so that there is no time lost in searching for the trail.

At about 10,000 feet the Mamani becomes scattering and shortly ends. Here we find very little growth. A few bunches of grass, Silver Sword, a silver leaf geranium, and a few other plants.

The numerous herds of wild cattle so often mentioned by the early explorers have practically disappeared and it is only once in a while that we see any, and then only at some distance.

At about 11,500 feet we find the "terminal moraines," showing the extent of the great glacier which at one time covered the top of Mauna Kea. These piles of "Blue Stone" are very interesting. They seem to prove that the Island of Hawaii is not nearly as young as was formerly supposed.

Mauna Kea (White Mountain) is rightly named. We are now in the snow, and the summit, seemingly not far away, is white and glistening in the sun.

The long time since breakfast and the keen mountain air have combined to give us a good appetite, so we find a sheltered spot and have lunch. When we finish there is not enough left for a hungry sparrow.

From here we push on through the snow and about noon we arrive at the top, an elevation of 13,825 feet. The day is still clear and the view is wonderful. On one side is snowcapped Mauna Loa (13,675 feet), and the wind coming across to us from that direction is sharp and cold. Turning a little, we see Hualalai (8,269 feet), and then, a little more to the north, the Kohala Mountains, and just beyond, above the clouds in the channel, we see the top of Haleakala (10,032 feet).

Many cinder cones can be seen, now filled with snow, that at one time were as hot as they are now cold. Hilo is not visible as the clouds have settled on that part of the island. But Hamakua is clear. The trip is more than well worth the view.

After leaving our names in a bottle at the Summit we start the down trip, via the cinder slide on the south side. It is very steep and the horses slide most of the way in the loose cinders and snow.

At 13,025 feet we come to Lake Waiau, tucked away between two Puus. This is a large pool of water about eight feet deep, with no outlet, and very greenish in color. The ice has formed and we enjoy a few slides, wishing that we had brought some skates with us. After playing around a while, and taking a few snaps, we again start down. Our sun glasses have protected our eyes against the glare of the sun but our faces have turned a deep red, and a few days later the skin peels.

On the way down we stop to see a few patches of "Silver Sword" (*Argyroxiphium sandwicense*). There are only a few remaining of this strange looking plant on Mauna Kea. It is more plentiful on some of the outer island mountains.

About dusk we run into the fog, but we are now on the ranch again, and by seven o'clock we are back at Umikoa after 15 hours in the saddle. We are all dead tired and hungry, and ready for a dinner cooked by the best cook on the island. A roasted wild mountain turkey is 14 pounds when we start, and about 14 ounces when we finish our meal.

It is a long hard trip, but well worth the effort, and it is something to look back upon in time to come. No mishaps all day; not one of the party was mountain sick, except one of the horses.

A day well spent and one I hope to have the pleasure of repeating (Bryan, 1922:73-74).

### **8.2.5.2 Geological Survey Trip to Humu'ula, Kalai'eha, Ka'ohē, and the Summit of Mauna Kea (1882)**

During the summer of 1882, Captain Clarence E. Dutton, of the United States Ordinance Corps conducted a geological survey of the Hawaiian Islands. His first stop on Hawai'i island was the district of Ka'ū, then on to Kilauea, and then the Puna district. He then traveled to Hilo and the slopes and summit of Mauna Kea via the old Hilo-Kalai'eha trail. Dutton described the summit plateau and the presence of workshops where stone was quarried and made into tools and weapons; he did not comment on Waiau. He then returned to the Humu'ula area by the route ascended and went to Kalai'eha, where his party stayed at the sheep station. Dutton and party then departed from Kalai'eha, crossed Mauna Kea on the western slope, below the summit plateau, and traveled to the Waimea region.

Dutton's report to the Secretary of the Interior in 1883 was published in the Fourth Annual Report of the United States Geological Survey (1884). Excerpts from the report, describing the mountain lands, are cited below (Maly 2005: 161-172):

#### **CHAPTER VII. FROM HILO TO MAUNA KEA.**

...From Hilo I decided to make an advance at once upon Mauna Kea and to visit the interval between that mountain and Mauna Loa. Mauna Kea may be approached from many directions, the easiest lines of access being from the northwest and north. The approach from Hilo is the most difficult of all, because it involves the necessity of traversing the belt of forest which lies between the middle slopes of the mountain and the sea. No one can imagine the density and exuberance of tropical vegetation until he has seen it. In truth, the forest can be penetrated only by hewing a way through it or by traversing a route which has already been cut by main force.

It is well to point out here that the forest region of this island is regulated by the precipitation. The windward side has very heavy rainfall, and a portion also of the western side is similarly favored. Most of the region under the lee of the island is arid, and in many places extremely so. Although vegetation upon the windward side is very abundant, even down to the margin of the sea,

it never has that close impenetrable character near the sea-coast which it assumes further inland. The reason for this is not difficult to discern. The windward coast of the island is for the most part very abrupt, and the water which falls upon it rapidly drains away. The trade-wind striking the shore is deflected upward by the gradual ascent of the land, and at heights varying from 1,000 to 4,000 or 5,000 feet the clouds envelop the land in fog and yield an almost constant rain. The effect of this upward deflection producing a condensation of moisture is not so fully felt at altitudes below a thousand feet, and thus we have near the sea-coast a margin of land which enjoys a great deal of sunshine, and even long periods of drought sometimes occur along the immediate neighborhood of the coast, while a mile or two inland it rains almost incessantly. The forest has its maximum density in the region of clouds.

The rainfall upon the windward side of Hawaii is phenomenally great. The mean annual precipitation as shown by the records extending through eighteen or twenty years ranges from 150 to 240 inches. This, however, is the result of measurements made near the sea-coast. Further inland it must be still greater, and may even attain more than 300 inches. Hardly a day passes at Hilo without a copious shower, and in the winter time long continuous rains always occur.

There are two routes leading from Hilo to Mauna Kea. One extends along the coast northwestward for about 30 miles, then turns abruptly upwards, striking the northeastern flank of the mountain. The other leads directly inland, and passing through the forest belt reaches the southern base of the mountain and the interval between it and Mauna Loa. Each route has difficulties peculiar to itself. The first one leading along the coast strikes into a country which is deeply scored with very abrupt ravines and ridges. Here the land terminates in a cliff from 300 to 500 feet in height, plunging down into deep water; and against the base the heavy swell of the Pacific, driven before the trade wind, is constantly breaking. Along the front of this cliff near the water's edge no pathway is possible. The country can be traversed only by going up and down the walls of the ravines which at frequent intervals score the platform above. The sides of these ravines are very steep, and in many places have all the abruptness of canyons. With much labor, very fair trails have been cut zigzag in the sides, and sure-footed animals may go up and down with perfect safety, but with great labor. Within a distance of less than 30 miles there are upwards of 60 of these ravines of varying depths, and steadily increasing in dimensions as we go northward. The two last ravines into which the trail has been built are very impressive and picturesque. One of these,

known as the Waipio gorge, has a northern wall about 1,400 feet high, the slopes probably exceeding 40 degrees. The beauty of the scenery consists more in the richness and luxuriance of tropical vegetation than in anything else, although the boldness and magnitude of the rocky walls are important elements in the picture. Many of these gorges carry living streams which are subject to frequent floods and which inundate very rapidly after the prodigious bursts of tropical rain.

In going from Hilo to Mauna Kea I declined the coast route across the gorges, and chose the much more direct line of approach passing through the forest. For two or three miles from Hilo the trail, if such it may be called, for scarcely any trail was visible, led through a country which was quite open and densely clothed with high grass. This grass is worthy of some little mention, for it is an exotic plant. Several accounts are given of the manner in which it was imported. Some describe it as a native of Holland, others as a native of Italy, and still others as coming from the Cape of Good Hope. It is said to have been brought to the island by accident; that the dried grass containing the seeds was used as the wrapping of bottles containing wine or oil; that the seed accidentally scattering at once took root, and finding the soil and climate specially adapted to its growth, spread with marvelous rapidity, and flourished with such vigor that in the moist districts of the island it has almost exterminated all other grasses. In its green state it is hardly fit for pasture. The cattle and horses eat it, but apparently get very little nourishment from it; for leaner and more cadaverous-looking horses and horned cattle it would be difficult to find than those which are pastured in the vicinity of Hilo. So dense and high is this grass that a passage through it on horseback is attended with extreme labor. It looks very green and inviting, but its very inferior character as a food for animals is abundantly demonstrated. It is said, however, to be very much better in the form of hay than when green. A dry climate is not well suited to it, and in such localities other grasses appear to hold their own. Perhaps the best variety is one which was brought from Mexico early in the century, about the time that horses were first imported. It is called, locally, maniania grass, and wherever it grows forms the richest and most velvety award imaginable. It is highly nutritious and animals are very fond of it. It flourishes best in a medium or very slightly arid climate. It was once universal all over the island, but the Hilo grass in all the wet districts of Hawaii has completely exterminated it.

Upon the outskirts of the village of Hilo we find the end of the great lava-stream which flowed the year before my visit. It is typical pahoehoe. From a

convenient standpoint in the vicinity we can see the last 3 or 4 miles of this stream, spreading out with a width of nearly a mile over the broad, open, grassy plain which lies just west of Hilo. The view of its is at length lost where it emerges from the forest. So flat is the country just here that by a common optical elusion the lava seems to have flowed up hill, though in reality the descent from the forest to the end of the stream may be anywhere between one and two feet per hundred. The slope, however, is exceedingly small. Within a half mile of the termination the thickness of the lava sheet appears to be very small, not exceeding, I imagine, 20 feet, and generally less. The numberless mounds or bosses of pahoehoe were all formed in detail in the manner already described, by repeated outshoots of streamlets from underneath the hardened crust behind. As these belches of lava cool they exclude the occluded steam, and the mass swells up by the formation of myriads of vesicles, and often also by the formation of great hollow blisters underneath. The supply of fresh lava during the last part of the eruption seems to have been quite copious, for the advance of the stream was nearly 300 yards per day.

The people of Hilo had concluded that there was no hope for the preservation of their beautiful village. The advance of the lava straight towards the town had been uniform for several months, and it was possible even to compute the number of days which would be required at this constant rate of progress to accomplish the destruction. As it drew near all portable property was packed up for removal, and many people would have sold valuable realty for a few dollars if purchasers could have been found. At length the end of the stream approached within about two days' march of the upper street. Already two long arms had begun to reach out divergently from the end of the flow, one extending as if to reach around the southern part, the other as if to reach around the northern part of the town, and finally to clasp the whole in its fiery embrace. Suddenly, without premonition, the movement ceased and was not renewed.

This eruption began, as before remarked, in November, 1880, and lasted until October, 1881. The eruptions of 1852 and 1855 broke out near the same point on the upper dome of Mauna Loa as that of 1880, and pursued closely adjoining and parallel courses. That of 1855 was much larger and that of 1852 a little smaller than this one. The length of the last flow (1880-'81) was nearly 50 miles, but its course is somewhat tortuous.

Three miles of travel through tall Hilo grass growing in a muddy soil brings us to the verge of the forest. Years ago a trail leading from Hilo up into the central wilderness of the island was cut through the forest and corduroyed. The trees used for the corduroy were trunks of the great tree ferns which form a large part of the undergrowth of the forest. These are soft, spongy, and perishable, and lasted but a very few years. They quickly became rotten, and wherever they were laid the trail has become worse than it would be if they had never been put there. The effects of the incessant rain are now abundantly visible, and that to our great discomfiture. The trail is a mixture of rocks, mire, and fragments of rotten fern-trees. Progress is difficult and extremely harassing. Every few rods some poor animal sinks his fore legs or hind legs into tough, pasty mud, and must be unloaded and pried out. Four miles of this kind of travel was accomplished in the space of about six hours. Suddenly and without warning a sharp turn of the trail brought us upon a wide expanse of naked pahoehoe. The relief was indescribable. Nobody would pretend that pahoehoe is pleasantly traveling. It is good only in comparison with clinker fields and forests. The exchange is that of misery which is intolerable for misery which can be borne readily by the exercise of patience. The animals being exhausted by the desperate struggle, we at once made camp upon the lava rock, finding a pool swampy water hard by.

We had landed upon the termination of the great flow of 1855, the grandest of all the historic eruptions of Mauna Loa. The next day we had an opportunity to observe and appreciate its immensity. Our route lay upon the upward course of this flow, which soon widened out on either hand until the forest was miles away from us in both directions. Already a few straggling ferns and other humble plants have begun to take root upon its surface, but without a vestige of soil. Except for these stragglers all is now bare rock, rolling in heaps and mounds, twisted ropes and huge wrinkles, with now and then a network of cracks rifting the mass into fragments, and large holes where the arch over some great lava pipe has fallen in. One characteristic of this great flow is the exceptional unevenness of it and the large size of the mounds and hills formed by the pahoehoe. It seems to lie very much thicker than in most other eruption. In many places it has formed high hills or ridges, and everywhere there are abundant indications that sheet after sheet of lava was piled up to form its final mass. The width of it a few miles above its extremity could only be estimated roughly by the eye, and seemed in many places to exceed six miles. In the course of an hour the forest was dim in the distance on either hand, the tall ohia trees appearing like mere shrubs.

As I looked over this expanse of lava I was forcibly reminded of some of the great volcanic fields of the western portion of the United States, where the eruptions are of such colossal proportions that they have received the name of massive eruptions. Richthofen, after studying many of these lava fields in California and Nevada, was led to the conclusion that they had burst forth from great fissures, inundating large areas of country with fiery seas of basalt. He was led to contrast the immense volume of these rocks with the comparatively insignificant streams which have emanated from vesuvius, Aetna, and other modern volcanoes, and concluded that the incomparably grander overflows of Western America must have occurred under circumstances differing widely from those of ordinary volcanic eruptions. Although the volcanic rocks of Western America may be considered as very well exposed as compared with rocks of equal antiquity in other portions of the world, they would be regarded as relatively obscure by anyone who has had an opportunity to inspect carefully the recent lavas of Mauna Loa. I am by no means certain that Richthofen's conclusions are wrong. But here is a lava flow, the dimensions of which fully rival some of the grand Pliocene outbreaks of the West, which demonstrably differs in no material respect, excepting in grandeur, from the much smaller eruptions of normal volcanoes. The flow lasted for thirteen months without interruption, and in that period it is easy to see that an enormous volume of fluent lava could be disgorged from an orifice of no very extravagant proportions. In estimating the volume of materials composing this flow there is one unknown factor, namely the thickness. Probably this can never be ascertained with a satisfactory approach to accuracy. It is extremely variable, and the configuration of the country which it deluged is wholly unknown in detail. The surface of the flow has not as yet been accurately surveyed, and its horizontal dimensions have been subjected only to eye estimates, which are extremely untrustworthy. The want of proper data, therefore, makes it unwise to venture an estimate of its mass. Some impression, however, of its grandeur, may be derived from the statement that for a distance of 20 miles from its termination the average width of the flow cannot be less than four or four and a half miles. The axis of the main stream from its source to its termination is a little more than 45 miles in length. The thickness of the stream in many places is very great, probably exceeding 250 feet, while the average may not exceed 100. Its final solidification has left the general surface extremely irregular, being piled up frequently in ridges or hillocks 50 feet high or more. By far the greater part of this mass is pahoehoe, and it was formed no doubt in detail after the manner which has already been described.

## Between Mauna Kea and Mauna Loa

A little more than 20 miles from the end of the flow we found ourselves confronted by a high barrier of clinkers stretching far out towards the base of Mauna Loa on the left and plunging into the forest on the right. Turning sharply to the right the trail crosses several spurs of this ridge of clinkers and at length leaves the lava field and enters the forest. The character of the forest is now greatly changed. It is no longer a swamp and jungle. We have gained an altitude of about 5,500 feet, and although we are not wholly above the wet region we are in one which is considerably dryer than that which is occupied by the main forest belt. The soil in the summertime is generally dry, and the undergrowth is so moderate that it offers little obstruction to progress. Winding through the forest we come frequently upon open parks densely clothed with mountain grass. The trail ascends slowly but steadily, and as we progress the trees become fewer and the parks larger and more numerous. Numberless trails of wild or half wild cattle traverse the country in every direction. The soil is abundant, but so too are the ledges of lava and fragments of clinker which project through it. Ascending a rocky shelf, Mauna Kea discloses its magnificent mass in close proximity on the one hand, while Mauna Loa, more distant and yet more grand, rises sublimely upon the other. The prospect towards Mauna Loa is desolate in the extreme. The wide interval between the two mountains is an enormous expanse of ominous black lava, mostly aa and clinkers which seem to bid defiance to all access. The sides of the mountain are everywhere streaked with descending tortuous bands indicating the positions of more recent lava flows. Where these strike the plain below they spread out into wide fields of clinkers. The fact is a significant one, and the explanation does not seem difficult. Upon the mountain slopes the lava runs with great velocity, and the streams are correspondingly narrow. But when it strikes the nearly horizontal plain below its velocity is checked and the liquid accumulates in great volume, becoming viscous by cooling. Its flow is greatly retarded and yet the mass is sufficient to enable it to move with a slow motion analogous to that of a glacier. When the viscosity of the lava becomes very great it is in a condition which enables it to yield to strains of a certain amount, but if that strain is exceeded it is crushed and ground up. The movement which takes place at this stage is partially a plastic yielding, more particularly of the interior and hotter parts, and partly a shattering and grinding up of the outer stiffer and colder parts. The glacier-like motion, however, is possible only with very large masses of the lava which still retain a sufficient quantity of heat to maintain a plastic condition. Persons who have witnessed the movement of a clinker field in the last stages of an eruption describe it as being so slow as to

be quite imperceptible until it has been watched for a long time, and as being attended with a cracking noise which comes in volleys like the report of musketry.

Turning around with Mauna Loa at our backs, the majestic pile of Mauna Kea rises immediately before us. The contrast is very great. The eye is instantly caught by the large number of cinder cones which everywhere stud its surface, from the summit where they cluster thickly, down its flanks to the plain below. All of them are symmetrical and normal in their outline, and in an admirable state of preservation. They are truncated at their tops, showing the existence of regular craters within the truncated portions. Some of these cones, by a careful eye estimate and comparison with known magnitudes, appear to be more than 1,000 feet in height and more than three-fourths of a mile in diameter. The number is too great to be easily counted. They are most numerous upon the summit platform, but they are very abundant, not only upon the immediate base of the mountain, but at all intermediate zones, and they ramble away far beyond the base like a crowd dispersing from a common center. The general form of the whole pile of Mauna Kea is notably different from that of Mauna Loa. Its slopes are much greater. And yet they are very far from being so abrupt as those which are found in the majority of the grander volcanoes of the world. Nowhere do they appear to exceed fifteen to eighteen degrees, except upon the flanks of the cinder cones, and the average profile upon the side here in view is about twelve degrees. The northern front of the mountain, which is not visible, has a slope considerably greater. Comparing this with Mauna Loa, we find that the average slope on the steepest flank of the latter mountain nowhere exceeds seven degrees, and in the longer ones it is only four degrees. Yet, in comparison with other great volcanoes, Mauna Kea is rather flat and obtuse.

Its composite character is disclosed at once. It has no dominant central peak or cone like Etna, Shasta, and Teneriffe, which completely overpowers any other features, but it has been accumulated by eruptions from numberless vents, which are spread out over a very large area and cluster most thickly at the central and highest part. Upon the summit are many large cinder cones grouped closely together and planted upon a well marked summit platform. But it is impossible to select anyone out of a dozen of these cones which can be confidently pronounced largest, nor is it possible to say which out of half a dozen is the highest. Cones even larger than those upon the summit are seen at varying altitudes upon the flanks.

Glancing back once more at Mauna Loa, not a single cinder cone of normal type is anywhere visible upon all its mighty expanse. Far up towards the summit are two or three minute pimples, which, upon examination with a strong field-glass, convince us that they were originally intended for cinder cones, but that the attempt was abandoned in a preliminary stage of the experiment. All of that stupendous pile, so far as visible, is built of streams of flowing lava. But Mauna Kea consists largely of fragmental material. What proportion of its mass is thus composed of fragmental matter can only be guessed. But the percentage is no doubt great.

The lavas of Mauna Kea will be alluded to more in detail hereafter. At present it may be remarked that nowhere in this part of the mountain are its lavas well exposed. The volcano has been extinct for many centuries, and although the degradation on this side of the mountain has made comparatively little progress, we shall soon find reason for believing that the epoch of final cessation, historically speaking, is quite ancient. The impression produced is that the period which has elapsed since the last sign of activity should be reckoned by thousands of years rather than by hundreds. Soil is everywhere abundant, and no fresh looking rocks are known. The dense forest comes up only to the level where the steeper part of the mountain begins its ascent; that is, to altitudes varying from 5,000 to 6,000 feet. Above that are many scattering groves with a gradually increasing proportion of open spaces. Up to an altitude of nearly 10,000 feet the mountain is clothed with long mountain-grass, which has a pale yellowish color. The cinder cones have that faint reddish cast often assumed by basaltic lapili which has long been exposed to weathering.

Winding onward by a rough stony trail, where old rotten clinkers and slabs of weathered basalt project up out of the soil, we at length reach a pool of stagnant water, where we make camp. Just before reaching camp the way was somewhat obstructed by a thicket of thorny bushes which at once aroused the keenest interest. They were apparently raspberries, but such raspberries! The bushes were gigantic and the fruit equally so, the berries being over two inches in length and an inch in diameter. Conceive our ordinary pale red garden raspberries magnified two and half to three times in linear dimensions whether in stalk, leaf, or fruit, and we shall have a very good idea of its appearance. Its flavor, however, was somewhat inferior, though by no means unacceptable. The taste of the fruit is almost exactly the same as our common Lawton blackberry. The abundance of fruit was remarkable. For two or three miles the banks and hillsides were covered with them and they could have been gathered by thousands of bushels. They were growing at an altitude of

about 6,000 feet, where snow frequently falls in winter and where the climate probably does not differ greatly from that of the coast range of California; though I presume this climate is rather the more equable of the two, being cooler in summer and perhaps a trifle milder in winter.

The journey from Hilo had been a very long and arduous one. Unpleasant as was the struggle with the forest, the journey of twenty miles over pahoehoe, so coarse and rough as that of the flow of 1855, proved in the end to be almost as harassing to the animals. The foothold upon the rocks is all that could be desired, but the constant ascent and descent of the smooth rounded hummocks produced an incessant lurching and strain upon the animals the effects of which were now manifest in the shape of sore and scalded backs. Two days' rest was deemed absolutely necessary to recuperate the sore, weary, and half-starved brutes. I occupied the time in tramping over the rolling hills and half-concealed lava beds around the base of Mauna Kea, and in exploring three or four long caverns or ancient lava pipes, which are quite as common here as they are upon Mauna Loa. No results of any importance attended the investigation. Many specimens of rock were picked up and examined superficially. They have no great variety, but at the first glance they show a well-marked difference as compared with those from Mauna Loa. Olivine is abundant, but is never seen in such excessive quantities. On the other hand, the feldspars are present in great quantity in well-marked tabular, crystals, and many large crystals of augite occur. The groundmass in the majority of cases inclines to bluish gray instead of being greenish black, as in most of the lavas of Kilauea and Mauna Loa. In short, they are true basalts, approaching more nearly the normal type than those we have hitherto seen. The methods of flow are apparently quite similar to those seen on Mauna Loa. The two forms, pahoehoe and aa, are as distinctly represented and yet there is some difference, especially in the case of aa, but a difference which I should find it extremely difficult to define.

### **Mauna Kea**

After two days' rest and recuperation the ascent of Mauna Kea was determined upon. The summit is easily reached from the southern side, so easily in fact that no great precaution is necessary in the choice of routes. Still, some routes are much easier than others, and it was thought best, in view of the long and tedious character of the ascent, to take a guide familiar with the mountain. I found a native who had been to the summit many times and who had hunted sheep, cattle, and goats all over its southern flanks. At daylight the party was

in motion with three pack animals carrying photographic apparatus, provisions, and also blankets, in case it should be found necessary to spend the night upon the mountain top. The guide went afoot from preference, a most unusual thing for kanaka, while the rest of the party were well mounted.

Our camp was situated at an altitude of about 5,670 feet, and the top of the mountain was more than 8,000 feet above us. Two hours were spent winding deviously among the foothills and cinder cones around the base of the mountain before the principal slope of the mass was reached. The platform consists of lava beds in a somewhat advanced stage of decay and having much the same character originally as the lava field which make up the gentle slopes descending away from Kilauea. There are the same alternations of pahoehoe and aa, but the roughness has been greatly mollified by weathering and by the formation of soil. In many places, especially at the foot of steep slopes, the soil has accumulated a very considerable thickness, having been washed down from above, and lies in heavy banks. Erosion also has begun its work. Here and there we crossed sharply cut ravines of small depth scoured in the rocks by the torrents. As yet no perennial stream exists on this side of the mountain, but the evidences of frequent spasmodic floods of great power and volume are often encountered. As we reach the principal slope the ascent becomes very rapid, but by no means uniform. Here for a few hundred feet it rises so rapidly that the animals struggle and strain. There it is so gentle that we may jog along at a trot. With increasing altitude the slope becomes greater, and at last we dismount to ascent on foot a continuous slope at an angle of more than twenty degrees. We do not leave vegetation behind us until we have attained an altitude of nearly 11,000 feet.

Most of the route lies through an alternation of rugged field of lava which show less and less soil the higher we ascent, and the fine lapilli of the cinder cones, into which the feet sink deeply. The flanks of these cinder cones are never excessively steep, but owing to the very loose character of their component materials the ascent becomes toilsome and very protracted. The cones also become more abundant as we approach the summit. They show no signs of decay as yet, except, possibly, a little weathering of the lapilli in the upper layers, which have turned red and brown, while at some little depth the color is still black. It is worthy of note that the lapilli of basaltic cinder cones are sometimes red when first ejected, though more frequently they are black, the color depending, I presume, upon weathering. The iron constituents have the form of protoxide or peroxide. Weather usually converts the iron sometimes to peroxide, sometimes into the hydrated form. Many cinder cones, however,

preserve, for an indefinite period, even until they are half obliterated, their original black color. In the cones of Mauna Kea the lapilli as originally ejected were, no doubt black, but have superficially changed to red or brown. All of it is comparatively fine and no large pellets are seen.

About one o'clock, after seven hours of travel without a halt, we reached what may be termed the summit platform, which has an altitude varying somewhat with its inequalities, but averaging probably 12,500 feet. This platform is about five miles in length and two miles in width, with a slightly pronounced ridge running along its axis. Upon this platform stand about a dozen large cinder cones, from 700 to 1,000 feet in height, carrying the extreme apices of the mountain very nearly to 14,000 feet. It is difficult to judge which of these cinder cones stands highest. But it soon becomes apparent that this distinction belongs to one of a group which are clustered thickly together near the western end of the platform. Towards these we direct our steps.

The aspect of the lavas beneath our feet now becomes somewhat different from those seen lower down the mountain. They are lighter colored and some of them are much more compact. A fragment when struck rings like clinkstone, and on being broken shows a dark, but very compact fracture and an entire absence of the vesicles which are universal in the lavas which we have hitherto seen. Some are vesicular, others glassy or obsidian like. It is interesting also to note the effect of weathering upon the summit. These lava beds have evidently lain for a long time exposed to the action of the elements. In a few places are to be seen traces of running water. But for the most part the weathering simply amounts to a slow decay and dissolution of the rock in place. Some of the sheets have been broken up into small fragments, and by the gradual dissolution of the exterior portions the angles have become rounded and the fragments smoothed off. In one place we crossed what was once probably an old sheet of lava. This is now reduced to a mass of rounded stones separated by considerable intervals.

As we approach the western end of the platform we gain notably in altitude, and at length find ourselves in a spot where in almost every direction we are hemmed in by large cinder cones towering to a considerable height above us. Here we halted for a midday camp. We brought up a few sticks of wood to build a fire, and enjoyed a cup of coffee, a few slices of bacon and some bread. The guides suffered somewhat with mountain sickness, and the animals betrayed the effects of the unaccustomed altitude, for we were more than 13,000 feet above the sea. There is no difficulty in ascending the summit cones where are

composed of fine loose lapilli and about 800 feet in height. The prospect was a total disappointment. The country below was completely buried in clouds, out of which the mountain rose like a great island. But to the southward was the mighty dome of Mauna Loa, rising above the clouds which floated about 6,000 feet below the summit. It seemed very near, though in reality it was about twenty miles distant. The great caldera was distinctly seen with portions of its encircling wall. There is a partial opening or gap in this caldera towards the north which enables the observer from Mauna Kea to look into it. And so clear is the atmosphere at these high altitudes that with a good field glass many details of the rock faces are easily discerned. To the southwestward and rising about 2,000 feet above the clouds was the summit of Hualalai, presenting an aspect quite similar to the summit of Mauna Kea, but upon a smaller scale. To the northwestward the dome of Haleakala, about eighty miles distant was in full view. By means of a field glass it was possible to discern easily the cliff inclosing its vast caldera, and one or two of the cinder cones within it. A purer atmosphere than that which prevails here at high altitude, it is impossible to conceive. Even the summit of Haleakala is seen in its natural colors without any of the adventitious tints usually imparted to distant objects by a hazy atmosphere. Now and then a glimpse is caught of some small portion of the country below from momentary openings in the clouds. Upon the leeward side of the island short stretches of sea coast are here and there disclosed, but from so great an altitude they have a strange visionary aspect.

Several hours were spent in photographing and in rambling about the platform in search of whatever might be found. Hard the noon-day camp is a mass of very light-colored lava which seems at first to have a constitution notably different from the very black almost ultra basalts to which we have thus far been accustomed. It is exceedingly compact and fine grained and has a very light gray color. The fresh fracture, however, is notably darker than the smooth weathered surfaces. It has been called a feldspathic rock, meaning, I suppose, a rock more nearly allied to the trachytes than to the basalts. Other observers have called it phonolite, probably because it is highly resonant when struck. But the term phonolite is now used by lithologists to indicate a special and limited group of rocks having a tolerably definite chemical constitution and possessing nephelin as its most characteristic mineral. This light-colored rock of Mauna Kea, however, is undoubtedly a basalt possessing an abundance of triclinic feldspar in exceedingly minute crystals and without olivin. It appears to be identical with a very large proportion of the basalts occurring in the western portion of the United States. This rock was used by the primitive Hawaiians for making their stone implements, for which it is very well suited,

being very hard, tough, fine grained, and free from vesicles; and it flakes readily. Hard by are abundant vestiges of the work of manufacturing weapons and tools; and incomplete products in all stages of manufacture, with large quantities of flakes, lie scattered about.

No signs of any recent volcanic activity are to be seen. All the lava beds look old and greatly weather-worn. In some of them the decay and disintegration are so far advanced that they are reduced to mere heaps of weather-beaten fragments. How these lava sheets have thus been torn to pieces, as it were, and reduced to piles of moldering ruins I can explain only by suggesting the action of frost and ice filling the cracks and wedging the pieces apart by expansion. To this, however, should be added the wasting away of the pieces by the solvent actions of the rains. A few hundred yards from our noon camp is the head of a ravine which has been scored to a considerable depth by the unmistakable action of running water. Thus erosion has made a good beginning here, and under circumstances where its action is undoubtedly slow and spasmodic. This ravine has at one part a depth of nearly 70 feet, and is exceedingly rough and much obstructed by fallen fragments. The cinder cones, however, do not appear to have suffered much from the ravages of time. Their preservation is no doubt due to their open, porous character. The rain can never fall fast enough to start a torrent or even a minute rill upon their surfaces, but sinks into the interstices at once. Everything indicates that a long period has elapsed since these vents became silent.

The temperature at the summit in the daytime was rather mild, being about 50°F. The air was calm, only a very light breeze blowing. But we knew quite well that the temperature would fall greatly during the night time; and the lightly-clad kanaka is not fond of cold. As a minute exploration of the summit promised little of special interest beyond what had already been seen, I decided to seek a lower altitude to pass the night. As we started, the day was drawing towards its close, and as we reached the verge of the summit platform the sun was near the horizon. Meantime the clouds to the southward had dispersed, revealed the whole northern side of Mauna Loa, which rose in indescribable majesty before us. Through the clear, pure atmosphere every detail was visible. Innumerable recent lava streams could be seen stretching their tortuous courses from the upper dome down to the plain below, spreading out in enormous fields of blackness and roughness. Three long streaks in particular attracted the attention. One upon the northwestern side, starting from a point a little below the summit, reaching down the slope into the broad interval between Mauna Kea and Hualalai, and vanished away in

the distance towards the sea-coast. This I had no doubt was the flow of 1859. Far to the left, upon the northeastern slope of the mountain, could be seen two streams which had flowed out from a year to a year and a half before. The one emanating from the point east of the mountain was the stream which first broke forth in November, 1880, and rushed rapidly down the slope directly towards Mauna Kea. The other, which was the last of three distinct streams from this eruption, started from a point lower down the mountain, flowing northeasterly then turning towards Hilo. Many other streams were distinctly visible, wearing an appearance of recency. Down the main slopes of the mountain these floods are comparatively narrow, having widths which might range from half a mile to a mile. But as they reached the plain between the two great volcanic piles they spread out into immense floods, which are mostly aa. The appearance of the plain thus deluged by the frequent outpours from Mauna Loa is black, desolate, and horrid in the extreme. They end very abruptly upon a sinuous line, where they meet the ascending slope of Mauna Kea.

The sun disappears and the brief twilight follows. At length we enter the clouds and move on in the mist and darkness, reaching camp a little before midnight.

In the afternoon of the day following the ascent of Mauna Kea, I moved camp about five miles further westward, to a locality called Kalaieha. This point is now used as a sheep station. The pasturage upon the slopes of Mauna Kea is very abundant and rich, but there is no water. At first it was a mystery to me how these animals could flourish with nothing to drink. It appears, however, that the fog is so abundant that a night rarely passes without more or less rain or a condensation of vapor sufficient to thoroughly saturate the grass, and the animals thus obtain sufficient moisture from the grasses they feed upon. They seem to thrive very well, and I have never heard of any serious loss arising from want of moisture.

Kalaieha is situated near the summit of the pass between Mauna Kea and Mauna Loa, at an altitude of about 6,900 feet. Both to the eastward and to the westward there is a very gentle slope towards the ocean, so gentle in fact that from here it appears to the eye like a broad level plain. The lavas from Mauna Loa have flooded it again and again, and are now outspread over a vast expanse in fields of black, ominous, naked aa. These lava floods stretch all the way up to the very base of Mauna Kea and find a sharp line of demarcation upon its lowest slopes. The base of Mauna Kea is well covered with soil and volcanic sand, giving life to an abundant herbage and no inconsiderable

number of trees, thus offering a strong contrast to the desolation and blackness of the lava fields beyond. Around us are very many cinder cones, some of noble proportions, and from the summit of any one of them we may obtain an overlook of the Phlegrean fields. The sense of desolation which they awaken is exceedingly impressive. In the preceding chapter I have already mentioned how the descending lava streams from Mauna Loa spread out over wide areas when they strike the comparatively level platform below. It is often difficult to distinguish one field from another, so intimately are they blended together and so faint is the distinction of color. Only when some field of extreme recency has been spread out like that of 1881, disclosing a superlative blackness, is it possible to comprehend its full extent and individuality, by its contrast with fields a little older and just beginning to show the first effects of weathering. The entire prospect conveys to the mind the idea that these flows succeeded each other at very brief intervals and that all of them are of great magnitude. The portion of any coulee which is comprised in its course down the mountain slope invariably bears a small ratio in respect of mass to the quantity spread out upon the lower plain. Nor do these currents by any means stop always at the base of the mountain, but deflect sometimes to the eastward, sometimes to the westward, according to the slope of the land. They stretch onwards towards the sea for a distance of many miles, and not a few of them have entered the ocean. This was the case with the great eruption of 1859, which entered the sea upon the western coast of the island, while the last eruption of 1881 came within about a mile of the sea at Hilo upon the eastern coast.

Several days were spent at Kalaieha searching for varieties among the lavas and for such other facts of interest as might present themselves. Very little, however, was discovered. The lavas of Mauna Kea, especially around the base of the mountain, show but little variety, and those of Mauna Loa are even more homogeneous.

Leaving Kalaieha, my next objective point was the valley of Waimea, on the northern side of Mauna Kea. To reach it, it was necessary to go over the mountain. This was not a serious undertaking, for it presents no difficulty except the length of the journey, and this is readily overcome by dividing up the march between two days. The mountain was crossed upon its western flank by an easy trail and our camp was pitched near the summit of the ridge. From this point a fine view of Mauna Loa and Hualalai is presented. The huge lava streams descending from Mauna Loa to the northwest between Mauna Kea and Hualalai are distinctly visible and present a most suggestive aspect.

The best defined among them is the great flow of 1859, which is visible in all its extent, reaching from a point near the summit to the sea, a distance of about 35 miles. The interval between Mauna Kea and Hualalai, which, reckoned from base to base, is about twelve miles, has been traversed by a great number of such lava floods within a very recent period in the history of the mountain. Viewed from a lofty standpoint on Mauna Kea, the general grouping of these beds and the long flowing profile which they have generated are presented to the eye most vividly.

It is easy to imagine how, step by step and by flood after flood, this part of the island has been built up by the simple superposition of numberless lava streams.

### **Plains of Waimea**

Descending to the northern slopes of Mauna Kea the plains of Waimea at length are reached. These plains are bounded by Kohala Mountain on the north and Mauna Kea on the south, and form a moderately elevated pass hardly 3,000 feet high between the east and west side of the island. The western declivity of this pass is arid, hot, and barren, suggesting the desert plains of Nevada. The comparison is strengthened by the occurrence of cacti, which seem to very closely related to some of the opuntias of southern Nevada and Arizona, and the first impression is that they are merely varietal forms of the common prickly pear which have here attained a considerably larger size, but without any other change of habit. But the ubiquitous sage (*Artemisia*) is wholly wanting and seems to be about all that is needed to complete the similarity of the picture. In place of it are many low, sickly, stunted shrubs having the air and habit of desert plants quite as distinctively as the American sage. As we approach the summit of the pass there is a gradual but rather rapid increment and freshening of vegetable life. From the summit to the eastern coast the descending slope is clothed with abundant vegetation, which soon becomes a tropical jungle similar to that which we traversed in passing from Hilo to the base of Mauna Kea. Thus in the course of a very few miles the journey from west to east over the plains of Waimea will lead us from a region as truly desert as Nevada to a region where the ground is muddy by incessant fog and rain and incumbered with the densest of tropical forests. The cause of this extreme contrast is easily discerned. The perpetual trade wind striking the eastern coast is thrown upward nearly 3,000 feet in the course of about fifteen miles, and is depleted of a great portion of its moisture. It then descends as rapidly to the western coast, and of course becomes very dry. Through the

Waimea pass a powerful breeze is always blowing from east to west. Its effects may be seen in many of them scattered around the base of Mauna Kea, are deformed, being built up more upon their western than upon their eastern sides. The steady wind has caught the showers of lapilli as they were projected upward and caused them to fall in much greater quantity upon the western sides, so that the vents are situated upon the eastern sides of the cones, giving them all a uniform aspect of deformity. The effect of the wind is also seen in the steady drift of the sand dunes, and even the clinkers scattered about upon the plains show a marked wearing upon their eastern sides by the ceaseless action of the sand blasts.

The little village of Waimea is situated upon the southern base of Kohala Mountain, a little west of the summit of the pass. It is a beautiful spot, seeming as we approach it from the south or from the west like an oasis in the desert. It lies just upon the verge where the arid region passes into the moist. A stream of delicious water, and perennial, comes down from Kohala Mountain, and flowing towards the western sea gradually sinks into the earth long before it reaches it. Like most other Hawaiian towns it is but a faded remnant of a population which was once considerable. There is still some thrift here, arising from rather exceptional advantages for pasturage. Curiously enough, horses and cattle seem to thrive best in a desert country when left to their own natural ways and devices. This is as true of these tropical islands as it is of Western America.

From Waimea we obtain a superb view of the northern flanks of Mauna Kea. As compared with the southern portion of that mountain there is one notable difference. This is in the amount of erosion, which is at once seen to be very much greater upon the northeastern or windward side. Several huge ravines are visible, commensurate in their proportions with the magnitude of the mountain. An observer viewing these gorges from the northern and eastern sides would be apt to conclude that a very long period of time has elapsed since eruptions of lava and cinders have ceased to exercise any appreciable effect in building up the mountain pile. Viewing it upon the opposite sides, he would be equally apt to infer a relatively brief period since the cessation of volcanic action. The difference in the effects of erosion upon the two sides is certainly very great; but I can hardly doubt that it may be fully accounted for by the difference in the precipitation alone. In noting the effect of atmospheric degradation upon the rocks of these islands, as well as in other countries, I have been most forcibly impressed at all times with the enormous disparity in the rates of weathering, where the only variable factor is the amount of

atmospheric moisture. Wherever the climate is moist the lavas decompose with great rapidity, so that a few years are sufficient to produce a very appreciable amount of superficial disintegration, and to start the vegetation growing upon the rocks. Wherever the climate is dry rocks of identical character – nay, even identical streams, passing from a wet to a dry region – preserve their freshness for probably a century or more. Many instances may be seen here of lava flows which descend through a belt of moisture to some of the driest regions along the western coast (most notably in Kona), and as a general rule the portions which are situated in the moist region will simulate very great antiquity, while the portions in the arid belt upon the coast will look extremely recent. We should of course expect to find the degradation of rocks much greater in a wet locality than in a dry one, but the difference is considerably greater than might be at first supposed (Dutton, 1884:152-168).

### 8.2.6 Wai (Fresh Water)

Fresh water (wai) is of tremendous significance to Native Hawaiians. It is closely associated with many Hawaiian gods. According to traditional accounts, Kāne and Kanaloa were the “water finders:” “Ka-ne and Kanaloa were the water-finders, opening springs and pools over all the islands, each pool known now as Ka-Wai-a-ke-Akua (The water provided by a god)” (Westervelt 1915: 38). Kāne is widely known to be closely associated with all forms of water, as outlined in the mele “He Mele No Kane.”

There was no element more important or precious than water. There was no god more powerful than Kāne. Pua Kanahale recounts the oli “O Kāne, ‘o wai ia ali’i o Hawai’i?” and notes of the oli: “The chant begins with Kāne and focuses on this deity as the connective force of all the po’e akua, or god family. All the entities mentioned in each paukū, or verse, are a manifestation of Kāne” (Kanahale 2011: 24). The association between water and Kāne is logical considering certain interpretations of Hawaiian mythology identify Kāne as the most powerful of all the Hawaiian gods.

Further investigation into the relationship between Kāne and Pele would be appropriate and helpful. Some interpretations identify Kāne as Pele’s father (Westervelt 1915). A full analysis of the different perspectives on Pele and Kāne would be helpful to refining an approach in developing community education programs for geothermal energy and culture. A brief analysis is provided below.

He Mele No Kāne asks:

E ui aku ana au iā ‘oe,  
Aia i hea ka Wai a Kāne?  
Aia i lalo, i ka honua, i ka Wai hū,

One question I ask of you:  
Where flows the water of Kane?  
Deep in the ground, in the gushing spring,

I ka wai kau a Kāne me Kanaloa-  
 He waipuna, he wai e inu,  
 He wai e mana, he wai e ola,  
 E ola no, ‘ea!

In the ducts of Kane and Kanaloa,  
 A well spring of water, to quaff,  
 A water of magic power- The water of life!  
 Life! O give us this life!

This mele and other mo‘olelo are clear: Kāne is water. It is deeply valued among the Hawaiian people. The only exceptions may be mist, known to be associated with Lilinoe, and snow, associated with Poli‘ahu. There is an extensive body of traditional knowledge about the expeditions of Kāne and Kanaloa during which Kāne drove his ‘ō‘ō (digging stick) into the earth in search of water. Based on historic maps, there are four water sources near the state-leased land and/or federally-managed lands. These are as listed in **Table 16**. The water study completed for the EIS identified no surface water features within the project area.

*Table 16. Names of Water Sources Within or in Areas Adjacent to the Project Area.*

| Water Resource Name   | Definition and Additional Information                                                                                                                                                                                                                        |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 'Auwaiakēkua Gulch    | Meaning “watercourse (or ‘auwai) of the gods,” this gulch and spring runs between the Ke‘āmuku lava flow and Pu‘uanahulu (in North Kona)                                                                                                                     |
| Pauoa Stream          | Name of a fern ( <i>Dyopteris squamigera</i> ), also name of gulch that runs north of Pu‘u Ke‘āmuku                                                                                                                                                          |
| Pu‘u Pōhakuloa Stream | Pōhakuloa means “long stone” and also refers to a powerful stone said to bless pregnant woman and help to grant children with strength and wisdom. It also refers to the stream and gulches in the Ko‘ohala, Mauna Kea, and Waiki‘i areas on Hawai‘i Island. |
| Waikahalulu Gulch     | Gulch that runs down the southern slope of Mauna Kea, this name means “water [of] the roaring.”                                                                                                                                                              |

The following from Maly 2005: 257 is a description of Lake Waiau, the kino lau of the goddess Waiau, which exists directly mauka (mountainward) of the project area.

***Paradise of the Pacific***

**Lake Waiau of Hawaii by L. Bryan, Associate Forester**

**February 1939 (page 11)**

Lake Waiau, located at 13,000 feet on Mauna Kea, is perhaps one of the highest lakes in the world. It is located not far from the summit peak of the world’s highest Island Mountain, the top of which is 13,784 feet above sea level. The name “Waiau” has several meanings, for example, “water to swim in.” However, it is questionable whether much use has ever made of this water for

swimming or whether this exact meaning was intended by the Hawaiians when they named it. It could mean, “the place of water.”

Lake Waiau is a small body of water, about one acre in extent, and about eight to ten feet deep. In times of freshets and high water it overflows to the south and escapes down the slopes, finding its way through a series of springs into the Pohakuloa Gulch. These springs, several in number, occur on the south slopes of the mountain above timber line at near 11,000 feet. Part of their supply of water probably is taken from this lake through underground channels. These springs have never been known to go dry and furnish a continuous supply of pure water to the Pohakuloa CCC Camp. The lake contains a large number of Algae, which gives it a “greenish” color. However, this plant life is not harmful and the water can readily be used by man or beast.

During the winter months the lake is usually covered with ice and frequently with snow. Even during the summer months a thin film of ice usually forms during the night but disappears when the sun comes up. In the winter the ice is often thick enough to hold the weight of several people and it is possible to enjoy ice skating thereon.

During the past few years this lake has been visited by increasingly large numbers of visitors. Three years ago the Civilian Conservation Corps reconstructed an old trail from near the Humuula Sheep Station (Kalaieha), past Hookomo and Halepohaku to Lake Waiau and thence to the summit. This trail is well made and carefully marked on the ground with Ahus or piles of stones and the trip to the lake and on to the summit can easily be made by strangers without the assistance of a guide. The distance is not great, for most automobiles can be driven to the forest fence above Hookomo. From the point to the rest house at Halepohaku it is only two miles and from there to the lake an additional five miles, making a total distance of seven miles to hike, from the point where the cars are usually left, to the shores of the lake.

Visitors usually remain overnight at Halepohaku. This, as the name implies, is a “Stone House” which was constructed by the CCC about three years ago. It consists of a 10 x 20 stone house with water tank attached. Inside is a large stove, table and benches. The stove has a firebox three by five feet so that even on very cold night this building is quite comfortable with a fire going. This station is open for the use of anyone making the trip and there is ample dry wood in this section to furnish fuel. From here to the lake and return by way of the summit is an easy day’s hike and one well worth taking.

Just before reaching the lake the trail passes by a number of the “Stone Adz Quarries” of the ancient Hawaiians. Here can be seen large piles of stone chips greatly resembling old “stone crusher” sites. The stone in this section is very hard and apparently made excellent stone implements. Just how the native Hawaiians withstood the intense cold while working and living there is somewhat of a mystery. How they kept warm, particularly at night, without modern clothing, is something yet to be solved.

### 8.3 Summary

The traditional or customary practices associated with kilo were widely practiced throughout the project area and geographic extent. Kilo traditions are important to resource management, as the scientific observations of kilo help to guide a wide range of activities, including travel, agriculture, and other practices.

Within the project area, kilo activities would have been associated with access to the pu‘u, which are located within the state land. The importance of pu‘u and their associated traditional names are also noted in the ethnographic data.

Kilo activities would have also occurred in the larger geographic extent. Access to a range of sites and locations is important to the kilo practice, as different resources will be visible from different vantage points. This valuable practice would have served practitioners in both the traditional era and historic era well, as it would help them traverse the region and provide valued insight as to properly preparing for the extreme weather that can occur in the area.

The practice of kilo has enjoyed a notable resurgence in the Hawaiian community, as there are numerous programs, both in educational institutions and among community groups, that are working to widely revitalize the practice.

*Table 17. Ethnoclimatology Practices Associated with the Project Area and Frequency over Historic Eras*

| Cultural Practice | Traditional Pre-Contact Era (prior to 1778) | Historic Post-Contact Era (1778-1943) | Contemporaneous Era (1943 – current)                                                                |
|-------------------|---------------------------------------------|---------------------------------------|-----------------------------------------------------------------------------------------------------|
| <b>Kilo</b>       | Regularly practiced                         | Regularly practiced                   | Practice in project area limited by Army control of land; regularly practiced in surrounding region |

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## 9.0 ARCHAEOLOGY, ETHNOARCHAEOLOGY, AND ETHNOENGINEERING

Hawaiians maintained the well-being of huge populations working in harmony with the land. This applied all elements of Hawaiian ecological engineering. Famed anthropologist Marion Kelly (2000) wrote:

Changes made by Hawaiians, as in the case of fishpond building, enhance the food productivity for the people as they modify or adapt some elements of the environment, without creating unplanned, extensive and irreversible destructions of other important elements of the original environment. ... The dedication of Hawaiian society to the concept of *malama* (caring) is basically a conservation value. Sometimes it is explained as a belief that the land and sea in the last analysis “belonged” to the gods. Permission for the use of the gods’ domain was continually asked of them through religious ceremonies, large and small. Works of Hawaiians, both on land and in the sea, were so carefully planned, engineered and executed that they enhanced productively without massive environmental degradation following as a result..

Therefore, any place possessed ecological, political and cultural value, and traditionally Hawaiians were unafraid to develop engineering innovations that improved their quality of life as long as environmental integrity remained uncompromised. Traditional Hawaiian knowledge included ecological and cultural expertise.

### 9.1 Associated Traditional or Customary Practices

While Hawaiians were expert at numerous practices associated with archaeology and ethnoengineering, the rocky nature of the area made it ill-suited for several practices, such as lo‘i (wet pond fields). Instead, food practices would have been limited in this environment, which contributed to limited habitation. The most common practices related to engineering would have been uhaul humu pohaku (dry stone stacking) and parietal art (petroglyphs and petrographs).

#### 9.1.1 Uhaul Humu Pohaku (Dry Stone Stacking)

Pōhaku were of great importance to Hawaiians (Malo, 1951: 19). Traditionally, numerous names were used to describe rocks of different sizes and compositions. The practice of construction with stone, or stone masonry, is called Uhaul Humu Pohaku (**Figure 34**). The term references the way rocks were placed in an overlapping fashion to create sturdy structures. Hawaiian employed this method widely, including in the construction creating habitation, terrace walls, heiau, ahu or cairns.



*Figure 34. Stone platform identified by the PTA cultural resource team on Pu‘u Koli, located at the south end of Training Area 21. Archaeologists find, preserve cultural resources at Pōhakuloa Training Area [Image 2 of 12], by Eric Hamilton, U.S. Army Garrison Pōhakuloa Training Area (2012)*

This practice has enjoyed a considerable revival in recent years. The State of Hawai‘i Department of Transportation has even developed an Ahu Program Guide which outlines the “The Ahu Program.” The program “is a partnership between HDOT and local communities to guide the installation process of signs and/or stone ahu markers along ahupua‘a boundaries on State roads. The installation of ahu markers through this program is a voluntary community effort towards recognizing the traditional geographic boundaries of our islands” (HDOT 2012).

Archaeological evidence shows that this practice occurred within the PTA lands. Emerson (1885) describes an ahu that was likely located in the state-leased land, “I have located an ahu 18 feet long, 7 feet wide, and 4 feet high on the East side of the well known Alanui Kui leading across the ancient aa from the flow of 1859 to Puu Ka Pele and Waimea. The direction of the road, as far as visible is N. 20 E. magnetic. About 40 feet South of the ahu is the edge of the aa bank. At about 90 feet is another similar descent of say 7 or 8 feet.” This may very well have been one of the altars built by ‘Umi, described in Hawaiians (translated by Maly) in the following section, as documented in the *Ke Au Okoa* newspaper in 1865.

### 9.2.1.1 *Heiau of the Mountain Lands Described in “Na Kaa o Kekahi Elemakule o Hawaii” (1865)*

Among the early accounts penned by Hawaiian writers, in which reference to features associated with Humu‘ula, Ka‘ohe and the ‘āina mauna are found, is an 1865 account, originally collected in 1853. Hawaiian language newspaper *Ke Au Okoa* published an article titled “Na Kaa o Kekahi Elemakule o Hawaii” May 8–22, 1865, taken from the stories collected by Jules Remy, a French man who came to Hawai‘i in 1851. While introducing the article, it is stated that Remy dwelt in Hawai‘i for about three years, during which time he became proficient in the Hawaiian language. Remy traveled around the islands, documenting sites and events he witnessed and recording histories that were related to him. His narratives, written in French, reached Hawai‘i and were translated into Hawaiian by W.D. Alexander (*Ke Au Okoa*, May 8, 1865).

“Na Kaa o Kekahi Elemakule Hawaii” was collected by Remy in March 1853 when he visited Ho‘opūloa, South Kona. Upon landing, Remy recorded that he was warmly greeted by the people on the shore, and among the many people gathered, he observed an elderly gentleman. He was “stout and broad-chested, and on the account of his age, his hair was reddish gray.”

Remy learned that the old was Kanuha,<sup>27</sup> a man of chiefly descent, born before the time that Alapa‘i-nui died in 1752 (*Ke Au Okoa*, May 8, 1865). Remy noted that Kanuha was nearly 116 years old and in good health. Due to his advanced age, he spoke with authority on ancient customs and the history of the Hawaiian people (*Ke Au Okoa*, May 8, 1865).

Among the traditions which Kanuha told Remy was an account of the ascent of ‘Umi to the position of king on the island of Hawai‘i. In the account, Kanuha describes the history behind the construction of the famed heiau (temple) ‘Ahu-a-‘Umi and the construction of three other heiau on the ‘āina mauna – one on Mauna Kea, one on Mauna Loa, and one on a hill near the Ka‘ohe-Waikōloa boundary. In addition to ‘Ahu-a-‘Umi, these heiau included Pu‘u Ke‘eke‘e (an area of a known pu‘u in Ka‘ohe, near Pu‘u ka Pele), Mauna Halepōhaku (on Mauna Kea), and Pōhaku o Hanalei (on Mauna Loa). By description, and in some cases, by physical features on the ground, these heiau were situated in the lands of Humu‘ula (perhaps two of the heiau), Ka‘ohe, and Keauhou.

It is noted here that in his own work Abraham Fornander acknowledged the age and authority of Kanuha, but he also found inconsistencies in the genealogical relationship of individuals mentioned by Kanuha (1973:99-101). In particular, Remy reported that Kanuha conveyed to him that ‘Umi went to war with Keli‘iokaloa, a chief of Kona. Historical accounts

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<sup>27</sup> Kanuha is found in several historical accounts recorded by Kamakau (1961) and Fornander (1973).

by native writers and Fornander record that Keli'iokaloa was the son of 'Umi and that he became king of Kona for a time following his father's death (Fornander, 1973:99-101). It should be considered here that this historical inconsistency may actually be attributed to Remy's own hand, rather than the narratives of Kanuha.

Regardless of the possible genealogical differences, one of the unique qualities of the account is that it provides otherwise unrecorded documentation regarding the construction and occurrence of heiau in the high mountainous region of Hawai'i. The following narratives, with excerpts of the original Hawaiian and translations of the accounts (translated by Maly), are taken from Remy's recording of Kanuha's story (Maly 2005: 26-29).

***Ke Au Okoa***

**Na Kaa a Kekahi Elemakule o Hawaii.**

**May 22, 1865**

Umi ruled in place of Hakau, and his friends Koi and Omaokamau dwelt with him. Piimaiwaa, Umi's war leader dwelt in Hilo. With Umi, there was also his trusted companion Pakaa, and his priest Lono. At this time, Umi ruled the eastern side of Hawaii, while on the western side, his relative Keliokaloa, ruled and dwelt at Kailua... In the time that he dwelt in Kailua, Keliokaloa was known as an evil chief, he cut down the coconut trees and desecrated the cultivated fields. It was because of these evil deeds that Umi made preparations to go to war against him. Umi marched to battle, joined by his famous warrior, Piimaiwaa, and his companions Koi and Omaokamau. Also with him were his favorite, Pakaa, and his priest Lono.

The Hawaiian narrative then reads:

**Ke Au Okoa****Na Kaa a Kekahi Elemakule o Hawaii.****Mei 22, 1865**

Mawaena o **Maunakea** a me Hualalai ka hele pualu ana o ua alii nei me kona manao e iho ae i Kailua. Aole nae i kali o Keliokaloa, aka, ua pii nui aku oia me kona poe koa e houka aku ia Umi. Ua halawai na puulu kaa a i elua maluna o kekahi wahi papu i hoopuni ia e na mauna ekolu, a i kapaia hoi ke Ahu a Umi. Kaua mai o Laepuni ma (he mau kanaka makaainana pili alii ole) ia Umi, a aneane e make o Umi ia laua, lele mai o Piimaiwaa e kokua iaia, a oia ka mea nana i hooholo ae ka lanakila ma ko Umi aoao. Aohe mau mea nui i hai ia mai, aka, me he mea la, ua make ke alii o Kailua iloko oia kaua ana. Ma keia kaua ana, ua lilo holookoa ia Umi ke Aupuni, a lilo iho oia ke alii ai moku o ka mokupuni o Hawaii. I mea e ili aku ai ka hoomanao ana no ia kaua ua hanauna aku a ia hanauna aku, ua kukulu ae la ia i ke ahua aa, e o ia nei a hiki i keia wa ke ahua a Umi...

**May 22, 1865**

Between **Mauna Kea** and Hualalai the chief and all his party traveled, with the thought of descending to Kailua. Keliokalo did not wait though, but instead, traveled with his warriors to meet Umi in battle. The two armies met on a broad open plain, surrounded by the three mountains, at the place [now] called Ahu a Umi. There, Laepuni and them (people who were unattached to a chief) fought with Umi. Umi was almost killed, but Piimaiwaa leapt in and helped him, it was he who turned the battle in the favor of Umi's side. There is not much else that is said, but, it is known that the chief of Kailua died in the battle. Thus, with this battle, the entire kingdom was gained by Umi. He became the chief that controlled the entire island of Hawaii. *So that the battle would be remembered from generation to generation, he [Umi] built the stone altar, that remains to this day, the altar [ahua] of Umi...*

The narrative records that early in 'Umi's life, the priests Nunu and Wawa had discerned 'Umi's nature, and foretold that his god Kā'ili, made with a feather from the god Halulu, had empowered him. Indeed, 'Umi was a religious chief and made many temples for his god. Among the temples were:

***Ke Au Okoa***

**Na Kaa a Kekahi Elemakule o Hawaii.**

**Mei 22, 1865**

...Ua kukulu no hoi ia he heiau malalo o Pohaku Hanalei, a ua kapaia o ke ahua o Hanalei; a ma na aoao o Maunakea e hele ala i Hilo, ua kukulu no ia i ke kolu a ka heiau, ma kahi i kapa ia o Puukekee<sup>28</sup>; a ma Mauna Halepohaku malaila ia i kukulu ai i ka ha o na heiau, a malaila no hoi i olelo ia ai ua noho o Umi malaila me kona mau kanaka. Ua olelo ia o Umi he alii noho mauna, no kona aloha i kona poe kanaka, nolaila, ua hoi aku ia i waenakonu o ka mokupuni ilaila kona wahi i noho ai me kona poe kanaka, a na kona makaainana e noho ana ma na kapakai, e lawe mai i ka ai na lakou, mai kela pea, keia pea...

**May 22, 1865**

...He [Umi] also built a heiau below Pohaku Hanalei, it is called the ahua o Hanalei [altar of Hanalei]; and on the side Mauna Kea, by where one travels to Hilo, he built the third of his temples, at the place called Puukekee [also written Puu Keekee in historical texts]; and there at Mauna Halepohaku he built the fourth of his temples; there it is said, Umi dwelt with his many people. It is said that Umi was a chief who dwelt upon the mountain, it was because of his love of his people, that he [Umi] returned and dwelt in the middle of the island [Ahu-a-Umi], that is where he dwelt with his beloved people. His commoners lived along the shores, and they brought food for them [in the uplands], from one side of the island to the other...

Also in the early 1860s, Hawaiian historian Samuel Mānaiakalani Kamakau provided several early Hawaiian historical accounts of Mauna Kea and its environs (either directly or indirectly by association with place names). These accounts are particularly significant because they can be dated by genealogical associations with individuals identified in text. Two of Kamakau’s narratives are set in the period of the great king ‘Umi-a-Līloa, who c. 1525–1550 unified the island of Hawai‘i under his rule and established the land division and land management system that remained in place until the Māhele ‘Āina of 1848.

In Kamakau’s description of the rise of ‘Umi to power, we learn of his conquest of Hilo and the route traveled from Waipi‘o, Hāmākua, crossed Mauna Kea via the trail that ran across Humu‘ula-Pi‘ihonua and through Kaūmana, to the royal community on Hilo Bay:

<sup>28</sup> Puukekee (Pu‘u Kēke‘e or Pu‘u Ke‘eke‘e) is a hill that sits on the boundary between Waikōloa, Kohala, and Ka‘ohe, Hāmākua.

It was decided to make war on the chiefs of Hilo and to go without delay by way of Mauna Kea. From back of Ka'umana they were to descent to Hilo. It was shorter to go by way of the mountain to *the trail of Poli'ahu and Poli'ahu's spring [Waiiau]* at the top of Mauna Kea, and then down toward Hilo. It was an ancient trail used by those of Hamakua, Kohala, and Waimea to go to Hilo. They made ready to go with their fighting parties to Mauna Kea, descended back of Hilo, and encamped just above the stream of Wai-anuenue... (Kamakau, 1961:16-17)

Describing a later period during the reign of 'Umi, Kamakau related an account of the death and burial of the kahuna Pae, who served 'Umi. Kamakau reported that Pae was "a descendant of Lilinoe, the woman of the mountains" (1961:215). Kamakau also reported that Lilinoe was an important ancestral figure in the genealogies of Hawai'i's ali'i (royalty) and that she was buried on Mauna Kea. He observed that in 1828, Ka'ahumanu traveled to Hawai'i to:

...attempt the recovery of the bones of Lilinoe on Maunakea where her body was said to have lain for more than a thousand years in a well-preserved condition, not even the hair having fallen out. Others deny this and say her body was too well-hidden ever to have been found. Her offspring count from Hua-nui-i-ka-la'ila'i; she was the ancestress of ruling chiefs, and from her line was born 'Umi-ka-lani [father of the Mahi family on Hawai'i], son of Keawe-nui-a-'Umi by Ho'opili-a-Hae. It is said that Ka-'ahu-manu did not find the bones of Lilinoe... (Kamakau, 1961:285)

### 9.1.2 Parietal Art (Petroglyphs and Petrographs)

McCoy and Orr identify the prevalence of petroglyphs and petrographs (also pictographs) throughout the Hawai'i Islands.

Hawaiians made the following types of rock art: pecked, grooved, and bas-relief petroglyphs, and painted pictographs. Pecking, however, was the predominant technique employed (citing Lee 2001:589). Common motifs include anthropomorphic figures and geometric elements, such as cupules (referred to as piko, or umbilical cord holes). The human figures tended to change in form over time from stick figures (similar to those found in the Marquesas Islands) to triangular-torso figures, and then to more muscled forms. Other less common motifs are footprints, canoe sails (not attached to canoes), and ceremonial regalia. Images of animals like fish, turtles, and sea mammals, are very rare (citing Lee 2001:590). Cox and Stasack (1970:63) noted a surprising lack of interest in nature or natural forms generally (e.g., so few animals and vegetation) on the part of Hawaiians. They further

noticed that houses, clothed figures, water, fire, volcanic activity, and geographical features were also conspicuously absent.

For the most part, archaeologists have largely ignored Hawaiian rock art (citing Lee 2002:79). In 1924, Kenneth Emory (1924) conducted one of the first attempts to study Hawaiian rock art. Unfortunately, he came to feel that petroglyphs were not very important, setting the tone for subsequent “dismissive” attitudes towards rock art in the decades to follow (citing Lee 2001:590). It was not until the 1970s, with Cox and Stasack’s (1970) *Hawaiian Petroglyphs*, did anyone undertake serious investigations into Hawaiian petroglyphs (following this, see Lee and Stasack 1999).

Hawai’i Island has an abundance of petroglyph sites compared to the other major Hawaiian Islands (citing Lee 2002:79). In fact, Hawai’i Island has the largest numbers, densest concentrations, and greatest variety of forms and styles in the Islands; consequently, most petroglyph research has been focused on Hawai’i Island sites (citing Cox and Stasack 1970:51). Petroglyphs on Hawai’i Island are most commonly found on pahoehoe flows and inside lava tube caves (citing Lee 2001:589). For example, the Ka’u region is where most lava tube petroglyphs are found (citing Cox and Stasack 1970:13).

McCoy and Orr identify Site 50-10-31-21303 as having recorded petroglyphs. According to the 2018 PA, Site -21303 is an unevaluated lava tube of unknown function located in Training Area 21.

## 9.2 Cultural Resources: Archaeological Sites and Features

Historic properties in the State-lease lands, as compiled by Kleinfelder/GANDA, are listed and described in the following table (**Table 18**); some sites are identified by their State Inventory of Historic Places (SIHP) numbers. Discussions regarding these sites are provided in the Archaeological Literature Review (**Appendix D** in the EIS) and **Chapter 3** of the EIS. The impact analysis as completed by Kleinfelder/GANDA is also included in the impact analysis section of this CIA.

*Table 18. Historic Sites Located Within the State-Leased Land (Kleinfelder/GANDA)*

| Known Archaeological Sites within State-Owned Land |          |                      |                        |             |
|----------------------------------------------------|----------|----------------------|------------------------|-------------|
| Site Number                                        | Location | Description          | NRHP Status (Criteria) | Period      |
| 50-10-31-5002                                      | TA 5     | Ranch wall           | Eligible (C, D)        | Historic    |
| 50-10-31-5003                                      | TA 6     | Habitation lava tube | Eligible (C)           | Traditional |
| 50-10-31-5009                                      | TA 17    | Trail                | Unevaluated            | Traditional |

| Known Archaeological Sites within State-Owned Land |                           |                                                                                 |                        |             |
|----------------------------------------------------|---------------------------|---------------------------------------------------------------------------------|------------------------|-------------|
| Site Number                                        | Location                  | Description                                                                     | NRHP Status (Criteria) | Period      |
| 50-10-31-14638                                     | TA 5                      | Habitation lava tubes, rectangular house foundation, artifact scatter, pavement | Eligible (D)           | Traditional |
| 50-10-31-19490                                     | TA 5                      | Habitation lava tubes, trails, C-shape                                          | Eligible (D)           | Traditional |
| 50-10-30-19509                                     | TA 22                     | Habitation lava tube                                                            | Unevaluated            | Traditional |
| 50-10-30-19529                                     | TA 22                     | Habitation lava tube                                                            | Unevaluated            | Traditional |
| 50-10-31-21351                                     | TA 5                      | Lithic workshop complex                                                         | Unevaluated            | Traditional |
| 50-10-31-21744                                     | TA 5                      | Lithic scatter                                                                  | Unevaluated            | Traditional |
| 50-10-31-21745                                     | TA 5                      | Habitation lava blister                                                         | Unevaluated            | Traditional |
| 50-10-31-21746                                     | TA 4                      | Mound/excavation complex                                                        | Unevaluated            | Unknown     |
| 50-10-31-22941                                     | TA 4                      | Lava blisters                                                                   | Unevaluated            | Traditional |
| 50-10-31-23450                                     | TA 15                     | Habitation, overhang shelter, artifact scatter, pictographs                     | Eligible (C, D)        | Traditional |
| 50-10-31-23452                                     | TA 1, 3-9, 13, 14, 16, 17 | Ranching fence line                                                             | Eligible               | Historic    |
| 50-10-31-23455                                     | TA 5                      | Pāhoehoe pits                                                                   | Unevaluated            | Traditional |
| 50-10-31-23456                                     | TA 5                      | Possible habitation enclosure                                                   | Unevaluated            | Traditional |
| 50-10-31-23457                                     | TA 7                      | Trail                                                                           | Eligible (C)           | Traditional |
| 50-10-31-23462                                     | TA 7                      | Cairn                                                                           | Not eligible           | Unknown     |
| 50-10-31-23562                                     | TA 5                      | Habitation lava tube                                                            | Unevaluated            | Traditional |
| 50-10-31-23563                                     | TA 5                      | Modified outcrop/wall                                                           | Unevaluated            | Traditional |
| 50-10-31-23565                                     | TA 5                      | Volcanic glass quarry                                                           | Unevaluated            | Traditional |
| 50-10-31-23566                                     | TA 5                      | Habitation lava tube                                                            | Unevaluated            | Traditional |
| 50-10-31-23568                                     | TA 5                      | Habitation lava tube                                                            | Unevaluated            | Traditional |
| 50-10-31-23572                                     | TA 5                      | Habitation complex                                                              | Unevaluated            | Traditional |
| 50-10-31-23575                                     | TA 5                      | Habitation lava blister                                                         | Unevaluated            | Traditional |
| 50-10-30-23694                                     | TA 22                     | Lava tube and burial                                                            | Unevaluated            | Traditional |
| 50-10-31-23842                                     | TA 1                      | Habitation platform/terrace                                                     | Unevaluated            | Unknown     |
| 50-10-31-23843                                     | TA 1                      | Enclosure/mound complex                                                         | Unevaluated            | Unknown     |
| 50-10-31-23844                                     | TA 1                      | Mound                                                                           | Unevaluated            | Unknown     |
| 50-10-31-23845                                     | TA 1                      | Mound                                                                           | Unevaluated            | Unknown     |
| 50-10-31-23846                                     | TA 1                      | Ranching enclosure                                                              | Unevaluated            | Historic    |
| 50-10-31-23847                                     | TA 3                      | Ranching alignments                                                             | Unevaluated            | Historic    |
| 50-10-31-23848                                     | TA 3                      | Mound                                                                           | Unevaluated            | Historic    |

| Known Archaeological Sites within State-Owned Land |                           |                                            |                        |             |
|----------------------------------------------------|---------------------------|--------------------------------------------|------------------------|-------------|
| Site Number                                        | Location                  | Description                                | NRHP Status (Criteria) | Period      |
| 50-10-31-23849                                     | TA 4                      | Mound                                      | Unevaluated            | Historic    |
| 50-10-31-23850                                     | TA 4                      | Ranch corral                               | Unevaluated            | Historic    |
| 50-10-31-23851                                     | TA 4                      | Habitation lava tube                       | Unevaluated            | Unknown     |
| 50-10-31-23852                                     | TA 1, 3–9, 13, 14, 16, 17 | Rock wall and enclosure                    | Unevaluated            | Historic    |
| 50-10-31-23853                                     | TA 4                      | Habitation lava tube                       | Unevaluated            | Unknown     |
| 50-10-31-23854                                     | TA 3                      | Volcanic glass quarry                      | Unevaluated            | Traditional |
| 50-10-31-23856                                     | TA 4                      | Pāhoehoe pits                              | Unevaluated            | Traditional |
| 50-10-31-24326                                     | TA 7                      | Blister cave and pit complex               | Not eligible           | Unknown     |
| 50-80-10-24327                                     | TA 7                      | Cairn                                      | Not eligible           | Unknown     |
| 50-80-10-24328                                     | TA 7                      | Wall, C-shape                              | Not eligible           | Unknown     |
| 50-10-31-26728                                     | TA 5                      | Habitation lava tube                       | Unevaluated            | Traditional |
| 50-10-31-26729                                     | TA 5                      | Habitation lava tube blister               | Unevaluated            | Traditional |
| C-020305-01                                        | TA 22                     | Lava tube                                  | Unevaluated            | Unknown     |
| C-031705-01                                        | TA 22                     | Lava tube                                  | Unevaluated            | Traditional |
| C-031705-02                                        | TA 22                     | Lava tube                                  | Unevaluated            | Traditional |
| C-031705-03                                        | TA 22                     | Lava tube                                  | Unevaluated            | Traditional |
| C-031705-04                                        | TA 22                     | Lava tube                                  | Unevaluated            | Traditional |
| C-031705-05                                        | TA 22                     | Lava tube                                  | Unevaluated            | Traditional |
| C-031705-06                                        | TA 22                     | Lava tube                                  | Unevaluated            | Traditional |
| PL-PTA-02                                          | TA                        | Volcanic glass quarry                      | Unevaluated            | Traditional |
| PL-PTA-03                                          | TA                        | Volcanic glass quarry                      | Unevaluated            | Traditional |
| PL-PTA-04                                          | TA                        | Volcanic glass quarry                      | Unevaluated            | Traditional |
| PL-PTA-05                                          | TA                        | Volcanic glass quarry                      | Unevaluated            | Traditional |
| PL-PTA-06                                          | TA                        | Volcanic glass quarry                      | Unevaluated            | Traditional |
| PL-PTA-029                                         | TA                        | Volcanic glass quarry and artifact scatter | Unevaluated            | Traditional |
| PL-PTA-030                                         | TA                        | Volcanic glass quarry                      | Unevaluated            | Traditional |
| PL-PTA-031                                         | TA                        | Volcanic glass quarry and artifact scatter | Unevaluated            | Traditional |
| PL-PTA-032                                         | TA                        | Volcanic glass quarry and artifact scatter | Unevaluated            | Traditional |
| PL-PTA-033                                         | TA                        | Volcanic glass quarry                      | Unevaluated            | Traditional |
| PL-PTA-034                                         | TA                        | Volcanic glass quarry                      | Unevaluated            | Traditional |

| Known Archaeological Sites within State-Owned Land |          |                                            |                        |             |
|----------------------------------------------------|----------|--------------------------------------------|------------------------|-------------|
| Site Number                                        | Location | Description                                | NRHP Status (Criteria) | Period      |
| PL-PTA-061                                         | TA       | Volcanic glass quarry and artifact scatter | Unevaluated            | Traditional |
| PL-PTA-062                                         | TA       | Volcanic glass quarry and artifact scatter | Unevaluated            | Traditional |
| PL-PTA-063                                         | TA       | Volcanic glass quarry and artifact scatter | Unevaluated            | Traditional |
| PL-PTA-064                                         | TA       | Volcanic glass quarry and artifact scatter | Unevaluated            | Traditional |
| PL-PTA-065                                         | TA       | Volcanic glass quarry                      | Unevaluated            | Traditional |
| PL-PTA-066                                         | TA       | Volcanic glass quarry and artifact scatter | Unevaluated            | Traditional |
| PL-PTA-067                                         | TA       | Volcanic glass quarry and artifact scatter | Unevaluated            | Traditional |
| PL-PTA-068                                         | TA       | Volcanic glass quarry and artifact scatter | Unevaluated            | Traditional |
| T-012805-02                                        | TA 22    | Habitation lava tube                       | Unevaluated            | Traditional |
| T-020305-02                                        | TA 22    | Habitation lava tube                       | Unevaluated            | Traditional |
| T-020701-02                                        | TA 6     | Artifact scatter                           | Unevaluated            | Traditional |
| T-031709-01                                        | TA 18    | Mound                                      | Unevaluated            | Unknown     |
| T-040418-01                                        | TA 1     | USGS survey marker                         | Unevaluated            | Historic    |
| T-041906-01                                        | TA 22    | Habitation lava tube                       | Unevaluated            | Unknown     |
| T-041906-02                                        | TA 22    | Habitation lava tube                       | Unevaluated            | Unknown     |
| T-041906-03                                        | TA 22    | Habitation lava tube                       | Unevaluated            | Unknown     |
| T-043094-02                                        | TA 22    | Habitation lava tube                       | Unevaluated            | Unknown     |
| T-043094-03                                        | TA 22    | Habitation lava tube                       | Unevaluated            | Unknown     |
| T-043094-04                                        | TA 22    | Habitation lava tube                       | Unevaluated            | Unknown     |
| T-043094-05                                        | TA 22    | Habitation lava tube                       | Unevaluated            | Unknown     |
| T-050906-01                                        | TA 22    | C-shape                                    | Unevaluated            | Unknown     |
| T-070104-01                                        | TA 5     | Artifact scatter                           | Unevaluated            | Traditional |
| T-071306-01                                        | TA 22    | Enclosure                                  | Unevaluated            | Unknown     |
| T-080206-01                                        | TA 1     | Enclosure                                  | Unevaluated            | Unknown     |
| T-082217-08                                        | TA 14    | USGS boundary marker                       | Unevaluated            | Historic    |
| T-082306-01                                        | TA 22    | Cairn                                      | Unevaluated            | Unknown     |
| T-082306-02                                        | TA 22    | Modified outcrop                           | Unevaluated            | Unknown     |
| T-082306-03                                        | TA 22    | Lava tube                                  | Unevaluated            | Unknown     |
| T-082306-04                                        | TA 22    | Pāhoehoe pit                               | Unevaluated            | Unknown     |
| T-082306-05                                        | TA 22    | Pāhoehoe pit                               | Unevaluated            | Unknown     |

| Known Archaeological Sites within State-Owned Land |          |                       |                        |             |
|----------------------------------------------------|----------|-----------------------|------------------------|-------------|
| Site Number                                        | Location | Description           | NRHP Status (Criteria) | Period      |
| T-092202-01                                        | TA 3     | Volcanic glass quarry | Unevaluated            | Traditional |
| T-092202-02                                        | TA 3     | Artifact scatter      | Unevaluated            | Traditional |
| T-092202-03                                        | TA 3     | Artifact scatter      | Unevaluated            | Traditional |
| T-092202-04                                        | TA 3     | Artifact scatter      | Unevaluated            | Traditional |
| T-092202-05                                        | TA 3     | Artifact scatter      | Unevaluated            | Traditional |
| T-092899-01                                        | TA 22    | Habitation lava tube  | Unevaluated            | Traditional |
| T-100606-01                                        | TA 22    | Mound                 | Unevaluated            | Unknown     |
| T-100606-02                                        | TA 22    | Mound                 | Unevaluated            | Unknown     |
| T-111402-01                                        | TA 3     | Artifact scatter      | Unevaluated            | Traditional |
| T-111402-02                                        | TA 3     | Volcanic glass quarry | Unevaluated            | Traditional |
| T-111402-05                                        | TA 3     | Volcanic glass quarry | Unevaluated            | Traditional |
| T-111402-06                                        | TA 3     | Volcanic glass quarry | Unevaluated            | Traditional |

### 9.3 Summary

The historic sites in the area illustrate practices related to ethnoengineering traditionally and historically occurred within PTA. While these practices are not currently occurring, the resurgence of these activities throughout the islands creates the possibility for these practices to take place within PTA in the future.

**Project Area:** Within the project area, there is archaeological evidence of the practice of uhuu humu pohaku. It is likely that many structures built in the project area or larger geographic extent utilizing this method were lost over time, either through ranching activities or military use of the land. Throughout Hawai'i Island and the Hawaiian Islands generally, the practice has enjoyed contemporaneous resurgence, with young practitioners being trained in this skill across all islands.

**Geographic Extent:** Uhuu humu pohaku also existed across the larger geographic extent, although, like within the project area, structures were likely lost to ranching and military activities. While there is a cultural resource program that maintains some of these cultural sites, there is no record that the military has allowed for the contemporaneous use of PTA for these specific cultural activities.

Dry-stone stacking would have been a valued skill in both the traditional era and historic era. It would have aided in the creation of ahu or other sites within the traditional era, and it would have also been employed in the creation of temporary habitation. In the historic era, these skills would have been important to protecting or managing wild animals that were prevalent throughout the region.

The State of Hawai‘i Department of Transportation has an “Ahu Program” which is identified as “a partnership between HDOT and local communities to guide the installation process of signs and/or stone ahupua‘a boundaries on State roads. The installation of ahupua‘a markers through this program is a voluntary community effort towards recognizing the traditional geographic boundaries of our islands” (HDOT, 2012: 8). The express benefits of the program are:

Acknowledge and re-establish traditional ahupua‘a boundaries and the place names of Hawai‘i.

Promote public awareness and appreciation for Hawai‘i’s culture, wisdom and sustainable land management practices.

Encourage mālama ‘āina (taking care of the land).

Make Hawai‘i’s roads local.

Provide a framework for understanding the land, its contemporary and traditional cultures, and its ecological history.

This opportunity would be potentially available to practitioners adjacent to the project area along DKI Highway, State Route 200.

*Table 19. Archaeology, Ethnoarchaeology, and Ethnoengineering Practices Associated with the Project Area and Frequency over Historic Eras*

| <b>Cultural Practice</b> | <b>Traditional Pre-Contact Era (prior to 1778)</b> | <b>Historic Post-Contact Era (1778-1943)</b>           | <b>Contemporaneous Era (1943 – current)</b>                                                         |
|--------------------------|----------------------------------------------------|--------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| <b>Uhau Humu Pohaku</b>  | Regularly practiced                                | Regularly practiced                                    | Practice in project area limited by Army control of land; regularly practiced in surrounding region |
| <b>Parietal Art</b>      | Evidence of practice, frequency undetermined       | Practice declined due to introduction of foreign goods | Not actively practiced; limited information about current practice                                  |

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## 10.0 ETHNOMUSICOLOGY

This section looks at the ways in which music served as a pedagogical device and means of transmitting Hawaiian epistemology. As with many indigenous groups that relied on oral traditions for the preservation of traditional ecological knowledge, music has been a critical traditional and customary practice in Hawai'i for generations.

### 10.1 Associated Traditional or Customary Practices

Composers draw inspiration from numerous places, including experience and location. Access to place is important to compose songs and chants, and hula (dances) are often inspired by specific places. The height of a mountain or interpretation of wind is directly correlated to the precise location of a practitioner when the song, chant, or dance is being created. Therefore, the ability to create songs, chants, and dances for a particular area is dependent upon the ability to access a specific area.

#### 10.1.1 Haku Mele and Haku Oli

This practice is related to the composition of song and chants. This is a practice that has existed for many centuries in the Hawaiian culture. When the Hawaiian culture primarily relied on an oral tradition to pass on knowledge and information, the ability to create songs and chants was essential to pass information from one generation to the next.

Songs and chants are largely influenced by the environment around them. As a pedagogical device it was important if not imperative that these songs or chants effectively captured data from the environment around the composer and passed on this information for others to utilize when managing natural resources. In a very real sense, the land and natural resources act as a muse for composers. The category of songs that provide information on or speak to natural resources are called mele 'āina (songs of the land). As shown in the previous section, there are numerous traditional chants and songs about the project area and its surrounding landscape. As we have seen in recent years, this particular landscape continues to inspire composers to write new chants and songs about this resource.

##### 10.1.1.1 *Queen Emma's Ascent of Mauna Kea (1882)*

One of the significant historical accounts of travel to Mauna Kea is associated with a journey made by the Dowager Queen Emma (Rooke) Kaleleonālani in 1882. It is an important account, as it is still discussed by the descendants of participants in the trip, some of whom carry names commemorating the journey, and because it is also celebrated in a number of mele (chants).

The trip of Queen Emma to Mauna Kea to see (actually to conduct a ceremonial bath in) Waiau is one of significant symbolism. It is believed that the Queen sought to demonstrate her lineage and godly connections, and to perform a ceremonial cleansing in the most sacred waters of Kāne. The mele composed as a result of the trip refer to Mauna Kea as the piko (summit, symbolically, the cord which connects Hawai'i to the heavens) of Wākea, and also reference a number of named places on this cultural landscape, including Ahumoa, Waiki'i, Pu'u Mau'u, Pu'u Kapele, Kalai'eha and others.

A short article published in the native newspaper *Kuokoa* (translated by K. Maly) documents the trip made by Queen Emma to Kohala in the company of Princess Likelike (sister of King David Kalākaua and then Princess Lili'uokalani), and announced the completion of the trip (Maly 2005: 155-161):

***Ka Nupepa Kuokoa***

**Emma Kaleleonalani Ma Kohala**

**Okatoba 14, 1882 (aoao 2)**

Ma ka Poalima o ka pule i hala, ua malamaia he papaina nui ma Halawa, ma ka hale noho o H. Hook, no ka Moiwahine Emma Kaleleonalani, a mahope o na hoohialaai ana, ua kamoe aku la ka huakai alii ma ia ano liula a moe ma ia po ma ka home noho o James Kaai. Ua nui na hoohiwahiwa a na makaainana oia apana ma ia po. Ma ka Poaono ae ua moe ma kahi o J. Kekipi, elua la ma ia wahi, a ma ka Poalua ae, ua kamoe hou ka huakai alii, a moe ma kahi o Kamauoha opio. Ma ia po ia haawai ia he papaaina nui loa i hiki aku ka huina nui o na \$1,000 e kekahi mau keiki lalawaia oia apana.

Ma ka Poakolu ae, ua kamoe hou ka huakai alii no Waimea, a hooluolu ma ia po ma ka home noho o J. Parker. Ma ka auina la Poaha, ua hele hou ka huakai no ka mauna, a moe ma Mana,

**Emma Kaleleonalani at Kohala**

**October 14, 1882 (page 2)**

Last week Friday, there was a large banquet at Halawa, at the residence of H. Hook, for Queen Emma Kaleleonalani, following the pleasantries, the royal party proceeded to, and spent a pleasant night at the home of James Kaai. There were many displays of affection given at that place that night. On Saturday, next, they slept at J. Kekipi's, spending two days there, and on Tuesday, next, the royal procession went to the place of Kamauoha, Junior. On that night there was a great banquet given, where was gathered \$1,000 from some of the fishermen of the district.

On Wednesday, next, the royal procession went on to Waimea, and was made comfortable in the home of J. Parker. On the afternoon of Thursday, the procession went on

ma kekahi la hoi hou no kai o Waimea, a no kahi la ae, kamoe hou ka huakai no Waiau, ma ka mauna. He oluolu ke ola o ke lii, a me na hoahale, ua huipu keia huakai alii me ke kama alii Likelike, ma keia huakai makaikai. J.K.

towards the mountain, and rested at Mana. On the next day, they went again to Waimea for the day. The procession then set out for **Waiau**, on the mountain. The health of the queen and her traveling companions is good. This royal site-seeing procession was joined by the Princess Likelike. J.K.

Around the time of Queen Emma's trip to Kohala, Mauna Kea, and the waters of Waiau, haku mele (composers of chants and songs), recounted the events, scenery, and significance of the journey in a series of mele. A number of these mele are housed in the collection of the BPBM, and have been published in *He Lei no 'Emalani* (2001). Selections from the collection of mele – one, directly from the museum collection (translated by Maly in 2000), and the others published in 2001 – focusing on places visited on and around Mauna Kea, follow below. The translations from *He Lei no Emalani* were prepared by Mary Kawena Pukui, Theodore Kelsey, and M. Puakea Nogelmeir (2001). Annotations have been added at a few lines where place names of Mauna Kea and the 'āina mauna occurred and were not recognized at such at the time of publication.

**1882**

**He Inoa Pii Mauna no Kaleleonalani (Na Kaniu Lumaheihei o Kapela i haku) In the Name of Kaleleonalani, Ascending the Mountain (Composed by Kaniu Lumaheihei Kapela)**

*Kaulana ke anu i Waikii*

*Oo i ka ili o ka Lani*

*E aha ana la Emalani*

*E walea a nanea ae ana*

*I ka leo hone o ka Palila*

*Oia manu noho Kuahiwi*

*Kikaha o ka Iwi-Polena*

*Ko Hoa ia e like ai*

*Hoolulu Kapena Kaulani*

*Ina ae hoi kakou*

*Kaalo ana Ahumoa mamua*

*A kau i ke one heehee*

Famous is the cold of Waiki'i,

Piercing the skin of the Chiefess.

What is it that Emalani is doing?

Relaxing and enjoying,

The sweet voices of the *Palila*,

Those birds that dwell upon the Mountain

The 'Iwi-polena soars overhead,

It is like your companion.

Captain Kaulani called us to shelter,

If we should continue.

We then passed before Ahumoa,

*A imua, a i hope o ka Lani*

He ihona loa ana Kilohana  
Noho ana o Pumauu i ka lai  
Au mai ana o Puukapele  
*Kaala i kuu maka ke aloha*  
Komo i ka olu o Kalaieha  
Eia mai ke Kuini Emalani  
Ua wehe i ka pua mamane

*E o ke Kuini Emalani*  
*Kaleleonalani he Inoa*

*Hau kahiaka nui 'o Kalani*

*I ka huaka'i māka'ika'i*  
*Inā kākou e 'apa nei*

*Nā ukali o ke Kuini Emalani*  
A kau i Kala'i'ehā pu'u  
'Alo mai huikau [Huikau<sup>29</sup>] i ke anu

*Huikau ka helena, e Kalani*  
A kau i Pu'uho'okomo  
*Kā'alo ana 'o ka 'ōnū*  
*Molemole o ka'e koa*  
*Li'u nā keiki o ke anu*

*Ho'olale ke kaula 'ili pipi*  
Ka lelena o ku'u kīpuka

Rising to the sliding cinders  
(Onehehe'e).

The Chiefess moved forward and  
backwards.

Descending the length of Kilohana.

Pu'u Mau'u sits in the calm,

Pu'ukapele juts out,

My eyes rise up with love.

We entered the cool of Kalaieha,

Here is Queen Emalani

The blossom of the māmane has  
opened.

Respond Queen Emalani

Kaleleonalani is the name.

[BPBM Archive, Mele Collection, call  
#fHLM50; Maly, translator]

The Royal One rises like an early  
morning dew

On a journey to tour and visit

We who are dallying should get in  
motion

The attendants of Queen Emalani

And rising on the hill, Kala'i'ehā

Huikau is there in the presence of the  
cold<sup>33</sup>

The travel is uncertain oh Royal One

Until we rise onto Pu'uho'okomo

The rise has passed on by

Lingering along the fringe of the koa<sup>34</sup>

The children of the cold are slow  
moving

The cattle whip urges us on

<sup>29</sup> Huikau is the name of a prominent pu'u, a short distance east of Kalai'eha pu'u. So named because when the mists settle on the ground, travelers are easily confused by the contours of Pu'u Huikau, and have been known to wander about in confusion.

<sup>33</sup> The translation of this line is modified from the 2001 text to take into account the place name of Huikau.

<sup>34</sup> The translation of this line has been modified from the 2001 text to fit more in the context of the region. Humu'ula being the land on the fringe of the sheltering koa trees.

*Hāwele pa'a i ka 'ōkumu  
E ake aku ana 'o Kalani  
'O ka 'ike maka iā Waiau  
Kau pono i ka piko o Wākea*

*I ka hena o nā kuahiwi  
E ō ke Kuini Emalani  
Kaleleonālani he inoa.*

*A Maunakea 'o Kalani  
'Ike maka iā Waiau  
Kēlā wai kamaha'o  
I ka piko o ke kuahiwi  
Huli ho'i mai 'o Kalani  
I ke ala kāpekepeke  
A he ala nihinihi ia  
A hiki a i ka mole [Kamole or  
Kemole<sup>30</sup>]  
Ui a'e nei o'o Kalani*

*"E 'uleu mai 'oukou"  
"He ihona loa ana ia"  
"A hiki i Wahinekea"  
'Emalani nō he inoa  
Ke ali'i 'a'e kuahiwi.*

*...Ō mai 'o Emalani ke ali'i nona ia inoa*

*Ia hana i Waimea i ke kapa a ka ua*

*I kukua mai e Lilinoe*

My lasso is flying  
Lashed tightly to the pommel  
Her Highness has a great desire  
To see Waiau with her own eyes  
There at the navel of Wākea, the sky  
father  
In the hollow of the mountain peaks  
Respond, oh Queen Emalani  
Kaleleonālani, a name song. [page  
112]

The Royal One is at Maunakea  
To see the lake, Waiau  
The amazing body of water  
At the very peak of the mountain  
The Royal One turned to come back  
Along that unwieldy path  
And it is a narrow, treacherous trail  
To reach Kemole<sup>35</sup>

And the Royal One offered  
encouragement  
"Be lively, all of you"  
"It will be a very long descent"  
"To reach Wahinekea<sup>36</sup>"  
For Emalani indeed, a name song  
For the chiefess who traverses the  
mountains. [page 115]

Emalani responds, the chiefess for  
whom is the name  
That activity at Waimea in the blanket  
of the rain

<sup>30</sup> Kemole (Kamole), a pu'u and gulch near the boundary of the forest and open mountain lands, on Mauna Kea, towards the Waimea side of the mountain. Kemole also marked the path taken by Queen Emma on her ascent of Mauna Kea.

<sup>35</sup> The translation of this line has been modified from the 2001 texts to take into account the place name Kemole.

<sup>36</sup> Wahinekea is a generally flat land area, with scattered hills, between Kemole and Mānā, where J. Parker's house was situated.

|                                                   |                                                                                      |
|---------------------------------------------------|--------------------------------------------------------------------------------------|
| <i>I humu 'ia mai e Kūkahau'ula</i>               | Beaten out as a coverlet by Lilinoe                                                  |
| <i>E ka piko lālāwai o nā mana'o ā</i>            | Sewn together by Kūkahau'ula                                                         |
| <i>E ka wai māpuna o ke kuahiwi</i>               | By the fertile center of the thoughts,<br>ah                                         |
| <i>I hū nō piha i luna o Paliāhu [Poliahu]...</i> | By the upwelling waters of the<br>mountain                                           |
| ...Ka helena a Kalani 'imi pono                   | Which gushed forth to overflowing<br>atop Poliahu... [page 180-181]                  |
| <i>Ua wehe mai nā kumu lani</i>                   | ...On the journey of Her Highness who<br>strives for goodness                        |
| <i>Ua ahuwale ka pae 'ōpua</i>                    | The foundations of the heavens have<br>opened                                        |
| <i>Ua kāla'e nā kualono</i>                       | The banks of the clouds are in clear<br>view                                         |
| <i>Ua lono Hawai'i a puni</i>                     | The mountain ridges are prominently<br>visible                                       |
| <i>I ka huaka'i māka'ika'i</i>                    | Throughout Hawai'i, all have heard                                                   |
| <i>Uluhua 'o Kalani i ka lono</i>                 | Of this famous sightseeing tour                                                      |
| <i>Ke kaulana o Kawaihū</i>                       | Her Highness is vexed at the rumor                                                   |
| <i>Ia wai ia ka lo'u pali o ka pali</i>           | Of the fame of Kawaihū                                                               |
| <i>Ka houpo o Kāne<sup>31</sup> ka i luna</i>     | That water on the hanging brink of the<br>cliff                                      |
| <i>'O ka lua kā ko'i<sup>32</sup> ka i lalo.</i>  | Ka houpo o Kāne lies there above<br>Kaluakāko'i lies below. <sup>37</sup> [page 201] |

### 10.1.2 Hula

Much like mele and oli, hula serves as a way of both honoring place and telling the story of place. Many hula, especially those based on mele 'āina, require intimate understanding of the place where the mele was composed, including the natural elements of that 'āina.

<sup>31</sup> Ka-houpo-o-Kāne (lit., The-bosom-of Kāne), is the sacred region of Mauna Kea (between the 10,000-11,000 foot elevation), in which are found the springs fed by Ka-wai-hū-a-Kāne; by a rivulet from Waiau to the head of Pōhakuloa Gulch.

<sup>32</sup> Ka-lua-kā-ko'i (the adze makers quarries), covering a region around Mauna Kea, extending from around the 10,000 to 12,000 foot elevation, and covering some seven miles of the mountain landscape.

<sup>37</sup> The translation has been modified from that given in the 2001 texts to take into account the place name, Kaluakāko'i.

Hula hālau will regularly take huaka‘i, or journeys, to visit and honor the place a particular mele speaks of. The ability to visit the place and learn about it is important to the practice of hula.

Hula, as well as mele or oli, are also offered as gifts to kupuna or gods. This practice also requires access to traditional sites. Associated with hula would have been the practices of lei making and the use of plants to dye clothing, both practices were identified through the ethnographic data collection (see **Section 6**, Ethnobotany).

## 10.2 Cultural Resources

Cultural resources associated with these practices are the mele themselves (as opposed to the act of creating or writing mele). Through mele, documentation of how Hawaiians and other ethnic groups saw the area, identified its valued resources, and passed down knowledge from one generation to the next are evident. Mele serves as an important repository of traditional knowledge.

### 10.2.1 Mele

Honua Consulting completed searches of mele written about the project area, Maui historian Inez Ashdown wrote in 1976 about the importance of mele:

The natives of Hawai‘i Nei saw the Creator in everything and the Haku Mele or Music Masters delighted in presenting the chants and songs, mele and oli, to inspire the people. Such mele tell of God’s assistant spirits which, to the imaginative natives, represented the winds, rains, and so on. Each spirit of creation was depicted as male or female and was given a personality and a name indicative of purpose. Hence the name of the volcanic action creating and cleansing the earth. She is beautiful, alluring, desirable. She also is unpredictable because she is temperamental and usually full of fiery emotions. She is an old woman asking help when she lies to test mortals, and woe betide anyone who is rude or inconsiderate of this form of an older person to whom respect and Aloha must be given (Ashdown, 1976:3).

The following are a selection of mele relevant to the project area.

#### 10.2.1.1 “Pōhakuloa” by Gary Haleamau and Keala H. Lindsey

Pōhakuloa nānea ia

Pōhakuloa nahenahe mai, nahenahe mai

Ke ola mau loa me ke aloha

Pōhakuloa nahenahe mai, nahenahe mai  
Pōhakuloa me Mauna Kea  
me Mauna Loa nahenahe mai, nahenahe mai

Pōhakuloa pāhoehoe pōhaku Pele  
Ala nui ki kie kie nānea ise mālīe, nānea ise mālīe

Hā'ina 'ia mai ana ka puana  
Pōhakuloa nahenahe mai, nahenahe mai

Hā'ina 'ia mai ana ka puana  
Pōhakuloa nahenahe mai

This mele is what is called a “wahi pana” or a song written for a particular place. The composer of this mele wrote of this sacred wahi pana called Pōhakuloa. So extremely still and relaxing is this area situated between Mauna Kea and Mauna Loa that the composers close every verse with nahenahe mai or nanea ise malie, nahenahe mai meaning soothing to the ear or gently calling to my heart and nanea ise malie meaning relaxing and peaceful. Pōhakuloa was also known to be the road traveled and frequented by the goddess Pele as written in the fourth verse. The composers use the different types of lava flow left by Pele along the roadway.

**10.2.1.2 10.2.1.2 “Pu’u Huluhulu” by Eliza Ha’aheo**

|                                    |                                                       |
|------------------------------------|-------------------------------------------------------|
| Ho’omakaukau ko kaula ‘ili         | Make ready your lariat                                |
| I luna o ka pu’u Kanakaleonui      | Put it over the throat, of the man with the big voice |
| Ho’olohe i ke kani o nā manu       | Heed the cry of birds                                 |
| O never mind ua hina pū ua hiki nō | Never mind, you will fall, it is done                 |
| O never mind ua hina pū ua hiki nō | Never mind, you will fall, it is done                 |
|                                    |                                                       |
| O ‘oe ka i huia ihola              | You are the one who was met                           |
| Ka mana’o e pua pua’i ‘ala         | My constantly recurring thought                       |
| Eia o Pu’uohulu                    | Here is a group of special people                     |
| Ulu nō wau ua hiki nō              | I am inspired, it is done                             |
| Ulu nō wau ua hiki nō              | I am inspired, it is done                             |
|                                    |                                                       |
| I loko o ka ulu la’au              | There in the forest,                                  |
| E ki’i ana i na pipi kuni’ole      | Catching the unbranded cattle                         |
| Ho’olei i hola ke kaula ‘ili       | Caught by the throw of the rawhide rope               |
| O never mind a komo ‘oe a komo’ole | Never mind if you come in or not                      |
| O never mind a komo ‘oe a komo’ole | Never mind if you come in or not                      |
|                                    |                                                       |
| Pa’a hola ka pipi kuni’ole         | The unbranded steer is held tight                     |
| Ho’opili i ke kumu mamane          | Bound to the mamane tree                              |
| Pa’a hola ka lio i ka alu          | The horse holds fast to the slack                     |
| O never mind a lilo ‘oe pau ela no | Never mind if it’s lost to you, that’s how it is      |
| O never mind a lilo ‘oe pau ela no | Never mind if it’s lost to you, that’s how it is      |
|                                    |                                                       |
| Kau mai ka hau o Mauna Kea         | The snows settle on Mauna Kea                         |
| Ka makani hu’ihu’i ke kino         | The cold wind is upon the body                        |
| E huli ho’i nei kēia               | So this one turns to go back                          |
| O never mind a ho’i au a ho’i’ole  | Never mind if you return or not                       |
| O never mind a ho’i au a ho’i’ole  | Never mind if you return or not                       |

There are a few names for this song that were used throughout the generations in Hawaiian mele. Some call this song, “Kaula’ili”, while other may refer to this song as “Pu’u Huluhulu” or “Pu’uohulu”. This is a mele written about the Paniolo back in the 1800’s when cattle ranching was prominent along the slopes of Mauna Kea, Mauna Loa, and the Kohala mountains. Stories of the paniolo and their prowess were known throughout the islands as they were the epitome of desire among the young ladies in the various towns. These paniolo would spend many consecutive days and nights tending to the cattle while they grazed the hillsides, so this mele was written to tell the story of their experiences while tending the

herd. It was a lot of work, but the story goes that when they saw the Pu'uohulu, or Pu'uhuluhulu, the hill with the fur, they knew that they were heading home, so this mele was written particularly for the area at the base of Mauna Kea. This area was known to have many bald cinder coned hills, but only one cinder cone was covered in trees. The paniolo referred to this tree covered hill as Pu'uohulu or Pu'uhuluhulu or the hill with the fur. When they saw this hill, they knew they were heading back home which excited not just the paniolo but also the cattle. They would make their way down the slopes of Mauna Kea at break-neck speed with wild steer in tow heading back to the pasture lands of Waimea and Waiki'i.

### **10.2.1.3 "Poli'ahu" by Frank Kawaikapuokalani Hewett**

Wai maka o Poliahu, I ka 'eha a ke aloha  
Kaumaha i ka ha'alele, O 'Aiwohikūpua

Anuanu ka 'iu kēhau, O Mauna Kea  
A'ohe āna ipo aloha, E ho'opumehana

Kau mai ka hali'a aloha, O ka wā mamua  
Pū'olu ka wai o Nohi, Ku'u mehameha

He lei ko aloha, No ku'u kino  
Pili poli hemo'ole, No nā kau a kau

Hui:

Ho'i mai (e ho'i mai)

E ku'u ipo

E ho'i mai (e ho'i mai)

E pili kāua

E ho'i mai (e ho'i mai 'oe)

E ho'i mai 'oe ē, ē

E ho'i mai 'oe

Poli'ahu is the snow goddess of Maunakea. This mele speaks of 'Aiwohi, a chief from the island of Kaua'i who started a journey to meet the beautiful princess, Lā'ieikawai, in Puna. On this journey he meets the beautiful Hina, a chiefess from Hāna Maui, falls in love with her, and promises to marry her when he returns from Puna. While returning to Kaua'i from Puna, he passes by the cliffs of Hāmākua and notices a beauty reclined upon the cliffs—the snow goddess Poli'ahu. 'Aiwohi propositions the snow goddess into marrying him, but she reminds him of his promise to marry the chiefess Hina. He breaks his vow to Hina, marries Poli'ahu, and return with her to the island of Kaua'i. Upon hearing of the marriage of her beloved 'Aiwohi and Poli'ahu, Hina heads to Kaua'i and confronts her betraying lover and his new

wife. Hina shames 'Aiwohi for breaking his promise to her and requires Poli'ahu to return to Mauna Kea. The first line of this mele says, "Waimaka o Poli'ahu, i ka 'eha ke aloha." Poli'ahu weeps from the pains of love. She returned home heartbroken and those tears fell as snow upon Mauna Kea, Mauna Loa, and Hualālai. Legend says that when all three mountains are blanketed with snow, Poli'ahu is reminded of her lover 'Aiwohi, and she weeps for him.

#### **10.2.1.4 "He Aloha Waiiau" by Frank Kawaikapuokalani Hewett**

He aloha Waiiau e ka wai 'olu ē

Ka wai kamaha'o lā i ka mauna ē

I ka mauna 'oe a Wākea ē

Kehakeha lā i luna i ke kapu ē

Hui:

E ō ē, e Waiiau ē

Ka wai kamaha'o lā, ka wai aloha ē

Kapu ka nohona i ke anu ē

I ke anuanu lā o ka kēhau ē

Kēhau ka pua o ka māmane ē

He māmane kou aloha pili poli ē

Me Poli'ahu 'oe i ka wao akua ē

I ka maluhia la me ka 'ōpua ē

Puana me ke aloha no Waiiau ē

Ka wai kamaha'o lā i ka mauna ē

This is a mele inoa for the goddess of Lake Waiiau, situated at the top of Mauna Kea, also known by the name Kawaikauikeaoiluna. She is one of the beloved sisters of the snow goddess, Poli'ahu.

Like the calming waters, her character is gentle and soothing, and she has the power to heal and revive life.

Lake Waiiau is a very integral part of the aquifers upon the island. This lake collects the snow that melts from atop Mauna Kea and enters the groundwater system to feed the island fresh

water.

This mele also references the wao akua which was explained earlier in the report. The use of this term in the mele is an example of Native Hawaiian personal and interpersonal relationships, and celebrates the idea that the wao akua is the playground of the gods, and not of man, forbidden and held sacred to the gods. This wao akua of Mauna Kea was the home of the three deities of the snow: Poli'ahu, Lilinoe, and Waiau.

#### **10.2.1.5 “Nā Kuahiwi ‘Elima” by Helen Desha Beamer**

Hoihoi ka pi'ina a'o Waimea  
I ka pā mai a ke kēhau anu  
'Akahi ho'i au a 'ike maka  
I nā wailele pālua i ka pali a'o Waipi'o  
I nā wailele pālua i ka pali a'o Waipi'o

Kilakila Mauna Kea me kona nani  
Helu 'ekahi o ke ki'eki'e  
Pili mai Mauna Loa mauna kamaha'o  
Home noho a ka wahine Pele mai Kahiki  
Home noho a ka wahine Pele mai Kahiki

Hanohano Hualālai e kū mai la  
E ho'ohiwahiwa ana a i nā Kona  
Aia lā nā kuahiwi o Kohala  
Ke holo a'ela mai uka a ke kai  
Ke holo a'ela mai uka a ke kai

Ma'ō aku o 'Alenuihāhā  
Haleakalā o Maui o Kama  
Ha'ina ka puana i lohe 'ia  
Mahalo i ka nani o nā kuahiwi 'elima  
Mahalo i ka nani o nā kuahiwi 'elima

This mele speaks of a car ride from Hilo to Kawaihae. Helen Desha Beamer is known to write some of the most beautiful mele from the island of Hawai'i, and within her mele, she often speaks in great detail of what she sees and feels when she views something; and in this she feels marvelous. On this ride, her eyes fall upon the resplendent mountains of Mauna Kea and Mauna Loa as the car climbs up the Hāmākua Coast, soon to be met by the Kohala mountains rising from the sea and then the majestic Hualālai mountains. There came a point on this road trip where she sights the Alenuihaha channel and, across the water, glimpses

Haleakalā on the island of Maui. It was at that point that in which Mrs. Beamer noticed that all the mountains were in plain sight almost in a straight line—Mauna Loa, Mauna Kea, Hualālai, Kohala, and off in the distance, Haleakalā—as she ends the song with this phrase: “worthy admiration for the beauty of the five mountains.”

### **10.2.1.6 “Lilinoe” by Kawaikapuokalani Hewett**

Nani wale ku‘u ‘ike iā ‘oe e Lilinoe

I ka nu‘u ‘oe o ka mauna  
E Lilinoe-i-ka-manomano-wai

Hui:  
He aloha iā ‘oe e Lilinoe  
He aloha, he aloha iā ‘oe  
Ka wahine kū i ke kualono Ka beauty o ka pua māmāne

Wai‘olu ku‘u mana‘o  
Me ka wai a o Waiāu  
Ka wai kau i ke ao lani Wai ho‘ōla i ka wao akua

Kū ka hau ‘ula i ka luna  
I ka piko o Wākea  
He kilohana e ho‘opumehana Poli‘ahu ‘ia maila me ke aloha

Puana ku‘u ‘ike iā ‘oe e Lilinoe I ka nu‘u ‘oe i ka mauna  
E Lilinoe-i-ka-manomano-wai

To complete the trilogy of the goddesses of the snow on Mauna Kea, Kawaikapuokalani wrote of Lilinoe, the goddess of the mist. Her presence is known as misty cloud that wraps around the summit of Mauna Kea like a lei, often engulfing the low-lying areas of Mauna Kea and Pōhakuloa with a very chilly mist. Again, the phrase is used in this mele of “wao akua,” referring to the home of the three sisters as the realm of the gods.

## **10.3 Summary**

Within the project area, there are mele that speak of the deities of the mountains, the importance of the mountains, the tradition of horseback riding, and Pōhakuloa as the land of Pele. This practice would have been common throughout the traditional era, but it also enjoyed wide practice during the historic era as paniolo were widely known as musicians thanks to the introduction of foreign music instruments.

Within the larger geographic extent, a picture of how Hawaiians viewed the region as a storied place (wahi pana) where stories of Hawaiian gods, like Poli’ahu, the snow goddess of Maunakea, unfolded. Many continue to be written about and within the areas adjacent to the geographic extent, within the ahupua’a that the project is being proposed. The land and resources have long served as muses for haku mele, inspiring new mele.

*Table 20. Ethnomusicology Practices Associated with the Project Area and Frequency over Historic Eras*

| <b>Cultural Practice</b>                              | <b>Traditional Pre-Contact Era (prior to 1778)</b>         | <b>Historic Post-Contact Era (1778-1943)</b>               | <b>Contemporaneous Era (1943 – current)</b>                                                         |
|-------------------------------------------------------|------------------------------------------------------------|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| <b>Haku mele and haku oli</b>                         | Regularly practiced                                        | Regularly practiced                                        | Practice in project area limited by Army control of land; regularly practiced in surrounding region |
| <b>Hula (including lei making and clothes dyeing)</b> | Limited information about practice, frequency undetermined | Limited information about practice, frequency undetermined | Practice in project area limited by Army control of land; regularly practiced in surrounding region |

## 11.0 COSMOLOGIES, GENEALOGIES, AND RELIGIOUS PRACTICES

In the Hawaiian world view, natural and cultural resources were treated alike, the well-being of one depended upon the well-being of the other. Native traditions describe the formation of the heavens, the islands, and all forms of life and nature, in the context of a genealogy, and the birth of children.

### 11.1 Associated Traditional or Customary Practices

Traditional or customary practices associated with cosmologies, genealogies, and other religious practices are complex, largely because of the connection of these practices and the careful way such knowledge was shared among Hawaiians. The kapu system, which is a regulatory system by which management occurred throughout the islands, often limited the way in which information was shared and who it was shared with. Over time, a considerable amount of information about the spiritual or religious practices of Hawaiians would become more widely shared, although many kupuna and practitioners are still careful sharing sensitive information. Practices or customs that are associated with these activities include:

- Cosmologies and Genealogies
- Mālama Iwi (caring for human remains and/or funerary objects)
- Ceremonial Practices
- Hana Kahuna

#### 11.1.1 Cosmologies and Genealogies

The epic “Kumulipo,” a Hawaiian Creation Chant, was translated by Martha Warren Beckwith (1951). The pule (prayer) was given, in ca. 1700, at the dedication of the new-born chief, Ka-ʻī-i-mamao, also known as Lono-i-ka-Makahiki. Beckwith described the pule:

The Hawaiian *Kumulipo* is a genealogical prayer chant linking the royal family to which it belonged not only to primary gods belonging to the whole people and worshiped in common with allied Polynesian groups, not only to deified chiefs born into the living world, the Ao, within the family line, but *to the stars in the heavens* and the plants and animals useful to life on earth, who must also be named within the chain of birth and their representatives in the spirit world thus be brought into the service of their children who live to carry on the line in the world of mankind... (Beckwith, 1951:8)

Beckwith's primary resources for the "Kumulipo" came from the papers of King David Kalākaua, his sister, Queen Lili'uokalani, who published the "Kumulipo" in 1897, and papers of Prince Jonah Kūhiō Kalaniana'ole.

In her introduction to the "Kumulipo," Queen Lili'uokalani observed that the language was itself at times difficult to translate, "because the true significance has been lost" (Liliuokalani, 1897). Of Hawaiian practices of navigation and knowledge of the heavens, stars, and world around them, she also observed that "the ancient Hawaiians were astronomers, and the terms used appertained to the heavens, the stars, terrestrial science, and the gods" (Liliuokalani, 1897).

Ka-'ī-i-mamao was the son of Keawe-i-kekahi-ali'i-o-ka-moku and Lono-ma-'ī-kanaka. She noted that the "Kumulipo" was:

"A prayer of dedication of a chief, A *Kumulipo* for Ka-'I-amamao and (passed on by him) to Alapai'i-wahine (woman)..." "An ancient prayer for the dedication of the high chief Lono-i-ka-makahiki to the gods soon after his birth..." (Beckwith, 1951:8)

This chant of Kumulipo is the chant recited by Pu'ou to Lono (Captain Cook) as he stood while a sacrifice of pork was offered to him at the *heiau* of Hikiau at Kealakekua.

The priest had said at the time of Ka-'I-'i-mamao's death that Lono would come again, that is, Ka-'I-'i-mamao, and would return by sea on the canoes 'Auwa'alalua.

That was why Captain Cook was called Lono... (Beckwith, 1951:10) [page 5]

Another Hawaiian genealogical account, records that Wākea (the expanse of the sky – the male) and Papa-hānau-moku (Papa, who gave birth to the islands – the female) – also called Haumea-nui-hānau-wāwā (Great Haumea, born time and time again) – and various gods and creative forces of nature, gave birth to the islands. Hawai'i, the largest of the islands, was the first-born of these island children. The birth of the islands is commemorated in various mele ko'ihonua, chants describing the forming of the earth. One such mele includes the following lines:

|                                         |                                    |
|-----------------------------------------|------------------------------------|
| 'O Wākea Kahikoluamea ea,               | Wākea the son of Kahikoluamea,     |
| 'O Papa, Papa-nui-hānau-moku ka wahine; | Papa, Papa-nui-hānau-moku the wife |
| Hānau o Kahiki-kū, Kahiki-moe           | Kahiki-kū and Kahiki-moe were born |
| Hānau ke 'āpapanu'u,                    | The upper stratum was born,        |

|                                                                                               |                                                                                                                                                          |
|-----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hānau ke ‘āpapalani,<br>Hānau Hawai‘i i ka moku<br>makahiapo,<br>Ke keiki makahiapo a lāua... | The uppermost stratum was born,<br>Hawai‘i was born, the first-born of<br>the islands,<br>The first born child of the two... (S.M.<br>Kamakau, 1991:126) |
|-----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|

As the Hawaiian genealogical account continues, these same god-beings, or creative forces of nature who gave birth to the islands, were also the parents of the first man (Hāloa), and from this ancestor all Hawaiian people are descended (cf. David Malo, 1951; Beckwith, 1951 & 1970; Pukui and Korn, 1973). It was in this context of kinship, that the ancient Hawaiians addressed their environment, and it is the basis of the Hawaiian system of land use. Importantly, in these genealogical accounts, Mauna Kea is referred to as “Ka Mauna a Kea” (Wākea’s Mountain), and it is likened to the first-born of the island of Hawai‘i (cf. Pukui and Korn, 1973).

A mele hānau (birth chant) for Kauikeaouli (Kamehameha III), who was born in 1814, describes the chiefly lineage in the context of creation and genealogy spanning – the heavens; placing the sun above; the spirit realms and physical earth – land and ocean forms; the birth of the island of Hawai‘i; and subsequent birth of Mauna Kea, as the son of Wākea. Excerpts from the mele, published in several issues of the *Ka Nupepa Kuokoa*, in 1866, follow below:  
Ka Nupepa Kuokoa

No Kalani “Kauikeaouli Kamehameha III.”

March 24, 1866 (page 4)

|                                     |                                                                                  |
|-------------------------------------|----------------------------------------------------------------------------------|
| O hanau ka po ia luna,              | Born was the night above,                                                        |
| Hanau ka po i luna nei,             | Born was the night up here.                                                      |
| O lani hanee ka po o pinai ke ewe,  | The heavens slid away into the night,<br>swift came the afterbirth.              |
| O pipili ka po o moe anaana le‘a,   | The nights came closer together,<br>stretching along until came a<br>separation. |
| O koho ana le‘a ka po o Mahinale‘a, | Making distinct the night of Mahinale‘a                                          |
| O huli e ka po o kaawale ka pili,   | The night turned, closeness became<br>separated.                                 |

|                                            |                                                                           |
|--------------------------------------------|---------------------------------------------------------------------------|
| O ke keiki po lani keika a “Kea,” i hanau, | This is the royal offspring of night borne by Kea,                        |
| Keiki akahi a ka po keiki alua a ka po,    | First child of the night, second child of the night,                      |
| Keiki akolu a ka po,                       | Third child of the night.                                                 |
| O ke kuakoko o ka po,                      | The night lay in travail,                                                 |
| E hanau mai auanei ka po,                  | To give birth to the night.                                               |
| O ka po la hoi auanei ko luna nei la,      | He is in the night, the night newly born,                                 |
| Owai la hoi auanei ko lalo?                | So it is the night that is there above,<br>Who then is below?             |
| Na Aua.                                    | By Aua.                                                                   |
| O hanau ka Moku a kupu,                    | Born was the island, it grew,                                             |
| A lau, a loa, a ao, a muo a liko.          | And sprouted, it flourished, rooted deeply, budded, formed tender leaves. |
| Ka moku ia luna o Hawaii.                  | That was the island of Hawaii.                                            |
| O Hawaii nei no ka moku.                   | Hawaii itself was an island.                                              |
| He pulewa ka aina he naka Hawaii,          | The land was unstable, Hawaii quivered,                                   |
| E lewa wale ana no i ka lani lewa.         | Moving freely about in space.                                             |
| Hanoa mai e Wakea pa hano ia.              | Wakea recognized the island, recognized, it remained.                     |
| Malia ikea ka moku me ka honua,            | Visible were island and earth,                                            |

|                                           |                                                               |
|-------------------------------------------|---------------------------------------------------------------|
| Paa ia Lewaalani i ka lima akau o Wakea.  | Held in heavenly space by the right hand of Wakea.            |
| Paa Hawaii, a la a Hawaii la ika he moku. | Hawaii was held, Hawaii was seen, an island.                  |
| O ka moku la hoi auanei kolalo nei la,    | Down here shall be the island,                                |
| Owai la hoi auanei ko luna, owai la?      | Who shall be above, who?                                      |
| O ke Ao! Aia, aia hoi ha.                 |                                                               |
| Na Hauna.                                 | The cloud! That is who is shall be.                           |
|                                           | By Hauna.                                                     |
| O hanau ke Ao, o hiki ae.                 |                                                               |
|                                           | The cloud was born, it rose and appeared.                     |
| O ohi ae ke ao o hiki ae.                 |                                                               |
| O mukupawa ke ao o hiki ae,               | The cloud thrived, it rose and appeared.                      |
|                                           | The cloud came at dawn, it rose and appeared.                 |
| O aka ula ke ao o hiki ae,                |                                                               |
|                                           | The cloud flushed with a reddish tinge, it rose and appeared. |
| O moakaka ku ke ao mala'e,                |                                                               |
|                                           | The cloud rose and appeared in clearest configuration,        |
| O opukupuku ke ao melemele,               | Turned yellow and menacing.                                   |
| O memele ka opua he la-i,                 |                                                               |
|                                           | The horizon cloud hung yellow over a calm sea.                |
| O opua nui, uli ka opua hiwahiwa,         |                                                               |
|                                           | A swelling cloud, a dark cloud,                               |
| O hiwahiwa ka opua lani ele,              |                                                               |

|                                       |                                                                                   |
|---------------------------------------|-----------------------------------------------------------------------------------|
| Eleele ka lani huhulu weo,            | A cloud whose deepening darkness                                                  |
| Lani ekaeka ha eleele,                | Turned to black, a sky already black                                              |
|                                       | In with feathery clouds of dusk,                                                  |
|                                       | A sky heavy with blackness, rough,<br>lowering,                                   |
| Hakona, hakuma, hakumakuma.           | A sky speaking in threat.                                                         |
| O ke ao nui mai hee ua keia,          | A vast cloud foretelling the approach<br>of rain.                                 |
| E hoowiliwili mai ana e hanau,        | The sky writhed in labor to give birth.                                           |
| Oia hoi, o ke Ao, hanau ke aoi,       | He is the Cloud. Thus the cloud was<br>born.                                      |
| O ke ao la hoi auanei ko luna nei la, | A cloud shall be up there.                                                        |
| Owai la auanei ko lalo la?            |                                                                                   |
| Owai la, o ka Mauna aia, aia hoi ha.  | Who shall be below?<br><br>Who, it shall be the Mountain there<br>indeed.         |
| Na Piopio.                            | By Piopio.<br><br>Born of Kea was the mountain.<br>The mauna of Kea budded forth. |
| O hanau ka mauna a Kea,               |                                                                                   |
| Opuu ae ka mauna a Kea.               |                                                                                   |
| O Wakea ke kane,                      | Wakea was the husband,<br>Papa Walinuu was the wife.                              |
| O Papa o Walinuu ka wahine,           |                                                                                   |
| Hanau Hoohoku he wahine,              | Born was Hoohoku, a daughter,                                                     |
| Hanau Haloa he alii,                  | Born was Haloa, a chief,                                                          |

|                                          |                                                         |
|------------------------------------------|---------------------------------------------------------|
| Hanau ka mauna he keiki mauna na Kea,    | Born was the mountain, a mountain-son of Kea.           |
| O ka lili o Wakea o ka hai i ka hala.    | Jealous was Wakea, he revealed his fault,               |
| O ke ku kuku laau ana me Kane,           | Told of his smiting Kane with a club,                   |
| I hoouka ai i iloko o Kahikiku,          | In battle, fought at Kahikiku.                          |
| Hee Wakea kalewa kona ohua,              | Wakea was routed, fled in confusion with his family.    |
| Kuamu ia e Kane, kuawa ia e Kane,        | None spoke to Wakea save in whispers, but Kane shouted. |
| Hoi mai Wakea a loko o lani momo-e,      | Wakea returned to the sky seeking a wife.               |
| Moa Wakea moa ia Papa,                   | Wakea mated with Papa,                                  |
| Hanau ka la na Wakea,                    | The sun was born to Wakea,                              |
| He keiki kapu na Wakea,                  | A sacred off-shoot of Wakea,                            |
| O ka uluna o Wakea na Kea no,            | The growth of Wakea was Wakea's own.                    |
| Hanau ka mauna he makahiapo kapu na Kea. | The mountain was born, the sacred first-born of Kea.    |
| Oia hoi ha, o ka mauna. Hanau ka mauna,  | So it is, the mountain. The mountain was born.          |
| O ka mauna auanei ko lalo nei la,        | The mountain shall be down here.                        |
| Owai la auanei ko luna la?               | Who shall be above?                                     |
| Owai la? O ka la, aia, aia hoi ha.       | Who? The sun, that is who it is.                        |
| Na Hehena.                               | By Hehena.                                              |
|                                          | (Pukui and Korn, 1973:13-28)                            |

Through such narratives as those above, it is shown that in the traditional cultural context, natural resources – such as the stars in the heavens, the pu‘u (hills) and rock outcrops, a pool of water, the mea kolokolo (insects), the hau (snow and dew), a forest grove, the moa uakea a Kāne and Lilinoe (white rains of Kāne and thick mists of Lilinoe), an ocean current, a mountain, and even the sunrise-tinted snows of Mauna Kea (Kūkahau‘ula) – are valued as cultural properties by the Hawaiian people. It is this “cultural attachment” to the natural world and heavens above that defines and shapes the beliefs, traditional cultural properties, and cultural practices of Hawaiians (Maly 2005: 4-10).

### 11.1.2 Mālama Iwi

Like many traditional cultures, Hawaiians practiced a range of customs and traditions associated with death and burial practices. These traditions and customs are documented extensively in historic texts particularly by Hawaiian scholars of the nineteenth century.

Numerous studies and reports have identified burials and potential burial sites within the project area. This demonstrates that traditional practices regarding the dead took place within the project area.

The relationship between Hawaiians living and passed is a sacred one. This is partly illustrated by the term ‘Ōiwi Maoli for “Native Hawaiian.” Professor Terry Kanalu Young (1989) wrote of this relationship:

It is important to note that the word ‘Ōiwi is used to denote Native person and thus relates directly to genealogy. The ‘Ō embedded within the word ‘Ōiwi is a subject marker commonly used to preface mention of a proper name. In this case, it precedes the term iwi which means “bones.” This intentional personalization indicates the link between bones and ancestors. The bones defined what it means to be Native. They are the point to which each Native Hawaiian descendant connects, ancestors who rest beneath the honua (earth) as physical remains we cherish and revere in the deepest spiritual sense.

“Concerning the Dead”, Reverend John F. Pogue (1978), former principal at Lahainaluna Seminary, wrote:

Just before death, when one is breathing his last, in the midst of his friends and relatives, whether he is actually dead or alive, the sick person would say: “Here comes Mea [a certain person] to fetch me that I may go.” He repeated these words continuously, until he died. His friends and relatives would cry aloud. If he were well liked by them, they would seize something belonging to his person as a finger nail, or a tooth, or hair. If they observed anything white issuing from his mouth or eyes

accompanied by tears, they knew that he loved them. They then kept the body four or five days, to show their great love. The body was then taken to a place unknown to the people, after being prepared for burial, as follows. The head was placed between the knees; the thighs were doubled up, so that the knees touched the shoulders. It was then tied around the bend of the knees, and made fast. The body is now round. Personal belongings were buried with the dead body. [This method was known as i'a loa long fish, burial of a chief.]

Only two or three persons secreted the body, never a large number. This was done at night, never during the day. The hole dug was round, like that for planting banana. When the proper depth was attained, the body was covered with cloth. The pit was called Pāhe'e [a sliding]. While digging, the dirt is carried in pieces of cloth and calabashes, less the footsteps are visible. If the house is new, the diggers will dig from outside, then make their entrance into the house without the knowledge of the owner. The people believe that if the burial place is known by others, that the bones will be made into fishhooks; the flesh would be fed to sharks. There were hiding places located in the sides of cliffs and fortifications. One such places on Haleakala; it is known as the pit of Ka'awa (ka lua o Ka'awa) located north of Nu'u on Maui.

The body is treated in the following manner before being buried. It is treated as above stated, but the relatives place favorite objects of the dead along side of the body. These are called Puni [favorites]. If a pig is the puni, or banana, or sugar cane, or still other things, a suitable portion of this commodity is carried to the pit, and a close relative of the deceased would then cry out to the ancestors previously buried in the spot: "Oh Mea, here comes your child." If the dead body should fall away into the water [while enroute to the burial site on a canoe], and the rainbow should be extinguished by the water [the appearance of a rainbow during a funeral is a good luck sign], not one of the newly dead persons deceased relatives buried within the area will associate with him. Thus the living relatives will hold onto the body so that it will not fall away into the sea.

After the body was secreted away, the people would return to their homes and commenced to cry and wail.

If the body is carried into the presence of its loved ones, and they pay their respects to it...

After [] this, the bones are separated from the flesh, and taken away to be buried. The pit is properly lined, the body is deposited, with the head facing the East, and the feet, the West. It was wrong to have the head facing the West, for the spirit would return and haunt the people. After all this the relatives would say

Do not remain in my house  
Stay in your own house  
You have been properly supplied  
With food, fish, and clothing.

Some people separate the bones from the flesh and make knives and fishhooks; or they would place the bones upon a rail in the house to be able to live with the spirit of the departed, and to look at the bones from time to time.

Some take the body and cast it into the sea, or in a pond to become a Guardian spirit – shark or lizard.

Traditional burial practices that include handling of the body were largely criminalized under Western law. Nonetheless, Hawaiians have continued to advocate to lift restrictions to allow for excarnation and associated burial practices. Through the advocacy of kūpuna and community leaders, Act 171 (2015 HSL) was codified into Hawai'i state law with the purpose of "amend[ing] the penal code to support the preparation and burial of a corpse consistent with traditional Hawaiian cultural customs and practices." This would allow for a return to practices utilizing excarnation (i.e., the practice of defleshing and removing organs from a body prior to burial).

Green and Beckwith (1926) describe burial practices specifically associated with caves, which would be most applicable to the project area:

The burial was in old days always held at night and was attended by men alone. Relatives (two, four, or six in number according to the weight of the corpse) acted as bearers. Those who lifted the body would "kahoā" or "intercede" with it in some such words as "Ke hele ala oe, e hoomaha oe!" that is, "You are departing, rest yourself, do not make yourself a burden!" Should they find the body very heavy to lift, they would inquire of the dead who was holding him back, by naming each relative in turn until at some name the body grew lighter.

The rite of pi kai or "sprinkling with salt water" must be performed upon all the bearers and those who are going to the grave. This purification ceremony is also performed all about the house and yard in order "to drive out bad spirits from the house after a death and keep the good." A calabash of water containing salt and a bit of olena root or of mauuakiaki grass is used for this purpose. This sprinkling of the house ensures the return of the spirit in a clean state; without such a purifying rite it might return in anger and cause trouble in the house. Anyone attending a burial should also be sprinkled with salt water lest the spirit of the dead follow him home and do him mischief. Another means of keeping away wrathful spirits is to plant

before the door a species of caladium called ape. Some persons in order to drive away evil spirits and keep them out, place under their bed-mats the leaves of the ti plant, of the ape, and of a certain banana called "lau-pala o ka maia lele," that is, "yellow-leaf of the lele (flying) banana."

The customary place of interment in old days was a cave in which the body was deposited. Often the mats were there opened, a pillow made of braided pandanus leaves stuffed hard with shredded leaves was placed under the head, and food left to supply the wants of the dead, should the dead revive. In the cave, the last ceremony was performed by a near relative, who circled the body with twigs of burning sandalwood to purify the air of the cavern. Before leaving the cave, the ohana, including the immediate family, relatives, and connections by marriage, chanted the following song:

Aloha na hale o maua i makamaka ole!  
Ka alanui hele mauka o Huliwale.  
E huli ae ana au i makana ia oe, a-a-a  
Aloha wale, e-, kaula, a-a-a!

Grief for our home without our friend!  
The road that leads to the mountain Gainless-Search.  
I am seeking a gift for you, alas!  
Boundless love, O (name of the dead), between us, alas!

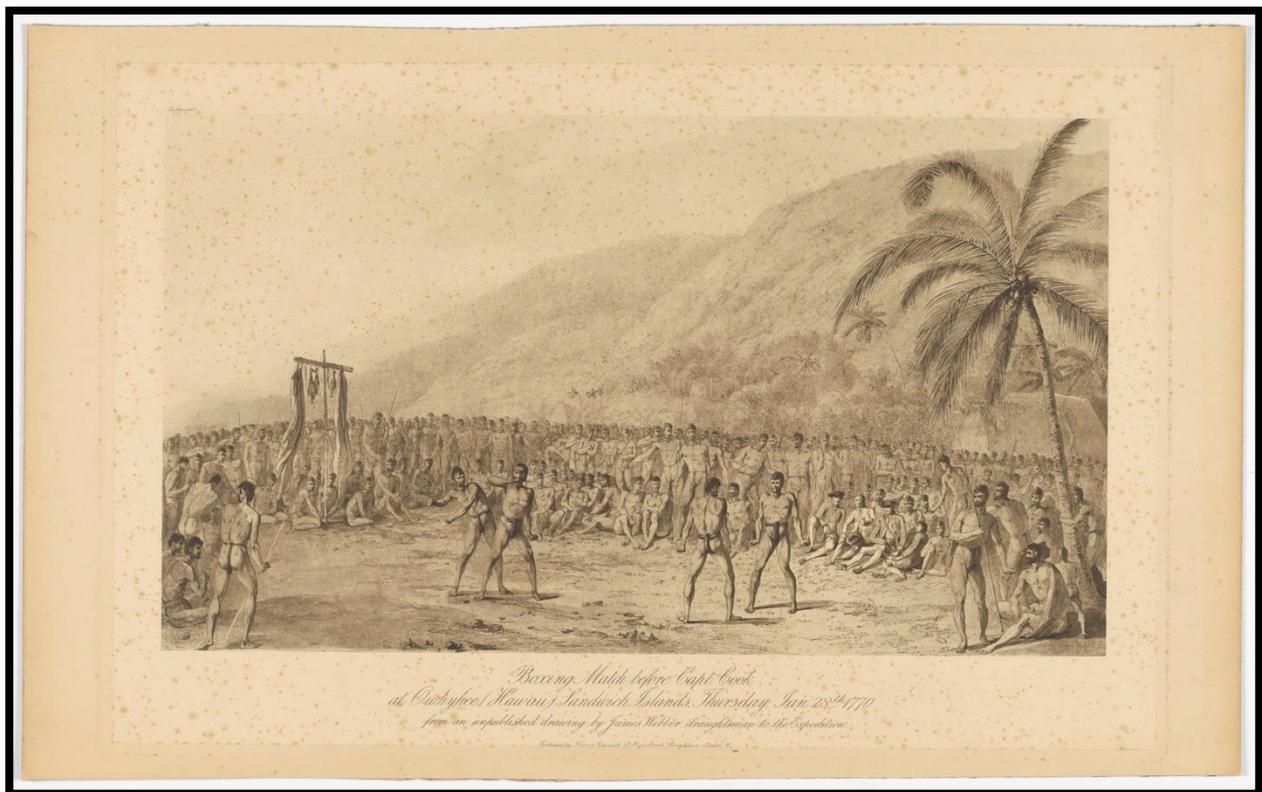
Green and Beckwith note "disposal in burial caves was the most common form of burial in ancient times..." (1926). There are a range of practices associated with this funerary tradition.

### 11.1.3 Ceremonial Practices

The ceremonial practices of traditional Hawaiians are extensive. Throughout the course of Hawaii's history, traditional Hawaiians have integrated religious, spiritual, and ceremonial practices in their daily lifestyle. Traditional or customary practices are then not distinct ceremonial practices but rather a part of their way of life. Therefore, it is challenging to define in discrete terms ceremonial practices associated with traditional Hawaiian customs. McCoy and Orr dedicate effort to distinguishing the differences between ceremony and ritual in the 2012 Ethnographic Study. For the purpose of this section, the ceremonial practices discussed here focus primarily on customs carried out by general populations of Hawaiians, as opposed to activities or rituals carried out by trained and recognized specialists, kahuna. Those practices are discussed in a separate section.

Ceremonial practices are incorporated throughout numerous, if not all, of the activities identified in this section. For example, there is a great level of ceremonial practice and ritual associated with the care of the dead, burial remains, and funerary objects. Native Hawaiians as with most Indigenous people integrated ceremony into most of their practices especially those that occurred out in the natural landscape or related to their way of life. There was no specific site or materials required for ceremony *per se*.

Nonetheless, shrines were sometimes associated with ceremonial practices. Shrines for the purpose of this assessment are distinct from heiau, which were places of worship. Again, the distinction is the nature in which these features or sites were created. Heiau required the advice and guidance of a kahuna, who would help ali'i determine the best location in which to erect a heiau. Conversely, shrines were erected by maka'āinana (commoners) as part of their daily or occupational functions.



**Figure 35. Boxing match before Captain Cook, Owhyhee (Hawaii) Thursday Jan 28<sup>th</sup>, 1779, by John Webber, Francis Edwards. Gift of Horace Fildes, 1937. Te Papa (1992-0035-1799) <https://collections.tepapa.govt.nz/object/383465>**

A layman's comparison would perhaps be the placement of a small cross in one's home for Christians or the use of *kagami-kochi* or *kadomatsu* by the Japanese for New Year's. These ceremonial symbols are created by commoners as a way of honoring tradition. Compare, then, these features to a church or temple, which is a formal place of worship led by a

religious expert. Just as with these other cultures, Hawaiians followed customs and ceremonies in their daily lives, while reserving more significant ritual and religious functioning to be led by kahuna.

Makahiki is one example of a practice that has taken place on Hawai'i Island prior to contact and continues post-contact and involves ceremonial elements. This image from 1779, identified as a "boxing match" is an image of Makahiki festivities, specifically ku'iku'i, a traditional form of boxing (Mitchell, 2006: 22), as evidenced by the presence of akua loa. The akua loa, described by Malo as "the image of the Makahiki god, Lono-makua ... This work was called ku-i-ke-pa-a" (Malo, 1951: 143). Further described by Malo:

22. This Makahiki idol was a stick of wood having a circumference of about ten inches and a length of about two fathoms. In form, it was straight and staff-like, with joints carved at intervals and resembling a horse's leg; and it had a figure carved at its upper end.

23. A cross piece was tied to the neck of this figure, and to this cross piece, kea, were bound pieces of the edible pala<sup>38</sup> fern. From each end of this cross piece were hung feather lei that fluttered about, also feather imitations of the kaupu bird<sup>39</sup>, from which all the flesh and solid parts had been removed.

24. The image was also decorated with a white tapa cloth made from wauke<sup>40</sup> kakahi<sup>41</sup>, such as was grown at Kuloli<sup>42</sup>. ... One end of this tapa was basted to the cross piece, from which it hung down in one piece to a length greater than that of the pole. The width of this tapa was the same as the length of the cross piece, about sixteen feet.

25. The work of fabricating this image, I say, was called kuiuēpaa. The following night the chiefs and people bore the image in grand procession, and anointed it with cocoanut (sic) oil. Such was the making of the Makahiki god. It was called Lono-makua (father Lono), also the akua loa. This name was given it because it made the circuit of the land (Malo, 1951: 144-145).

<sup>38</sup> Native fern (*Marattia douglasii*) used for medicinal purposes as well as in ceremony.

<sup>39</sup> Laysan albatross (*Diomedea immutabilis*), written with diacritical markings as ka'upu.

<sup>40</sup> Paper mulberry (*Broussonetia papyrifera*)

<sup>41</sup> Meaning outstanding or of high quality, as in reference to the white kapa (tapa) made from these fibers.

<sup>42</sup> Likely a reference to the place in Pelekunu Valley at Kamalō, Moloka'i, located between the peaks of Kaunuohua and Pēpē'ōpae.

The akua loa was taken to each ahupua'a. This custom was important to the care, stewardship, and worship of the gods. These practices were intimately tied to the proper care and sustainable stewardship of all cultural and natural resources.

Hawaiian practitioners have continuously sought to conduct Makahiki activities within the project area. In recent years, limited access has been granted to conduct Makahiki ceremonies at Pu'u Ka Pele and Pu'u Ke'eke'e. Practitioners have been allowed limited day access with escorts to conduct ceremony. There is also evidence that Hawaiians traditionally gave offerings, known as ho'okupu, within the area (**Figure 36**).



*Figure 36. Item, speculated to be ho'okupu, an offering, found in a lava tube in the project area. Looks to possibly be a pū'olo, a bundle of kī leaves in which ho'okupu is contained. [Image 9 of 12], by Eric Hamilton, U.S. Army Garrison Pōhakuloa Training Area (2015)*

#### 11.1.4 Hana Kahuna

As with many concepts of traditional Hawaiian living and practices, the contemporaneous concept of the kahuna has been largely influenced by Western thought. The roles and responsibilities of the kahuna are well explained by Professor Terry Kanalu Young in his text, *Rethinking the Native Hawaiian Past*, in which he writes:

As recipients of hana lawelawe<sup>43</sup>, the Ali'i Nui were themselves serves of a sort. They were responsible for maintaining a positive spiritual relationship with the Akua through pono conduct. Pono was defined for individuals of that era within the context of a particular task specialty. Kahuna who functioned as experts in specific skill areas like medicinal healing, canoe building, or spiritual advising were consulted by leaders. The experts were looked to as responses for what was considered pono in their respective realms of knowledge (Young, 1998).

Kahuna were critical to traditional Hawaiian lifeways as their extensive expertise helped to provide sound and strategic advice to ali'i and other leaders on proper spiritual, cultural, and ecological management. There are numerous types of kahuna in Hawaiian traditions, including, but not limited to:

kahuna 'anā'anā - sorcerer who practices black magic and counter sorcery

kahuna a'o - teaching preacher, minister, sorcerer.

kahuna hāhā - an expert who diagnoses, as sickness or pain, by feeling the body.

kahuna ha'i'ōlelo - preacher, especially an itinerant preacher.

kahuna ho'ohāpai keiki - medical expert who induced pregnancy.

kahuna ho'opi'opi'o - malevolent sorcerer, as one who inflicts illness by gesture.

kahuna ho'oulu 'ai - agricultural expert.

kahuna ho'oulu lāhui - priest who increased population by praying for pregnancy.

kahuna hui - a priest who functioned in ceremonies for the deification of a king.

kahuna kālai - carving expert, sculptor.

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<sup>43</sup> Hana lawelawe are defined by Young as “service tasks” by which kaukau ali'i (lower ranked chiefs) served the Ali'i Nui (high chiefs). These hana lawelawe were critical to the ability of the Ali'i Nui to effective govern (Young, 1989).

kahuna kālai wa‘a - canoe builder.

kahuna ki‘i - caretaker of images, who wrapped, oiled, and stored them, and carried them into battle ahead of the chief.

kahuna kilokilo - priest or expert who observed the skies for omens.

kahuna lapa‘au - medical doctor, medical practitioner, healer. lit., curing expert.

kahuna makani - a priest who induced spirits to possess a patient so that he might then drive the spirits out.

kahuna nui - high priest and councilor to a high chief; office of councilor.

kahuna po‘o - high priest.

kahuna pule - preacher, pastor, minister, parson, priest. clergyman HE. lit., prayer expert.

kahuna pule ka‘ahele - preacher

kahuna pule wahine - priestess

In a telephone discussion with Mililani Trask, she spoke of how she would collect kuni stones from the PTA area, but she stopped doing so out of concern for potential contaminants created from military use (Miliani Trask, per. comm.). Kuni stones are traditional stones considered to have great power. This concern about military debris is consistent with the findings of recent Hawaii State Supreme Court decision in *Ching v. Case*, 449 P.3d 1146 (Haw. 2019), in which the Court stated, “The State was aware of the United States’ failure to clean up other sites in the state and of the possibility that UXO and munitions were present on the leased PTA land. Cultural monitors spent ‘extensive time’ at the leased PTA land and observed military debris on the ground, including UXO and ‘spent shell casing, scattered across’ the land. The concerns of the cultural monitors were documented in a number of federal reports” (*Ching*, 2019: 32).

## 11.2 Cultural Resources

The Langlas et al. 1999 study identified and documented ritual sites at PTA. Those and other identified resources are documented below.

### 11.2.1 Ritual Sites Previously Identified by Henry Auwae

As part of their extensive work in 1999, Langlas et. al collected a substantial amount of information from Henry Auwae (1918–2000). In their section on Traditional and Hawaiian Cultural Sites, they noted:

All of the information on the sites comes from "Papa" Henry Auwae. He believes he is the only individual alive today who still has knowledge of either the burials or the ritual sites, and that appears to be the case. A considerable attempt was made to locate additional informants with knowledge of Native Hawaiian sites in the project area, without success. Older Hawaiians in Waimea (Sonny Kaniho, Johnny Lindsey) and Hilo (Genesis Lee Loy, Pua Kanahale) and Native Hawaiian Organizations in both areas were asked if they knew of any kūpuna who might have such knowledge, but they could not suggest anyone. In this century, the Hawaiians familiar with the project area would mainly have been the Hawaiian cowboys who worked for Parker Ranch at Ke'āmuku, Waiki'i, and Humu'ula, and for Shipman at Pu'u 'Ō'ō Ranch. Men like Willie Kaniho, who lived at Humu'ula, and David Kaiawe, who worked Pu'u 'Ō'ō Ranch, may have gained knowledge of traditional sites. But if so, that knowledge did not pass down to Willie's son Sonny Kaniho (Int. 1) or to David's nephew John Kaiawe (pers. comm.). It is not difficult to understand why Henry Auwae's knowledge of these sites is unique. Early in this century when he was a boy, he journeyed several times through the Saddle together with his great-grandparents. They both had specialist knowledge of ritual sites, and they pointed those sites out to him as they traveled. His great-grandmother was an expert healer (kahuna lā'au lapa'au) and his great-grandfather was a prophet (kalua), who came from a line of prophets. Mr. Auwae has not revisited the sites since that time (1999: 134).

Through his interviews, Henry Auwae (also known throughout the Hawaiian community as "Papa" Auwae) identified five ritual sites<sup>44</sup> in that study's project area.

*Table 21. Ritual Sites, Burials and Homesteads identified by "Papa" Henry Auwae.*

| Ritual Sites, Burials and Homesteads | General Description                                                                                                                                                                                                                                                           |
|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Papa Hemolele</b>                 | Described as a flat area mauka of the old trail from Waimea to Humu'ula, south of Waiki'i Gulch. It was identified as a part of rest and prayer. Three stone ahu were said to be associated with this ritual site. It is likely within PTA but outside the state-lease lands. |
| <b>'Āina Kao</b>                     | Identified as a ritual site in Pi'ihonua, near the southwest corner of Pu'u 'Ō'ō Ranch. An aerial survey conducted for the 1999 study confirmed it was covered by the 1935 lava flow.                                                                                         |
| <b>'Āina Hānau</b>                   | A ritual site in Pi'ihonua, south of the former Saddle Road near milepost 13, used for ritually                                                                                                                                                                               |

<sup>44</sup> It should be noted that Figure 76 in Langlas et al. (1999) was redacted from the provided copy, as it contained sensitive information.

| Ritual Sites, Burials and Homesteads            | General Description                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                 | preparing women for giving birth. It was described as having “a small stone-walled enclosure where the women waited, and a rock that she clung to while giving birth” (Langlas et al., 1999: 138, citing Auwae).                                                                                                                                                                                                                    |
| 'Āina 'Ākau                                     | A site described as used for preparing bodies of high ali'i for burial. Its location was described as south of Saddle Road between mileposts 9 and 10. The site was described as a tiered platform.                                                                                                                                                                                                                                 |
| 'Āina Kahukahu                                  | This site was described as several altars that were used to bless travel and make the journey safe for the travelers. It was identified as being located in Ponahawai, south of Saddle Road, between mileposts 8 and 9.                                                                                                                                                                                                             |
| Pu'u Kamokumoku (also known as Pu'u Kala'i'ehā) | Identified as a place where powerful kālua (prophets) lived.                                                                                                                                                                                                                                                                                                                                                                        |
| Burials and Homesteads 1                        | Papa Auwae identified two areas that were used for habitation and/or burial sites. He recalled visiting people who lived near the Ke'āmuku Sheep Station as a child with his great-grandmother, specifically a Kahaealii family. He noted numerous Hawaiian graves in the area.                                                                                                                                                     |
| Burials and Homesteads 2                        | In addition to the site above, Papa Auwae identified villages in the Saddle area, on the lower slopes of Mauna Kea. He also noted that several springs were also at that elevation. He personally knew of Hawaiian burials in that area. He also specifically noted the locations of Hawaiian burials in the Bradshaw Field at PTA. He believed that these areas were heavily bulldozed by the Army and destroyed by these actions. |

The Langlas et al. study specifically found:

Four of the ritual sites discussed above are potentially eligible for the National Register of Historic Sites as traditional cultural properties; the other two are not. 'Āina Kao is gone, covered by the lava. The Pu'u Kamokumoku area is too diffuse to be easily considered a traditional cultural property, and Mr. Auwae did not want that sort of status for it. Of the four-remaining sites, 'Āina Kahukahu, 'Āina 'Ākau, 'Āina Hānau and Papa Hemolele, none is presently being used by Hawaiian religious practitioners. In general, however, Hawaiians believe that heiau and other ritual sites

still have mana (religious power) because of their previous use. In Western terms, they are still sacred sites (1999: 141).

### 11.2.2 Kai-a-ka-Hinalii: An Account of the Ocean Flood of Ka-Hina-Li'i and Mauna Kea

In 1823, British missionary William Ellis documented the earliest penned tradition of Mauna Kea (Mouna-Kea). Following a sermon in Hilo, in which Ellis had mentioned the biblical account of the Great Flood and Noah's Ark, several Hawaiians approached him with questions and recalled a tradition of Mauna Kea that they had learned (Maly 2005: 18). Ellis reported that the natives were:

...informed by their fathers, that all the land had once been overflowed by the sea, except a small peak on the top of Mouna-Kea, where two human beings were preserved from the destruction that overtook the rest, but they said they had never before heard of a ship, or of Noah, having always been accustomed to call it the kai a Kahinarii (sea of Kahinarii)... (Ellis, 1963:321)

### 11.2.3 Ka Moolelo o Laieikawai

One of the earliest mo'olelo which provides references to Humu'ula, Mauna Kea and neighboring lands, and associates the names of places on Mauna Kea with the goddesses of the mountain is "Ka Moolelo o Laieikawai" (The Tradition of Laieikawai). This tradition spans the Hawaiian Island group and was collected by native historian, S.N. Haleole. While introducing the series, Haleole noted that he originally wrote out the tradition in 1844 (Haleole, November 29, 1862). It was published as a serial in *Ka Nupepa Kuokoa* between November 29, 1862 and April 11, 1863. In 1919, Martha Beckwith published Haleole's account, titled "The Hawaiian Romance of Laieikawai by S.N. Haleole."

In Beckwith's translation, Poli'ahu is referred to as the "goddess of the snow covered mountain," Mauna Kea. The following is a synopsis of the account by Beckwith, focusing on the main characters of the tradition and their association with Mauna Kea (Maly 2005\_ 20-26):

The young chief [Aiwohikupua] of Kaua'i when he goes to seek the beauty of Puna makes a vow to enjoy no other woman until he has won Laieikawai. At Hana on Maui, he is attracted by the lovely Hina-i-ka-malama as she rides the famous surf at Puhele, and he turns in at Haneoo. The chiefess falls in love with the handsome stranger and wins him at a game of konana (Hawaiian checkers). He excuses himself until his return and goes on to Hawaii, where he courts an even more beautiful chiefess in the person of Poliahu, who also

promises him her hand. When he finally loses hope of winning Laie-i-ka-wai, he “claps his hands before his god” to free himself from his rash vow and proceeds to a marriage with Poliahu, whom he fetches home with a great cortege to Kauai. While the festivities are proceeding at Mana, the disappointed Hina, apprised of her lover’s duplicity, appears and claims the forfeited stake. Aiwohikupua is obliged to relinquish himself to her embraces, but the angry Poliahu envelopes the lovers in alternate waves of unendurable heat and cold until they are obliged to separate, when the mountain goddess retires to her home attended by her three maidens, Lilinoe, Waiaie [sic<sup>45</sup>], and Kahoupokane, and Aiwohikupua finds himself bereft of both ladies... (Beckwith, 1970:222)

Excerpts of the native texts from Haleole’s publication in *Ka Nupepa Kuokoa* are cited below, with translation by Kepā Maly. Excerpts that mention Humu’ula and specific locations on the upper slopes of Mauna Kea are included (sites today identified as being in the ahupua’a of Ka’ohe):

***Ka Nupepa Kuokoa***  
**Mokuna VII.**

**Dekemaba 27, 1862**

Ia Aiwohikupua ma i haalele ai ia Paliuli, hoi aku la laua a hiki i Keaau, hoomakaukau na waa, a ma ia wanaao, kau maluna o na waa, a hoi i Kauai...

Ma keia holo ana mai Keaau mai, a kau i Kamaee, ma Hilopaliku, a ma kekahi la ae, haalele lakou ia laila, hiki lakou i Humuula, ma ka palena o Hilo, me Hamakua... A hala hope o Humuula ia lakou, hiki lakou maaho pono o Kealakaha, ike mai la lakou nei i keia wahine e noho ana i ka pali kahakai, e hiamoe ana nae ke Alii ia manawa.

**Chapter VII.**

**December 27, 1862**

Aiwohikupua and his companions departed from Paliuli, and went to Keaau, where the canoe was readied in the early morning, and they boarded the canoe to return to Kauai...

While on their way from Keaau, they arrived at Kamaee, in Hilopaliku, and on the following day they departed and arrived at Humuula, on the boundary of Hilo and Hamakua... Passing Humuula, they were outside of Kealakaha, where they saw a woman sitting along the ocean cliff. The chief (Aiwohikupua) was asleep at that time.

<sup>45</sup> Waiaie appears as a typesetting error in one section of the Haleole’s tradition, though it is written as “Waiiau” in another section of the account (Chapters XVIII & XIX, included in the following pages).

Ia lakou i ike aku ai i kela wahine, hooho ana lakou iluna o na waa, “E! ka wahine maikai hoi!”

A no keia, hikilele ae la ka hiamoe o Aiwohikupua, ninau ae la i ka lakou mea e walaau nei, haiia aku la, “He wahine maikai aia ke noho mai la i ka pali.” Alawa ae la ke Alii, a ike aku la he mea e o ka wahine maikai.

A no keia mea, kauoha ae la ke Alii i na hoewaa e hoe pololei aku ma kahi a ka wahine e noho mai ana, a holo aku la a kokoke, halawai mua iho la lakou me ke kanaka e paeaea ana, ninau aku la, “Owai kela wahine e noho mai la iluna o ka pali maluna pono ou?”

Haiia mai la, “O Poliahu.”

A no ka manao nui o ke Alii e ike i kela wahine, peahiia aku la, a iho koke mai la kela me kona aahukapa i hoopuniia i ka hau, a haawi mai la i kona aloha ia Aiwohikupua...

Ia laua e halawai malihini ana, i aku o Aiwohikupua, “E Poliahu e! E ka wahine maikai o ka pali, pomaikai wale wau ia oe ma ko kaula halawai ana iho nei, a nolaila e ke Alii wahine o ka pali nei, ke makemake nei wau e lawe oe ia’u i kane hoao nau, a e noho kanaka lawelawe aku malalo ou, ma kau mau olelo e olelo ai, a malaila wale no wau. Ina hoi e ae oe

Seeing the woman, they called out from the canoe, “Oh! What a beautiful woman!”

Because of this, the sleep quickly departed from Aiwohikupua, and he asked what was this that they were talking about, they said, “There is a beautiful woman there, sitting on the cliffs.” The Chief looked, and he saw indeed that there was a beautiful woman there.

Because of this, the Chief ordered the canoe paddlers to paddle straight to the place where the woman was sitting. Arriving there shortly, they met with a man who was pole fishing, and asked, “Who is that woman sitting there atop the cliff above you?”

He answered, “It is Poliahu.”

Great was the Chief’s desire to see this woman, he waved, and she quickly surrounded herself with her snow garment, and then extended her aloha to Aiwohikupua...

Meeting as strangers, Aiwohikupua spoke, “Say Poliahu! The beautiful woman of the cliff, I am indeed blessed by you, at our meeting here. So you, Chiefess of these cliffs here, I desire that you would take me as your husband, as one who will live as a person below you. If you will speak the words, there I will be. If you agree to take me as I have asked you, then we

e lawe ia'u e like me ka'u e noi aku nei ia oe, alaila, e kau kua maluna o na waa, a holo aku i Kauai, a pehea ia?"

two shall board the canoe, and travel to Kauai. How would that be?"

I mai la ka wahine, "Aole wau he wahine no keia pali, no uka lilo mai wau, mai ka piko mai o kela mauna, e aahu mau ana i na kapa keokeo e like me keia kapa a'u e aahu aku nei. A pehea la i hikiwawe ai ka loa ana o ko'u inoa ia oe e ke Alii?"

The woman responded, "I am not a woman of these cliffs, I come from the distant uplands, from the summit of that mountain, always adorned in the white garment, just as I am wearing now. And how is it that you come to have my name, o Chief?"

Olelo aku la o Aiwohikupua, "Akahi no wau a maopopo no Maunakea mai oe, a ua loa koke kou inoa ia makou ma ka haiia ana e kela kanaka paeaea."

Aiwohikupua then said, "I only now, understand that you are from Maunakea, but I got your name from the man that is fishing there.

"A no kau noi e ke Alii," wahi a Poliahu, "E lawe wau ia oe i kane na'u, a nolaila, ke hai aku nei wau ia oe, me ka ninau aku; aole anei o oe ke Alii i ku iluna a hoohiki ma ka inoa o kou mau Akua, aole oe e lawe i hookahi wahine o keia mau mokupuni, mai Hawaii nei, a Kauai; aia kau wahine lawe noloko mai o Moaulanuiakea? Aole anei oe i hoopalau me Hinaikamalama, ke kaikamahine Alii kaulana o Hana? A pau ko huakai kaapuni ia Hawaii nei, alaila, hoi aku a hoao olua? A no kau noi mai e lawe kua ia kua i mau mea hoohui nolaila, ke hai aku nei wau ia oe; aia a hoopau oe i kau hoohiki mua, alaila, aole na'u e lawe ia oe, nau no e lawe ia'u a hui kua e like me kou makemake."

"And regarding your request, o Chief," Poliahu said, "I will consider taking you as my husband. But, I say this of your request; are you not the Chief who stood and made an oath in the name of your Gods, that you would not take a wife, from Hawaii to Kauai; for your wife is to be taken from Moaulanuiakea? Yet, are you not betrothed to Hinaikamalama, the famous young chiefess of Hana? And when your journey around Hawaii was completed, that you would return and you two would be married? Now that you have asked that the two of us be joined together, I tell you that you must end your previous oath, or else I cannot take you; if you do, then you may have me as you desire."

A no keia olelo a Poliahu, pili pu iho la ko Aiwohikupua manao me ke kaumaha no hoi; a liuliu hoopuka aku la o Aiwohikupua i wahi ninau pokole penei, “Pehea la oe i ike ai, a i lohe ai hoi no ka’u mau hana au e hai mai nei? He oiaio, e Poliahu e, o na mea a pau au e olelo mai nei, ua hana wau e like me ia nolaila, e hai mai i ka mea nana i olelo aku ia oe.”

Because of these words of Poliahu, Aiwohikupua’s thoughts were saddened; Aiwohikupua then asked, “How do you know, how have you heard of my tasks, as you have stated? Poliahu, it is true, all the things that you have said, I have done as you’ve described. So tell who told you these things.”

“Aole o’u mea nana i hai mai i keia mau mea, e ke Alii kane, no’u iho no ko’u ike,” wahi a ke Alii wahine, “no ka mea, ua hanau kupuaia mai wau e like me oe, a ua loa no ia’u ka ike mai ke Akua mai o ko’u mau kupuna a hooili ia’u, e like me oe, a na ia Akua wau i kuhikuhi mai e like me ka’u e olelo nei ia oukou. Ia oukou no e holo mai ana i Humuula, ua ike wau nou na waa, a pela wau i ike ai ia oe.”

“No one has told me these things, o Chief, it is known to me by my own knowledge,” the Chiefess said. “Because I, like you, am of a wondrous birth, and I have the knowledge from the Gods, from my ancestors, as inherited by me, like you. These Gods have directed me in my words to you. When you traveled to Humuula, I saw your canoes, and thus, I saw you.”

A no keia olelo, kukuli iho la o Aiwohikupua, a hoomaikai aku la imua o Poliahu, me ke noi aku e lilo ia i kane hoopalau na Poliahu, me ke noi aku a holo pu i Kauai...

Because of these words, Aiwohikupua, kneeled down, and praised Poliahu, asking her to take him as the promised one of Poliahu, and also asked that she travel with him to Kauai...

The narratives continue, telling that Poli’ahu stated that she would only travel with ‘Aiwohikūpua and his companions as far as Kohala. She then told him that if she was to agree to a betrothal, he must first be released from his previous engagement to Hina-i-ka-mālama.

Upon preparing for his departure from Kohala, Poli’ahu gave ‘Aiwohikūpua her “kapu hau” (snow mantle), describing its sacred nature. The events are described in the following narratives:

...Ia lakou ma Kohala, a hiki i ka la i haalele ai o Aiwohikupua ma ia

Arriving at Kohala, the day for Aiwohikupua’s departure arrived,

Kohala, lawe ae la o Poliahu i kona kapa hau, a haawi aku la ia Aiwohikupua me ka olelo aku, “O kuu kapa hau, he kapa i papa loaia e ko’u mau makua, aole e lilo i kekahi mea e ae, ia’u wale iho no; aka, no ko kua lawe ana ia kua i kane hoao oe na’u, a pela hoi wau ia oe, nolaila, he haawi lilo aku nei wau i keia kapa, a hiki i kou la e manao mai ai ia’u a loa, iluna o Maunakea, alaila, hoike ae oe ia’u, hui kino kua...”

Poliahu took her snow mantle and gave it to Aiwohikupua, saying, “This is my kapa hau, it is a mantle that is very sacred to my parents, not to be given carelessly to any other, only for me. But because you are to be my husband, I thus give it you, until the day that you think of me and take me, there atop Maunakea, then you will know me, and we two shall join together...”

...la manawa, kii aku la o Aiwohikupua i kona Ahuula, lawe mai la a houhi aku la ia Poliahu, me ka olelo aku, “E like me kau olelo ia’u mamua o kou haawi ana mai ia’u i ke kapa hau, pela no oe e malama ai a hiki i ko kua hui ana e like me ke kauoha.”

At that time, Aiwohikupua took his Feather Cloak, and placed it upon Poliahu, saying, “As you have told me, when you gave me your snow mantle, so too shall you keep this until we two are joined together as instructed.”

A pau ka laua kamaio ana i ka wanaao, hookaawale lakou i ka wahine noho mauna, a holo aku la a hiki i Hana, a halawai me Hinaikamalama...

It was as the early light of dawn appeared, that they finished their conversation. They then departed from the woman who dwells upon the mountain, sailing to Hana, to meet with Hinaikamalama...

‘Aiwohikūpua then returned to Kaua’i, though he failed to formally break off his betrothal to Hina-i-ka-mālama. After some time, ‘Aiwohikūpua sent his messenger to Hawai’i to arrange for Poli’ahu to meet with him in preparation for their marriage.

At this point, Haleole introduced readers to Lilinoe, Waiau (a typesetting error by the newspaper in this issue gave the name as Waiaie), and Kahoupokane, the companion-goddess of Poli’ahu, who dwelled upon the mountains; and places for which names are still known on the mountain landscape today.

The messenger, Koa’e, went to Hawai’i and met with Poli’ahu, giving her the message of ‘Aiwohikūpua. Arrangements were made, and on the appointed day, ‘Aiwohikūpua and his

retinue departed from Kaua'i and traveled to Kawaihae, and then on to the designated meeting place at Wai'ula'ula (the boundary between the ahupua'a of Kawaihae and 'ili of 'Ōuli, Waimea):

***Ka Nupepa Kuokoa***

**Mokuna XVIII.**

**Ianuali 17, 1863**

...hoouna hou aku la oia ia Koaē, kekahi o kana mau elele mama e like me ka olelo kauoha i na elele mua.

A hiki o Koaē i o Poliahu la, halawai aku la laua, hai aku la o Koaē i ke kauoha a ke Alii e like me ka mea i haiia ma na pauku hope o ka Mokuna XVII o keia Kaao; a pau na olelo a ke Alii i ka haiia, hoi aku la ko ke Alii elele, a hai aku la ma ka pololei, alaila, he mea maikai ia i kona Haku.

Noho iho la o Aiwohikupua, a i na la hope of ke kolu o ka malama; lawe ae la ke Alii i kona mau kaukualii, a me na punahele, i na haiawahine hoi, na hoa kupono ke hele pu ma ke kahiko ana i ka hanohano Alii ke hele ma kana huakai no ka hoao o na Alii.

I na la i o Kaloa kukahi, haalele o Aiwohikupua ia Kauai, holo aku oia he kanaka kaulua, elua kanaka kaukahi, he iwakalua peleleu.

Mamua o ka po hoao o na Alii, i ka po i o Huna, hiki lakou i Kawaihae, ia manawa, hoouna aku la oia ia koaē,

**Chapter XVIII.**

**January 17, 1863**

...he sent Koaē, one of his swift messengers, with the command, as given to the first messenger.

Koaē arrived before Poliahu, and they met. Koaē told her the command of the Chief, as given in the last paragraph of Chapter XVII of this tale. When the words of the Chief had been spoken, the Royal messenger repeated the words to his Lord's satisfaction.

Aiwohikupua then sat down, and in the last days of the third month; the Chief took his royal attendants, favorites, female retainers, and those necessary companions, adorned in their Chiefly manner, and traveled to where the chief would be married.

On the day of Kaloa kukahi, Aiwohikupua departed from Kauai with his people on double and single-hulled canoes, and twenty peleleu canoes.

Before the night of the Royal wedding, on the night of Huna, they arrived at Kawaihae, he [Aiwohikupua] then sent

kona elele e kii ia Poliahu e iho mai e halawai me Aiwohikipua, i ka la i kauohaia'i e hoao.

A hiki ka elele imua o Aiwohikipua mai ke kii ana ia Poliahu, a hai mai la i kana olelo mai a Poliahu mai, "Eia ke kauoha a ko wahine, ma Waiulaula olua e hoae ai, ina e ike aku kakou ma ke kakahiaka nui o ka la o Kulu, e halii ana ka hau mai ka piko o Maunakea, Maunaloa, a me Hualalai, a hiki i Waiulaula, alaila, ua hiki lakou i kahi o olua e hoao ai, alaila, hele aku kakou, pela mai nei."

Alaila, hoomakaukau ae la o Aiwohikipua i kona hanohano Alii.

Kahiko aku la o Aiwohikipua i kona mau kaukualii kane, a me na kaukualii wahine, a me na punahele, i ka Ahuula, a o na haiawahine kekahi i kahikoia i ka Ahuoenō. A kahiko iho la o Aiwohikipua i kona kapa hau a Poliahu i haawi aku ai, kau iho la i ka mahiole ie i hakuia i ka hulu o na liwi. Kahiko aku la oia i kona mau hoewaa o ka Alii, pela no na hoewaa o kona puali alii a pau...

Ma ka la o Kulu, ma ke kakahiaka, i ka puka ana ae o ka la a kiekie iki ae, ike aku la o Aiwohikipua ma i ka hoomaka ana o ka hau e uhi maluna

his messenger, Koaē, to fetch Poliahu, bringing her down to meet with Aiwohikipua, on the day set for the wedding.

Returning from his trip to get Poliahu, the messenger went in front of Aiwohikipua, and gave him the message that Poliahu had given him, "Here is the command of your woman; at Waiulaula you two will be wed. When, in the early morning of Kulu we see that the snows have spread from the summit of Maunakea, to Maunaloa, and Hualalai, and are descending to Waiulaula, we are to go, for there is the place where you two will wed."

So Aiwohikipua prepared in his Royal honor.

Aiwohikipua adorned his supporting chiefs and chiefesses, and his favorites in Feather cloaks; his female attendants were adorned in fine woven garments [ahu'o'eno]. And Aiwohikipua was adorned in the snow mantle, which Poliahu had given him, and with an ie helmet, covered with the feathers of the iiwi birds. He also adorned all of his Royal paddlers and all of his warriors...

On the day of Kulu, in the early morning, as the sun was just rising, Aiwohikipua and companions saw that the snow began to cover the summits of the mountains, and then

o ka piko o na mauna, a hiki i kahi o laua e hoao ai.

descended to the place where they two were to be married.

I kela manawa, ua hiki o Poliahu, Lilinoe, Waiaie [Waiau], a me Kahoupokane, i kahi e hoao ai na Alii.

At that time, Poliahu, Lilinoe, Waiaie [Waiau], and Kahoupokane arrived at the place where the Royal couple was to be wed.

Ia manawa, hoomaka o Aiwohikupua e hele e hui me ka wahine noho mauna o Maunakea. E like me ka mea i oleloia maluna, pela ko ke Alii hele ana.

At that time, Aiwohikupua then went to join the mountain-dwelling woman of Maunakea. As described above, the Chief went to meet her.

Ia Aiwohikupua ma e holo aku ana i ka moana mai Kawaihae aku, he mea e ka olioli o Lilinoe i ka hanohano launa ole o ke Alii kane.

Aiwohikupua and his companions traveled across the ocean from Kawaihae, and Lilinoe rejoiced at the unequalled glory of the Chief.

A hiki lakou i Waiulaula, ua pauia lakou e ke anu, a nolaila, hoouna aku la o Aiwohikupua i kona elele e hai aku ia Poliahu, "Aole e hiki aku lakou no ke anu."

When they arrived at Waiulaula, they were overtaken by the cold. Therefore, Aiwohikupua sent his messenger to tell Poliahu, "They could not continue because of the cold."

Ia manawa, haalele e Poliahu i kona kapa hau, lalau like ae la ka poe noho mauna i ko lakou kapa la, hoi aku la ka hau a kona wahi mau.

Poliahu then set aside her snow mantle, as did the others who dwell on the mountain, and the snows returned to their usual abode.

Ia Aiwohikupua ma i hiki aku ai ma ko Poliahu ma wahi e noho ana, he mea lealea loa i ke Alii wahine na mea kani o na waa o ke Alii kane, a he mea mahalo loa no hoi ia lakou ka ike ana i ko ke Alii kane hanohano, a maikai hoi.

When Aiwohikupua and his companions arrived at the place where Poliahu and her companions were sitting, there was great joy between the Chiefesses, and those of the canoes of the Chief. They greatly admired the Chief in his glory.

Ia laua i hui ai, hoike ae la o Aiwohikupua, a me Poliahu, i na

When they met, Aiwohikupua and Poliahu both showed one another their

aahu o laua i haawi muaia i mau garments which they had first given as  
hoike no ka laua olelo ae like... a sign of their original agreement...

Poli'ahu, 'Aiwohikūpua and his party then departed for Mānā, Kaua'i, as had been agreed upon earlier. They joined the chiefs hauailiki and Makaweli, then entered into enjoyable contests in the lover's game of kilu.

In the meantime, Hina-i-ka-mālama heard of 'Aiwohikūpua's wedding to Poli'ahu, and she determined to travel to Kaua'i to claim her first right to 'Aiwohikūpua as a husband.

As described in the summary of the mo'olelo prepared by Beckwith (1970), the promised marriage between Poli'ahu and 'Aiwohikūpua was not meant to be. Outraged, Poli'ahu abandoned 'Aiwohikūpua to Hina but punished them by sending waves of cold and heat over them.

***Ka Nupepa Kuokoa***  
**Mokuna XIX.**

**Ianuali 24, 1863**

...Iloko o ko laua manawa i hoomaka ai  
no ka hooko ana i ka hoohiki, alaila, ua  
pono ole ia mea i ko Poliahu manaō.

Ia manawa, lawe ae la o Poliahu i kona  
kapa la, a aahu iho la, ia manawa ka  
hookuu ana'ku o Poliahu i ka wela  
maluna o Hinaikamalama. I manawa,  
hapai ae la oia he wahi mele, penei:

"He wela – e, he wela,  
Ke poi mai nei ka wela a kuu ipo ia'u,  
Ke hoohahana nei i kuu kino,  
Ke hoonakulu nei hoi i kuu manawa,  
No kuu ipo paha keia wela –e."

I aku o Aiwohikupua, "Aole no'u na  
wela, maila paha no Poliahu no na  
wela, ua huhu paha ia kaua..."

**Chapter XIX.**

**January 24, 1863**

...Poliahu felt sorely wronged at the time  
they [Aiwohikupua and Hinaikamalama]  
set out to fulfill their oath.

At that time, Poliahu took her mantle  
and put it on, and then she released a  
heat upon Hinaikamalama. At that time,  
she [Hinaikamalama] took up a chant,  
thus:

It is so hot, so hot,  
The heat of my love covers me,  
Warming my body,  
Causing my feelings to flutter,  
Perhaps the heat is from my sweetheart.  
Aiwohikupua said, "This heat is not from  
me, it is perhaps a heat from Poliahu,  
who is perhaps upset with us..."

...I ke kolu o ka po lealea o Hauailiki, i na'lii e akoakoa ana, a me na mea e ae, oia ka po i hui ai o Lilinoe, me Poliahu, o Waiau, a me Kahoupokane, no ka mea, ua imi mai lakou ia Poliahu, me ka manao ke pono nei ko Aiwohikupua ma noho ana me Poliahu.

On the third night of the contests of Hauailiki, the chiefs gathered together, as well as the others. And it was on that night that Lilinoe, Waiau, and Kahoupokane joined with Poliahu. They had been searching for her, thinking that all was good between Poliahu and Aiwohikupua.

Ia po, ia Aiwohikupua me Makaweli, e kilu ana, a i ka waenakonu o ko laua manawa lealea, komo ana na wahine noho mauna iloko o ka aha lealea.

That night, while Aiwohikupua and Makaweli were playing kilu, the women who dwell upon the mountain entered the assembly.

Ia Poliahu ma eha e ku ana me na kapa hau o lakou, he mea e ka hulali, ia manawa, nei aku la ka aha lealea no keia poe wahine, no ke ano e o ko lakou kapa. Ia manawa, popoi mai la ke anu ka aha lealea a puni ka papai kilu, a kau mai la maluna o ka aha ka pilikia a hiki i ka wanao, haalele o Poliahu ma ia Kauai. O keia manawa pu no hoi ka haalele ana o Hinaikamalama ia Kauai...

With Poliahu, the four of them stood in their glistening snow mantles. The crowd murmured among themselves about these women and the nature of their garments. Then, the assembly in the kilu shelter was buffeted by waves of severe cold, a trouble which persisted to the early morning light. Poliahu and her companions then left Kauai. Hinaikamalama also left Kauai at that time...

As described by Beckwith (1970), 'Aiwohikūpua was left without the company of either Poli'ahu or Hina-i-ka-mālama.

### 11.3 Summary

Within the project area, practices associated with mālama iwi have occurred, as well as other ceremonial practices. The presence of human remains provides evidence. Within recent years, cultural access for the celebration of Makahiki has been requested and granted. These events have taken place at Pu'u Ka Pele and Pu'u Ke'eke'e, both of which are within or on the border of the project area.

Human remains have also been identified within the larger geographic extent. Practitioners have identified that they have conducted hana kahuna within the PTA, but they also identify

that those practices have been adversely impacted by live fire training and the contamination of the area, which have left them unable to gather materials from the area for spiritual use.

Ceremonial practices were adversely impacted by the arrival of foreigners who introduced Christianity to Hawai'i. After contact in 1778, the Hawaiian Kingdom would undergo a series of significant changes. Kamehameha I would unify the islands under his rule. After his death in 1819, his son, Kalaninui kua Liholiho i ke kapu 'Iolani (known commonly as Liholiho or Kamehameha II), became his successor. Influenced by his father's Kahuna Nui (high priest and advisor) Hewahewa, his mother Keōpūolani, and his father's Queen Regent and Kuhina Nui Ka'ahumanu, Liholiho ended the kapu system. This created opportunity for more western influences and institutions to take hold across the Kingdom, but it also effected existing practices. These changes are captured in the table below.

*Table 22. Cosmologies, Genealogies, and Religious Practices Associated with the Project Area and Frequency over Historic Eras*

| <b>Cultural Practice</b>           | <b>Traditional Pre-Contact Era (prior to 1778)</b>                                                     | <b>Historic Post-Contact Era (1778-1943)</b>               | <b>Contemporaneous Era (1943 – current)</b>                                                                 |
|------------------------------------|--------------------------------------------------------------------------------------------------------|------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| <b>Cosmologies and genealogies</b> | Regularly practiced, specifically in relation to deities associated with Mauna Kea and other landforms | Practice declined due to introduction of foreign religions | Practice in project area limited by Army control of land; regularly practiced in surrounding region         |
| <b>Mālama iwi</b>                  | Regularly practiced                                                                                    | Practice declined due to introduction of foreign religions | Not actively practiced and practice limited by state and federal law (i.e., laws regarding handling of iwi) |
| <b>Ceremonial practices</b>        | Regularly practiced                                                                                    | Practice declined due to introduction of foreign religions | Practice in project area limited by Army control of land; regularly practiced in surrounding region         |
| <b>Hana Kahuna</b>                 | Regularly practiced                                                                                    | Practice declined due to introduction of foreign religions | Practice in project area limited by Army control of land; regularly practiced in surrounding region         |

## 12.0 ORAL HISTORIES AND ETHNOGRAPHIES

As discussed previously, information was collected from a wide range of individuals and sources. The findings of those efforts are discussed in this section. Ethnographic data is utilized to supplement the other research methods utilized. It is one in a range of research tools employed to gather information about the project area.

Honua Consulting was tasked with gathering information from individuals with lineal and cultural ties to the area and its vicinity regarding regional biocultural resources, potential impacts to these biocultural resources, and mitigation measures to minimize and/or avoid these impacts.

Past interviews (Langlas et al. 1999) and histories were also considered and integrated throughout this report as appropriate. The bulk of the information available from practitioners and kūpuna were drawn from native testimonies and Hawaiian language sources and integrated into the cultural and historic overview section of this assessment. Those sources, along with responses to this project, were considered when researching the traditional or customary practices discussed in a previous section.

Considering the significant interest in this project, efforts were made to make participation as widely available and transparent as possible. Therefore, innovations were utilized to allow for participation via the internet, via email, or by telephone. The primary means of gathering information was an online survey, for which Honua Consulting crafted questions specifically to gather information about the project area and allow for stakeholders to identify any potential impacts they felt would result from the Proposed Action and its alternatives.<sup>46</sup>

### 12.1 Scoping Comments

A wide range of valuable comments were provided in response to the Environmental Impact Statement Preparation Notice and public scoping. These generally include the following:

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<sup>46</sup> It is important to note that question #20 of the survey confirmed acceptance of participation in the survey and participants were provided an option to accept or decline participation after completion of the survey, and authorized use of response in this CIA document.

*Table 23. General Responses to Comments*

| General Comment                                                                 | Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|---------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Concern regarding land ownership and the history of the overthrow</b>        | This discussion and issue are outside the scope of this assessment, but a brief discussion regarding the importance of this issue from a historic perspective is provided in Section 3.4 (Modern History of the Project Area).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Requesting an inventory of the historic sites</b>                            | See Appendix D of the EIS for the literature survey of historic properties completed by Kleinfelder / GANDA.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Significance of Pōhakuloa</b>                                                | The significance of the place, name, hill, and gulch are discussed throughout the document.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Compliance with NHPA</b>                                                     | <p>Compliance with Section 106 of the NHPA requires close coordination between PTA CRM staff and project planners to integrate the identification and evaluation of historic properties with training activities or other projects at PTA. This compliance process includes regular consultation with the State Historic Preservation Office (SHPO), NHOs, and other interested parties. Such consultation is initiated by letter but may take place face to face. If a project is determined to have an adverse effect on historic properties, Army staff will develop a MOA or PA to address these effects and mitigate adverse effects. Such an agreement is usually signed by the Army, the SHPO, the ACHP, and other interested organizations or individuals. Army cultural resources staff members conduct regular outreach to Native Hawaiians to facilitate compliance with Sections 106 and 110 of the NHPA and other consultation efforts to fulfill its consultation obligations. This outreach includes offering tours and open houses, speaking to school groups and college students, and providing access for cultural activities and practices.</p> <p>For the purposes of this assessment, NHPA is outside the scope of this impact assessment.</p> |
| <b>Mismanagement of land resources</b>                                          | The management issue is outside the scope of this assessment, but brief discussions regarding the <i>Ching</i> lawsuit are provided throughout this assessment.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>The CIA should be authentically completed, not just performed pro forma.</b> | The comment is appreciated, and this assessment makes an extensive and good faith effort to complete a thorough assessment.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

| General Comment                                                                                                                                                                                                                                     | Response                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Restriction of access to land                                                                                                                                                                                                                       | This topic is discussed throughout this assessment, for the specific impact analysis of this issue, see Section 13 (Impact Assessment ).                                                                                                                                                                                                                                                                                                                       |
| The importance of the significance of the land at PTA and surrounding area needs to be fully researched                                                                                                                                             | Based on this and similar comments, the geographic extent for this CIA does include the surrounding area, see Chapter 3 of the Draft EIS for discussion on Region of Influence and Geographic Extent.                                                                                                                                                                                                                                                          |
| These aspects of cultural practices on the 23,000 acres should be addressed: Quarrying and stone tool manufacture, bird hunting, human burial, shrine construction, huaka'i, hunting of feral ungulates, scattering of cremation remains, ranching. | Based on this and similar comments, all these practices were researched and individually assessed. See sections on Quarrying, Stone Tool Manufacture, Traditional Hunting, Bird Collection, and Feature Collection, Mālama Iwi, Modern Hunting, Disposition of Cremated Remains, and Ranching.                                                                                                                                                                 |
| Concerns regarding who decided which practitioners to consult with                                                                                                                                                                                  | Based on this and similar comments, cultural consultation was widely made available to any interested parties.                                                                                                                                                                                                                                                                                                                                                 |
| Cultural Landscapes: the CIA must consider the entire connected cultural landscape of Ka'ohē Ahupua'a, Mauna a Wakea, and the surrounding cultural landscapes.                                                                                      | Based on this and similar comments, the CIA does take a cultural landscape approach to this assessment.                                                                                                                                                                                                                                                                                                                                                        |
| Hawaii law recognizes that in addition to built structures, a cultural resource may also be a natural feature of the landscape, such as a mountain, hill, rock, tree, stream, or animal which has cultural significance to Kanaka Oiwi.             | Based on this and similar comments, this CIA does thoroughly research and assess natural features which may have cultural significance to Hawaiians.                                                                                                                                                                                                                                                                                                           |
| The EIS and CIA for the Pōhakuloa training Area must follow the <i>Ka Pa'akai</i> Analytical Framework                                                                                                                                              | While the <i>Ka Pa'akai</i> framework is discussed in the beginning of this CIA, a <i>Ka Pa'akai</i> is outside the scope of the contract for this CIA and the EIS. It shall be the responsibility of the Army and/or State of Hawai'i (through the Department of Land and Natural Resources, Land Division) to conduct a <i>Ka Pa'akai</i> analysis and the obligation of the State to make specific findings and conclusions consistent with applicable law. |

## 12.2 Email Responses

Email comments were provided by four individuals: Mililani Trask, Thomas Lenchanko, Kamanawa Kini, and Kyle Kajihiro. In order to maintain transparency and integrity in the discussion of these comments, these emails and all attachments are provided in their entirety in Appendices B-E.

### 12.3 Survey

Determining which stakeholders, practitioners, or users to reach out to for interviews could be considered arbitrary. Therefore, to ensure that as many individuals as possible were given the opportunity to participate, an online survey was conducted to help with responses. This also proved valuable once the COVID-19 pandemic resulted in emergency orders limiting travel and person-to-person contact.

To avoid the inadvertent exclusion of individuals wanting to participate in this CIA, three methods were employed. First, the standard public notice was placed in the *Ka Wai Ola*. Due to the anticipated interest in this project, the ad was placed in the *Ka Wai Ola* for two months rather than the standard one month. The ad provided the survey link.

Second, appreciating the influence of social media in communicating with a wide section of the Hawaiian community, advertisements were taken out on both Facebook and Instagram specifically targeting all of Hawai'i Island.

Third, letters were sent out to individual and organizations inviting them to participate in the CIA.

#### 12.3.1 Survey Questions

A true, exact, and complete copy of the full survey is provided as Appendix F.

#### 12.3.2 Survey Responses

The survey was created in September 2020 and made publicly available starting October 1, 2020, with the public notice in the October 2020 *Ka Wai Ola*. The survey remains open and available for any member of the public. There were 62 total responses, with a 39 percent completion rate. One respondent asked to have their responses disregarded from the CIA. The low completion rate was likely due to individuals looking to see the questions of the survey but not completing the survey. The responses are provided in their entirety, with the exception of any surveys where no responses were provided or those that asked to be redacted, included in Appendix G.

#### 12.3.3 Aggregated Survey Responses

Responses to all survey questions are summarized or provided in their entirety in this section.

**Question 1:**

I hereby agree to be a participant in the Cultural Impact Assessment (herein referred to as “CIA”) for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. I understand that part of the purpose of the CIA is to conduct oral history interviews with individuals with information about the subject property and surrounding area. I understand that Honua Consulting, LLC will retain the products of my participation (responses to this survey, etc.) for use on the project, but that I will remain owner of any of these products. I have the right to request them at any time. I understand that the material(s) will remain in the possession of Honua Consulting, LLC and that the material(s) may be used for scholarly, educational, land management, and other purposes.

Option A: Yes, I agree to be a participant - A "yes" response will allow you to continue the survey and your answers will be included in the CIA.

Number of responses = 62 (100%)

Option B: No, I do not agree to be a participant - A "no" response will disqualify you from the survey and your answers will not be included in the CIA.

Number of skipped responses = 0 (0%)

**Question 2:**

Please provide your name.

Number of responses = 27 (43%)

Numbers of skipped responses = 35 (57%)

**Question 3:**

What is your current profession?

Number of responses = 26 (42%)

Numbers of skipped responses = 36 (58%)

**Question 4:**

Where do you live now?

Number of responses = 26 (42%)

Numbers of skipped responses = 36 (58%)

**Question 5:**

Where were you born and raised?

Number of responses = 27 (43%)

Numbers of skipped responses = 35 (57%)

**Question 6: Are you associated or representing a specific Native Hawaiian Organization (NHO), 'ohana, or organization in the completion of this survey? If so, please list the entity you are representing.**

Number of responses = 24 (39%)

Numbers of skipped responses = 38 (61%)

**Question 7: What is your association, if any, with the Project Area?**

Number of responses = 25 (40%)

Numbers of skipped responses = 37 (60%)

| Provided Responses (n = 25)                                                                                                                                                                                                                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Spiritual                                                                                                                                                                                                                                                                                                         |
| Cultural Advisor for Military at Pōhakuloa, Traditional Practitioner, kiai                                                                                                                                                                                                                                        |
| I was included as a cultural practitioner                                                                                                                                                                                                                                                                         |
| The Project Area of Pōhakuloa Training Area is on Crown Land, not owned by the State of Hawaii; but under a Trust with Congressional Oversight. I have been trained in Section 106. and Federal Undertakings.                                                                                                     |
| None                                                                                                                                                                                                                                                                                                              |
| None                                                                                                                                                                                                                                                                                                              |
| I will not be answering that right now until 1. I have a better understanding what the army is proposing to do there. 2. Every Kanaka Maoli today is associated to that area so to ask this question hits a nerve with me.                                                                                        |
| Familial ties to Kaohe (Pōhakuloa)                                                                                                                                                                                                                                                                                |
| a resident and landowner on the Big Island                                                                                                                                                                                                                                                                        |
| I love it it is sacred ground it is my neighborhood                                                                                                                                                                                                                                                               |
| 43 CFR section 50 reestablishing the government to government relations withering the United states                                                                                                                                                                                                               |
| I have been to the "Project Area" many times over the period of 27 years I lived and worked in Hawai'i from 1992-2020                                                                                                                                                                                             |
| This is my home.                                                                                                                                                                                                                                                                                                  |
| My home and farm is in Puna. What happens there affects the dust and water that flows throughout the island. I also drive past there regularly.                                                                                                                                                                   |
| I live on the island, hear the noise, breath the air, and love the mountains. I see the water at Kiholo and have learned much of it comes from the mountain areas.                                                                                                                                                |
| I live on the island                                                                                                                                                                                                                                                                                              |
| resident of Moku o Keawe                                                                                                                                                                                                                                                                                          |
| I live on the Big Island and identify with the area in question and want it removed from the toxic pollution and destruction the U.S. Military has wreaked on this sacred area. The Military is harmful and Colonialist and should be removed from their presence and use of this sacred land! U.S. Military OUT! |
| none, just a resident with concerns about what PTA does to our land                                                                                                                                                                                                                                               |
| Research, study, access restricted by US Army, interference with native Hawaiian traditional practices.                                                                                                                                                                                                           |
| While I do not have an explicit affiliation with the 'āina contained within the boundaries of by USARHAW, I conduct pig hunting for subsistence purposes on the slopes of Mauna a Wākea within Ka'ohē Mauka Ahupua'a and have ancestral lineage to the moku of Hāmākua.                                           |
| 'A'ohē pilina pilikino, koe wale ka Hawai'i 'ana - No personal connection, save for being a citizen of Hawai'i.                                                                                                                                                                                                   |
| Lineal Descendant of those who inhabited the Hawaiian Islands prior to 1778                                                                                                                                                                                                                                       |
| I am a hunter gatherer, and religious user                                                                                                                                                                                                                                                                        |
| No association                                                                                                                                                                                                                                                                                                    |

**Question 8: Are you aware of any traditions or customs that may take place near the Project Area or are otherwise associated with the Project Area?**

Number of responses = 26 (42%)

Numbers of skipped responses = 36 (58%)

| Provided Responses (n = 26)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 'Ae, yes. Pōhakuloa is our piko of Hawai'i island. Many sacred sites such as heiau temples, ahu altars built by our Ali'i, and the 'āina and her genealogy itself are sacred to me and to Hawai'i.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Ae , ( yes )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Yes. PTA has different Cultural Sites and includes an old Village with burials. An elderly Hawaiian Man is attempting to pick up bone fragments and long bones, and says Pōhakuloa is being used as a bombing site for foreign countries and wants it to stop.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| None                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Well let me just say the map you sent and description of the proposed sight is generic. With the resources of knowledge with today's technology I would have expected a lot better from you folks. This is the norm for the US military to give us bare minimum but Dr Kehau wow here's a hint of advice, give us better maps of the area preferably old maps, the older the better, even if you have to write over the names of places on the map do it those names deserve to be said out loud over and over. If there are family names associated with the LCA's or Royal Patents we should know about it. Seeing and reading it is will help us channel our ancestors so we can get that knowledge you seek. Many of us here represent our entire ohana and you know how far that could extend. Take this proposed sight and give it the mana it deserves. We all want to repeatedly say the names of those places to give it mana. For far to long our history has been kept silent. So can we not be silent and can you teach geography that way by the time we pau with this the army will have no choice but to leave it as is. |
| Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| no                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Not formal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Just that they are ceremonial                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| We are currently working with other native Hawaiian organizations in regard to traditions and customs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| The water in this area brings life to plants and animals. We must honor the land and take care of the earth.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Yes, Hawaiians conduct cultural activities near the project area.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| I have friends who go for traditional reasons but I don't. My relationship with the area is more about keeping the environment pristine                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| The whole area is considered sacred and holy to Native Hawaiians and many others. The Military is desecrating this sacred land that is part of the Hawaiian reverence for the area.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| no                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Yes, native Hawaiian cultural practices.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| I am aware of subsistence pig hunting occurring within Pōhakuloa Training Area during certain hunting seasons, a traditional practice. I am not aware of any other traditional Hawaiian practices (e.g. feather collection, 'uwa'u hunting) currently being practiced within the project area as the general public, and particularly kanaka 'ōiwi, are not typically permitted within PTA despite the presence of iwi kūpuna and upwards of a thousand cultural sites, several of which are ceremonial in nature.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ‘O ke alualu pua‘a kekahi hana o ia ‘āina, pēlā nō ka māka‘ika‘i ka‘apuni, ka ho‘omana, a keu nō i ka po‘e hula - Pig hunting is a tradition of that land, as is its status as an important place in the tradition of spiritual island circling excursions, known as "huaka‘i ka‘apuni," special spiritual meaning and customs may be held by certain individuals especially those involved in hula. Every piece of land is steeped in history, and the land in question was originally held under the tenure of high ali‘i Victoria Kamāmalu and Laura Kōnia. Those decedents of these ali‘i, and others seeking to honor or connect with them for other cultural and spiritual reasons may find great importance in these lands. |
| Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Not aware                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

**Question 9: What place names do you know for the project area or areas near or adjacent to the project area?**

Number of responses = 24 (39%)

Numbers of skipped responses = 38 (61%)

| Provided Responses (n = 24)                                                                                                                                                                                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ahu a ‘Umi                                                                                                                                                                                                                            |
| Malama Aina                                                                                                                                                                                                                           |
| ahupuaa Kaohe , Burial grounds within Pōhakuloa                                                                                                                                                                                       |
| Judd Trail                                                                                                                                                                                                                            |
| The Pu'u cinder cones all have names in Hawaiian and the area is know to be a gathering place. Bombing has made an impact to the area and Destroyed vegetation and crucial forests, altering these sites named in mo'olelo.           |
| None                                                                                                                                                                                                                                  |
| None                                                                                                                                                                                                                                  |
| I am still looking at the map you sent and I still don't know where it is. Now you know I am being sarcastic but if this is a Cultural Impact Assessment this survey is ridiculous it only shows how generic your consulting firm is. |
| Not willing to offer names for the project but I do know names of these places                                                                                                                                                        |
| none                                                                                                                                                                                                                                  |
| Waikoloa and Waimea                                                                                                                                                                                                                   |
| Also working with other native Hawaiian organizations familiar with the aspect of names in the project area                                                                                                                           |
| Pōhakuloa. Kohala.                                                                                                                                                                                                                    |
| Mauna Loa, Mauna Kea, Hualālai, Pu‘ukea, Pu‘ukapele, pu‘uma‘au, Napu‘ukūlua, Omakoili                                                                                                                                                 |
| Mauna Kea park                                                                                                                                                                                                                        |
| the entirety of Hawaii Island is sacred in traditional Hawaiian culture and U.S. military presence here is harmful, illegal desecration                                                                                               |
| I know it as a sacred place that is being misused and polluted and this needs to stop!                                                                                                                                                |
| -                                                                                                                                                                                                                                     |
| Ka'ohē Mauka ahupua‘a, Humu'ula ahupua‘a, Waimea Crown lands (1848), Keauhou Ii Nene Sanctuary, Kaohe Game Management area, Land Commission Award (LCA Helu 8521 B:1, G.D. Hueu).                                                     |

## Oral Histories and Ethnographies

|                                                                                                                                                                                                                                                                                                                               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The name Pōhakuloa may refer to an akua, a                                                                                                                                                                                                                                                                                    |
| 'O Pu'uahi, ka punawai 'o Lilinoe, ka punawai 'o Hopukani, 'o Ahumoa, 'o Kilohana, 'o Pu'ukea, 'o Pu'ukoko, 'o Pu'umana'o, 'o Pu'umau'u, 'o Pu'uokau, 'o Pu'uokahua, 'o Pu'upōhakuloa, 'o Pu'u'ula'ula. Aia paha 'o Kawaihūokāne i kēia 'āina, 'a'ole paha. - " ", Kawaihūokāne may be located at or near this piece of land. |
| Kaohe Mauka                                                                                                                                                                                                                                                                                                                   |
| Kaohe                                                                                                                                                                                                                                                                                                                         |
| None                                                                                                                                                                                                                                                                                                                          |

### Question 10: Are you aware of any cultural resources in the Project Area or near the Project Area? If so, please list them below.

Number of responses = 24 (39%)

Numbers of skipped responses = 38 (61%)

| Provided Responses (n = 24)                                                                                                                                                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ahu A 'Umi- altar built by Ali'i 'Umi a Lilio who is my ancestor and chief of Hawai'i. He trained his warriors here in Pōhakuloa and the entire region is the piko umbilical cord of Hawai'i island.         |
| Malama Aina                                                                                                                                                                                                  |
| yes, the list would be too long, it is known as a burial and kapu aloha everywhere,                                                                                                                          |
| No                                                                                                                                                                                                           |
| The Project area contained medicinal plants, petroglyphs, burials, and was a resource for hunting and gathering, lei making, and Navigational que stones                                                     |
| No                                                                                                                                                                                                           |
| None                                                                                                                                                                                                         |
| Many                                                                                                                                                                                                         |
| There are family heiau, ahu and burials on these lands. We need access to carry out our traditions and practices.                                                                                            |
| Ohio trees and temples                                                                                                                                                                                       |
| We are familiar with the watershed and conservation of aquifers under the slopes of Maunakea and Mauna Loa                                                                                                   |
| Hunting. Fishing. Early settlements including farming, living, religious practices. There are many caves where people lived. Many ancient walls and agricultural sites. Also trails and pathways.            |
| Yes, water and natural resources.                                                                                                                                                                            |
| Yes, burial grounds, heiau                                                                                                                                                                                   |
| No                                                                                                                                                                                                           |
| endemic plants, petroglyphs, endemic birds, endemic insects, endemic people who inhabited the region until the illegal U.S. overthrow of the Kingdom of Hawaii                                               |
| The whole area is worshipped as part of the sacred area of Mauna Kea. It should be removed from Military control. Period.                                                                                    |
| -                                                                                                                                                                                                            |
| Unknown specifically.                                                                                                                                                                                        |
| Yes. I am aware of a network of lava tubes that extend for miles below the surface of the project area that preserve within them significant and intact cultural resources that have (so far) been protected |

from the abhorrent destruction that has occurred already within PTA. I am also aware of intact nesting grounds for the ‘uwa’u (‘ua’u) bird, a bird that was traditionally caught in the lands of Pōhakuloa according to boundary commission testimonies from the late nineteenth century. There has also been evidence that other birds traditionally significant to Hawaiians were hunted in these lands, including the nēnē. Precontact site types documented within the project area have included but are not limited to human burials as well as those pertaining to temporary habitation, lava tube shelters, transportation, markers (e.g. cairns), terraces, and lithic and volcanic glass flakes. Furthermore, there is great potential to unearth subsurface cultural features within or in the proximity of existing sites. There are also numerous surface features (e.g. hearths, cupboards) associated with these sites that are indicative of a rich plethora of traditional activities which have occurred within the bounds of PTA. Some of the sites that have been lucky enough to have been preserved have yielded rare finds of organic materials including a ti leaf sandal, cordage, ipu, and charcoal, indicating an area rich in pronounced human activity most likely utilized during activities associated temporary and more long-term habitation to facilitate upland resource procurement. I am also aware of several trails that lead to the lands contained within the project area (which include kīpuka) although I am unsure as to their current integrity given the activities that have been undertaken on the lands of Pōhakuloa over the course of the last 77 years.

Since the first archaeological survey of the lands of Pōhakuloa wasn't conducted until approximately 30 years subsequent to the initial military use of the lands and 13 years after the lease of the lands to the Army, it is unfathomable to imagine how many significant cultural sites and resources were subject to obliteration during these spans of time.

English below. He pilina ko Hawai‘i nei ‘āina i ka Hawai‘i ma kona kanaka ‘ana. He pilina ikaika, anoano, a me ke aloha wale ho‘i. Ke lawe ‘ia ka ‘āina, lawe ‘ia kekahi mea o ke kanaka ‘ana. Ma ‘ō loa aku ka ‘āina o kekahi mea e ho‘onanea ai ka maka, he mea ia e pā ‘e‘ehia ai ka na‘au o ka Hawai‘i. Loa‘a nō ka po‘e nona he pilina ikaika, a he pilina ‘ohana paha i kēia ‘āina i hāpai ‘ia a‘e nei, a he waiwai ka mālama ‘ia o ia ‘āina me ke hāpai a ho‘omana‘o ‘ia o ko lākou kuleana ma laila. Hawaiian lands have a special relationship existential with the identity of the people from Hawai‘i. The land is a part of not just a collective cultural and societal identity, but a strong, spiritual, and personal one as well. When a piece land is taken, it piece of identity is also taken as well. In a very actual Hawaiian perspective, land is more than just something appealing to the eye of man, but is something that strikes a deep and spiritual chord in the identity of anyone of Hawai‘i. There are those who have a deep and possibly even familial connection with the lands mentioned above, and the very existence of this land is a very important cultural resource for them. Disregarding this as a intangible and therefore un-important cultural resource would be objectively ethnocentric and cultural biased and intolerant.

substance informs of native plants, animals, and springs as well as places of worship

Yes, I have found sacred area's while hunting

Not aware

**Question 11: Is there anything about the project area that’s particularly significant you would like to share? If so, please share the information below.**

Number of responses = 24 (39%)

Numbers of skipped responses = 38 (61%)

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Number of responses = 24 (39%)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Ahu A 'Umi is sacred to me because Ke Ali'i o 'Umi A Liloa is my kupuna ali'i. This is a sacred site from a pono and important Chief of Hawai'i built thousands of years ago that stands firm today. Second. Pōhakuloa, the 'āina is thr piko of Hawai'i Island. The mana and spiritual energy as well as natural energy that exists in this realm is sacred. Disturbing this mana and energy disturbs everyone and everything. Respect what is sacred. Our house of worship may not have steeples or look like a cathedral, mosque, or synagagogue but Pōhakuloa and Mauna Kea are our Houses of Worship and we demand mutual respect. |
| Malama Aina                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| needs to be stopped bombing, archeologist are not cultural practitioner and had no accountability of understanding or know place base and destruction within project military base                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| I am curious as to how the US Government acquired ownership of the land as indicated in the purple colored area of the map of Kaohe area. Is this real estate that was acquired from Parker Ranch?                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| PTA was given a Lease by BLNR. The entire site of Pōhakuloa looked very different than it does today, due to severe bombing and live fire training. The "Cultural Impact Statement" and EIS should first be about Complying with the Lease that signed. Focus should be on Clean-up and just how the DoD plans to Comply; what native plants will be grown to plant there to Comply with the former lease. No future lease should be considered because DoD needs to Comply now.                                                                                                                                                        |
| No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| None                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| every piece of aina is significant to me                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| So shared above                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| It is very close to to 2 towns and the military activities are very disturbing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Currently in consultation with other native Hawaiian organizations pertaining to that matter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Ancient and historical sites for hunting, fishing, living, worship, observing stars and planetary movement.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| The water and natural environment must be protected.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| This place is unique in the entire world. Why on earth would we bomb such a place? It is an inappropriate place for such training.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| I would like the bombing to stop. It is time to focus on peaceful solutions to problems in our world.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| This is sacred ground that should be restored to its natural condition then left by the U.S. military                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| The whole area is sacred to Native Hawaiians. Get the Colonialist U.S. Military out of there and off the Saddle.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| TMK's 3-3-8-001-013 & 022 belong to the beneficiaries of the Hawaiian Homes Commission Act of 1921, administered by the Dept. of Hawaiian Homelands (DHHL). Removal of these lands from this inventory is prohibited by the ACT, without consultation and approval of the beneficiaries! [HHCA §228 (b)].                                                                                                                                                                                                                                                                                                                               |
| The name Ka'ohē, which literally translates to "the bamboo," may be affiliated with water transportation throughout the ahupua'a and speak to the significance of the richness of water as a natural resource within Ka'ohē, and thus within the project area.                                                                                                                                                                                                                                                                                                                                                                          |
| He 'āina ia o ka wao akua, 'a'ohē noho 'ia e kānaka koe nā mea pili 'uhane a me nā māka'ika'i kuleana. - This land is of the "wao akua" or holy/godlike region. This essentially means that it was not lived on by people, and was only traveled to for the sake of spiritual journeys and other travels of special                                                                                                                                                                                                                                                                                                                     |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| responsibility. This perspective still lives on in Hawaiian culture today, and isolated untouched lands are held in great esteem and revered. These lands are not considered lands opportune lands for use, as that would be a kind of defilement of sacred land. This is a very real and important aspect of the current cultural worldview and to view it as intangible and therefore unimportant would again be ethnocentric.                                                                                                                                                                                                                                                                 |
| My great grandparents used to go up their for substance and prayer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| The military already has too much land, and once in their control most of it is never used, then the usage rule change to the point most people cannot access, and area becomes overgrown. Keamoku is good example, or they restrict access to area's that were open to hunting/ close area, or they put a road through state land so they can more easily access pta while trying to control state land which they have no jurisdiction, they have already taken portions of unit A that were open to public since I was a kid. Too much land has already been taken and military imposes absurd rules for access then want you to pay for the process in the form of a permit. Enough already. |
| Depleted uranium is a health hazard for the entire community. The lands are sacred and should not be used for military training. Protection of native species must be a priority.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

**Question 12: Are there any stories associated with the project area we should be aware of? If so, please share that information below.**

Number of responses = 21 (39%)

Numbers of skipped responses = 41 (34%)

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Number of responses = 21 (39%)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Stop War                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| I will leave the moolelo to Kupuna whose iwi reside there.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Unknown.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| I am aware of the story of the United States of America (of which I am a Patriot) is involved in the illegal Overthrow of the Hawaiian Kingdom; now "...under a strange form of Occupation" according to UN Human Rights investigator Dr. De Zayas. PTA military have a Field Manual that explains "Occupation" and how the "Laws of the Occupied" must be followed. Originally, the United States signed the Treaty of Friendship, Commerce and Navigation with No Hawai'i Pae 'Aina (The Hawaiian Kingdom) Recently a letter was sent to Gov. Ige on Nov. 10th, 2020 from the National Lawyers Guild (NLG) made of 6,000 members who voted to send the Compliance letter. Perhaps the story will end well if the USA does the right thing and set Hawai'i Kingdom free.. .if America stands for FREEDOM we would be hypocrites if we now know we are Belligerently Occupying Hawai'i Nei and we don't set her free. |
| No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| how inconvenient, do you need a history lesson? stories like this are so scarce why would anyone say it for the army?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Plenty                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Loud bombs and fires. Shaking the ground and very upsetting to people                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Native Hawaiian organization related to this will be assistance for us as we proceed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Yes. See booklists available thru the University of Hawai'i at Manoa and Hilo.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Some years ago a friend of mine told me that she lived here in the 1960s and that there were some poisonous effects from the military happenings up by Mauna Kea                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| There was no treaty if acquisition, which means it was never legal under U.S. law for Hawaii to become a state. 78% of Hawaiian s signed a petition requesting the Queen be reinstated. Hawaiians weren't who voted for statehood, it was plantation workers and owners who got to vote. An entire, independent country became an illegal state without its citizens getting a vote. Even the United Nations has called Hawaii a "strange" colony of the U.S.                                                                                                                                                                                                                                                                                                                                                |
| The area is talked about as sacred in many historical Hawaiian stories. It was stolen from Native Hawaiians by the Colonialist U.S. govt. Return it to it's rightful owners!                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Unknown.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| The name Pōhakuloa may refer to an akua, and a lover of Poli'ahu, and is discussed in the Kaao Hooniua Puuwai no Ka-Miki tale. He is affiliated with the akua Kāne and also with Waihu Spring and Lake Waiau. There are many more.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| He 'āina ia i kua ai 'o Kamalalawalu lāua 'o Lanikaula. He wahi kēia i hele mua ai 'o Hi'iaikaipoliopole, a he ko'iko'i ko laila no ka po'e hula. Nui nā mo'olelo o ka nūpepa i laha 'ole, a he mea pono ka maka'ala loa a me ka noi'i nui loa i ka hana pono. - Kamalalawalu and Lanukaula battled here in the story of Lonoikamakahiki. This is also a specifically mentioned spot that Hi'iaikaipoliopole first traveled to after she left Pele. Due to the great importance of the latter story, and especially its importance to those associated with Hula, this land is of importance. There are great numbers of relatively uncommon stories held in Hawaiian news paper, so great care must be taken to ensure that important landmarks in these stories are not adversely affected by the project. |
| for substance and worship/prayers/halawai/church                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| If you look close, they are expanding, but not creating jobs for locals, it has always been a select few, or mainland contractors, training is good but they don't use over half of what they have control of, land not being used should be returned.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| None                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

**Question 13: The Department of the Army is proposing retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. The project area is comprised of Tax Map Keys 4-4-015:008; 4-4-016:005; 3-8-001:013 & 022; and 7-1-004:007 in the ahupua'a of Ka'ohē Mauka on the Island of Hawai'i. Are you aware of any resources that may be impacted by such a project? What might those impacts be?**

Number of responses = 25 (40%)

Numbers of skipped responses = 37 (60%)

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Number of responses = 25 (40%)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Yes the further destructions of our wahi pana and wahi kapu. The cultural sites and religious sites will continue to be desecrated and destroyed if this lease is renewed. The water resevoirs, rivers and streams polluted. The atmosphere intoxicated with the most harmful substane ; depleted uranium. This land is supposed to be used for benefit of Hawaiians. Hawaiians have for long been on the backburner and treated as strangers in our homeland. This is cruel and evil to allow a foreign occupier military to pay only \$1 lease for 65 years why Hawaiians are being gentrified and overcharged and losing our lands, homes, and being forced to leave. Many Chiefs and Hawaiian Monarchs such as Ke Ali'i 'o Lunalilo allowed Hawaiians to live on his land for free. Queen Lili'uokalani allowed Hawaiians to live in their homes for \$1 a year. This is how we Hawaiians should continue to be nurtured. Hawaiians should receive this treatment and benefits Not the occupying military receiving those treatments and benefits. |
| Malama Aina , stop war                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| many na pohaku have been attacked and are now lying down when they were put upright because of the importance In relation to all else there. but you all should know this, many questions here are mahaai ....I am not comfortable or do we have even have permission to be answering many of these questions.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Correction: None of these Parcels are "owned" by the State of Hawaii. Ka'ohē is Crown Land within the Metes and Bounds of occupied Hawai'i. PTA was found to contain at least four sites with Depleted Uranium. There must be NO LIVE-FIRE TRAINING into any of the RCAs. at PTA to prevent further contamination and reducing Depleted Uranium Oxide...which one particle in the human body an cause havoc. Water Aquifers and soil contamination.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Ohana                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Ask me again on a later date                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Water, land, burials, heiau, ahu, wildlife, humans, etc. PTA and its use of depleted uranium!                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Water, Land abuse, Toxic waste, erosion, and potential historic artifacts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| The bombing is toxic as well as the noise and nature                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Water resources and contamination of those waters                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Numerous cultural sites. I was part of a University of Hawai'i workgroup which did mapping & excavation of sites in the late 1990's. We were allowed on the site but were usually accompanied by a representative employed by the Army. Damage to the area from shelling and other military activity was evident almost everywhere we worked                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Yes, ahupua'a of Ka'ohē feeds many people. If you contaminate this area, you are responsible for poisoning those people and any future visitors to the area. Further, the Department of the Army would be responsible for any contaminants that are carried away in rainwater and runoff downstream.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| It is not a matter of resources. It is a matter of protecting an absolutely unique ecosystem.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Bombing the land has no positive impact on the earth. It kills whatever is in its way. It is only destructive. It is most likely going to have a negative impact on the ground water                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Endemic trees, birds, plants, insects. Ability of Hawaiian people to inhabit the island placed here for them and to use natural resources safely                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| The ability to access and protect this sacred land by Native Hawaiians would be destroyed by letting the Military retain control of an area they have repeatedly polluted and desecrated. The impact is simple and already seen as the U.S. Military keeps destroying native fauna and leaving toxins every                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| where they touch the land. That's a pretty negative impact and interferes with Native Hawaiian culture and belief and ritual ceremonies and practices.. U.S. Military out!                                                                                                                                                                                                                                                                                                            |
| -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| TMK's 3-8-001-013 & 022 belong to beneficiaries of the Hawaiian Homelands. Any leasing of these lands require beneficiary approval. All these lands are close to the Keauhou Ii Nene Sanctuary, and Kaohe Game Management area, which would be negatively impacted by military bombing and other destructive activities.                                                                                                                                                              |
| The proposed retention by the Army of the state-leased lands of Pōhakuloa means certain death for the remaining cultural sites within the project area. We can only surmise the amount of such sites destroyed between 1943 and 1964, and then between 1964 up until the initial archaeological survey was conducted in 1977. From now until the end of the current lease in 2029, unimaginable and irreversible damage will be caused to the cultural landscape comprising Pōhakula. |
| Nā waiwai mo'omeheu a'u i hāpai aku nei i luna a'e ma ka hā'ina nīnau 10 me 11. - The cultural resources I previously brought up as answers to questions 10 and eleven. These are real, true cultural resources that can and will be affected.                                                                                                                                                                                                                                        |
| the water springs below the areas, substance in forms of herbs, plants, animals/livestock, insects                                                                                                                                                                                                                                                                                                                                                                                    |
| What for, they don't need it or use it, it should be returned to the people                                                                                                                                                                                                                                                                                                                                                                                                           |
| Depleted uranium is a health hazard for the entire community. The lands are sacred and should not be used for military training. Protection of native species must be a priority. Heiau and other cultural artifacts must also be respected and preserved.                                                                                                                                                                                                                            |

**Question 14: Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?**

Number of responses = 25 (40%)

Numbers of skipped responses = 37 (60%)

|                                                                                                                                                                                                                                                                                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Number of responses = 25 (40%)</b>                                                                                                                                                                                                                                                                                                               |
| Absolutely, end the lease immediately, the military should stop desecrated not only our 'āina but everyone else's 'āina. They need to leave Pōhakuloa forever, leave our 'āina, go somewhere else and train period.                                                                                                                                 |
| Stop all wars                                                                                                                                                                                                                                                                                                                                       |
| stop the bombing and destruction                                                                                                                                                                                                                                                                                                                    |
| No                                                                                                                                                                                                                                                                                                                                                  |
| Yes. Do not allow further military use of the land other than the beginnings of Clean-up and reforestation. High altitude bombing with cement filled "dummy bombs" and foreign bombing on PTA grounds must cease. The Lease states the DoD's Clean-up Budget would be based on the "Fair Market Value of the Land"--assessed by DLNR Land Division. |
| Does the Army really need 23,000 acres? The question is what does the Army plan to do with all that land? If practice bombing is to rake place then that would have an impact on the land.                                                                                                                                                          |
| Give more money                                                                                                                                                                                                                                                                                                                                     |
| Before we answer that could we at least know the specific names of these areas.                                                                                                                                                                                                                                                                     |
| STOP BOMBING HAWAII!                                                                                                                                                                                                                                                                                                                                |
| No. And based on past practices, the military cannot be relied on to prevent or remedy such occurrences                                                                                                                                                                                                                                             |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Stop bombing and playing war games there and not lease any more of this land to them                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| With diplomacy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <ol style="list-style-type: none"> <li>1. Have the military vacate the property.</li> <li>2. If allowed to remain require the on site presence of an archeologist to survey and inspect sites and botanist to do the same for endangered species. And to then require mitigation measures to be developed and put in place and maintained.</li> <li>3. Require the notary to pay a fair market rates with appropriate increases.</li> <li>4. Make those leases for short terms with right of renewal/extension at the sole discretion of the DLNR or whoever is the signatory to the lease.</li> </ol> |
| Cancel your plans. Leave the area in its natural state.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Do not renew the lease and return the area to Hawaiian control                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Make it a national park and stop bombing in it.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Cease all bombing practices                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Yes. Keep the U.S. Army off the islands entirely, since it was military action by the U.S. that overthrew the Queen illegally.                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Easy. Remove the U.S. Military from control and oppressive occupation of this sacred land.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| By not renewing the lease of all of these lands to the US Military! There is no great need to conduct such culturally and environmentally disruptive activities on Hawaiian lands. The military has far more space available on the US mainland to conduct destructive exercises, rather than on the limited lands of Hawaii.                                                                                                                                                                                                                                                                          |
| Pono ka ho'opane'e, a me ke kūkulu i wahi e hāpai ai ka po'e nona he kuleana maoli ma laila i ko lākou mau mana'o, me ke hiki aku i hana e mālama 'ia ai nā pono mo'omeheu a siwila maoli o ia po'e. - There must be dialogue held with people with a firm grasp on Hawaiian culture, and specifically how actions taken at Pōhakuloa will end up affecting the larger public, and also those with legitimate relationships with the land, and a solution must be reached that honors and respects the legitimate cultural and thereby civil and human rights of those people in question.             |
| not till i have a better understanding of the project from start to finish                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Yeah, get out, you don't need the land or use it.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Identify and get appropriate cultural approvals for other larger land areas instead of selecting an island state with very limited land mass. Use simulation training.                                                                                                                                                                                                                                                                                                                                                                                                                                 |

**Question 15: Are you aware of any traditions or customs that may be impacted by such a project? What might those impacts be?**

Number of responses = 23 (37%)

Numbers of no responses = 29 (53%)

|                                                                                                                                                                                                                                                                                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Numbers of no responses = 29 (53%)</b>                                                                                                                                                                                                                                                |
| Absolutely, the heiau and cultural sites that we as Kānaka could enter, have ceremony, cleanse the 'āina and injustices through pule and oli and cleanups, restoring Pōhakuloa are all being restricted from us because the occupying american military is bombing our sacred Pōhakuloa. |
| Destruction of all life , Kanaka Seek Truth Justice Peace , Hale o Lono                                                                                                                                                                                                                  |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I have been a traditional midwife here for 25 yrs. Am keeping documentation on the history of trauma that native Hawaiian women have with high miscarriage and fetal mortality rates during RIMPAC exercises on aina ame kai. you should be aware already that Native Hawaiians who have a high cultural affiliation with Pōhakuloa and their iwi there, experience a greater impact on them on body, mind and spirit. Statistics show that they are impacted disproportionately. |
| No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Yes, but under NHPA Section 106, these practices are alled to be confidential.                                                                                                                                                                                                                                                                                                                                                                                                    |
| No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| The plant dying custom                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Aina that has lost its history can always be rejuvenated all it takes is for us to know                                                                                                                                                                                                                                                                                                                                                                                           |
| The negative impacts have BEEN affecting Hawai‘i and its people. Cancer is on the rise while bombs continue to fall. The lawsuit is still intact and needs to be fulfilled with a hefty cleanup by PTA                                                                                                                                                                                                                                                                            |
| The proper handling of significant artifacts and burial remains, have been and continue to be mishandled by authorities. I see neither any acknowledgment nor any behavior changes unless monitored and enforced by an agency outside of the government.                                                                                                                                                                                                                          |
| Ceremony by the hawaiiians                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Mamalahoakanawai                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Only bad impacts such as not allowing free access, decimation of cultural sites loss of historical physical documentation.m which may be u known at the present time.                                                                                                                                                                                                                                                                                                             |
| Fencing off an area with Hawaiian cultural areas and bombing it has a huge impact on the people and the ‘aina.                                                                                                                                                                                                                                                                                                                                                                    |
| No one except the military is allowed on the land so it impacts all of us. We’re not allowed to hike or walk anywhere near there                                                                                                                                                                                                                                                                                                                                                  |
| All traditional customs will be impacted. Prove the U.S. military has legal right to be on the islands under U.S. and international law or get out.                                                                                                                                                                                                                                                                                                                               |
| Remove the Military, their presence is 100% blocking all sacred rituals of the Hawaiian people.                                                                                                                                                                                                                                                                                                                                                                                   |
| -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Native Hawaiian practices.                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Ua hiki ke pā nō nā mea a’u i hapai a’e ai ma ka helu 8, 10 me 11. The traditions and customs i previously brought up on number 8, 10, and 11 could all surely be affected.                                                                                                                                                                                                                                                                                                       |
| substance and worship                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| I have already been denied access to places I go to talk to GOD, this will just make it worse.                                                                                                                                                                                                                                                                                                                                                                                    |
| Hawaiian values, traditions, culture and history.                                                                                                                                                                                                                                                                                                                                                                                                                                 |

**Question 16: Are you aware of any traditions or customs that may be impacted by such a project? What might those impacts be?**

Number of responses = 25 (40%)

Numbers of no responses = 37 (60%)

|                                                                              |
|------------------------------------------------------------------------------|
| <b>Number of responses = 25 (40%)</b>                                        |
| End the lease. Military needs to leave our ‘Āina and leave Hawai‘i for good. |
| Stop war                                                                     |

|                                                                                                                                                                                                                                                          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| There should be studies done and information gathered on fetal morality rates and miscarriages due to RIMPAC exercises. Where are they? Why has the Department of Health refused to release Hawaii Fetal and Maternal Mortality rates the last 20 years. |
| No                                                                                                                                                                                                                                                       |
| Stop all LIVE-FIRE Training into RCAs.<br>Neutrality, Geneva IV and Geneva V. Show the DoD will comply with current lease requirements for Clean-up. No further destruction of the land.                                                                 |
| Avoid war games                                                                                                                                                                                                                                          |
| Give Hawaiians with 100% bloodline a class on racism.                                                                                                                                                                                                    |
| any impact on any aina when we are dealing with the United States Army should be avoided in fact state owned lands (de facto) should never be leased to the military.                                                                                    |
| Yes.. STOP BOMBING HAWAII!                                                                                                                                                                                                                               |
| Only the constant monitoring of ALL military activities by outside agencies such as OHA could possibly prevent damaging impacts.                                                                                                                         |
| Stop the military activity here                                                                                                                                                                                                                          |
| Diplomacy                                                                                                                                                                                                                                                |
| No. As long as the military is allowed free reign, shelling etc. known and unknown sites will be lost                                                                                                                                                    |
| The only way to avoid the potential impacts is not to renew the lease.                                                                                                                                                                                   |
| Make it a national Park and stop bombing in it.                                                                                                                                                                                                          |
| Stop bombing                                                                                                                                                                                                                                             |
| Yes. Leave the islands (after restoring to pristine condition).                                                                                                                                                                                          |
| Remove the U.S. Military presence and control of the land. Return it to Native Hawaiians. That would fix everything.                                                                                                                                     |
| -                                                                                                                                                                                                                                                        |
| Not renewing the leases to US military.                                                                                                                                                                                                                  |
| Please see below.                                                                                                                                                                                                                                        |
| E like nō me ka'ū i hāpai ai ma ka helu 14 - Similarly to what I brought up on number 14.                                                                                                                                                                |
| not till I have a better understanding of the project from start to finish                                                                                                                                                                               |
| Yeah give it up, you don't need it                                                                                                                                                                                                                       |
| Terminate lease and find another alternative site not in Hawaii.                                                                                                                                                                                         |

**Question 17: Are you aware of any traditions or customs that may be impacted by such a project? What might those impacts be?**

Number of responses = 25 (40%)

Numbers of no responses = 37 (60%)

|                                                                                                                                                                                                                                                                                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Number of responses = 25 (40%)</b>                                                                                                                                                                                                                                                                                               |
| LEAVE HAWAII'I. WHY ARE ILLEGAL OCCUPYING AMERICAN FORCES BEING TREATED ROYALLY ON OUR HAWAIIAN LANDS? WHY ARE HAWAIIANS BEING TREATED AS THE FOREIGNERS? WHY ARE OUR SACRED SITES AND CULTURAL SITES AND ANCESTRAL LANDS BEING PROSTITUTED FOR TARGET PRACTICE AND BEING DESTROYED. HOW WOULD YOU FEEL IF THIS WERE YOUR OWN HOME? |
| Turn Pōhakuloa into world healing center for PTSD                                                                                                                                                                                                                                                                                   |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Malama na keiki o hawaii nei. Respect the land, stop bombing, if this is a Hawaiian organization you should already know the best management practices for a area that without a doubt is kapu aloha. abide by these practices.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <p>None</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <p>No. This project should NOT proceed for continued use and bombing. DoD must compile monies, resources, and draw up a Clean-up Compliance Plan. The Lease requires Signs in dangerous areas. No "DANGER RCAs" have ever been placed in areas known to contain the Davy Crockett Spotter Rounds. Civilians and Soldiers should be wearing Radiation Detection Badges right now. The NRC stated in reports that water sampling must be done to check on DU contamination.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <p>Honor the land and preserve wild life and waterways</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <p>As a good steward.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <p>It will not proceed if we know the specific names of the areas.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <p>STOP BOMBING HAWAII! No it should not proceed</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <p>Constant Monitoring with halting power in all operations.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <p>But realistically? No! Not at all.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <p>Managed by a environmental group</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <p>We propose that native Hawaiian organization Hawaiian Kingdom Task Force facilities be created within the project area as an oversight committee and to partake with the United States military in regards to the project.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <p>Monitoring, monitoring, monitoring. And adequate funding of all mitigation measures.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <p>The best management practice would be to not renew the lease and return the area to the Hawaiians who will malama the area rather than bombing it.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <p>Finish cleaning up the mess you left before such as the depleted uranium etc. and then don't make anymore.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <p>Offer up many community meetings to get feedback from the people who live on Hawaii Island. If we cannot meet in person have meetings on zoom. But you also need to reach out to people who do not have access to computer technology</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <p>Require zero impact on endemic plants, birds, insects, humans or environment.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <p>The U.S. Military has ruined the land with toxins and toxic evil behaviors. Give the land back to Native Hawaiians to cleanse and return to it's original sacred status.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <p>-</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <p>It should NOT proceed.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <p>Clearly my viewpoint is against the lease renewal, and I am staunch in my belief that this project should absolutely, under no conditions, proceed.</p> <p>However if, for some reason the PTA lease is renewed, there needs to be not only extensive consultation conducted with the aboriginal kānaka ʻōiwi community, but also a serious commitment to ongoing collaboration with members of said community who wish to be involved. To exclude kānaka ʻōiwi from the process dictating what happens on their ʻāina hānau is inexcusable and intolerable. There should be full disclosure to all participants in this process, and full transparency should the United States military wish to proceed on an ethical journey, of which this request for renewal is not. Those kānaka ʻōiwi who wish to conduct traditional cultural practices at sites within PTA (where safe) should be allowed unrestricted access (with reasonable notice) accompanied by a team of EODs for their safety. And cultural resource management staff should work in full cooperation with members of the community. An outreach program to kanaka ʻōiwi and to keiki</p> |

should also be ongoing, to facilitate learning about the cultural resources present within Pōhakuloa from a firsthand perspective and also to allow for the learning of the traditions and practices that commonly occurred there.

It is absolutely imperative that the lands contained within the bounds of the project area be considered as a cultural landscape. Our kūpuna viewed the world holistically, as a multitude of elements, each forming an intricate network that influenced their world view, their lives, their beliefs and practices. The lava flows and geologic features contained within PTA are just as significant as the physical material culture left behind by our kūpuna, as are the waters that flow towards the project area from freshwater springs and the ua that falls from the sky blown by the winds. A pōhaku is not just a pōhaku. A pu'u is not just a pu'u, and it is unethical and unwise to consider these as suitable objects for target practice. Each individual element contained within the cultural landscape at Pōhakuloa must be taken into consideration, as it was by our kūpuna, and thoughtfully be considered cohesively with other material elements of culture in conjunction with living kānaka 'ōiwi to truly comprehend the significance of the Pōhakuloa lands and to preserve what is left for the future generations to come. Our 'āina has been ravaged at the hands of the oppressor, and the aboriginal descendants of these lands have been victimized through this continued exploitation not only of our lands, but of our cultural resources and the prohibition of our traditional cultural practices that are our birthright. I urge the United States military and PTA personnel to reflect deeply upon these reflections and lead from a place of genuine understanding. An understanding of our precious 'āina. An understanding of kānaka and the culture of the people whose lands are continually exploited. An understanding of the relationship between the 'āina and its people. The 'āina doesn't simply exist to serve for profit (especially to an illegally occupying country), it is that which feeds, but you must mālama 'āina first and foremost. The continued lease of these 23,000 acres termed the "project area" is a promise of extensive desecration and serves as an insult to kānaka, the 'āina, and the legacy of our ancestors. So much has been stripped already, will you not stop until the 'āina is wiped clean of any trace of our history?

These suggestions and musings are merely a basis upon which to form the best management practices should, in the worst case, the project proceed and the lands lawfully belonging to the Hawaiian Kingdom be illegally re-leased to the United States military as they continue their belligerent, prolonged occupation of the kingdom and perpetuate their continued failure to comply with international humanitarian law.

Ka ho'omana'o me ka ho'omaopopo mau i ka 'oia'i'o maoli nō ho'i o ka 'oko'a lua 'ole o ke kuana'ike me ka mo'omeheu Hawai'i. He mea ia e maka'ala mau ai ka haole. - The remembrance and recognition of the true and unique differences of Hawaiian perspective and culture. It is something that non-Hawaiian people working in Hawaii must be constantly be aware of, lest they end up working to break down an already marginalized culture.

a meeting of the minds amongst the lineal descendants, cultural descendants, and any other parties that can come together with reason

No restrictions on public access none of the nonsense happening now, why do I need a background check, or register my weapons with military, then they want me to pay for process in the form of a permit, no thank you, I worked for federal govt for 20 plus years and probably held a higher clearance than most people there so , this is a hard no for me you can't have it.

None other than to find another training area outside of Hawaii

**Question 18: Are you aware of any traditions or customs that may be impacted by such a project? What might those impacts be?**

Number of responses = 25 (40%)

Numbers of no responses = 37 (60%)

|                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Number of responses = 25 (40%)</b>                                                                                                                                                                                                                                                                                                                                                                                               |
| DEFEND PŌHAKULOA! THIS IS THE HAWAIIAN KINGDOM. NOT AMERICA. EVERYTHING OCCURING IS ILLEGAL UNDER INTERNATIONAL LAW, HAWAIIAN KINGDOM LAW, AND U.S. CONSTITUTIONAL LAW.                                                                                                                                                                                                                                                             |
| Make Peace NOT war                                                                                                                                                                                                                                                                                                                                                                                                                  |
| What impact did the bombing have at Kahoolawe ? why is allowed on the aquifers for all of Moku o Keawe?                                                                                                                                                                                                                                                                                                                             |
| Not at this time                                                                                                                                                                                                                                                                                                                                                                                                                    |
| More efforts of "Friendly Relations and Diplomatic discussions on "Exit Strategy". NOTE: The lands of Pohukuloa are NOT owned by the State of Hawaii, who actually have no legal right to issue any future lease. Also, it is good to know about the Trophorestorative enzyme called "P4D1" which was discovered after the bombing of Nagasaki and Hiroshima and reducing effects.ofutatkons and birth defects caused by radiation. |
| Can the Army be transparent with how the land would be used?                                                                                                                                                                                                                                                                                                                                                                        |
| Stop capitulating to the racist Hawaiians.                                                                                                                                                                                                                                                                                                                                                                                          |
| Lots, but I will reserve for now, mahalo                                                                                                                                                                                                                                                                                                                                                                                            |
| Our military has still not cleaned up their previous destruction. They continue to damage our environment to this day. Increasing their domain is moving in the wrong direction.                                                                                                                                                                                                                                                    |
| They have not adequately justified their need for this land abuse.                                                                                                                                                                                                                                                                                                                                                                  |
| Delay the lease approval till, more people know and have a chance to voice their concerns                                                                                                                                                                                                                                                                                                                                           |
| Under DoD instructions 4710.03 We here at IDP/HKTF would like to continue a mutual agreement for reestablishing a formal government to government relationships                                                                                                                                                                                                                                                                     |
| The military is getting/taking a free ride in many areas in the islands such as Pōhakuloa and Makua. It needs to stop.                                                                                                                                                                                                                                                                                                              |
| We are living in a time of great destruction. The pandemic is a direct result of man's ignorance. If we are to have a home on earth- We must create spaces of sanctuary and care for the environment. If you want to do the best with this land, then work on creating a place of sanctuary. Protect the land.                                                                                                                      |
| Once again, I would like to say that uniquely uniquely situated spot such as this in a tiny island chain with situations that don't exist anywhere else in the world is an inappropriate place for any military activity.                                                                                                                                                                                                           |
| No                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Please leave the islands altogether. You were never meant to be here.                                                                                                                                                                                                                                                                                                                                                               |
| End the Military occupation and end the desecration of our sacred Mauna Kea/Mauna Loa. Return the land to Native Hawaiians.                                                                                                                                                                                                                                                                                                         |
| Please stop bombing the land and polluting the air                                                                                                                                                                                                                                                                                                                                                                                  |
| I don't support the military practices that PTA does to our land. The noise pollution, the air pollution that goes to Kona, the damage it does to our land...many many many residence feel the same way. We don't support PTA - period.                                                                                                                                                                                             |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| US military needs to release the lands on Oahu as well. The impact to Honolulu is even greater, due to the limited space and large population there!                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| No. Mahalo.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Ma ka mo'omeheu 'oia'i'o o ka Hawai'i, 'elua wale nō mea e hehi ai ke kanaka ma kahi malihini, 'o ke kuleana, a me ke kama'āina. He maha'oi, a he hō'eha ka hele wale o ke kanaka. Ma 'ane'i ho'i e 'ike ai, 'o kēia hanana a ka pū'ali koa i Pōhakuloa, he kuleana 'ole, a kama'āina 'ole. He hakina kolonaio nō ia.- In an again real and actual Hawaiian perspective, there are only two reasons one would go to a place one is not framiliar with. They are "kuleana" or responsibility, and "kama'āina," or interpersonal connections. If one does not a specific responsibility to a place or have people to welcome one to an unfamiliar spot, it is considered rude to go there. This is the fundamental reason why the U.S. training camp at Pōhakuloa is so painful and displeasing to people of Hawai'i. It is a vestige of Hawai'i's colonial history. |
| not at the current moment or told othewise                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Thank you for the oppportunity for input.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

**Question 19: If there are any documents you would like to share, feel free to upload them here.**

Number of responses = 0

Numbers of skipped responses = 62

**Question 20:**

**CONFIRMATION OF PARTICIPATION - I hereby understand and agree that the answers I have provided in this survey are to be included in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area.**

Number of responses = 29 (28 "yes" responses; 1 "no" response that was removed from CIA)

Numbers of skipped responses = 33

**Question 21 (OPTIONAL): If you would like to share your contact information, please do so below. This information will be redacted from your response in the CIA to protect your privacy.**

Number of responses = 8

Numbers of skipped responses = 54

## 12.4 Interview with Kamana Kapele

**Interviewer:** Trisha Kehaulani Watson

**Interviewee:** Mana Kapele

**Date:** September 12, 2021

**Location:** via phone

### Biography

Mr. Kapele is self-employed and retired. He currently lives in Kealahou on Hawai‘i Island. He was born on O‘ahu and raised in Kāne‘ohe until the mid-1960s, when his family then moved to Hawai‘i Island. In this interview, he represents his family and others who share a similar connection and association with the project area.

### Overview

Mr. Kapele’s association with the project area is through his own namesake. Pu‘u Kapele, a prominent geographic feature in the project area, is associated with his family name. He is also associated with the ki‘i and shrine next to the pu‘u.

### General Discussion

When asked about specific place names associated with the project area, Mr. Kapele mentioned Kilohana and Hāmākua. He also noted that Kona District and Hāmākua District merge at Pu‘u Kapele.

Mr. Kapele shared the story of the shrine during the interview. Mr. Kapele was raised by his grandfather and spent his early childhood with him before moving to Hawai‘i Island. He recalls fondly the vivid memories and dreams associated with his childhood, which include spending time with his grandfather. After moving to Hawai‘i Island, his grandfather passed away.

In the early 1990s, he had a tremendous spiritual awakening. Mr. Kapele noted that he would receive information (names of places and people) which he described as surfacing within his mind. Not knowing where this information had originated, Mr. Kapele recounted how he eventually realized that this received information was coming from his late grandfather. This prompted him to join the sovereignty movement. The eclipse of 1991 was a part of this journey, said Mr. Kapele.

Around 2000, a friend of Mr. Kapele notified him that the military was leasing Pōhakuloa and Pu‘u Kapele. Noting the shared namesake, he began a journey to Pu‘u Kapele. He noted that while he had never been to Pu‘u Kapele before, he knew how to get there. When he arrived, it was as if he had been there before, as if he had stood in the exact place generations ago. Then, Mr. Kapele describes hearing his ancestors’ voice ask him to “find the stone”. He walked through the grass in the area, soon finding a stone covered in dirt. After wiggling it free, he discovered one half of a geode.

Understanding this to be of spiritual significance, Mr. Kapele placed the stone to serve as an ahu. He recited a pule. As he was preparing to leave, Mr. Kapele recounted that he heard the voice instruct him to find the other half. After walking through the field, he then found the other half of the geode partially buried. He joined the two halves of the geode together, which fit seamlessly.

Mr. Kapele noted that this experience shows that Native Hawaiian spiritual practices are alive and well. They are not only distant stories. From this experience, Mr. Kapele noted how other insights came. The establishment of the ahu in the early 2000s prompted him to meet with the military later in 2004. The discussion focused primarily on the Queen's protest. He noted that his time spent in spiritual reflection and within the sovereignty movement have provided him with a further understanding of history, law, and cultural practice.

Eventually, Mr. Kapele and his family were granted access to Pu'u Kapele with military escort. This is the only way Mr. Kapele and his family can now visit Pu'u Kapele. Mr. Kapele had previously been able to access Pu'u Kapele without escort, prior to blockades on the old hunting roads, along with fencing which was constructed after the bypass. He noted that visiting Pu'u Kapele was not associated with a specific time, but rather that he would access it whenever he felt called to do so.

Mr. Kapele specifically described how the Queen's protests are relevant today, not just for his family, but also for the Hawaiian Islands and k̄naka maoli overall. Through his years of research and spiritual practice, he has come to realize that the Queen's protest is more than just an appeal by a private person, and is rather a document that was entered under a condition of war. It is a wartime convention prevent the loss of life and a suspension of hostilities until a treaty of peace terminates the war. The terms and stipulations laid out in the treaty, recounted by Mr. Kapele, state: until such time that the government of the United States shall, upon the facts being presented to it, undo the action of its representative, reinstate me in the authority I claim as the constitutional sovereign of the Hawaiian Islands.

Mr. Kapele noted that these terms and stipulations have been established, and questions how the United States can continue its illegal occupation. Mr. Kapele stated that it is their responsibility, as descendants of the Queen, to carry on her work.

### **Cultural Resources**

Mr. Kapele confirmed that Pu'u Kapele, the ki'i, and the shrine are all cultural resources. He noted that Pu'u Kapele is fenced off due to the endangered species of plants found in the habitat, specifically honohono (an endemic mint).

### **Traditions and Customs**

Mr. Kapele noted that his family makes regular visits to the site for spiritual and religious practices. He noted that his traditional and customary association with the project area is centered on Pu‘u Kapele. However, he also noted that Native Hawaiian traditional and customary beliefs suggest that there is connectivity between sacred spaces, and that other prominent pu‘u in the area, including Pu‘u Ke‘eke‘e, are also culturally significant.

### **Impacts**

Mr. Kapele noted that should the military retain its usage and lease of the land, they will continue to bomb and degrade the environment. He explained that in agreeing to the continued military usage of Pōhakuloa is to agree to the desecration of other sacred sites. Mr. Kapele also noted that another impact would be the continued barring of access to important cultural and religious sites.

### **Mitigation Measures & Recommendations**

Mr. Kapele has been working with personnel at Pōhakuloa regarding access. He believes that access to his spiritual areas, including Pu‘u Kapele, should be free access.

## **12.5 Summary**

Responses to the survey identified many of the same resources, practices, and/or customs identified through the research for this CIA. Respondents noted a few additional resources or practices that were not identified in the initial research conducted for this assessment and include:

- Fishing
- ‘Ōhia
- Keauhou Ii Nene Sanctuary
- Pu‘u Maau (also referred to as Pu‘u Mau‘u)
- Napuukulua
- Omakoili (Also Oma Koili)
- Lei making
- Pig hunting

Where appropriate and when located within the project area or geographic extent, these resources were incorporated into the appropriate sections throughout this assessment.

## 13.0 IMPACT ASSESSMENT

When the Hawaii State Legislature passed Act 50 in 2000, the purposes of the Act were clear: “1) Require that environmental impact statements include the disclosure of the effects of a proposed action on the cultural practices of the community and State; and 2) Amend the definition of “significant effect” to include adverse effects on cultural practices” (Act 50, SLH 2000).

HRS 343-2, as amended per Act 50, defines an “Environmental impact statement” as “an informational document prepared in compliance with the rules adopted under 343-6 and which discloses the environmental effects of a proposed action, effects of a proposed action, effects of a proposed action on the economic welfare, social welfare, and *cultural practices of the community and State*, effects of the economic activities arising out of the proposed action, measures proposed to minimize adverse effects, and alternatives to the action and their environmental effects” (emphasis added) (HRS Chapter 323-2).

Under the same part, “Significant effects” is defined under state law as “the sum of the effects on the quality of the environment, including actions that irrevocably commit a natural resource, curtail the range of beneficial uses of the environment, are contrary to the State’s environmental policies or long-term environmental goals as established by law, or adversely affect the economic welfare, social welfare, or *cultural practices of the community and State*” (emphasis added) (HRS Chapter 323-2). Therefore, an adverse effect to cultural practices of the community or State constitutes a “significant effect” under Chapter 343.

Following the above legislative definitions, the Proposed Action for this environmental analysis is a real estate action (i.e., administrative action) that would enable continuation of current activities on state-leased land. It does not include construction or proposed changes to the current levels or types of activities conducted at PTA (e.g., training, maintenance and repair activities, or natural and cultural resources management). Potential future actions that are not part of the current Proposed Action would require separate NEPA (and possibly HEPA) and NHPA compliance.

Any tangible or physical impacts to historic sites are addressed in the archaeological section of the EIS and are not covered by this CIA. Similarly, any tangible physical impacts to flora or fauna are address in the biological section of the EIS and not covered by this CIA. This CIA focuses on affects to cultural practices of the community and State as required by Chapter 343.

While the Proposed Action is primarily a real estate transaction, all three alternatives (Alternatives 1 through 3) include retention of state-leased land by the Army that include potential PTRCI, specifically Pu'u Kapele, Pu'u Ke'eke'e, Pu'u Kea, Pu'u Koko, Pu'u Ahi, and Pu'u Mau'u. Pu'u Ko'ohi and Pu'u Pōhakuloa would be retained in Alternative 1, but not Alternatives 2 and 3. All of these sites would be returned to State control under the No Action Alternative.

Sites of religious and cultural significance are, by their nature, often difficult to define, identify, and map. In their 2010 *Archaeological Inventory Survey of the Mauna Kea Science Reserve*, McCoy and Nees write, "The boundaries of places, and sacred places in particular, are not always easily defined" (McCoy and Nees 2010: 7-14). They continue to state:

From the perspective of the people that were engaged in the various practices that made the various definable places in the summit regions, the boundaries of each place are essentially unmappable because of all the "invisibilities that can never be made visible," which means that maps of such places "are by definition incomplete". As Carson notes, "The performance of the practice is itself the map" (McCoy and Nees 2010: 7-14, citing Carson 1995: 126).

There are other pu'u immediately upslope from the state-leased land (project area) that have been recognized through ethnographic data as significant. This CIA identified dozens of additional pu'u, both within and outside the project area, that have not yet been formally evaluated for their significance but are potentially PTRCI.

It is not the role of this CIA to conduct these significance assessments, rather the role of this assessment is to identify effects of the Proposed Action on cultural practices. Impacts to traditional or customary practices have not been previously assessed and cultural access is not accounted for in the existing PA for training activities. Cultural practices historically and contemporaneously associated with the project area fall into three general eras: a traditional pre-contact era, a historic post-contact era, and a contemporaneous era under Army control.

As shown through the preceding discussions regarding traditional and customary practices, the project area saw different cultural practices through the different eras. During the traditional era, cultural practices would have only been limited by the kapu system. The kapu system was the widely employed political system that allowed for chiefs to oversee their people and manage resources. Under the kapu system, access to and use of the resources in the project era were generally allowed without much oversight or restriction as evidenced by the extensive trail system constructed under Hawai'i Island chiefs as well as the extensive quarrying activities that occurred under this system. The project area is not suitable for permanent habitation, but past reports for PTA have documented use of the project area for temporary habitation. "[A]rchaeological studies in PTA and neighboring areas demonstrate

that Hawaiians nevertheless utilized this upland plateau in prehistory for various types of resource acquisition. Radiocarbon dates indicate that Native Hawaiians used the Saddle Region for more than 1,000 years, from ca. A.D. 775 to the nineteenth century, with the most intense use of the Hawai'i Islands uplands extending from A.D. 1200 to 1700" (Taomia 2007: 4).

As discussed in Section 11, the Hawaiian Kingdom would undergo a series of significant changes after foreign contact in 1778. From the unification of the Kingdom under Kamehameha I to the end the kapu system. Once foreigners arrived, changes came quickly.

Liholiho's reign, while significant for the end of the kapu system, would ultimately be short, as he and his wife, Kamāmalu, would succumb to the measles while visiting London in 1824. His younger brother Kauikeaouli, Kamehameha III, succeeded Liholiho as mō'ī (high chief or king). It was under the rule of Kauikeaouli that the Kingdom became a constitutional monarchy with the promulgation of the 1840 Constitution. Further changes under his governance included changes to the land title system. A land commission that served to quiet land titles was first formed in February of 1846. The Māhele, which occurred in 1848, "was a division of nearly all the lands of the Hawaiian Kingdom" (Beamer 2014: 142). Beamer further explains, "The Māhele – which established distinct land bases for the mō'ī, the government, and the chiefs and ultimately made large-scale private ownership possible – was nevertheless still subject to the rights of maka'āinana to make their claims for land" (Beamer 2014: 142). Many native tenants failed to make successful claims for their ancestral lands, and this would open the door to land ownership by foreigners.

Changes in cultural practices within the project area pre-dated the political changes that would take place within the Kingdom in the 19<sup>th</sup> century. As discussed in Section 7.1.4 of this assessment, horses would be introduced to Hawai'i in the late 18<sup>th</sup> century. The introduction of cattle significantly impacted the region and the traditional (pre-contact) cultural practices that occurred during that time. The introduction of foreign goods reduced the need to quarry materials and produce tools that had modern counterparts.

Cultural practices nonetheless continued in the region, although influenced by foreign contact. *The 2006-2007 Annual Report for Cultural Resources Management Projects Performed Under the Ecosystems Management Program at the Pōhakuloa Training Area, Island of Hawai'i, Hawai'i* states:

By the late 19<sup>th</sup> century ranches managed the cattle, and sheep and goats were introduced. Walls and other features for animal control were constructed in the uplands and across the Saddle region, and supporting infrastructure (watering structures, shelters for animals and humans, etc.) was built across the area. The cantonment area of PTA itself was built in 1956.

The archaeological remains found across PTA illustrate the use of this area throughout human occupation of the island. Archaeological sites found across PTA include chill glass quarries, excavated pits, trails, lava tube habitation and water collection sites, and shrines. These sites and the physical remains found in them demonstrate the variety of activities that took place in the Saddle region prior to European contact. The walls and other remains of the ranching era are the legacy of the historic era use of the area (Taomia 2007: 4-5).

In 1942, Kaumana Road was built to facilitate military access and the military began regular use of the area in 1943. The construction of the road led to the establishment of the training area, which would become PTA (CEMML, 2020: 21). Military use of the region steadily increased through the 20<sup>th</sup> century. The use of the area for military activities, including live-fire training, required the military’s exclusive use of the land, which in turn limited entry to areas that had been accessible to Native Hawaiians and local residents up until that time.

**Table 24** summarizes the cultural practices historically associated with the project area and how those practices may have changed over the various eras. This aggregates the information from the preceding chapters and places them in this table for summary review.

*Table 24. Cultural Practices Associated with the Project Area and their Frequency over Historic Eras*

| Cultural Practice                                       | Traditional Pre-Contact Era (prior to 1778) | Historic Post-Contact Era (1778-1943)                                               | Contemporaneous Era (1943 – current)                                                                |
|---------------------------------------------------------|---------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| <b>Mo’olelo (Story-Telling and History Recordation)</b> | Regularly practiced                         | Regularly practiced                                                                 | Practice in project area limited by Army control of land; regularly practiced in surrounding region |
| <b>Alanui (Trail Usage)</b>                             | Regularly practiced                         | Regularly practiced, and facilitated by Kingdom to aid access, travel, and commerce | Practice in project area limited by Army control of land; regularly practiced in surrounding region |
| <b>Quarrying</b>                                        | Regularly practiced                         | Practice declined due to introduction of foreign goods                              | Not actively practiced                                                                              |
| <b>Stone Tool Manufacture</b>                           | Regularly practiced                         | Practice declined due to introduction of foreign goods                              | Not actively practiced; limited information about current practice                                  |

| <b>Cultural Practice</b>                                        | <b>Traditional Pre-Contact Era (prior to 1778)</b>         | <b>Historic Post-Contact Era (1778-1943)</b>                              | <b>Contemporaneous Era (1943 – current)</b>                                                         |
|-----------------------------------------------------------------|------------------------------------------------------------|---------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| <b>Hōlua</b>                                                    | Limited information about practice, frequency undetermined | No evidence of practice in region                                         | No evidence of practice in region                                                                   |
| <b>Habitation</b>                                               | Regularly practiced                                        | Regularly practiced                                                       | Practice in project area limited by Army control of land; limited practice in surrounding region    |
| <b>Lā'au Lapa'au</b>                                            | Regularly practiced                                        | Practice declined due to introduction of foreign medicine and practices   | Practice in project area limited by Army control of land; regularly practiced in surrounding region |
| <b>Life Cycle Patterns (i.e., burying of 'iewe, piko, etc.)</b> | Regularly practiced                                        | Regularly practiced                                                       | Practice in project area limited by Army control of land; regularly practiced in surrounding region |
| <b>Disposition of Cremated Remains</b>                          | Not yet introduced (modern cremation not yet introduced)   | Limited information about practice, frequency undetermined                | Practice in project area limited by Army control of land; regularly practiced in surrounding region |
| <b>Bird Catching</b>                                            | Regularly practiced                                        | Practice declined due to introduction of foreign goods                    | Not actively practiced; practice limited by state and federal law                                   |
| <b>Agriculture, Cooking, and Food Traditions</b>                | Regularly practiced                                        | Practice declined due to introduction of foreign goods                    | No evidence of current practice in region                                                           |
| <b>Ranching</b>                                                 | Not yet introduced                                         | Regularly practiced, although taking or cattle or livestock was regulated | Practice in project area limited by Army control of land; regularly practiced in surrounding region |

| <b>Cultural Practice</b>           | <b>Traditional Pre-Contact Era (prior to 1778)</b>                  | <b>Historic Post-Contact Era (1778-1943)</b>                              | <b>Contemporaneous Era (1943 – current)</b>                                                              |
|------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| <b>Paniolo</b>                     | Not yet created                                                     | Regularly practiced, although taking of cattle or livestock was regulated | Practice in project area limited by Army control of land; regularly practiced in surrounding region      |
| <b>Modern Hunting</b>              | Not yet introduced                                                  | Regularly practiced, although taking of animals was regulated             | Regularly practiced in project area through a recreational hunting program, subject to existing policies |
| <b>Kilo</b>                        | Regularly practiced                                                 | Regularly practiced                                                       | Practice in project area limited by Army control of land; regularly practiced in surrounding region      |
| <b>Uhau Humu Pohaku</b>            | Regularly practiced                                                 | Regularly practiced                                                       | Practice in project area limited by Army control of land; regularly practiced in surrounding region      |
| <b>Parietal Art</b>                | Evidence of practice, frequency undetermined                        | Practice declined due to introduction of foreign goods                    | Not actively practiced; limited information about current practice                                       |
| <b>Haku mele and haku oli</b>      | Regularly practiced                                                 | Regularly practiced                                                       | Practice in project area limited by Army control of land; regularly practiced in surrounding region      |
| <b>Hula</b>                        | Limited information about practice, frequency undetermined          | Limited information about practice, frequency undetermined                | Practice in project area limited by Army control of land; regularly practiced in surrounding region      |
| <b>Cosmologies and genealogies</b> | Regularly practiced, specifically in relation to deities associated | Practice declined due to introduction of foreign religions                | Practice in project area limited by Army control of land; regularly                                      |

| Cultural Practice           | Traditional Pre-Contact Era (prior to 1778) | Historic Post-Contact Era (1778-1943)                      | Contemporaneous Era (1943 – current)                                                                        |
|-----------------------------|---------------------------------------------|------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
|                             | with Mauna Kea and other landforms          |                                                            | practiced in surrounding region                                                                             |
| <b>Mālama iwi</b>           | Regularly practiced                         | Practice declined due to introduction of foreign religions | Not actively practiced and practice limited by state and federal law (i.e., laws regarding handling of iwi) |
| <b>Ceremonial practices</b> | Regularly practiced                         | Practice declined due to introduction of foreign religions | Practice in project area limited by Army control of land; regularly practiced in surrounding region         |
| <b>Hana Kahuna</b>          | Regularly practiced                         | Practice declined due to introduction of foreign religions | Practice in project area limited by Army control of land; regularly practiced in surrounding region         |

### 13.1 Impacts Under the Proposed Action

The impacts resulting from current military control of the state-leased land and the Proposed Action stem from limitations of access, as identified by practitioners who provided ethnographic data for this assessment (**Section 12**). Physical impacts to cultural resources are managed and mitigated by existing agreements. Access to important cultural resources is limited physically and by current policy. It is this limitation of access that directly creates adverse effects to cultural practices, as practice cannot be conducted absent access to sites of traditional, religious, or cultural importance. This adverse effect to cultural practices equates a significant effect under the express language of HAR §11-200.1.

There is no record that practitioners, both Hawaiian and from other ethnic groups, were ever denied access to sites or resources within the project area during the traditional pre-contact era (prior to 1778) or during the historic post-contact era (1778 – 1943), although, as described in Section 3.2, ali'i managed the taking of wild animals in the region and such takings were only allowed with permission in the early historic era after the introduction of livestock. Ethnographic data collected for this assessment from cultural practitioners identified limitations on access as unique to the Army's control of the lands. The practitioners identified three areas of concern:

1. Practitioners unwilling to gather resources from the project area due to concerns about potential contamination of these resources resulting from military activity (M. Trask, pers. comm.)
2. After the realignment of Saddle Road (DKI Highway), physical barriers were installed blocking previously used access roads that were utilized by cultural practitioners to access sites of religious and cultural importance (M. Kapele, interview).
3. The Army's current practice allows limited approved access for cultural practices on a case-by-case basis, and practitioners<sup>47</sup> must be escorted the entire time (M. Kapele, interview).

Access to the project area specifically for “traditional or customary practice” is currently limited by physical barriers to the project area. Current Army practice offers no codified process for allowing access specifically for traditional or customary practices protected under state law. This has caused significant adverse impacts to traditional or customary practices.

To date, the Army has not codified any protections or considerations to the intangible cultural resources or ICH associated with PTA's cultural landscapes.<sup>48</sup> While Article XII, Section 7 of the Hawaii State Constitution does not call out intangible resources by name, a plain, reasonable reading of this Section clearly includes and is intended to protect, intangible, as well as tangible cultural resources. This Section states: “The State reaffirms and shall protect all rights, customarily and traditionally exercised for subsistence, cultural and religious purposes and possessed by ahupua'a tenants who are descendants of native Hawaiians who inhabited the Hawaiian Islands prior to 1778, subject to the right of the State to regulate such rights.”

To the extent that the project area is the state-leased land, there is an obligation of the state to protect all rights, customarily and traditionally exercised for subsistence, cultural and religious purposes and possessed by Native Hawaiians.

The Army processes access requests on a case-by-case basis. Recently, cultural access for daytime Makahiki activities have been granted twice per year in 2019, 2020, and 2021, as approved under Lt. Col. Borce (LTC Borce, pers. comm.).

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<sup>47</sup> As previously noted, the escort requirement does not apply to the recreational hunting program.

<sup>48</sup> See also Desilets et al. 2011, “Properties affiliated with traditional religious and cultural importance to a Native Hawaiian tribe or Native Hawaiian group may be eligible for listing on the NRHP. A Traditional Cultural Property or Place (TCP) has always been afforded protection in the NHPA; however, it was not until 1980 that it was recognized that intangible elements of our cultural heritage need to be more systematically addressed when implementing the NHPA” (173, emphasis in original).

The total effect of these physical barriers and Army practices for access, in addition to direct impacts from military occupation of the site, has resulted in a significant decline in the ability of Native Hawaiians and other ethnic groups to access the property. Prior to Government purchase of private ranch land that now forms the Keamuku Maneuver Area, practitioners were able to access the area, allowing for the continuation of traditional or customary activities.

As noted throughout this document, the cultural practices in the project area have been dynamic. As part of living cultures, the practices of different ethnic and cultural groups changed over time and were influenced by the geopolitical transformations occurring on Hawai'i Island. The following table looks specifically at impacts under the Proposed Action. This includes consideration of how cultural practices are impacted under the existing lease agreement with the state and considers how cultural practices would be impacted under the Proposed Action, which result in the Army's retention of some or all of the state-leased land. This table also looks at impacts under the No Action Alternative, in which the state would regain control of the project area.

*Table 25. Summary of Impacts Under the Proposed Action and the No Action Alternative*

| CULTURAL PRACTICE                                       | IMPACTS UNDER PROPOSED ACTION                                                                                       | IMPACTS UNDER NO ACTION ALTERNATIVE                                                                                 |
|---------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| <b>Mo'olelo (Story-Telling and History Recordation)</b> | Practice adversely impacted by limitation of access                                                                 | Practice beneficially impacted by restoration of access                                                             |
| <b>Alanui (Trail Usage)</b>                             | Practice adversely impacted by limitation of access                                                                 | Practice beneficially impacted by restoration of access                                                             |
| <b>Quarrying</b>                                        | No impact as practice is not on-going and there is no evidence of potential restoration of practice in project area | No impact as practice is not on-going and there is no evidence of potential restoration of practice in project area |
| <b>Stone Tool Manufacture</b>                           | No impact as practice is not on-going and there is no evidence of potential restoration of practice in project area | No impact as practice is not on-going and there is no evidence of potential restoration of practice in project area |
| <b>Hōlua</b>                                            | No impact as practice is not on-going and there is no evidence of potential restoration of practice in project area | No impact as practice is not on-going and there is no evidence of potential restoration of practice in project area |

| CULTURAL PRACTICE                                                | IMPACTS UNDER PROPOSED ACTION                                                                                                                                              | IMPACTS UNDER NO ACTION ALTERNATIVE                                                                                                                                         |
|------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Habitation</b>                                                | Practice adversely impacted by limitation of access                                                                                                                        | Practice beneficially impacted by restoration of access                                                                                                                     |
| <b>Lā'au Lapa'au</b>                                             | Practice adversely impacted by limitation of access and existing state and federal law                                                                                     | Practice beneficially impacted by restoration of access, although access and practice will remain limited by state and federal law                                          |
| <b>Life Cycle Patterns (i.e., burying of 'iwele, piko, etc.)</b> | Practice adversely impacted by limitation of access                                                                                                                        | Practice beneficially impacted by restoration of access                                                                                                                     |
| <b>Disposition of Cremated Remains</b>                           | Practice adversely impacted by limitation of access                                                                                                                        | Practice beneficially impacted by restoration of access                                                                                                                     |
| <b>Bird Catching</b>                                             | No impact as practice is not on-going and there is no evidence that restoration of practice in project area is possible; practice is also limited by state and federal law | No impact as practice is not on-going and there is no evidence of potential restoration of practice in project area; practice would remain limited by state and federal law |
| <b>Agriculture, Cooking, and Food Traditions</b>                 | No impact as practice is not on-going and there is no evidence of potential restoration of practice in project area                                                        | No impact as practice is not on-going and there is no evidence of potential restoration of practice in project area                                                         |
| <b>Ranching</b>                                                  | Practice adversely impacted by limitation of access                                                                                                                        | Practice beneficially impacted by restoration of access                                                                                                                     |
| <b>Paniolo</b>                                                   | Practice adversely impacted by limitation of access                                                                                                                        | Practice beneficially impacted by restoration of access                                                                                                                     |
| <b>Modern Hunting</b>                                            | No impact, practice is on-going in project area                                                                                                                            | No impact, practice is on-going in project area                                                                                                                             |
| <b>Kilo</b>                                                      | Practice adversely impacted by limitation of access                                                                                                                        | Practice beneficially impacted by restoration of access                                                                                                                     |
| <b>Uhau Humu Pohaku</b>                                          | Practice adversely impacted by limitation of access                                                                                                                        | Practice beneficially impacted by restoration of access                                                                                                                     |
| <b>Parietal Art</b>                                              | No impact as practice is not on-going and there is no evidence of potential restoration of practice in project area                                                        | No impact as practice is not on-going and there is no evidence of potential restoration of practice in project area                                                         |

| CULTURAL PRACTICE                  | IMPACTS UNDER PROPOSED ACTION                                                          | IMPACTS UNDER NO ACTION ALTERNATIVE                                                                                                |
|------------------------------------|----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| <b>Haku mele and haku oli</b>      | Practice adversely impacted by limitation of access                                    | Practice beneficially impacted by restoration of access                                                                            |
| <b>Hula</b>                        | Practice adversely impacted by limitation of access                                    | Practice beneficially impacted by restoration of access                                                                            |
| <b>Cosmologies and genealogies</b> | Practice adversely impacted by limitation of access                                    | Practice beneficially impacted by restoration of access                                                                            |
| <b>Mālama iwi</b>                  | Practice adversely impacted by limitation of access and existing state and federal law | Practice beneficially impacted by restoration of access, although access and practice will remain limited by state and federal law |
| <b>Ceremonial practices</b>        | Practice adversely impacted by limitation of access                                    | Practice beneficially impacted by restoration of access                                                                            |
| <b>Hana Kahuna</b>                 | Practice adversely impacted by limitation of access                                    | Practice beneficially impacted by restoration of access                                                                            |

### 13.2 Impacts Under the No Action Alternative

This alternative would allow for the least impact to cultural practices. PTRCI included in the state-leased land that would return to state management are Pu‘u Ke‘eke‘e, Pu‘u Ka Pele, Pu‘u Kea, Pu‘u Ahi, Pu‘u Koko, Pu‘u Ma‘au, Pu‘u Pōhakuloa, and Pu‘u Ko‘ohi.

The No Action Alternative would result in long-term, significant, beneficial impacts to traditional or customary practices, as land returned to the State would be available for cultural use. Existing Army access restrictions placed on cultural practitioners would be eliminated.

Assuming these lands remain undeveloped, under state law practitioners would have a protected right to exercise their culture on these lands. Additionally, lease compliance actions can be expected to require the removal of perimeter fencing and/or barriers that currently prohibit access for traditional or customary practices.

When considering the specific concerns identified by practitioners regarding access identified in **Section 13.1**, the No Action Alternative would have the following effect for land returned to the state following lease expiration and based on future negotiation with the state:

- The Army would decommission the portion of the range on state-leased land where depleted uranium-containing rounds were fired and perform depleted uranium

investigation and cleanup protocols, if needed. Decommissioning would be coordinated with the Nuclear Regulatory Commission to ensure that public health and safety would continue to be protected if cleanup is needed (**EIS Section 3.5**).

- It is assumed access restrictions would be eliminated and PTA perimeter fencing on state-lease would be removed, creating easier access for cultural practitioners.
- State limitations on cultural access to the PTRCI would be determined when the state resumes control of the lands.

Should the state decide to limit access to the site, it would need to erect new barriers, which would require separate environmental review. This would require separate HEPA (and possibly NEPA) compliance.

## 14.0 CONCLUSION

In Hawaiian culture, natural and cultural resources are largely viewed as being one and the same. Without the resources provided by nature, cultural resources could not and would not be procured. From a Hawaiian perspective, all natural and cultural resources are interrelated, and all natural and cultural resources are culturally significant. Ethnographer and Hawaiian language scholar Kepā Maly observed, “In any culturally sensitive discussion on land use in Hawaii, one must understand that Hawaiian culture evolved in close partnership with its natural environment. Thus, Hawaiian culture does not have a clear dividing line of where culture ends and nature begins” (Maly, 2001:1).

The kinship between Hawaiians and their land extends back across many generations, and it was the depth and intimacy of this relationship that enabled Hawaiians to thrive sustainably in the islands for hundreds of years prior to the arrival of Europeans. Therefore, Hawaiians are entitled to the pain and anguish they feel at the loss of their lands and resources. There is no gain from ignoring the fact that the acquisition of lands by foreigners, including the U.S. Military, has caused and continues to cause Hawaiians pain and even trauma.

This loss lies at the heart of Hawaiian struggles for traditional or customary access. Therefore, the obligation of the state to ensure that these rights are protected is much more than a legal obligation, as such rights are a necessity of indigenous human life. Recognition and respect for these rights also enables a more mutually respectful and beneficial relationship between the military and Hawaiians.

Act 50 was passed by the state recognizing:

... the past failure to require native Hawaiian cultural impact assessments has resulted in the loss and destruction of many important cultural resources and has interfered with the exercise of native Hawaiian culture. The legislature further finds that due consideration of the effects of human activities on native Hawaiian culture and the exercise thereof is necessary to ensure the continued existence, development, and exercise of native Hawaiian culture (Act 50, SLH 2000).

The CIA is a construct of state law and a requirement of HRS Chapter 343. It is not a requirement under NEPA and has not been considered or evaluated under federal laws, regulations, or guidelines.

The legislative intent quoted above is critical to the due consideration of the effects the proposed action has and will have on cultural practices, because it specifies the importance of ensuring “the continued existence, development, and exercise” of culture. This recognizes

that culture is not static; it is dynamic. It changes over time. Act 50 specifically calls for consideration of the effects a proposed action may have on the continued “development” of native Hawaiian culture. Which means it is insufficient to simply look back to historic practices. Considering effects to the continued development of culture means the state, specifically DLNR, as the accepting authority of the Chapter 343 EIS, of which this CIA is a requirement, must contemplate how an action may affect a culture’s ability to evolve, innovate, and develop.

Additionally, HAR §11-200.1 offers specific guidelines for what elements and issues a CIA should address. They are detailed in Table 17, and the section of this CIA which addresses that element is also provided.

*Table 26. HAR §11-200.1 Requirements and the Corresponding Section in this Assessment*

|                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                           |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>OEQC notes that in addition to the content requirements for the draft environmental impact statement, which are set out in HAR §11-200.1 et seq., the assessment concerning cultural impacts should address, but not necessarily be limited to, the following matters:</b></p>                                                                                                                               |                                                                                                                                                                           |
| <p><b>A. A discussion of the methods applied and results of consultation with individuals and organizations identified by the preparer as being familiar with cultural practices and features associated with the project area, including any constraints or limitations which might have affected the quality of the information obtained.</b></p>                                                                | <p>A detailed methodology section is provided in <b>Section 2, Methodology</b>.</p>                                                                                       |
| <p><b>B. A description of methods adopted by the preparer to identify, locate, and select the persons interviewed, including a discussion of the level of effort undertaken.</b></p>                                                                                                                                                                                                                               | <p>A discussion of the effort to gather into from persons familiar with the area or other stakeholders is provided in <b>Section 2.3.7, Ethnographic Methodology</b>.</p> |
| <p><b>C. Ethnographic and oral history interview procedures, including the circumstances under which the interviews were conducted, and any constraints or limitations which might have affected the quality of the information obtained.</b></p>                                                                                                                                                                  | <p>A discussion of procedures, including constraints or limitations, is provided in <b>Section 2.3.7</b>.</p>                                                             |
| <p><b>D. Biographical information concerning the individuals and organizations consulted, their expertise, and their historical and genealogical relationship to the project area, as well as information concerning the persons submitting information or interviewed, their particular knowledge and cultural expertise, if any, and their historical and genealogical relationship to the project area.</b></p> | <p>Biographical information was provided in and through the surveys, which are included in their entirety in the appendices.</p>                                          |

|                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                             |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>E. A discussion concerning historical and cultural source materials consulted, the institutions and repositories searched and the level of effort undertaken. This discussion should include, if appropriate, the perspective of the authors, any opposing views, and any other relevant constraints, limitations or biases.</b></p>                                            | <p>A discussion of the materials consulted is provided in Section 2. An extensive cultural and historical overview, which uses both Hawaiian and English language resources is also provided in Section 2.</p> <p>Stakeholders are given significant consideration. Petitions and other materials by project opponents are included in the appendices and are addressed in the context of this assessment.<sup>49</sup></p> |
| <p><b>F. A discussion concerning the cultural resources, practices and beliefs identified, and, for resources and practices, their location within the broad geographical area in which the proposed action is located, as well as their direct or indirect significance or connection to the project site.</b></p>                                                                   | <p>In addition to the cultural and historical overview, an extensive discussion concerning cultural resources, practice and beliefs are provided throughout the document by subfield.</p>                                                                                                                                                                                                                                   |
| <p><b>G. A discussion concerning the nature of the cultural practices and beliefs, and the significance of the cultural resources within the project area affected directly or indirectly by the proposed project.</b></p>                                                                                                                                                            | <p>A thorough discussion concerning the nature of traditional or customary practices and the significance of the cultural resources affected directly or indirectly by the proposed alternatives are provided in <b>Section 13, Impact Assessment</b>.</p>                                                                                                                                                                  |
| <p><b>H. An explanation of confidential information that has been withheld from public disclosure in the assessment.</b></p>                                                                                                                                                                                                                                                          | <p>There has no confidential information withheld from public disclosure, except for personal emails, addresses, or phone numbers.</p>                                                                                                                                                                                                                                                                                      |
| <p><b>I. A discussion concerning any conflicting information regarding identified cultural resources, practices and beliefs.</b></p>                                                                                                                                                                                                                                                  | <p>There was no conflicting information regarding cultural resources, practices, or beliefs.</p>                                                                                                                                                                                                                                                                                                                            |
| <p><b>J. An analysis of the potential effect of any proposed physical alteration on cultural resources, practices or beliefs; the potential of the proposed action to isolate cultural resources, practices or beliefs from their setting; and the potential of the proposed action to introduce elements which may alter the setting in which cultural practices take place.</b></p> | <p>A thorough analysis is provided in <b>Section 13</b>.</p>                                                                                                                                                                                                                                                                                                                                                                |
| <p><b>K. A bibliography of references and attached records of interviews which were allowed to be disclosed.</b></p>                                                                                                                                                                                                                                                                  | <p>References are included in <b>Section 15</b>. Surveys are included in the appendices.</p>                                                                                                                                                                                                                                                                                                                                |

<sup>49</sup> These materials collected were responses to the CIA public notice.

## Conclusion

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The standard under which an EIS is considered sufficient is also well-established in Hawaii state case law. The court has held:

...an EIS need not be exhaustive to the point of discussing all possible details bearing on the proposed action but will be upheld as adequate if it has been compiled in good faith and sets forth sufficient information to enable the decision-maker to consider fully the environmental factors involved and to make a reasoned decision after balancing the risks of harm to the environment against the benefits to be derived from the proposed action, as well as to make a reasoned choice between alternatives” *Price v Obayashi Hawaii Corp*, 81 Hawaii 171, 182 (1996), upheld in *Kaleikini v Yoshioka*, 283 P. 3d 60, 74 (2012).

It is the obligation of this CIA to disclose information as required under Act 50 sufficiently and in good faith such that the state may consider all impacts when acting as decision-maker to the Proposed Action. This assessment is not a policy document, nor does it intend to influence decision-making in any fashion. Rather, it has sought to document the complex, and often elusive, history of past and present cultural practices within the project area and larger region. It is ultimately the responsibility of the state to accept or reject the adequacy of this assessment, and then, if accepted, consider the information disclosed herein when deciding on the Proposed Action.

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- 1900d “Destruction In The Big Storm; Honolulu Plantation Engineer May Have Been Drowned – Minute Guns Heard Off Pearl Harbor May Mean Ship on Reef; Rain Swells the Streams and the City is Flooded in Many Districts Causing Heavy

- Losses to Owners." *The Pacific Commercial Advertiser*, Oct. 17, 1900.
- 1900e "Gigantic Deal of Honolulu Sugar Co. Capital Raised to Five Million Dollars – Details Arranged – Most of Stock Already Subscribed for and Only Small Amount for Market." *The Pacific Commercial Advertiser*, Jun. 29, 1900.
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**Appendix A:**  
**Letter Inviting Participation in the Cultural Impact**  
**Assessment**



December 12, 2020

████████████████████  
████████████████████  
████████████████████  
████████████████████@gmail.com

Re: Cultural Impact Assessment for the Army Training Land Retention at Pōhakuloa Training Area  
Ka'ōhe Mauka, Island of Hawai'i  
TMKs: 4-4-015:008; 4-4-016:005; 3-8-001:013 & 022; and 7-1-004:007

Aloha Ms. ██████████,

The Department of the Army is in the beginning stages of the preparation of an Environmental Impact Statement (EIS) that analyzes the environmental and cultural effects of the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. The EIS is being prepared in accordance with National Environmental Policy Act (NEPA), Hawai'i Revised Statutes Chapter 343, and Hawai'i Administrative Rules Chapter 11-200.1. The project area is comprised of Tax Map Keys 4-4-015:008; 4-4-016:005; 3-8-001:013 & 022; and 7-1-004:007 in the ahupua'a of Ka'ōhe Mauka on the Island of Hawai'i. At a minimum, the EIS shall consider three (3) action alternatives and a no action alternative. A Cultural Impact Assessment (CIA) will be prepared as part of the EIS.

The CIA team is seeking consultation with practitioners, Native Hawaiian Organizations, stakeholders, and other individuals. Specifically, consultation is sought on a) identification of an appropriate geographic extent of study, b) historic or existing cultural resources that may be impacted by the proposed project, c) historic or existing traditional practices and/or beliefs that may be impacted by the proposed project, and d) identification of individuals or organizations that should be sought out for consultation on the CIA.

Articles IX and XII of the State Constitution, other state laws, and the courts of the state require government agencies to protect and preserve cultural beliefs, practices, and resources of Native Hawaiians and other ethnic groups. To assist decision makers in the protection of cultural resources, Chapter 343, Hawaii Revised Statutes (HRS) and Hawaii Administrative Rules (HAR) § 11-200 rules for the environmental impact assessment process require project proponents to assess proposed actions for their potential impacts to cultural properties, practices, and beliefs.

This process was clarified by the Act 50, Session Laws of Hawaii (SLH) 2000. Act 50 recognized the importance of protecting Native Hawaiian cultural resources and required that Environmental Assessments include the disclosure of the effects of a proposed action on the cultural practices of the community and state, and the Native Hawaiian community in particular. Specifically, the Environmental Council suggested the CIAs should include information relating to practices and beliefs of a particular cultural or ethnic group or groups. Such information may be obtained through public scoping, community meetings, ethnographic interviews, and oral histories.

The State and its agencies have an affirmative obligation to preserve and protect Native Hawaiians' customarily and traditionally exercised rights to the extent feasible.<sup>1</sup> State law further recognizes that the cultural landscapes provide living and valuable cultural resources where Native Hawaiians have and continue to exercise traditional and customary practices, including hunting, fishing, gathering, and religious practices. In *Ka Pa'akai*, the Hawai'i Supreme Court provided government agencies an analytical framework to ensure the protection and preservation of traditional and customary Native Hawaiian rights while reasonably accommodating competing private development interests. This is accomplished through:

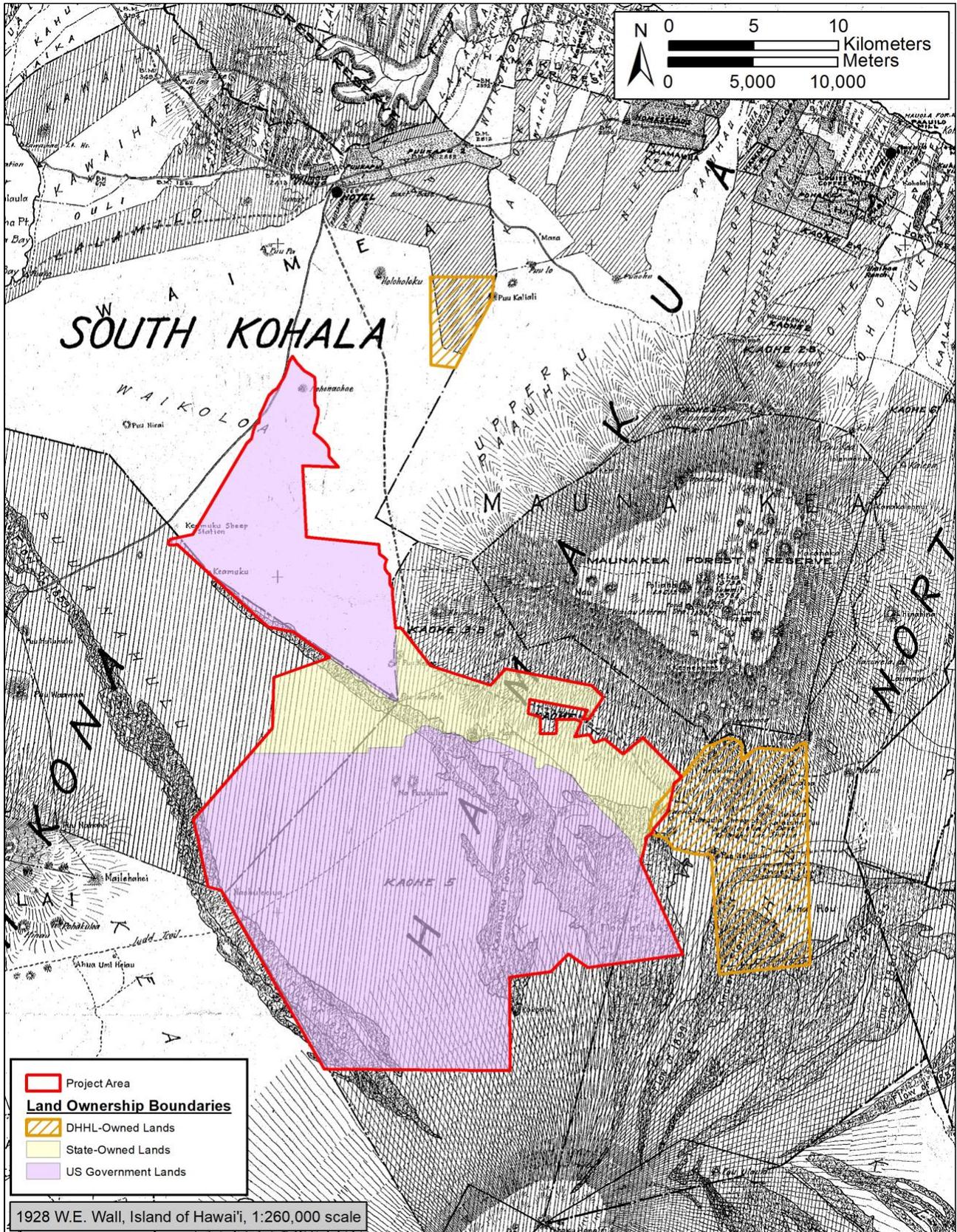
- 1) The identification of valued cultural, historical, or natural resources in the project area, including the extent to which traditional and customary Native Hawaiian rights are exercised in the project area;
- 2) The extent to which those resources—including traditional and customary Native Hawaiian rights—will be affected or impaired by the proposed action; and
- 3) The feasible action, if any, to be taken to reasonably protect Native Hawaiian rights if they are found to exist.

As part of the effort to comply with applicable laws, we are seeking to interview practitioners and other stakeholders who can assist in the identification of valued cultural, historical, or natural resources in the project area, including the extent to which traditional and customary Native Hawaiian rights are exercised in the project area. We are also seeking to identify historic sites that may be of religious or cultural significance to practitioners, stakeholders, or Native Hawaiian Organizations (NHOs).

We aim to assess the extent to which those resources—including traditional and customary Native Hawaiian rights—will be affected or impaired by the proposed action. We also seek input on feasible action(s), if any, to be taken to reasonably protect Native Hawaiian rights if they are found to exist. A project area map is included below.

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<sup>1</sup> Article XII, Section 7 of the Hawai'i State Constitution, *Ka Pa'akai O Ka 'Āina v. Land Use Commission*, 94 Haw. 31 [2000] (*Ka Pa'akai*), Act 50 SLH 2000.





Individuals or organizations may complete the CIA survey online at <https://www.surveymonkey.com/r/PohakuloaCIA> or contact the CIA team at [community@honuaconsulting.com](mailto:community@honuaconsulting.com) or (808) 392-1617.

If you know of any person(s) or organization(s) we should contact regarding potential interviews, you are encouraged to email us at [community@honuaconsulting.com](mailto:community@honuaconsulting.com) or call us at (808) 392-1617.

We greatly appreciate your time and consideration. We would appreciate a response by January 11, 2021

Me ka ha'aha'a,

Trisha Kehaulani Watson, JD, PhD  
Honua Consulting

**Appendix B:**  
**Comments and Documents Received from Mililani**  
**Trask**

**From:** Mililani Trask mililani.trask@icllchawaii.com

**Subject:** Pohakuloa Survey Responses

**Date:** October 14, 2020 at 4:56 PM

**To:** community@honuaconsulting.com

**Cc:** Mililani Trask mililani.trask@icllchawaii.com, Lakea Trask lakeatrask@gmail.com, Leilani Lindsey lkaapuni@gmail.com, Damien Trask onaonatrask@gmail.com

MT

Aloha Trisha,

I tried using the on-line survey but it keeps closing before I can finish it!!!!

I am sending you this input because of this. Please put it as my survey response.

I think you will find 2 efforts in your survey box, neither completed.

Name: Mililani B. Trask, I reside at Olaa Hawaii. PO Box 6377 Hilo HI 96720

Responses:

I am a cultural practitioner, an indigenous Hawaiian, and have used the Pōhakuloa Area for cultural purposes over the years.

I have hiked the Pohakuloa area and used it for gathering purposes for pohaku, including Kuni stones, and also for plants including medicinals.

I have used the data in various Reports over the years as well as some of the chants & songs about the area and island.

In 1915-17 I learned about the DU at Pohakuloa and radiation problems. I took all the stones I had gathered back to the areas from which I had collected them near Pohakuloa because I was afraid of radiation poisoning. Prior to that time I had gathered at Maunakea, Pohakuloa & Mauna Loa but thereafter I limited myself to the Maunakea side of the Saddle Road.

Some of the resources I have used are the modern archaeological & historical data including the rare plant surveys by Robert Shaw have not been updated for awhile.

I gathered & hiked this area for years until the radiation problem arose.

XX

MBT

Some of the Resources I have used that I am identifying & requesting be included in the CIA are listed below.

I AM INCLUDING & INCORPORATING THESE RESOURCES BY REFERENCE IN MY ANSWERS TO THIS SURVEY.

PLEASE INCLUDE THIS EMAIL AS PART OF MY RESPONSE TO THE SURVEY.

1. 1993-TITLE Archaeological survey and testing for the Saddle Road improvement project, Pohakuloa area, Island of Hawaii by Welch, David J., International Archaeological Research Institute,

2. 1996-

An archaeological collections summary for Pohakuloa Training Area, Hawaii

by the U.S. Army Corps of Engineers, TITLE Archaeological surveying Pohakuloa Training Area (PTA)1996,

3. 2004

An overview of the archaeological context of Pohakuloa Training Area in Hawaii island

Godby, William C., Carson, Mike T.

Adzes Pohakuloa; Archaeological surveying Pohakuloa Training Area (PTA); Bird hunting; Pohakuloa Training Area (PTA); Saddle Road; Volcanic glass quarries and quarrying.

4. 2004

The Pohakuloa Chill Glass Quarry Complex, U.S. Army Pohakuloa Training Area, Hawaii Island, by Williams, Scott S. locations: surveying Pohakuloa Training Area (PTA); Pohakuloa Chill Glass Quarry Complex; Pohakuloa Training Area (PTA); Saddle Road

5. 2012

Ethnographic study of Pohakuloa Training Area and Central Hamakua District, Island of Hawaii, State of Hawaii, final report

McCoy, Patrick C., Orr, Maria, Pacific Consulting Services, Inc.

Archaeological surveying Pohakuloa Training Area (PTA); Cultural property Hawaii Island; Natural resources; Pohakuloa Training Area (PTA)

6. 1997

Title: Rare plants of Pohakuloa Training Area, Hawaii by Author: Shaw, Robert Blaine. Part I & Part II.

Comment: Trisha, this is a two part study that uses the Land Condition-Trend Analysis (LCTA) that was designed to inventory and monitor the Army's lands.

One of the major components of LCTA is a floristic inventory. The LCTA floristic inventory for Pohakuloa Training Area (PTA) began in November 1988 and continues today. Numerous rare and endangered plants were discovered through the course of the initial inventory, prompting more extensive surveys and research. These surveys have added valuable information concerning the biology, ecology, and abundance of the rare taxa found on the installation. The report introduces the physical features of PTA, summarizes major threats to rare plant species on the installation, and outlines and illustrates information concerning each taxa. An updated list of species inhabiting the installation is provided as well

species inhabiting the installation is provided as well.

URL: <http://www.denix.osd.mil/nr/upload/97-23-Rare-Plants-of-the-Pohakuloa-Training-Area-Hawaii-Part-I.pdf>  
<http://www.denix.osd.mil/nr/upload/97-23-Rare-Plants-of-the-Pohakuloa-Training-Area-Hawaii-Part-II.pdf>

7. 7. Kumu Pono Associates (Kepa Maly) has done several studies on Maunakea & Kahohe. These studies include data on gathering as well as wahi pana of Pohakuloa that also lies in Kahohe. There are significant sites involved including the trail of Umi that leads to the Ahu A Umi. The trail comes in from Hilo side & Kona side.

8. I am requesting the Honua Consulting contact & interview Kepa Maly and his wife Onaona (Kumupono Associates) about the Kahohe area (which is a component of Maunakea in Hawaiian Cosmogony).

Pohakuloa is part of the larger cultural landscape now referred to as "Maunakea" .  
The Hawaiian Cosmogony, traditional belief system and cultural practices identify Pohakuloa not only as an area between Maunakea & Maunaloa, but clarify that the God Pohakuloa resided at Lake Waiau. Hawaiian Cultural & religious practitioners, including myself, understand & utilize Pohakuloa as one part of the biocultural cultural landscape which we access for cultural reasons.

The following is a verbatim quote from Pohakuloa - 'AinaMauna Historic Notes' Compiled by Kepa Maly, Kumupono Associates) re: the "Inoa pana"of the traditional area.

"Inoa Pana o ka 'Āina Mauna (Storied Place Names of the Mountain Lands)

While much has been lost since western contact, the persistence of inoa pana that have survived the passing of time, give us a glimpse into the Hawaiian knowledge of place, and the cultural attachment that Hawaiians share with their biocultural landscape. These names are among those that demonstrate the Hawaiian familiarity with the sites and features, and varied elevations of the mountain regions. In ancient times, named localities served a variety of functions, including but not limited to — heiau or other features of ceremonial importance; triangulation points such as ko'a (land markers for fishing and bird catching areas; residences; areas of planting; water sources; trails and trail-side resting places (o'io'ina), such as a rock shelter or tree shaded spot; sources of a particular natural resource or any number of other features; or the names may record a particular event or practice (e.g., use for burials, or making of ko'i {adzes}) that occurred in a given area. (emphasis added by MBT)

Mauna Kea – May be literally translated as “White Mountain,” because during the winters, the summit is often covered with snow. The peak of Mauna Kea (Pu'u Kūkahau'ūla) stands 13,796 feet above sea level. Also, early native accounts (cf. Malo 1951 and Kamakau 1991) suggest that other translations are appropriate. One such account, recorded by an elderly Hawaiian source in c. 1917 by researcher and translator, Theodore Kelsey tells us that “Mauna Kea” may also be translated as “Wakea’s Mountain.” Wākea, also written and pronounced as Ākea and Kea, was the god-father of the island of Hawai'i. The island child was born by Papa or Haumea, the goddess who gave birth to islands. Mauna Kea as a place name, can be traced to the earliest written and cartographic resources of the Hawai'i; for examples see the Journals of Captain James Cook (Beaglehole 1967) and S.C. Wiltse (in Register Map No. 668).

Houpo-o-Kāne  
also written

Ka-houpo-o-Kāne – May be literally translated as “The chest (bosom) of Kāne.” The god Kāne is believed to be foremost of the Hawaiian gods, and is credited with creation, procreation, light, waters of life, abundance, and many other attributes. A land being likened to the chest of Kāne, can imply that the land was cherished and blessed by the god Kāne. (This name is now written Hopukani; known as one of the springs near the 10,000 foot level on the north side of Pōhakuloa Gulch.)

S. N. Hale'ole's tradition of Lā'ie-i-ka-wai (In Kū 'Okō'a 1862-1863), records that “Kahoupokane” was one of three companions of Poli'ahu. The other two companions were Lilinoe and Waiau.

The area identified as Ka-houpo-o-Kāne is situated below Waiau, on the southwestern slopes of Mauna Kea, in the land of Ka'ōhe (Figure2). One of the primary attributes of Kāne are the wai ola (life giving waters), sacred springs and water sources made by Kāne around the islands, to provide for the welfare of the people and the land (cf. Kamakau 1976 and Beckwith 1970). Interestingly, at Ka-houpo-o-Kāne are found the waters of Pōhakuloa, Hopukani, and Waihū (also known by the name “Ka-wai-hū-a-Kāne”).

Kū-ka-hau-ūla – Kū of the red hewed dew or snow: named for a male deity form of the god Kū and lover of Poli'ahu, goddess of the mountain (see the section of traditional narratives in this study). Kūkahau'ūla is identified in the Boundary Commission testimonies of 1873 as the highest peak on Mauna Kea (now generally identified as Mauna Kea peak or Pu'u Wekiu) and is recorded by C. Lyons in his 1884 survey the summit peaks of Mauna Kea (cf. Register Map 1210 of 1884; in the collection of the State Survey Division). (Figure 2)

Pōhaku-a-Kāne – May be literally translated as the “Stone made by Kāne.” A traditional Hawaiian account recorded in the early twentieth century tells us that Pōhaku-a-Kāne, also called Ka-paepae-kapu-a-Kāne (the sacred platform of Kāne), was named for a form taken by the god Kāne. A platform near Waiau was named for and dedicated to this deity (see the historical narratives in this study).

Pōhaku-loa – May be literally translated as the “Long Stone.” A traditional account recorded in the early twentieth century tells us that Pōhakuloa was named for a deity who was a guardian of Ka-wai-kapu-a-Kāne (The sacred water of Kāne) at Waiau. The name Pōhakuloa is applied to a land area, gulch, and water source situated on the slopes of Mauna Kea and making up a portion of the saddle between Mauna Kea and Mauna Loa. As a place name, Pōhakuloa can be traced back to a least the Boundary Commission testimonies of native informants in the 1870s (see selected narratives in this study)."

Please include this email as my testimony & response to the Survey.  
I request the opportunity for an interview, please call me at 808-990-0529.  
I will return to Oahu in November.

.....  
**Mahalo,**  
**Mililani B. Trask**

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**From:** Mililani Trask mililani.trask@icllchawaii.com   
**Subject:** Fwd: Pohakuloa Consultation  
**Date:** January 12, 2021 at 10:43 AM  
**To:** community@honuaconsulting.com, Ku Kahakalau kukahakalau@gmail.com

MT

----- Forwarded message -----

**From:** Mililani Trask <mililani.trask@icllchawaii.com>  
**Date:** Tue, Jan 12, 2021 at 9:24 AM  
**Subject:** Pohakuloa Consultation  
**To:** <admin@honuaconsulting.com>, Luana Busby <alakupui@aol.com>, Ku Kahakalau <kukahakalau@gmail.com>

Aloha Trisha,

Your letter dated December 12, 2020 was received by me on January 11th! It was 1 month late!  
The Post offices in Hilo & Keaau were backed up for miles last month, and no wonder it never arrived. I immediately called Luana Busby Neff to talk with her about it, she did not receive it either. She did not know or hear about it at all. She is following up with you directly.

Luana, Craig & a few others have been Makahiki practitioners on Pohakuloa for many years.

In my submittal to the U.S. DoD, I state that I was a practitioner on Pohakuloa for years, going there to gather Kuni stones, however when Uncle KU learned about the radiation resulting from US Military testing & the problem with rocks being contaminated & washing down during heavy rains, I had to stop going up and return all the stones because there was no way to insure that the Kuni stones were safe. My sister Keonaona (Damien) came with me during this years. She later was diagnosed with Breast Cancer.

I am sending photos of the letter to Luana today. Please follow up with her directly. She is on this email. Please confirm that you have received these attachments.

I am forwarding herewith the response I sent to the US DoD (Gilda) and the attachments which include my request for copies of all cultural reports done by the US DoD these past years. The DoD has significant data including reports on the location status of cultural features being impacted in Pohakuloa, but refuses to release these data.

XX  
MBT  
Call me  
808-990-0529

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Indigenous Consultants LLC Mail - Comments - DoD 4710.03

11/5/20, 10:31 AM



Mililani Trask <mililani.trask@icllchawaii.com>

**Comments - DoD 4710.03**

Mililani Trask <mililani.trask@icllchawaii.com>

Fri, Nov 6, 2020 at 10:28 AM

To: laura.j.gilda@mail.mil, DoD\_NativeAffairs@keresnm.com

Bcc: Mililani Trask <mililani.trask@icllchawaii.com>, Luana Busby <alakukui@aol.com>, Leilani Lindsey <lkaapuni@gmail.com>, Kyle Kajihiro <kyle.kajihiro@gmail.com>, Malia Nobrega <malianob@gmail.com>, Ku Kahakalau <kukahakalau@gmail.com>

Forwarding attachments including Testimony & Submission to DOD Re: DoD 4710.03 – Re: Consultation Policy of USA with Native Hawaiians, as well as executed forms for continuing Consultation with US DoD on protection of Hawaiiin Cultural properties & affiliated human rights.

Please confirm receipt.

XX

Mililani B. Trask  
Convener,  
Na Koa Ikaika Kalahui Hawaii

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### 3 attachments

 **DoD-USAGP Training PA Cons Party Status Request2020.pdf**  
332K

 **DoD - 2020GeneralConsultUpdateForm.pdf**  
195K

 **MBT- NaKoa DOD COmments- FNL:PDF.pdf**  
458K



MBT- DOD  
COmm...6.docx

**From:** Mililani Trask mililani.trask@icllchawaii.com   
**Subject:** Fwd: Comments - DoD 4710.03  
**Date:** January 12, 2021 at 3:49 PM  
**To:** community@honusconsulting.com



Hre is my complete submission to DoD Cnsultation  
XX  
MBT

----- Forwarded message -----  
**From:** Mililani Trask <mililani.trask@icllchawaii.com>  
**Date:** Fri, Nov 6, 2020 at 10:28 AM  
**Subject:** Comments - DoD 4710.03  
**To:** <laura.l.gilda@mail.mil>, <DoD\_NativeAffairs@keresnm.com>

Forwarding attachments including Testimony & Submission to DOD Re: DoD 4710.03 – Re: Consultation Policy of USA with Native Hawaiians, as well as executed forms for continuing Consultation with US DoD on protection of Hawaiiin Cultural properties & affiliated human rights.

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## United States Army Garrison - Pōhakuloa

### Consulting Party Request Form for Hawaii Island Training Programmatic Agreement

**Name of Person Completing Form:** Milani B. Trask

- I request to be added as a consulting party to the Training PA.
- I am no longer interested in consultation on the development of the Training PA.



Na Koa Ikaika o Ka Lahui Hawaii  
Affiliate of Indigenous World Association  
P.O.Box 6377 ❖ Hilo, HI 96720  
mililani.trask@icllchawaii.com



To: U.S. Dept. of Defense  
[DoD\\_NativeAffairs@keresnm.com](mailto:DoD_NativeAffairs@keresnm.com)

October , 2020

From: Mililani B. Trask, Convenor  
Na Koa Ikaika KaLahui Hawaii  
ECO-SOC Affiliate to Indigenous World Association  
And NHO on U.S. Federal 106 Consultation list.

Re: DoD 4710.03 – Re: Consultation Policy of USA with Native Hawaiians.

**I. *Objections to the manner in which this Consultation is being conducted by the USDOD & Proposed Corrective Measures to address these deficiencies:***

- A. The US DOD is trying to include Native Hawaiians ( hereafter Hawaiians)in its federal policy governing Consultations with Indians, who have federally recognized tribes. Hawaiians are not federally recognized Tribes and so do not have an indigenous governing body to speak for & represent their interests. Because Hawaiians are not federally recognized, the USDOD has tried& is trying, to avoid real Consultations with real Hawaiian cultural practitioners by substituting the Office of Hawaiian Affairs as the Hawaiian peoples representative government, and hosting informal discussions with Hawaiian Social groups who are not cultural practitioners.
- B. This cannot be done. What is required is a Consultation process & procedures with Hawaiians who are cultural practitioners with family & traditional affiliations to Land and Ocean based resources that comprise the Native Hawaiian land trusts, including the Northwest Hawaiian Islands, which trust lands and resources are impacted by DoD activities.

**Recommendations for Procedural Requirements: Published Notice in News Media outlets statewide & mailouts to Hawaiian individuals & NHO's whose members are practitioners and for all NHO's on the 106 list of Interior.**

The USDOD needs to adopt a procedure for providing notice to Hawaiians practitioners of future Consultations at least 60 days prior to the actual Consultation, that requires (at a minimum) detailed information on what the Consultation process is, the topic & scope of the Consultation are as well as the timeframe for submitting written input and comments.

Notice to Hawaiian cultural practitioners should be published in local & Statewide newspapers for 8 consecutive weeks prior to the date of the scheduled consultation. COVID is no excuse for not hosting ZOOM meetings so that Hawaiians can participate directly in Consultations re: USDOD activities in our State, on Ceded as well as DHHL lands and State waters.

OHA is a State Agency elected by the public, Statewide. OHA Trustees are elected primarily by non-Hawaiian voters from Oahu who are not ethnically Hawaiian and who do not “represent” Hawaiians from any State or County Election district. Most importantly. The record indicates that Hawaiians have repeatedly had to sue OHA for accountability and that there have been in recent years at least 3 Audits questioning OHA's use of trust funds, and failure to be transparent and accountable to its Hawaiian beneficiaries. In recent years the State Legislature withheld funding from OHA because of these problems.

**II. The failure of the current process, including the current “Consultation” on DoD 4710.03 is evident in the evolution of this USDOD Policy.**

It is now 2020, the USDOD claims that it has already completed its ‘initial’ “Consultation” with Native Hawaiian practitioners because it held “community” meetings with some Hawaiian Social groups, (Civic Clubs) , OHA, CNHA and others “interested in the impact of DoD operations and efforts to preserve natural and cultural resources and places of traditional religious and cultural significance.” These meetings were held for 2 years, between 2006 and 2008.

(See Report to Congress, Department of Defense Consultation With Native Hawaiians, Sept. 2019).

Three years later, in 2011 DoD entered into an MOU with two other Federal Agencies (Interior & ACHP) called the “ Native Hawaiian Federal Interagency Working Group”. In October, 2011 DoD adopted its own internal policy which it has recently sent out as a “DRAFT” for further input from OHA & Hawaiian Social groups.

DoD never actually adopted any procedure or policy framework for consultations with Native Hawaiian cultural practitioners. In its 2019 Report to Congress, Dod States...” DoD established a separate consultation policy 2011, *Department of Defense Instruction 4710.03: Consultation With Native Hawaiian Organizations* (DoDI 4710.03). DoD remains the only federal agency with a policy specific to consultation with NHOs. “ This is patently false. DoD is now circulating another red lined “Draft” Policy for input.

What is required is a real Consultation, publically Noticed NOW. Instead DOD is trying to use data gathered from Social groups, businesses, a State Agency & “others” 12-14 years ago as input to a Consultation on current cultural uses & practices & related belief systems impacted by current DOD Land & Ocean Activities on EO, State trust lands & resources leased to the US & utilized by the USDOD.

**Recommendation: NaKoa requests that the DOD hold real consultations NOW on the adoption of a DOD policy framework & procedures for DOD Consultation with Native Hawaiians Hawaiians that includes but is not limited to NHO's on the 106 list as well as others who respond to the published notice which has yet to be undertaken.**

A. Current efforts of DoD to hold secret “off the record” discussions with Hawaiian practitioners using Pohakuloa, in KAOHE, Hawaii Island:

Recently, DOD acting with the support of the Chamber of Commerce held quiet ZOOM meetings with a few Hawaiians in secret. The contractor hired was Noe Kalipi (Kalipi Enterprises). Hawaiians involved (about 7 people) were not even told what the ZOOM was about or who would be on the ZOOM. It turned out it was a USDOD “Consultation” being paid for by the Chamber of Commerce! Military personal including several Generals & the topic was renewal of the DOD leases in Pohakuloa!!

After weeks, it went nowhere, two months later, this USDOD notice came out in the OHA Newsletter. Outer islands saw it in mid-October when the newspapers are sent out, leaving only 3 weeks to respond. However, the USDOD posting of data referred to in the OHA newspaper could not be accessed on line as represented.

B. Misrepresentation of U.S. to United Nations on Consultation with Native Hawaiians:

On April 26, 2019 Valerie Houser, Advisor to the US Mission to the U.N. delivered a false statement to the US Permanent Forum representing that US Agencies had a functioning policy for consulting with Native Hawaiians when federal “projects” protection of Hawaiian and Indian affect Hawaiian “properties” Hawaiians view as religious or culturally significant. In her Statement Houser only mentions the NHPA, ACHP, the ARPA and NEPA – the USDOD WAS EXCLUDE BECAUSE THERE IS NO POLICY OR PROCEDURE IN PLACE FOR Consultation with real Hawaiian cultural and religious practitioners.

**III. Request for DoD disclosure of all relevant current & historic data, including archeological, cultural, & scientific reports relating to all US DoD uses & the impacts of such uses to Native Hawaiian trust lands & oceanic resources & assets.**

**A. Na Koa Ikaika KaLahui Hawaii requests copies of the following Reports & studies, including appendixes, attachments including cultural mapping diagrams in order to facilitate its review of the impact of DoD uses of Native Hawaiian trust lands and oceanic resources & areas...**

Beavers, Andrew M., and Robert E. Burgan. 2002. "Analysis of Fire History and Management Concerns at Pohakuloa Training Area." CEMML TPS 02-02. Center for Environmental Management of Military Lands.

"Final Report Ecosystem Management Program Cultural Resources Inventory Survey of Previously Unsurveyed Areas, Redleg Trail Vicinity, U.S. Army." 2002. DACA83-95-D-0006, Task Order 0030 and 0031. U.S. Army Corps of Engineers.

Roberts, Alice K.S. 2002. "Archaeological Reconnaissance of 1,010 Acres of Pu'u Ke'eke'e Lands, U.S. Army Pohakuloa Training Area (PTA), Island of Hawaii, Hawaii." DACA83-01-D-0013, Task Order No. 0008. U.S. Army Corps of Engineers.

Williams, Scott S. 2002. "Final Report Archaeological Reconnaissance Survey U.S. Army Pohakuloa Training Area (PTA) for the U.S. Army Garrison, Hawaii, Ecosystem Management Program, Hawai'i Island, Hawai'i." U.S. Army Corps of Engineers.

Garcia and Associates. 2010. "Final Archaeological and Cultural Monitoring of Construction of Battle Area Complex (BAX) for Stryker Brigade Combat Team (SBCT), Pōhakuloa Training Area, Hawai'i Island, Hawai'i." DACA83-03-D-0011, Task Order No. 0016. U.S. Army Corps of Engineers.

Monahan, Christopher M., and SWCA Environmental Consultants. 2009. "Cultural Resource Evaluations of Stryker Transformation Areas in Hawai'i." Office of Hawaiian Affairs and U.S. Army.

Monahan, Christopher M., Sarah Wilkinson, and Momi Wheeler. 2013. "FINAL Archaeological Phase II Crater Investigation, U.S. Army Pōhakuloa Training Area, Island of Hawai'i, Hawai'i: A Functional and Temporal Interpretation of Excavated Pits in the Mauna 'Āina and Their Significance in Hawaiian Prehistory." W9128A-08-D-0009, Task Order No. 0012. U.S. Army Corps of Engineers.

Taomia, Julie M E, James A Head, Kelly Leialoha Luscomb, and J Cary Stine. 2008. "Cultural Resources Management Projects Performed at the Pohakuloa Training Area, Island of Hawai'i, Hawai'i," 178.

Thurman, Douglas, Katie M. Sprouse, Christopher Manahan, and Davidf Shidleler. 2013. "Final Archaeological Reconnaissance Survey Report of Infantry Platoon Battle Area, U.S. Army Pōhakuloa Training Area (PTA), Ka'ohē Mauka Ahupua'a, Hāmākua Dstrict." W9128A-08-D-0009. U.S. Army Corps of Engineers.

Wheeler, Momi, Sarah Wilkinson, and Hallett H. Hammatt. 2014. "Archaeological and Cultural Monitoring Report for the Stryker Brigade Combat Team (SBCT) Construction-Related Activities along the Loop Trail, Main Supply Route, and Ke'eke'e Road, Ke'āmuku Maneuver Area (KMA), U.S. Army Pōhakuloa Training Area (PTA), Island of Hawai'i, Hawai'i." W9128A-08-D-0009, Task Order No. 0019. U.S. Army Corps of Engineers.

Wilkinson, Sarah, Momi Wheeler, Auli'i Mitchell, and Christopher M. Monahan. 2014. "Archaeological and Cultural Monitoring Report for Activities Related to Construction of the Proposed Battle Area Complex (BAX) for the Stryker Brigade Combat Team (SBCT), U.S. Army Pōhakuloa Training Area (PTA), Island of Hawai'i, Hawai'i, TMK: (3) 4-4-016:005." U.S. Army Corps of Engineers.

HHF Planners. 2020. "Real Property Master Plan Pohakuloa Training Area, Hawai'i Island - Final" Full Report.

Institute for Sustainable Development, and Belt Collins Hawai'i. n.d. "Environmental Assessment (EA) for Marine Corps Amphibious Training in Hawaii." Contract Number N62742-94-D-0006, Delivery Order 22.

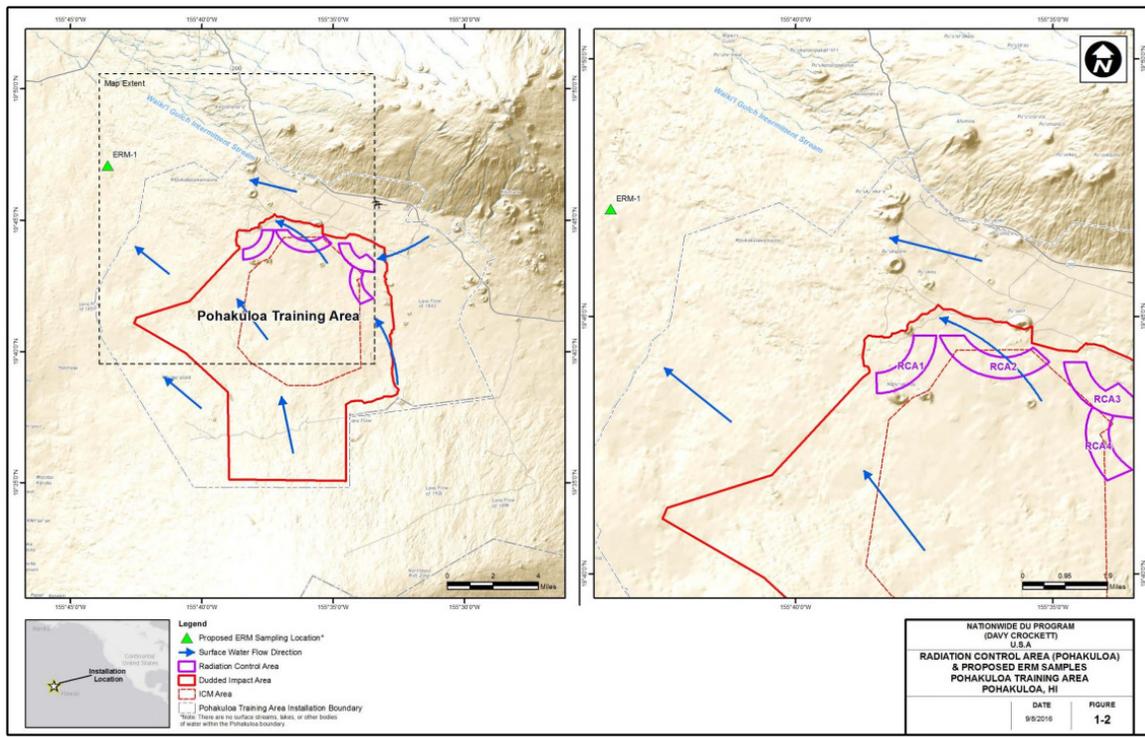
James Kent Associates, and Institute for Sustainable Development. 1998. "Decision Support Document: Community Resources Summary and Recommendations Marine Corps Amphibious Training at Makua Beach." Kane'ohē, Hawai'i: Marine Corps Base Hawaii.

James Kent Associates, and Institute for Sustainable Development. 1999. "Three Reports Related to the Makua Beach Amphibious Training of the U.S. Marine Corps, Support Documents for the Environmental Impact Statement." Kane'ohē, Hawai'i: Environmental Department, Marine Corps Base Hawaii.

Maly, Kepā, and Institute for Sustainable Development. 1998. "Oral History Study: Ahupua'a of Mākua and Kahanahāiki, District of Wai'anae, Island of O'ahu." BCH Project No. 442.0122. N62742-94-D-0006 D.O. 22. U.S. Navy, PACDIV.

Maly, Kepā.; Rechtman, Robert B., 1961-; Rosendahl, Paul H. (Paul Harmer). 1997. "Guidance for the preparation of a community caretaker/partnership plan for cultural resources stewardship at Marine Corps Base Hawaii (MCBH) Mōkapu Peninsula, Hawaii : lands of He'ēia and Kāne'ohē, Ko'olau Poko District, Island of O'ahu." Marine Corps Base Hawaii.

**B. NaKoa requests that DoD provide a current Report on the status of the Pohakuloa Radiation Monitoring Plan that was finalized in December 2016.** This U.S. Army plan was produced as a condition to a Nuclear Regulatory Commission license for the possession of depleted uranium, used at the facility decades ago. This site-specific Plan was finalized for the Pohakuloa Training Area. The DU spotting rounds and fragments were scattered at PTA as a result of the use of the 1960s-era Davy Crockett weapons system. The plan was to identify potential routes for DU transport and describe the monitoring approach to detect any off-installation migration.



This map of Pohakuloa, found in the plan, shows the radiation control areas in purple. The green triangle is the proposed Radiation Monitoring sample location. Co-located surface water and sediment samples will be gathered, the Army says. The blue arrows indicate the direction of surface water flow, according to the Army.

Na Koa is seeking DoD data on groundwater samples at PTA, as well as the results of the quarterly testing the Army agreed to conduct in 2016 when they were forced to admit to the past use of Davy Crockett weapons system at PTA. These data are critical to the health & safety of Hawaiian cultural practitioners who use the area for gathering or worship.

C. NaKoa has obtained a copy of the FINAL // UNCLASSIFIED PROGRAMMATIC AGREEMENT AMONG THE U.S. ARMY GARRISON, PŌHAKULOA TRAINING AREA, THE U.S. ARMY GARRISON, HAWAII, THE HAWAII STATE HISTORIC PRESERVATION OFFICER, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION REGARDING ROUTINE MILITARY TRAINING ACTIONS AND RELATED ACTIVITIES AT UNITED STATES ARMY INSTALLATIONS ON THE ISLAND OF HAWAII, HAWAII dated 25 September 2018.

**It states, in part...**

**“WHEREAS, as of the signing of this PA, identification of potential historic properties through intensive pedestrian archaeological surveys have been conducted on approximately 45% of the accessible land (approximately 81,000 acres outside of the high hazard Impact Area) at PTA (Appendix B); and....**

**WHEREAS, as of the signing of this PA, approximately 31% of the identified archaeological type properties at PTA have been evaluated for NRHP eligibility. The remaining 69% of known archaeological properties distributed across the accessible land are treated as eligible for the NRHP and adverse effects avoided in accordance with AR 200-1 Part 6-4(b)(9); and**

**WHEREAS, the targeted high-hazard impact area at PTA has been used for high- explosive and incendiary munitions training since the mid-20th century and will continue to be used in this manner; and**

**WHEREAS, the danger of unexploded ordnance in the targeted high-hazard impact area (Appendix A) precludes pedestrian survey for historic property identification and evaluation efforts in that area; and**

**WHEREAS, the USAG-Pōhakuloa has determined that previous military training and related activities have had adverse effects on historic properties in the APE, and that some undertakings may continue to have adverse effects on historic properties in the APE; ....”**

Following these representations, the PA includes several pages of “Stipulations” and agreements between the State & DoD. Na Koa requests that DoD address in writing, the progress made in implementation of the Stipulations.

For Example: At the time the PA was signed only 31 percent of archaeological properties had been evaluated for NRHP eligibility, have the remaining 69 percent been evaluated. What is the status on the protection of these properties today?

D. NaKoa is concerned that some of the procedures & processes being implemented in the PA of 25 September 2018 are not in conformity with State law regarding the treatment of burials, including traditional burials. For example **Appendix G - Post-Review Discoveries currently allows the US DoD to assess, remove & dispose of Native Hawaiian human remains and related artifacts, after implementing their internal procedure. This would occur without posting 'public notice' notice of the find and location for in a public and native Hawaiians who may have a family or cultural affiliation with the burial. Under the current DoD procedure, no effort is made to conform to our State burial laws, or to identify and include lineal descendants when DoD activities disturb traditional burial areas.**

#### CONCLUSION:

The US is a signatory to the UNDRIP which sets minimum standards for protection of the rights on indigenous peoples, whether or not they are recognized by States. NaKoa suggests that the US DoD utilize the standards contained in the UNDRIP to address their obligations to Native Hawaiians and that the US DoD create a procedure to facilitate working with Hawaiians with cultural & ohana ties to the trust lands & resources impacted by USDoD activities.

Upon receipt & review of the materials requested, NaKoa will respond in more detail to the DoD draft policy (red-lined) that was forwarded with the materials.

Dated: November 6<sup>th</sup>, 2020,

Mililani B. Trask  
Na Koa Ikaika KaLahui Hawaii

**Organization Name:** Na KOa Ikaika KaLahui Hawaii  
(if applicable): \_\_\_\_\_

Native Hawaiian Organization serving and representing interests of Native Hawaiians, providing services to Native Hawaiians, and with expertise in aspects of historic preservation significant to Native Hawaiians.

Other relationship to undertaking or concern with effects to historic properties.  
Please briefly describe:

ECO-SOC affiliate to Indigenous World credential at UN

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### Contact information

Please take this opportunity to update the contact information on file. If no change is necessary, this section can be left blank.

**Organizational Contact Name if different from above:** Na KOa Ikaika KaLahui Hawaii

**Mailing Address (Street, City, State, Zip Code):** PO BX 6377m Hilo HI 96720

**Email Address:** mililani.trask@iclichawaii.com **Phone Number:** 10808-90-0529

Please submit this form via email to Mr. Richard Davis, USAG-HI Cultural Resources Manager, at [usarmy.hawaii.crm@mail.mil](mailto:usarmy.hawaii.crm@mail.mil) or by U.S. Postal mail to: Department of the Army, United States Army Garrison, Pohakuloa, DPW Environmental – Cultural Resources Section, P.O. Box 4607, Hilo, Hawaii 96720. Please contact Dr. Taomia at (808) 436-4280 if you have any questions.



DoD -  
2020G...rm.pdf



MBT- NaKoa  
DOD C...DF.pdf



**Na Koa Ikaika o Ka Lahui Hawaii**  
**Affiliate of Indigenous World Association**  
**P.O.Box 6377 ❖ Hilo, HI 96720**  
**mililani.trask@icllchawaii.com**



To: U.S. Dept. of Defense  
[DoD\\_NativeAffairs@keresnm.com](mailto:DoD_NativeAffairs@keresnm.com)

October , 2020

From: Mililani B. Trask, Convenor  
Na Koa Ikaika KaLahui Hawaii  
ECO-SOC Affiliate to Indigenous World Association  
And NHO on U.S. Federal 106 Consultation list.

Re: DoD 4710.03 – Re: Consultation Policy of USA with Native Hawaiians.

**I. *Objections to the manner in which this Consultation is being conducted by the USDOD & Proposed Corrective Measures to address these deficiencies:***

- A.** The US DOD is trying to include Native Hawaiians ( hereafter Hawaiians)in its federal policy governing Consultations with Indians, who have federally recognized tribes. Hawaiians are not federally recognized Tribes and so do not have an indigenous governing body to speak for & represent their interests. Because Hawaiians are not federally recognized, the USDOD has tried& is trying, to avoid real Consultations with real Hawaiian cultural practitioners by substituting the Office of Hawaiian Affairs as the Hawaiian peoples representative government, and hosting informal discussions with Hawaiian Social groups who are not cultural practitioners.
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It is now 2020, the USDOD claims that it has already completed its ‘initial’ “Consultation” with Native Hawaiian practitioners because it held “community” meetings with some Hawaiian Social groups, (Civic Clubs) , OHA, CNHA and others “interested in the impact of DoD operations and efforts to preserve natural and cultural resources and places of traditional religious and cultural significance.” These meetings were held for 2 years, between 2006 and 2008.

(See Report to Congress, Department of Defense Consultation With Native Hawaiians, Sept. 2019).

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**Recommendation: NaKoa requests that the DOD hold real consultations NOW on the adoption of a DOD policy framework & procedures for DOD Consultation with Native Hawaiians Hawaiians that includes but is not limited to NHO’s on the 106 list as well as others who respond to the published notice which has yet to be undertaken.**

A. Current efforts of DoD to hold secret “off the record” discussions with Hawaiian practitioners using Pohakuloa, in KAOHE, Hawaii Island:

Recently, DOD acting with the support of the Chamber of Commerce held quiet ZOOM meetings with a few Hawaiians in secret. The contractor hired was Noe Kalipi (Kalipi Enterprises). Hawaiians involved (about 7 people) were not even told what the ZOOM was about or who would be on the ZOOM. It turned out it was a USDOD “Consultation” being paid for by the Chamber of Commerce! Military personal including several Generals & the topic was renewal of the DOD leases in Pohakuloa!!

After weeks, it went nowhere, two months later, this USDOD notice came out in the OHA Newsletter. Outer islands saw it in mid-October when the newspapers are sent out, leaving only 3 weeks to respond. However, the USDOD posting of data referred to in the OHA newspaper could not be accessed on line as represented.

B. Misrepresentation of U.S. to United Nations on Consultation with Native Hawaiians:

On April 26, 2019 Valerie Houser, Advisor to the US Mission to the U.N. delivered a false statement to the US Permanent Forum representing that US Agencies had a functioning policy for consulting with Native Hawaiians when federal “projects” protection of Hawaiian and Indian affect Hawaiian “properties” Hawaiians view as religious or culturally significant. In her Statement Houser only mentions the NHPA, ACHP, the ARPA and NEPA – the USDOD WAS EXCLUDE BECAUSE THERE IS NO POLICY OR PROCEDURE IN PLACE FOR Consultation with real Hawaiian cultural and religious practitioners.

**III. Request for DoD disclosure of all relevant current & historic data, including archeological, cultural, & scientific reports relating to all US DoD uses & the impacts of such uses to Native Hawaiian trust lands & oceanic resources & assets.**

**A. Na Koa Ikaika KaLahui Hawaii requests copies of the following Reports & studies, including appendixes, attachments including cultural mapping diagrams in order to facilitate its review of the impact of DoD uses of Native Hawaiian trust lands and oceanic resources & areas...**

Beavers, Andrew M., and Robert E. Burgan. 2002. "Analysis of Fire History and Management Concerns at Pohakuloa Training Area." CEMML TPS 02-02. Center for Environmental Management of Military Lands.

"Final Report Ecosystem Management Program Cultural Resources Inventory Survey of Previously Unsurveyed Areas, Redleg Trail Vicinity, U.S. Army." 2002. DACA83-95-D-0006, Task Order 0030 and 0031. U.S. Army Corps of Engineers.

Roberts, Alice K.S. 2002. "Archaeological Reconnaissance of 1,010 Acres of Pu'u Ke'eke'e Lands, U.S. Army Pohakuloa Training Area (PTA), Island of Hawaii, Hawaii." DACA83-01-D-0013, Task Order No. 0008. U.S. Army Corps of Engineers.

Williams, Scott S. 2002. "Final Report Archaeological Reconnaissance Survey U.S. Army Pohakuloa Training Area (PTA) for the U.S. Army Garrison, Hawaii, Ecosystem Management Program, Hawai'i Island, Hawai'i." U.S. Army Corps of Engineers.

Garcia and Associates. 2010. "Final Archaeological and Cultural Monitoring of Construction of Battle Area Complex (BAX) for Stryker Brigade Combat Team (SBCT), Pōhakuloa Training Area, Hawai'i Island, Hawai'i." DACA83-03-D-0011, Task Order No. 0016. U.S. Army Corps of Engineers.

Monahan, Christopher M., and SWCA Environmental Consultants. 2009. "Cultural Resource Evaluations of Stryker Transformation Areas in Hawai'i." Office of Hawaiian Affairs and U.S. Army.

Monahan, Christopher M., Sarah Wilkinson, and Momi Wheeler. 2013. "FINAL Archaeological Phase II Crater Investigation, U.S. Army Pōhakuloa Training Area, Island of Hawai'i, Hawai'i: A Functional and Temporal Interpretation of Excavated Pits in the Mauna 'Āina and Their Significance in Hawaiian Prehistory." W9128A-08-D-0009, Task Order No. 0012. U.S. Army Corps of Engineers.

Taomia, Julie M E, James A Head, Kelly Leialoha Luscomb, and J Cary Stine. 2008. "Cultural Resources Management Projects Performed at the Pohakuloa Training Area, Island of Hawai'i, Hawai'i," 178.

Thurman, Douglas, Katie M. Sprouse, Christopher Manahan, and Davidf Shidleler. 2013. "Final Archaeological Reconnaissance Survey Report of Infantry Platoon Battle Area, U.S. Army Pōhakuloa Training Area (PTA), Ka'ohē Mauka Ahupua'a, Hāmākua Dstrict." W9128A-08-D-0009. U.S. Army Corps of Engineers.

Wheeler, Momi, Sarah Wilkinson, and Hallett H. Hammatt. 2014. "Archaeological and Cultural Monitoring Report for the Stryker Brigade Combat Team (SBCT) Construction-Related Activities along the Loop Trail, Main Supply Route, and Ke'eke'e Road, Ke'āmuku Maneuver Area (KMA), U.S. Army Pōhakuloa Training Area (PTA), Island of Hawai'i, Hawai'i." W9128A-08-D-0009, Task Order No. 0019. U.S. Army Corps of Engineers.

Wilkinson, Sarah, Momi Wheeler, Auli'i Mitchell, and Christopher M. Monahan. 2014. "Archaeological and Cultural Monitoring Report for Activities Related to Construction of the Proposed Battle Area Complex (BAX) for the Stryker Brigade Combat Team (SBCT), U.S. Army Pōhakuloa Training Area (PTA), Island of Hawai'i, Hawai'i, TMK: (3) 4-4-016:005." U.S. Army Corps of Engineers.

HHF Planners. 2020. "Real Property Master Plan Pohakuloa Training Area, Hawai'i Island - Final" Full Report.

Institute for Sustainable Development, and Belt Collins Hawai'i. n.d. "Environmental Assessment (EA) for Marine Corps Amphibious Training in Hawaii." Contract Number N62742-94-D-0006, Delivery Order 22.

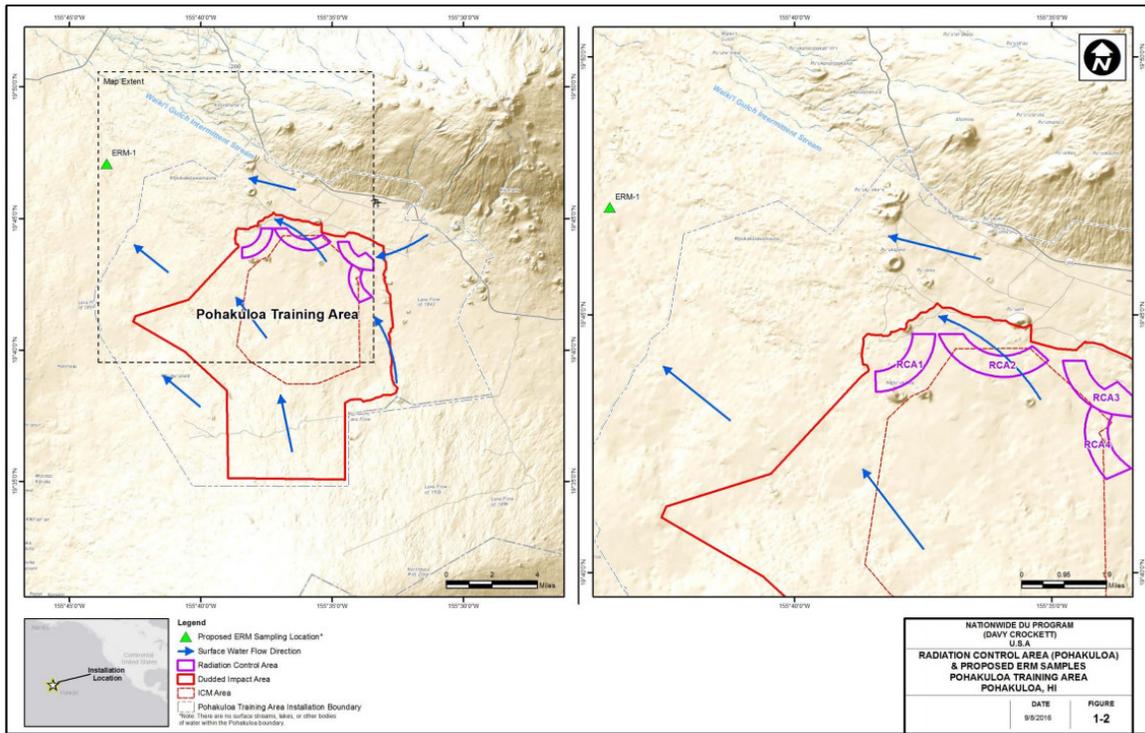
James Kent Associates, and Institute for Sustainable Development. 1998. "Decision Support Document: Community Resources Summary and Recommendations Marine Corps Amphibious Training at Makua Beach." Kane'ohē, Hawai'i: Marine Corps Base Hawaii.

James Kent Associates, and Institute for Sustainable Development. 1999. "Three Reports Related to the Makua Beach Amphibious Training of the U.S. Marine Corps, Support Documents for the Environmental Impact Statement." Kane'ohē, Hawai'i: Environmental Department, Marine Corps Base Hawaii.

Maly, Kepā, and Institute for Sustainable Development. 1998. "Oral History Study: Ahupua'a of Mākua and Kahanahāiki, District of Wai'anae, Island of O'ahu." BCH Project No. 442.0122. N62742-94-D-0006 D.O. 22. U.S. Navy, PACDIV.

Maly, Kepā.; Rechtman, Robert B., 1961-; Rosendahl, Paul H. (Paul Harmer). 1997. "Guidance for the preparation of a community caretaker/partnership plan for cultural resources stewardship at Marine Corps Base Hawaii (MCBH) Mōkapu Peninsula, Hawaii : lands of He'eia and Kāne'ohē, Ko'olau Poko District, Island of O'ahu." Marine Corps Base Hawaii.

**B. NaKoa requests that DoD provide a current Report on the status of the Pohakuloa Radiation Monitoring Plan that was finalized in December 2016.** This U.S. Army plan was produced as a condition to a Nuclear Regulatory Commission license for the possession of depleted uranium, used at the facility decades ago. This site-specific Plan was finalized for the Pohakuloa Training Area. The DU spotting rounds and fragments were scattered at PTA as a result of the use of the 1960s-era Davy Crockett weapons system. The plan was to identify potential routes for DU transport and describe the monitoring approach to detect any off-installation migration.



This map of Pohakuloa, found in the plan, shows the radiation control areas in purple. The green triangle is the proposed Radiation Monitoring sample location. Co-located surface water and sediment samples will be gathered, the Army says. The blue arrows indicate the direction of surface water flow, according to the Army.

Na Koa is seeking DoD data on groundwater samples at PTA, as well as the results of the quarterly testing the Army agreed to conduct in 2016 when they were forced to admit to the past use of Davy Crockett weapons system at PTA. These data are critical to the health & safety of Hawaiian cultural practitioners who use the area for gathering or worship.

C. NaKoa has obtained a copy of the FINAL // UNCLASSIFIED PROGRAMMATIC AGREEMENT AMONG THE U.S. ARMY GARRISON, PŌHAKULOA TRAINING AREA, THE U.S. ARMY GARRISON, HAWAII, THE HAWAII STATE HISTORIC PRESERVATION OFFICER, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION REGARDING ROUTINE MILITARY TRAINING ACTIONS AND RELATED ACTIVITIES AT UNITED STATES ARMY INSTALLATIONS ON THE ISLAND OF HAWAI'I, HAWAI'I dated 25 September 2018.

**It states, in part...**

**“WHEREAS, as of the signing of this PA, identification of potential historic properties through intensive pedestrian archaeological surveys have been conducted on approximately 45% of the accessible land (approximately 81,000 acres outside of the high hazard Impact Area) at PTA (Appendix B); and....**

**WHEREAS, as of the signing of this PA, approximately 31% of the identified archaeological type properties at PTA have been evaluated for NRHP eligibility. The remaining 69% of known archaeological properties distributed across the accessible land are treated as eligible for the NRHP and adverse effects avoided in accordance with AR 200-1 Part 6-4(b)(9); and**

**WHEREAS, the targeted high-hazard impact area at PTA has been used for high- explosive and incendiary munitions training since the mid-20th century and will continue to be used in this manner; and**

**WHEREAS, the danger of unexploded ordnance in the targeted high-hazard impact area (Appendix A) precludes pedestrian survey for historic property identification and evaluation efforts in that area; and**

**WHEREAS, the USAG-Pōhakuloa has determined that previous military training and related activities have had adverse effects on historic properties in the APE, and that some undertakings may continue to have adverse effects on historic properties in the APE; ....”**

Following these representations, the PA includes several pages of “Stipulations” and agreements between the State & DoD. Na Koa requests that DoD address in writing, the progress made in implementation of the Stipulations.

For Example: At the time the PA was signed only 31 percent of archaeological properties had been evaluated for NRHP eligibility, have the remaining 69 percent been evaluated. What is the status on the protection of these properties today?

D. NaKoa is concerned that some of the procedures & processes being implemented in the PA of 25 September 2018 are not in conformity with State law regarding the treatment of burials, including traditional burials. For example **Appendix G - Post-Review Discoveries** currently allows the US DoD to assess, remove & dispose of Native Hawaiian human remains and related artifacts, after implementing their internal procedure. This would occur without posting 'public notice' notice of the find and location for in a public and native Hawaiians who may have a family or cultural affiliation with the burial. Under the current DoD procedure, no effort is made to conform to our State burial laws, or to identify and include lineal descendants when DoD activities disturb traditional burial areas.

#### CONCLUSION:

The US is a signatory to the UNDRIP which sets minimum standards for protection of the rights on indigenous peoples, whether or not they are recognized by States. NaKoa suggests that the US DoD utilize the standards contained in the UNDRIP to address their obligations to Native Hawaiians and that the US DoD create a procedure to facilitate working with Hawaiians with cultural & ohana ties to the trust lands & resources impacted by USDoD activities.

Upon receipt & review of the materials requested, NaKoa will respond in more detail to the DoD draft policy (red-lined) that was forwarded with the materials.

Dated: November 6<sup>th</sup>, 2020,

Mililani B. Trask  
Na Koa Ikaika KaLahui Hawaii

## United States Army Garrison Hawaii Consultation Request Form

|                                                                                                     |                                                                                              |
|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| <b>Organization Name (if applicable):</b> Na Koa Ikaika KaLahui Hawaii                              |                                                                                              |
| * Native Hawaiian Organization? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |                                                                                              |
| ** Other? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No                       |                                                                                              |
| <b>Primary Contact Name:</b><br>Mililani B. Trask<br>Convener,<br>NaKoalkaika KaLahui Hawaii        | <b>Mailing Address (Street, City, State, Zip Code):</b><br>PO BX 6377, Hilo Hawaii 96<br>720 |
| <b>Phone Number:</b><br>1-808-990-0529                                                              | <b>Email Address:</b><br>mililani.trask@icllchawaii.com                                      |

\* A Native Hawaiian Organization is any organization which serves and represents the interests of Native Hawaiians; has a primary stated purpose of providing services to Native Hawaiians; and has demonstrated expertise in aspects of historic preservation that are significant to Native Hawaiians.

\*\*Other individuals and organizations with a demonstrated interest in the project may participate in Section 106 review as consulting parties "due to the nature of their legal or economic relation to the undertaking or affected properties, or their concern with the undertaking's effects on historic properties." Their participation is subject to approval by the responsible federal agency.

- I / We would like to participate in National Historic Preservation Act (NHPA) Section 106 Consultation with the U.S. Army Garrison Hawaii regarding (check all that apply):
- Architectural concerns including historic buildings, structures, and districts
  - Archaeological concerns including sites, districts, and places of traditional, religious and cultural significance

I am / We are no longer interested in participating in consultation and wish to be removed from the Army's consultation list.

I / We have no updates for the Army's consultation list.

Help conserve paper and resources, please opt in to receive all consultation correspondence by email. If at any time you prefer a paper copy please let us know.

## United States Army Garrison Hawaii Consultation Request Form

Please check all areas of interest:

### Hawai'i Island

|                                     |                                                                                                                                             |                                     |                                                                 |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-----------------------------------------------------------------|
| <input checked="" type="checkbox"/> | <b>Kawaihae Military Reservation</b><br>Moku: South Kohala<br>Ahupua'a: Kawaihae 1st                                                        | <input checked="" type="checkbox"/> | <b>Kilauea Military Camp</b><br>Moku: Ka'u<br>Ahupua'a: Keauhou |
| <input checked="" type="checkbox"/> | <b>Pōhakuloa Training Area</b><br>Moku: Hāmākua, South Kohala, North Kona, North Hilo<br>Ahupua'a: Ka'ohe, Waikoloa, Pu'u Anahulu, Humu'ula |                                     |                                                                 |

### O'ahu Island

|                                     |                                                                                                                                                                                                |                                     |                                                                                                                                                                             |
|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> | <b>Aliamanu Military Reservation</b><br>Moku: Kona<br>Ahupua'a: Moanalua, Hālawā                                                                                                               | <input checked="" type="checkbox"/> | <b>Makua Military Reservation</b><br>Moku: Wai'anae<br>Ahupua'a: Mākua, Kahanahāiki                                                                                         |
| <input checked="" type="checkbox"/> | <b>Dillingham Military Reservation/<br/>Mokule'ia Army Beach</b><br>Moku: Waialua<br>Ahupua'a: Keālia, Kawaihāpai, Mokulē'ia, Ka'ena                                                           | <input checked="" type="checkbox"/> | <b>Mauna Kapu Communication Station</b><br>Moku: Wai'anae, 'Ewa<br>Ahupua'a: Nānākuli, Honouliuli                                                                           |
| <input checked="" type="checkbox"/> | <b>Field Station Kunia</b><br>Moku: 'Ewa<br>Ahupua'a: Waikele                                                                                                                                  | <input checked="" type="checkbox"/> | <b>Pilila'au Army Recreational Center</b><br>Moku: Wai'anae<br>Ahupua'a: Wai'anae Kai                                                                                       |
| <input checked="" type="checkbox"/> | <b>Fort DeRussy</b><br>Moku: Kona<br>Ahupua'a: Waikīkī                                                                                                                                         | <input checked="" type="checkbox"/> | <b>Pūpūkea-Pa'ala'a Uka- Drum Road</b><br>Moku: Waialua, Ko'olauloa<br>Ahupua'a: Kahuku, Kapaeloa, Kaunala, Kawailoa,<br>Lauhulu, Paumalū, Pa'ala'a, Punanue, Waimea, 'Ōi'o |
| <input checked="" type="checkbox"/> | <b>Fort Shafter</b><br>Moku: Kona<br>Ahupua'a: Kahauiki                                                                                                                                        | <input checked="" type="checkbox"/> | <b>Schofield Barracks<br/>East, West, South Ranges &amp; Cantonment Area</b><br>Moku: Wai'anae, 'Ewa<br>Ahupua'a: Wai'anae Uka, Honouliuli                                  |
| <input checked="" type="checkbox"/> | <b>Helemano Military Reservation</b><br>Moku: Waialua<br>Ahupua'a: Pa'ala'a                                                                                                                    | <input checked="" type="checkbox"/> | <b>Tripler Army Medical Center</b><br>Moku: Kona<br>Ahupua'a: Moanalua                                                                                                      |
| <input checked="" type="checkbox"/> | <b>Kahuku Training Area</b><br>Moku: Ko'olauloa<br>Ahupua'a: Paumalū, Kaunala, Waiale'e, 'Ōpana, Kawela,<br>Hanaka'oe, 'Ōi'o, Kahuku, Mālaekahana, Ulupehupehu,<br>Pahipahiālua, Kahuku, Keana | <input checked="" type="checkbox"/> | <b>Waikakalaua Ammunition Storage Site</b><br>Moku: 'Ewa<br>Ahupua'a: Waikele                                                                                               |
| <input checked="" type="checkbox"/> | <b>Kawailoa Training Area</b><br>Moku: Waialua<br>Ahupua'a: Pa'ala'a, Kawailoa, Lauhulu, Kuikuiloloa, Punanue,<br>Kapaeloa, Kamananui                                                          |                                     | <b>Wheeler Army Airfield</b><br>Moku: Wai'anae, 'Ewa<br>Ahupua'a: Wai'anae Uka, Waikele                                                                                     |
| <input checked="" type="checkbox"/> | <b>Kipapa Ammunition Storage Site</b><br>Moku: 'Ewa<br>Ahupua'a: Waipi'o                                                                                                                       |                                     |                                                                                                                                                                             |

Please submit this form via email to Mr. Richard D. Davis, Cultural Resources Manager, at [usarmy.hawaii.crmp@mail.mil](mailto:usarmy.hawaii.crmp@mail.mil) or by U.S. Postal mail to: Department of the Army, United States Army Garrison, Hawaii, DPW Environmental – Cultural Resources Section, 948 Santos Dumont Ave. Bldg 105, Wheeler Army Airfield, Schofield Barracks, Hawai'i 96857-5013. Contact Mr. Davis at (808) 655- 9709 if you have any questions.

# United States Army Garrison - Pōhakuloa

## Consulting Party Request Form for Hawaii Island Training Programmatic Agreement

Name of Person Completing Form: Mililani B. Trask

- I request to be added as a consulting party to the Training PA.
- I am no longer interested in consultation on the development of the Training PA.

Organization Name: Na KOa Ikaika KaLahui Hawaii  
(if applicable):

- Native Hawaiian Organization serving and representing interests of Native Hawaiians, providing services to Native Hawaiians, and with expertise in aspects of historic preservation significant to Native Hawaiians.
- Other relationship to undertaking or concern with effects to historic properties.  
Please briefly describe:

ECO-SOC affiliate to Indigenous World credential at UN

### Contact information

Please take this opportunity to update the contact information on file. If no change is necessary, this section can be left blank.

Organizational Contact Name if different from above: Na KOa Ikaika KaLahui Hawaii

Mailing Address (Street, City, State, Zip Code): PO BX 6377m Hilo HI 96720

Email Address: mililani.trask@icllchawaii.com Phone Number: 10808-90-0529

Please submit this form via email to Mr. Richard Davis, USAG-HI Cultural Resources Manager, at [usarmy.hawaii.crmf@mail.mil](mailto:usarmy.hawaii.crmf@mail.mil) or by U.S. Postal mail to: Department of the Army, United States Army Garrison, Pōhakuloa, DPW Environmental – Cultural Resources Section, P.O. Box 4607, Hilo, Hawai'i 96720. Please contact Dr. Taomia at (808) 436-4280 if you have any questions.

**Appendix C:**  
**Comments Received from Thomas Lenchanko**

**From:** Thomas Lenchanko tlenchanko1@hawaii.rr.com

**Subject:** Pohakuloa... December 12, 2020 Cultural Impact Assessment

**Date:** December 20, 2020 at 4:38 AM

**To:** community@honuaconsulting.com, admin@honuaconsulting.com

**Cc:** Matthew Kahoopii matthewkahoopii@gmail.com, daniel.misigoy.mil@mail.mil, Gilda, Laura L CIV USARMY USAG (USA) laura.l.gilda.civ@mail.mil

TL

December 20, 2020

Daniel Misigoy  
Colonel  
USAG-Hawaii  
Commanding

Loreto V. Borce  
Lieutenant Colonel  
US Army Pohakuloa  
Commanding

Ms. Trisha Kehaulani Watson JD, PhD  
Honua Consulting

Regarding: Kaohe Mauka, Hawaii Island; and 23,000 acres of State of Hawaii owned land

aloha no na kau A pauole ke kuamoo o na kupuna ma

We, Aha Ula Puuhonua Kukaniloko – aha kukaniloko koa mana mea ola kanaka maui hoalii iku pau the living evidence of those ancients buried within our homeland, continue our non-concurring posture to all injury, damages, ground disturbing activities, undertaking, programs and projects within and without the inviolable and sacrosanct Pokahuloa, relative traditional cultural property upon Hawaii Island and throughout the Hawaiian Archipelago...

Note: Please affirm and demonstrate proof of clear unbroken chain of ownership and the transfer of “exclusive territorial” jurisdiction of Kingdom of Hawaii property throughout the Hawaiian Archipelago to the United States government, its agent the State of Hawaii and the liable to public and private citizens working in their behalf...

oia ua ike a aia la

Thomas Joseph Lenchanko  
Hawaiian National, Protected Person and Private Citizen  
Aha Ula Puuhonua Kukaniloko  
kahuakaiola ko laila waha olelo aha kukaniloko koa mana mea ola kanaka maui hoalii iku pau  
808-349-9949  
[tlenchanko1@hawaii.rr.com](mailto:tlenchanko1@hawaii.rr.com)



Virus-free. [www.avg.com](http://www.avg.com)

**Appendix D:**  
**Comments Received from Kamanawa Kini**

**From:** Kamanawa Kinimaka kahukamanawa@gmail.com  
**Subject:** Re: Pohakuloa  
**Date:** January 20, 2021 at 12:16 PM  
**To:** Honua Consulting community@honuaconsulting.com

KK

Aloha Again Kehau,

This message is completely unrelated to our Kanaka kine political kine things...

I have read over your accomplishments and narratives.

Especially this:

We were born here, raised here, and are raising our families here. We work only for the good of Hawai'i, because Hawai'i is the only home we have ever known...

I believe this is at the heart of Kanaka. I hope with your continual efforts it one day may be a perspective that every human on earth is able to comprehend.

Aloha,

IKKM

On Tue, Jan 19, 2021, 9:16 AM Kamanawa Kinimaka <[kahukamanawa@gmail.com](mailto:kahukamanawa@gmail.com)> wrote:

Aloha Again Kehau,

My cousin Jon Kinimaka takes the position of full eviction of the Army from Pohakuloa if not immediately then by 2033 when the lease is terminated.

My cousin also takes the lead voice in our 'Ohana's political positions.

We are both descendants of Col. David Leleo Kinimaka, Hanai to our Late King David Kalakaua.

Mahalo again for all your hana hana, and May the Good Lord Bless and Keep your Family.

Mahalo,

IKKM

On Fri, Jan 15, 2021, 2:30 PM Kamanawa Kinimaka <[kahukamanawa@gmail.com](mailto:kahukamanawa@gmail.com)> wrote:

Mahalo Kehau for answering one of my questions.

I have read through your organization's letter several times now and also had it reviewed by one of my aids on the mainland.

I am myself new to the Hawaiian Culture. I would not be considered a Hawaiian Cultural Practitioner by the status quo of our cultural authorities of the current day. I was given away to a Haole 'Ohana at birth by my Tutu Lady Maile Kinimaka.

But I am Hawaiian and I do exist in a culture inherent that requires not only a daily interaction with Akua, Na'aumakua and Kupuna but a singularly focused moment to moment attention and dedicated worship to the Diety of Iesu Kristo.

I would like to be very frank about my worship of the Diety. A foreign scripture of another culture from the opposite side of the world was imposed onto our Kupuna, now passed on to the Po, or in modern Hawaiian Christianity the Kingdom of Heaven. And many of our gifted and dedicated Keiki 'O Ka 'Aina have fallen mentally and physically ill to the introduction of such a foreign manuscript upon a people so heavily dedicated in the current historical era of time to the worship and communion with Nature. An example of this is the recent human sacrifice and self surrender to Akua of former mayoral candidate Mr. Mikey Glendon a Kia'i of Mauna A Wakea. This is an example of the presence of Kupuna at conflict with Christian Dogma. The idea of human sacrifice is still historically fresh to the Kanaka Maoli and held by some practitioners as honorable. While in Christianity only one single sacrifice was needed to be made. The sacrifice of God's only begotten son Iesu Kristo, Jesus Christ. Yet, doesn't that also encourage the idea that suicide is acceptable compounded with the notion that human sacrifice is honorable as well? I observe this confusion and complicated spiritual phenomenon especially in Kanaka Maoli Men.

Yet, the cognitive dissonance even though negative in parts is actually the needed cultural salvation for the hypocrisy of abrahamic religions. It is the reform of a relationship with the Divine through the protection of, communication with and technology forgotten through all aspects of nature. Abrahamic Religions possess a part of a greater story, but indigenous perspectives and Eastern philosophy must be interwoven into the very modern challenges of today's chaos and anarchy to stabilize the World's Security. Iesu Kristo provides the Avenue for the Kanaka Maoli to represent the potential of a new covenant with Akua through accessing Ho'o Mana (I always credit Kupuna Dr. Marie Alohalani Brown the Hawaiian Religion Professor of U.H. Manoa for the identity of what the practice is called.)

If the Bible was written and established by a patriarchal entity and then perpetuated by a consumeristic colonizing entity then doesn't our human salvation potentially exist within our own making by assessing Akua and our relationship with the Creator and the Creation through an indigenous matriarchal cultivating lense?

I am going to pose a question. If I as a practitioner recognize Snow as the Kino Lau of Poli'ahu, then is she therefore present in all things that are considered and associated with Snow? Not only ecologically and geographically but also metaphorically, spiritually, mentally poetically, verbally and linguistically.

The United States of America represents a out of date, archaic model of authority regarding human freedom, because the idea of freedom was still exclusive. Luckily, the Kingdom of Hawai'i dormant like Mauna Kea has been resting for the last 128/129 years. And in needing to gather in its protection we witness a host culture welcoming alternative cultural perspectives as offerings of ho'okupu. True and ancestral diplomacy on all accounts offered in faith and aloha versus contracts and currency.

You, Kehau and your consultation firm have a true opportunity to create changes that usher in a new era of our people at the most important and vital seat of a global discussion.

When you have that discussion I pray with all good intentions that Tutu Pele and the Tutu Lady Haumea are present by your side, because as I am sure you are aware...The Department of the Army of the United States of America continues to physically encroach upon the territory of the Matriarchal Akua.

This storyline is just a continuation and retelling of the same inappropriate non-consensual relationship between a patriarchal figure like Wakea with victimized figure like Ho'ohokuokalani. If we correct the storyline, the mo'olelo then we fulfill our responsibility as a chosen and favored People of God.

Therefore, in my humble sight towards global salvation the only redress towards the affront on the occupied land by the Department of the Army to better support the cultural demands of the host culture they are guests of would be to stop physically altering or infringing upon the physical manifestations of our Akua and Kupuna and facilitate a new approach towards global security.

The Hula. Halau O Kekuhi and the Kanak'ole Foundation would be the most appropriate in facilitating a complete transition of the Training Facility. Instead of our Native Community pushing for total removal and eviction of Pohakuloa in 2033, perhaps we re-engineer the entire purpose of the military industrial complex to a method of self protection and security that far outweighs the continued study of a bomb.

I however am just one voice speaking on behalf of myself. I realize that you have taken the time to entertain the radical ideas of a slowly deteriorating friar...thank you for listening to my vision for our people.

Akua Bless and Keep you and your 'Ohana, Now and Forever.

Faithfully,

Iosua Kamanawa Kinimaka Mano'I

On Thu, Jan 14, 2021, 8:49 PM Honua Consulting <[community@honuaconsulting.com](mailto:community@honuaconsulting.com)> wrote:

Aloha e Iosua,

I don't mind at all. I'm proud of my family and it's a totally appropriate ask. Mahalo for asking. I've only included some of my Hawaii Island ties below. I'm happy to provide more information if you want.

My full name is Trisha Kehaulani Watson-Sproat. My grandfather was Walter Oliver Lehuanani Watson Jr. His family are Victors from Hilo side (my great great grandmother was Lucy Pe'a Victor). My grandfather was born in Hilo, as was my father and two of his siblings. My grandmother was a Hoapili and a Naipo. My great great grandmother on my great grandmother's side was Eliza Kaaionalani Naipo of Kohala. My great great great grandfather was Judge John Green Ulumaheihē Hoapili Kanehoa of Kona, his daughter Lydia Kamakanoe Hoapili was my great great grandmother.

My husband is Matthew Kawaiola Sproat, the singer from Waipuna, and his family is originally from Kohala. I'm pretty sure I got all of those correct :) Matt and I were both born on Oahu.

Mahalo nui,  
Kehau

On Jan 11, 2021, at 2:39 PM, Kamanawa Kinimaka <[kahukamanawa@gmail.com](mailto:kahukamanawa@gmail.com)> wrote:

Aloha Kehau,

What a beautiful name. 😊😘

I appreciate your very respectful manner. Before we chat on the phone, I would like to become more acquainted with what information exactly you are tasked in gathering?

information exactly you are tasked in gathering:

And where are you and your family originally from if I may ask?

Mahalo,

Iosua Kamanawa Kinimaka Mano'i

On Sun, Jan 10, 2021, 3:57 PM Honua Consulting <[community@honuaconsulting.com](mailto:community@honuaconsulting.com)> wrote:

Aloha e Iosua,

Apologies for the delay in responding. I was largely out of the office this week. I would love the opportunity to speak with you.

Is there a best time for us to talk? '

Mahalo nui,  
Kehau Watson

> On Jan 4, 2021, at 1:57 AM, Kamanawa Kinimaka <[kahukamanawa@gmail.com](mailto:kahukamanawa@gmail.com)> wrote:

>

> Aloha,

>

> I am Iosua Kamanawa Kinimaka Mano'i.

> One of my Kahus forwarded me a letter from your organization regarding Pohakuloa.

>

> You are free to contact me directly for the time being at (808) 345-8063.

>

> Mahalo Piha

>

> IKKM

**Appendix E:  
Comments and Documents Received  
from Kyle Kajihiro**

## Pōhakuloa Scoping Comments

Kyle Kajihiro <kkajihir@hawaii.edu>

Mon 1/25/2021 1:28 PM

To: Trisha Kehaulani Watson <watson@honuaconsulting.com>

 1 attachments (138 KB)

2020.10.11 PTA lease scoping comments (1).pdf;

Aloha e Kehau

I hope you are well.

Since I am not Kanaka 'Ōiwi, I didn't feel that it was appropriate for me to complete the cultural impact analysis survey. But if I may, I would like to share my scoping comments on the Pōhakuloa lease retention EIS.

I am very concerned that the Army may be considering condemnation of public trust lands at Pōhakuloa. This would exacerbate the historical trauma of the overthrow and illegal annexation and further erode the land base for Kānaka 'Ōiwi. By permanently severing relationships between Kānaka 'Ōiwi and the 'āina, the Army would be perpetuating the slow violence of dispossession and cultural disintegration.

I will send another email with some documents that may also be useful for your study.

Thank you for your consideration.

Best,

Kyle Kajihiro

October 14, 2020

Kyle Kajihira, Ph.D.  
Lecturer, Ethnic Studies and Geography, University of Hawai'i at Mānoa  
kkajihir@hawaii.edu

## **Scoping Comments on the Environmental Impact Statement (EIS) for Army Training Land Retention at Pōhakuloa Training Area (PTA)**

### **Historical and Cultural Context**

In its approach to the preparation of this EIS, the Army must situate Kānaka ʻŌiwi (Native Hawaiians) as a genealogical, cultural, and spiritual embodiment of the ʻāina (land) itself. Any activities that affect the environment will have significant effects on Kānaka ʻŌiwi, especially those with closer genealogical ties to the land. This will necessarily affect interpretations of the significance of impacts on natural and cultural resources and environmental justice.

Public Law 103-150 recognizes two key facts: (1) the importance of land to Kānaka ʻŌiwi, and (2) as a condition of the Admissions Act, public trust lands of the Hawaiian Kingdom were to be held by the State for, among other things, "... the betterment of the condition of Native Hawaiians." Further, Public Law 103-150 finds, in relevant part, "Whereas, the indigenous Hawaiian people never directly relinquished their claims to their inherent sovereignty as a people or over their national lands to the United States, either through their monarchy or through a plebiscite or referendum; Whereas, the health and well-being of the Native Hawaiian people is intrinsically tied to their deep feelings and attachment to the land" (P.L. 103-150 1993).

### **Purpose and Need Statement**

The issue at the core of the purpose and need statement in the EIS must be the Army's responsibility as lessee to care for the land as defined by the terms of General Lease (GL) 3849. In the case *Clarence Ching and Mary Maxine Kahalelio vs. Suzanne Case*, Judge Gary Chang ruled:

Public trust lands are state-owned lands that are held for the use and benefit of the people in general of the State of Hawaii. The State of Hawaii is the trustee of these public lands in the public trust. The trustee of the public lands trust has the highest duty to preserve and maintain the trust lands. This duty is broadly coined in the concept of

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"malama 'aina"—to care for the land. (*Clarence Ching and Mary Maxine Kahaulelio vs. Suzanne Case* 2018)

Therefore, the Army as lessee is governed by the terms of the lease to mālama 'āina.

The purpose and need statement must be rewritten to reflect this duty to clean up and restore the land it leases from the state. The court has found that Army activities have caused environmental damage in violation of the terms of the lease and that the State has a duty to enforce the terms of the lease consistent with the principle of mālama 'āina (care for the land).

### **Alternatives Statement**

In line with this purpose and need, the *preferred alternative* should be: returning the leased parcel GL 3849 back to the people of Hawai'i (via the Department of Land and Natural Resources) after restoring it to its condition prior to the Army's use of this land. The Army must fulfill its agreements to return Pōhakuloa to the people of Hawai'i in its original state by 2029.

The alternatives analysis must also consider other locations outside of Hawai'i where the proposed training activities may be conducted. In the process of stationing the Stryker Brigade Combat Team (SBCT) in Hawai'i, the public was frequently told that Hawai'i was the only place where the unit could be stationed. And yet, in 2016, less than ten years after the decision to station the SBCT in Hawai'i was finalized, the Army moved the SBCT to Washington State.

### **Affected Environment**

Defining the scope of the affected environment requires thinking along both *temporal* and *spatial* axes.

**Temporal Scope: Environmental effects of past, present, and foreseeable future activities:** In order to provide an accurate assessment of environmental impacts for proposed actions, an EIS must begin with a thorough understanding of the baseline and current ecological and cultural conditions of the affected site.

*Baseline conditions* at the Pōhakuloa Training Area are the environmental conditions which existed *prior to military use of the land*. A reasonably accurate picture of baseline conditions can be determined by extrapolating from historical records, oral histories, cultural, archaeological, and geophysical studies, and biological studies of relatively intact native ecosystems in neighboring areas which have similar environmental conditions.

Understanding *current environmental conditions* at PTA requires a comprehensive study of the *cumulative environmental effects of all past military activities* at PTA. This study must consider effects of the proposed action that are reasonably foreseeable and have a reasonably close causal relationship to the proposed action or alternatives, including how the proposed action may compound or increase the adverse effects of past military activities.

**Spatial Scope: Region of Influence (ROI):** The geographical scope of analysis, or region of influence (ROI) must include environmental effects of proposed military activities on all lands within the PTA boundary, the neighboring areas, as well as more distant sites which are operationally linked to the proposed action and affected environment, such as Kawaihae Harbor. The rationale for this is that the state-owned parcel in question (general lease 3849) is identified as key to providing access and support to all training activities at PTA. The EIS must also consider the cumulative effects of the proposed action with other non-military projects in the affected area.

## **Land Use**

The EIS should incorporate a complete history of land title and land use with maps. A central issue is the Army's use of public trust lands (also known as "ceded lands"). The status of these lands are unique in that they are held in trust for a number of public purposes defined by the Statehood Act. The EIS should explain the decision making process, with relevant documentation, for the initial negotiation and approval of G.L. 3849.

**DHHL Land:** Also at issue is the Army's use of land owned by the Department of Hawaiian Home Land (DHHL).

- What decision making steps were followed to lease DHHL land to the Army?
- How are DHHL beneficiaries being involved in the decision making for renewal of the lease?

**No Condemnation:** A document titled "Information Paper: Subject: Land leased to the U.S. Army by the State of Hawaii for Training" (Army Garrison Hawaii 2015), states that "Major actions associated with entering into a new lease are broken down into (3) Phases," with the Phase III including the step "Proceed with Acquisition or Condemnation" (Army Garrison Hawaii 2015). Condemnation of the land would be an egregious breach of trust and abuse of power.

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Nothing is more politically inflammatory in Hawai‘i than the forcible taking of land, especially public trust lands considering the injustice of the U.S.-military backed overthrow Queen Lili‘uokalani and the unlawful means by which the United States claims to have annexed Hawaiian territory.

The military’s condemnation of 187-acres of Kamaka family land in Waikāne after failing to clear UXO is another bitter reminder of grievous injustice by the military. The present EIS must unequivocally state that there will be no use of eminent domain to condemn the State-owned parcel at Pōhakuloa.

**State Land Use Regulations:** Most of PTA falls within the State Conservation District. As stated above, the Army has a duty to fulfill its obligations under the lease, consistent with State land use regulations, to mālama ‘āina.

### **Cultural Resources**

To date, investigations into the number and significance of cultural sites have been superficial. The EIS should include a thorough inventory of the historic sites in the area, discussion of the cultural significance of Pōhakuloa itself, in relation to the larger cultural landscape, and a discussion as to how the condition of these sites has changed while the Army has used these lands. Kānaka ‘Ōiwi and the general public currently only have limited access to Pōhakuloa, and therefore, are denied the right to fully enjoy and conduct cultural, religious, or subsistence gathering practices until the lands are cleaned up and restored.

The EIS must incorporate a comprehensive Cultural Impact Assessment (CIA). Pursuant to the Hawai‘i Environmental Policy Act (HEPA), and Articles IX and XII of Hawai‘i State Constitution government agencies are required “to promote and preserve cultural beliefs, practices, and resources of native Hawaiians and other ethnic groups” (Guide to the Implementation and Practice of the Hawaii Environmental Policy Act, 2012, 11). The CIA must include an analysis of adverse cultural impacts on Kanaka ‘Ōiwi and other cultural practices by military activities at PTA which have occurred in the past, and which may occur in the future as a result of proposed military activities.

**Cultural Landscapes:** The CIA must consider the entire connected cultural landscape of Ka‘ohe ahupua‘a, Mauna a Wākea (Mauna Kea), and the surrounding cultural landscapes. Hawai‘i law recognizes that in addition to built structures, a cultural resource may also be a

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natural feature of the landscape, such as a mountain, hill, rock, tree, stream, or animal which has cultural significance to Kānaka ʻŌiwi. This study should include an in-depth cultural landscape study (CLS) and ethnographic survey (ES).

The Papakū Makawalu methodology, developed by the Edith Kanakaʻole Foundation, would be appropriate to employ in the assessment of the cultural meanings and significance of the affected area.

- What does the name Pōhakuloa signify?
- What is the relationship of Pōhakuloa to Mauna a Wākea (Mauna Kea)?
- What is the significance of the ahupuaʻa name Kaʻohe and the fact that it encompasses Mauna a Wākea (Mauna Kea), Pōhakuloa, parts of Mauna Loa, and a portion of the windward coastline?
- How does this land division relate to the history of the important chief ʻUmi a Līloa?
- How does Pōhakuloa relate to the heiau Ahu a ʻUmi to the west of the PTA boundary?

**Cultural Sites and Resources:** Affected sites include, but are not limited to alanui (trails), ahu and heiau (shrines and temples), puʻu (hills), rocks, caves and lava tubes, plants and animals used in traditional healing, hunting grounds, sites for harvesting birds, sites for observation and study of celestial bodies, burial sites, quarries and workshops for tools, and sources of water.

- How have military activities affected the cultural sites in Pōhakuloa?
- How have military activities affected the availability and quality of plant, animal, and mineral resources for Kanaka ʻŌiwi cultural practices.
- What are the effects of live fire training on lava tubes and cultural artifacts in PTA?

**Cultural Practices:** Pursuant to the Army's lease agreement and legal obligations, the Army must mālama ʻāina to restore ola (life) and create a safe and healthy environment for the well-being of flora, fauna and all interdependent life forms including the native tenants/hoa ʻāina/beneficiaries. The native tenants must include, but are not limited to: hunters and gatherers, lāʻau lapaʻau (herbal medicine practitioners), cultural and religious/spiritual practitioners and their relationship to the ʻāina. Adverse impacts on cultural practices include, but are not limited to restrictions on access due to security or safety restrictions, the destruction of cultural or religious sites, the destruction of environmental resources used in cultural practices, and the disruptions of the view plane and serenity of the area caused by explosions, vehicle and aircraft noise, and smoke and dust.

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- What Kānaka ‘Ōiwi cultural practices have been conducted in the past and are currently conducted in the ROI?
- What cultural sites and resources are needed for the revival and/or perpetuation of these cultural practices?
- How will the Army improve the ability of Kānaka ‘Ōiwi and the public to have safe, meaningful, and regular cultural access to Pōhakuloa?
- How will the Army increase the opportunities for Kānaka ‘Ōiwi and the public to safely participate in mālama ‘āina (environmental and cultural restoration activities) at Pōhakuloa?

## **Biological Resources**

**Native Ecosystems:** The EIS must adopt an ecosystems approach to analyzing the effects of the proposed military activities on the natural resources. This means studying the components, structures, and functioning of affected ecosystems. Individual species cannot be considered in isolation from their ecosystems. Nor can they be considered as separate from cultural relationships with humans. Ecosystems and species that inhabit them are also cultural resources for Kānaka ‘Ōiwi.

**Threatened and Endangered Species:** It is imperative that all rare, threatened and or endangered organisms within the area remain protected. The EIS must incorporate a complete inventory of all rare, threatened and/or endangered plant, insect and animal species including those identified as Native Hawaiian ‘Aumakua and Kinolau (Divine Bodily Manifestations Of Hawaiian Deities) within PTA and neighboring areas which are likely to be affected by activities on the range. Some of the species of particular concern should include, but not be limited to the following: Palila, ‘I‘iwi and all forest birds, Nēnē, Pueo, ‘Ōpe‘ape‘a, ‘Io, ‘Ua‘u, ‘Iwa and other sea birds. Also the forest flowers and trees that must be considered include; ancient Lehua, Māmane, ‘Iliahi (Aoa), Koa, ‘Akoko and all other rare, threatened and endangered species of plants that represent Hawaiian ‘Aumakua and/or Kinolau.

- What occurrences of rare threatened and endangered species have been documented within PTA?
- Cultural monitors have testified that they have heard the singing of Palila in PTA construction areas. Please provide documentation of recent or previously undocumented occurrences of any rare, threatened, and endangered species.

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- I have read that historically, there may have been as many as 90,000 ‘Ua‘u nesting burrows. What is the current status and the future outlook for recovery of the ‘Ua‘u population? How are they affected by the noise and activity of military training?

**Invasive Species:** The EIS should fully disclose the extent of invasive species threats at PTA.

- What is the inventory and extent of invasive species threats at Pōhakuloa?
- What is the status of ungulates within the area used by the Army and what is the extent of damage they have caused?
- What is the Army doing to control these threats?
- Please provide any incident reports of damage to endangered species or habitats by invasive species.
- Please provide any incident reports of accidental releases or introductions of invasive species, such as: hitchhiking fountain grass or fireweed on vehicles or personnel or the introduction of invasive species such as fire ants, rodents, snakes, spiders, rhinoceros beetles as stowaways on cargo boats, vehicles, and aircraft.

**Wildfires:** The EIS must provide a complete history of wildfires at Pōhakuloa, including the dates, causes, extent of damage, and responses.

- How are wildfires documented, and where is this information reported and archived?
- What have been the impacts on fires to protected species and habitats?
- What have been the impacts of fires on cultural sites and resources?
- How have fire incidents affected the transformation of the ecology?
- How are biologists and cultural resources specialists documenting the impacts of fires?

## **Socioeconomics / Environmental Justice**

**Environmental Justice Analysis:** As mentioned above, the greatest environmental justice impacts will be borne by Kānaka ‘Ōiwi who have the most profound connection to the lands in question. The environmental justice analysis in the EIS must not use demographic data to claim that there are negligible environmental justice impacts because all ethnic groups are considered minorities on Hawai‘i island. The key considerations in determining environmental justice impacts include:

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- Who has the longest history, deepest connections, and profound knowledge about Pōhakuloa?
- Who has the greatest stake and is most directly affected by the environmental and cultural impacts there?
- Who has suffered the greatest historical injustice, cultural disintegration, and dispossession as a result of the history of the U.S.-backed overthrow of the Hawaiian Kingdom and the subsequent seizure of Hawaiian land by the federal government?
- Whose cultural practices are most adversely affected by Army activities in Pōhakuloa?
- Who is exposed to the greatest risk of exposure to toxins, injury, or death in the exercise of their cultural practices?
- How are subsistence hunters, la‘au lapa‘au practitioners, and Kanaka ‘Ōiwi religious practitioners affected by the access restrictions and hazards at PTA?

**Department of Hawaiian Homelands (DHHL):** Another important issue is the impact of military use of DHHL lands and Kanaka ‘Ōiwi beneficiaries. The EIS should include feedback from beneficiaries about the use of DHHL land by the military.

**Economic Costs:** Some questions about the economic impacts of the military activities at PTA:

- What are the costs of clean up and restoration of environmental damage caused by military activity?
- What is the depreciation in the land’s value as a result of military activities?
- How does the loss of value adversely affect the general public and Native Hawaiians as beneficiaries of the public land trust?
- What are the opportunity costs?
- What economic value can be gained by restoring the ecological and cultural integrity of Pōhakuloa?

## **Noise**

Noise is one of the major complaints about military training at PTA. The EIS should include consultations with residents of neighboring communities about the effects of noise.

- How does noise affect the value of homes?
- How does it affect quality of life?

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- What public health effects might be induced by chronic noise?
- How are veterans' mental health affected by the noise?
- How does noise affect the behaviors of animals, especially endangered species?

### **Air Quality**

The EIS must provide thorough data on air quality at Pōhakuloa.

- What kinds of documentation and reporting is conducted when there are incidents that may adversely affect air quality, such as a fire or training event?
- What emissions of air pollutants have been reported at PTA?
- What toxins or hazardous substances have been detected in airborne particulate matter during fires or training events?

### **Water Resources**

The ahupua'a of Ka'ōhe refers to bamboo, which is a kinolau of Kāne, a deity associated with sources of fresh water.

- What is the history and status of aquifers in the vicinity of PTA?
- How has live fire training affected aquifers within PTA? Does the pulverization of lava in the impact areas increase the soil's permeability and the infiltration of contaminants into the groundwater?
- Where are the wells? What is the history of water usage? What has been the impact of past uses of aquifers on Mauna a Wākea?
- Did the Army request a UH researcher to conduct test drilling for water at Pōhakuloa? Was this research funded by the Army?
- What has been the role of the Hawai'i State Water Commission in approving or overseeing this prospecting activity?
- What is the Army's proposed water use at PTA?

### **Natural Hazards, Geology, and Soils**

- What are the impacts on lavas and soils in the impact range?
- Are they changing the permeability of the ground?
- What are the projected impacts if Mauna Loa erupts?

## **Visual Resources**

Wide open spaces and views of the mountains is part of the significance of Pōhakuloa. As a site that usually sits above the tradewind inversion layer, the skies are often clear.

- What are the Kanaka 'Ōiwi visual resources at Pōhakuloa?
- What is the cultural significance of different view planes?

## **Public Facilities and Infrastructure**

- What are the effects on the quality of roads?
- What are the impacts of military use on Kawaihae harbor facilities?
- How are convoys affecting traffic?
- How do residents feel about the traffic disruptions?

## **Toxic and Hazardous Substances**

The EIS must include comprehensive information characterizing toxic and hazardous substances in soil, groundwater, surface water runoff, uptake in plants and animals, air emissions, and air borne particulate matter. The Contaminants of Concern (COC) that should be investigated include, but are not limited to:

- Munitions and explosives of concern (MEC);
- Metals, including lead from small arms munitions, mercury, beryllium, cadmium, arsenic, copper, aluminum,
- Depleted uranium (DU), strontium 90, and other radioactive contaminants,
- PCBs, dioxins and furans,
- Energetics and explosive constituents and their byproducts,
- Per- and polyfluoroalkyl substances (PFAS) which is commonly found in fire-fighting foam,
- Perchlorate, a common chemical in rocket fuels,
- Petroleum, oil, and lubricants (POLs),
- Volatile organic compounds (VOCs), including solvents, pesticides, and herbicides,
- Benzene, Toluene, Ethylbenzene, and Xylene (BTEX) and Polycyclic Aromatic Hydrocarbons (PAHs),

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- Asbestos,
- Various kinds of air pollution emissions.

### **Cumulative Impacts**

The EIS must incorporate data and analysis of the environmental effects of all past military activities at PTA, including:

- A comprehensive list of all military activities ever conducted at PTA, including any nuclear, biological, and chemical weapons tests and military activities by other service branches and foreign militaries.
- A comprehensive study of toxic and hazardous substances and their effects on the human and natural environment.
- A comprehensive list of federal actions since 2001 within the entire PTA boundary and at sites on Hawai'i Island which are connected to the affected environment in the EIS, and a summary of their environmental impacts.
- A description of all munitions used, the quantities used, the explosive yields, contaminants associated with these munitions, the extent of unexploded ordnance contamination, and the results of any removal actions.
- A comprehensive report on wildfires, their causes, responses, and environmental consequences.

The EIS must also take into account the combined environmental and cultural impacts of all past, present, and reasonably foreseeable future projects at or near the project area. Past projects include:

- Infantry Platoon Battle Course;
- Kawaihae Harbor improvements (state facilities);
- Stryker Brigade Combat Team training support facilities (prior to cessation of Stryker training at PTA)—with the removal of the Stryker Brigade from Hawai'i, why has there not been a reversion of land acquired and developed for the aborted project?;
- changes in military aircraft training at PTA, including the Urban Close Air Support Range and an Aviation Bulls-Eye Range;
- Multi-Purpose Range Complex facilities.

Present and reasonably foreseeable actions that must be taken into consideration include:

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- PTA Cantonment Facilities Improvement Program modernization projects;
- Daniel K. Inouye Highway extension;
- State small boat and commercial harbor improvements at Kawaihae Harbor;
- marine sciences center at Kawaihae Harbor;
- Department of Hawaiian Home Lands development plans;
- State airport plans;
- Mauna Kea Observatories Thirty-Meter Telescope—opposition to the telescope has sparked widespread protest across Hawai‘i and around the world; these energies will spill over into Pōhakuoa;
- and other recreational and residential community plans.

**Characterizing the Natural Resources, Cultural Resources, and Environmental Impacts within the Impact Area:** Given the dangers of the UXO in the impact area, this vast area remains a blank spot on the map. The absence of cultural and environmental resources on Army maps does not mean that there are no resources there. It simply reflects the fact that no one has looked or been able to look. It is a map of our ignorance about Pōhakuoa. As a result, any EIS for PTA without an investigation of the impact area will be fatally flawed because it will not provide a complete picture of the affected environment or the environmental impacts.

The present EIS must do better to characterize the cultural and natural resources and impacts within the impact area. The Army should explore different unmanned aerial vehicle technologies to conduct aerial surveys of the impact area. Aerial imagery and remote sensing technologies can detect and map the topography, differentiate between different types of vegetation and land composition, identify archaeological structures, and even detect UXO and munitions debris. As the landscape and hazards are mapped in finer detail, planners can begin to explore new techniques for removing UXOs, perhaps using robotics, or adopting creative demining techniques and technologies.

Again, the Army has a duty to clean up and restore the environmental damage caused by its activities. This EIS must begin the process of fulfilling those responsibilities.

### **Restoration of past environmental impacts**

General Lease 3849 requires that that the Army “make every reasonable effort to ...remove or deactivate all live or blank ammunition upon completion of a training exercise or prior to entry by the said public, whichever is sooner” and remove “all trash, garbage and other

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waste materials[.]” Cultural monitors, who spent extensive time on State lands at the PTA, observed military debris, including unexploded ordnance and spent shell casings, scattered across the area leased by the Army. The EIS should fully disclose the extent to which the Army has complied with this lease provision and should include a thorough investigation of the entire area to determine whether there is any military debris (including unexploded ordnance) on the land that the Army has been using. Further the EIS must outline plans for the clean up and restoration of state-owned land at PTA affected by military contamination.

The *Real Property Master Plan Pohakuloa Training Area, Hawai‘i Island - Final (Digest)* states that “Specific data on UXO at PTA is not available at the time of this study” (HHF Planners 2020, 35). All areas used for live munitions training in the past, present or foreseeable future must be surveyed and characterized for unexploded ordnance (UXO) hazards.

Therefore the Army should disclose its unexploded ordnances (UXO) protocol for full transparency, accountability and confidence of adequacy. Mālama ‘Āina (to care for), requires cleanup and restoration of the land, and therefore means:

- Pōhakuloa is to be restored to its natural habitat with healthy ecosystems that Kanaka Maoli can access and utilize as right holders/practitioners of the ‘āina.
- The process for clean-up must include restoring the ‘āina to its original condition and beauty.

**Former Bazooka Range:** In a draft document entitled "Action Memorandum for the Time Critical Removal Action", that was prepared in March 2015 by the United States Army Garrison at Wheeler Army Airfield on Schofield Barracks in Wahiawa, O‘ahu, Hawai‘i, it was reported that the former Bazooka Range MRS is located at the Pōhakuloa Training Area. The former Bazooka Range was apparently used as a military maneuver area through the early 2000s. During a site inspection of the Bazooka Range area that was jointly conducted by DLNR and the Army in 2014, the area was found to be "heavily contaminated on the surface with material potentially presenting an explosive hazard (MPPEH) and munition debris (MD)." (Emphasis added.) A subsequent inspection by two military explosive ordnance disposal units found that the following types of ordnance were observed to be present:

- M29A2 training rounds with dummy M405 fuse
- Practice 81mm mortars, and
- High explosive anti-tank (HEAT) rifle grenades.

Other suspected fired ordnance at the Bazooka Range area also included:

- M28A2 bazooka rounds with M404 fuse, and

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- M30 white phosphorus (WP) bazooka rounds.

The Army noted that the sheer densities and quantities of ordnance that are present on the ground at the former Bazooka Range area "coupled with the accessibility to the public make for the potential for significant danger to public health and welfare." The estimated cost of remediating the danger as of March 2015 was \$2,353,000. The Army recommended that the removal of ordnance danger because of the significant possibility that ordnance exists at the former Bazooka Range area that "presents an imminent and substantial endangerment to public health, or welfare, or the environment." Any EIS should disclose the status of the cleanup of the Former Bazooka Range:

- Has it been completely cleaned up?
- Is it safe to enter?
- How much waste was collected?
- What types of waste was removed?
- Where and how was it disposed of?

### **Failed Public Involvement**

Although the COVID-19 pandemic creates difficulties for in-person participation, new video conferencing technologies could have allowed for meaningful remote participation in public information sessions. Unfortunately, the virtual scoping open house session on September 23 failed to take advantage of the technology and instead offered the public what amounted to an audio-visual brochure. The posting of slides and the audio recordings of the text did not fulfill the need for public involvement. Many people had questions, but there was no way to ask questions of subject matter experts. The result was that members of the public who wished to participate went away frustrated and disillusioned by the process.

I have tried to obtain more background information on the proposed real estate action. My searches led me to a digest of the *Real Property Master Plan (RPMP) Pohakuloa Training Area, Hawai'i Island - Final* (HHF Planners 2020a). While this was helpful, I wished to study the full master plan. However, the document was not publicly available. Also, the RPMP makes reference to a number of documents that would be relevant to understanding the proposed action. Please make these documents publicly available:

- U.S. Army Engineering and Support Center Huntsville, Alabama. 2009. "Enhanced Area Development Plan, Pohakuloa Training Area, Hawai'i." Final Submittal.
- U.S. Army Garrison Hawaii. 2020. *Integrated Natural Resources Management Plan*.

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- U.S. Army Region Hawaii. 2015. "Memo for Commander, USARHAW, Approach to Training in Hawaii: A Strategy for PTA." October 25.
- U.S. Department of Defense, Assistant Secretary of Defense. 2018. "Approval of Major Land Acquisition Waiver Request - US Army Hawaii Training Sites, Hawaii." June 4.
- PTA Area Development Plan (ADP). 2015.

Thank you for your consideration of these comments.

## References

- Army Garrison Hawaii. 2015. "Information Paper: Subject: Land Leased to the U.S. Army by the State of Hawaii for Training."
- Apology to Native Hawaiians*. 1993. Public Law 103-150. 103rd Congress.
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## **Scoping Comments on the Environmental Impact Statement (EIS) for Army Training Land Retention at Pōhakuloa Training Area (PTA)**

### **Historical and Cultural Context**

In its approach to the preparation of this EIS, the Army must situate Kānaka ʻŌiwi (Native Hawaiians) as a genealogical, cultural, and spiritual embodiment of the ʻāina (land) itself. Any activities that affect the environment will have significant effects on Kānaka ʻŌiwi, especially those with closer genealogical ties to the land. This will necessarily affect interpretations of the significance of impacts on natural and cultural resources and environmental justice.

Public Law 103-150 recognizes two key facts: (1) the importance of land to Kānaka ʻŌiwi, and (2) as a condition of the Admissions Act, public trust lands of the Hawaiian Kingdom were to be held by the State for, among other things, "... the betterment of the condition of Native Hawaiians." Further, Public Law 103-150 finds, in relevant part, "Whereas, the indigenous Hawaiian people never directly relinquished their claims to their inherent sovereignty as a people or over their national lands to the United States, either through their monarchy or through a plebiscite or referendum; Whereas, the health and well-being of the Native Hawaiian people is intrinsically tied to their deep feelings and attachment to the land" (P.L. 103-150 1993).

### **Purpose and Need Statement**

The issue at the core of the purpose and need statement in the EIS must be the Army's responsibility as lessee to care for the land as defined by the terms of General Lease (GL) 3849. In the case *Clarence Ching and Mary Maxine Kahalelio vs. Suzanne Case*, Judge Gary Chang ruled:

Public trust lands are state-owned lands that are held for the use and benefit of the people in general of the State of Hawaii. The State of Hawaii is the trustee of these public lands in the public trust. The trustee of the public lands trust has the highest duty to preserve and maintain the trust lands. This duty is broadly coined in the concept of

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"malama 'aina"—to care for the land. (*Clarence Ching and Mary Maxine Kahaulelio vs. Suzanne Case* 2018)

Therefore, the Army as lessee is governed by the terms of the lease to mālama 'āina.

The purpose and need statement must be rewritten to reflect this duty to clean up and restore the land it leases from the state. The court has found that Army activities have caused environmental damage in violation of the terms of the lease and that the State has a duty to enforce the terms of the lease consistent with the principle of mālama 'āina (care for the land).

### **Alternatives Statement**

In line with this purpose and need, the *preferred alternative* should be: returning the leased parcel GL 3849 back to the people of Hawai'i (via the Department of Land and Natural Resources) after restoring it to its condition prior to the Army's use of this land. The Army must fulfill its agreements to return Pōhakuloa to the people of Hawai'i in its original state by 2029.

The alternatives analysis must also consider other locations outside of Hawai'i where the proposed training activities may be conducted. In the process of stationing the Stryker Brigade Combat Team (SBCT) in Hawai'i, the public was frequently told that Hawai'i was the only place where the unit could be stationed. And yet, in 2016, less than ten years after the decision to station the SBCT in Hawai'i was finalized, the Army moved the SBCT to Washington State.

### **Affected Environment**

Defining the scope of the affected environment requires thinking along both *temporal* and *spatial* axes.

**Temporal Scope: Environmental effects of past, present, and foreseeable future activities:** In order to provide an accurate assessment of environmental impacts for proposed actions, an EIS must begin with a thorough understanding of the baseline and current ecological and cultural conditions of the affected site.

*Baseline conditions* at the Pōhakuloa Training Area are the environmental conditions which existed *prior to military use of the land*. A reasonably accurate picture of baseline conditions can be determined by extrapolating from historical records, oral histories, cultural, archaeological, and geophysical studies, and biological studies of relatively intact native ecosystems in neighboring areas which have similar environmental conditions.

Understanding *current environmental conditions* at PTA requires a comprehensive study of the *cumulative environmental effects of all past military activities* at PTA. This study must consider effects of the proposed action that are reasonably foreseeable and have a reasonably close causal relationship to the proposed action or alternatives, including how the proposed action may compound or increase the adverse effects of past military activities.

**Spatial Scope: Region of Influence (ROI):** The geographical scope of analysis, or region of influence (ROI) must include environmental effects of proposed military activities on all lands within the PTA boundary, the neighboring areas, as well as more distant sites which are operationally linked to the proposed action and affected environment, such as Kawaihae Harbor. The rationale for this is that the state-owned parcel in question (general lease 3849) is identified as key to providing access and support to all training activities at PTA. The EIS must also consider the cumulative effects of the proposed action with other non-military projects in the affected area.

## **Land Use**

The EIS should incorporate a complete history of land title and land use with maps. A central issue is the Army's use of public trust lands (also known as "ceded lands"). The status of these lands are unique in that they are held in trust for a number of public purposes defined by the Statehood Act. The EIS should explain the decision making process, with relevant documentation, for the initial negotiation and approval of G.L. 3849.

**DHHL Land:** Also at issue is the Army's use of land owned by the Department of Hawaiian Home Land (DHHL).

- What decision making steps were followed to lease DHHL land to the Army?
- How are DHHL beneficiaries being involved in the decision making for renewal of the lease?

**No Condemnation:** A document titled "Information Paper: Subject: Land leased to the U.S. Army by the State of Hawaii for Training" (Army Garrison Hawaii 2015), states that "Major actions associated with entering into a new lease are broken down into (3) Phases," with the Phase III including the step "Proceed with Acquisition or Condemnation" (Army Garrison Hawaii 2015). Condemnation of the land would be an egregious breach of trust and abuse of power.

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Nothing is more politically inflammatory in Hawai‘i than the forcible taking of land, especially public trust lands considering the injustice of the U.S.-military backed overthrow Queen Lili‘uokalani and the unlawful means by which the United States claims to have annexed Hawaiian territory.

The military’s condemnation of 187-acres of Kamaka family land in Waikāne after failing to clear UXO is another bitter reminder of grievous injustice by the military. The present EIS must unequivocally state that there will be no use of eminent domain to condemn the State-owned parcel at Pōhakuloa.

**State Land Use Regulations:** Most of PTA falls within the State Conservation District. As stated above, the Army has a duty to fulfill its obligations under the lease, consistent with State land use regulations, to mālama ‘āina.

### **Cultural Resources**

To date, investigations into the number and significance of cultural sites have been superficial. The EIS should include a thorough inventory of the historic sites in the area, discussion of the cultural significance of Pōhakuloa itself, in relation to the larger cultural landscape, and a discussion as to how the condition of these sites has changed while the Army has used these lands. Kānaka ‘Ōiwi and the general public currently only have limited access to Pōhakuloa, and therefore, are denied the right to fully enjoy and conduct cultural, religious, or subsistence gathering practices until the lands are cleaned up and restored.

The EIS must incorporate a comprehensive Cultural Impact Assessment (CIA). Pursuant to the Hawai‘i Environmental Policy Act (HEPA), and Articles IX and XII of Hawai‘i State Constitution government agencies are required “to promote and preserve cultural beliefs, practices, and resources of native Hawaiians and other ethnic groups” (Guide to the Implementation and Practice of the Hawaii Environmental Policy Act, 2012, 11). The CIA must include an analysis of adverse cultural impacts on Kanaka ‘Ōiwi and other cultural practices by military activities at PTA which have occurred in the past, and which may occur in the future as a result of proposed military activities.

**Cultural Landscapes:** The CIA must consider the entire connected cultural landscape of Ka‘ohe ahupua‘a, Mauna a Wākea (Mauna Kea), and the surrounding cultural landscapes. Hawai‘i law recognizes that in addition to built structures, a cultural resource may also be a

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natural feature of the landscape, such as a mountain, hill, rock, tree, stream, or animal which has cultural significance to Kānaka ʻŌiwi. This study should include an in-depth cultural landscape study (CLS) and ethnographic survey (ES).

The Papakū Makawalu methodology, developed by the Edith Kanakaʻole Foundation, would be appropriate to employ in the assessment of the cultural meanings and significance of the affected area.

- What does the name Pōhakuloa signify?
- What is the relationship of Pōhakuloa to Mauna a Wākea (Mauna Kea)?
- What is the significance of the ahupuaʻa name Kaʻohe and the fact that it encompasses Mauna a Wākea (Mauna Kea), Pōhakuloa, parts of Mauna Loa, and a portion of the windward coastline?
- How does this land division relate to the history of the important chief ʻUmi a Līloa?
- How does Pōhakuloa relate to the heiau Ahu a ʻUmi to the west of the PTA boundary?

**Cultural Sites and Resources:** Affected sites include, but are not limited to alanui (trails), ahu and heiau (shrines and temples), puʻu (hills), rocks, caves and lava tubes, plants and animals used in traditional healing, hunting grounds, sites for harvesting birds, sites for observation and study of celestial bodies, burial sites, quarries and workshops for tools, and sources of water.

- How have military activities affected the cultural sites in Pōhakuloa?
- How have military activities affected the availability and quality of plant, animal, and mineral resources for Kanaka ʻŌiwi cultural practices.
- What are the effects of live fire training on lava tubes and cultural artifacts in PTA?

**Cultural Practices:** Pursuant to the Army's lease agreement and legal obligations, the Army must mālama ʻāina to restore ola (life) and create a safe and healthy environment for the well-being of flora, fauna and all interdependent life forms including the native tenants/hoa ʻāina/beneficiaries. The native tenants must include, but are not limited to: hunters and gatherers, lāʻau lapaʻau (herbal medicine practitioners), cultural and religious/spiritual practitioners and their relationship to the ʻāina. Adverse impacts on cultural practices include, but are not limited to restrictions on access due to security or safety restrictions, the destruction of cultural or religious sites, the destruction of environmental resources used in cultural practices, and the disruptions of the view plane and serenity of the area caused by explosions, vehicle and aircraft noise, and smoke and dust.

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- What Kānaka ‘Ōiwi cultural practices have been conducted in the past and are currently conducted in the ROI?
- What cultural sites and resources are needed for the revival and/or perpetuation of these cultural practices?
- How will the Army improve the ability of Kānaka ‘Ōiwi and the public to have safe, meaningful, and regular cultural access to Pōhakuloa?
- How will the Army increase the opportunities for Kānaka ‘Ōiwi and the public to safely participate in mālama ‘āina (environmental and cultural restoration activities) at Pōhakuloa?

## **Biological Resources**

**Native Ecosystems:** The EIS must adopt an ecosystems approach to analyzing the effects of the proposed military activities on the natural resources. This means studying the components, structures, and functioning of affected ecosystems. Individual species cannot be considered in isolation from their ecosystems. Nor can they be considered as separate from cultural relationships with humans. Ecosystems and species that inhabit them are also cultural resources for Kānaka ‘Ōiwi.

**Threatened and Endangered Species:** It is imperative that all rare, threatened and or endangered organisms within the area remain protected. The EIS must incorporate a complete inventory of all rare, threatened and/or endangered plant, insect and animal species including those identified as Native Hawaiian ‘Aumakua and Kinolau (Divine Bodily Manifestations Of Hawaiian Deities) within PTA and neighboring areas which are likely to be affected by activities on the range. Some of the species of particular concern should include, but not be limited to the following: Palila, ‘I‘iwi and all forest birds, Nēnē, Pueo, ‘Ōpe‘ape‘a, ‘Io, ‘Ua‘u, ‘Iwa and other sea birds. Also the forest flowers and trees that must be considered include; ancient Lehua, Māmane, ‘Iliahi (Aoa), Koa, ‘Akoko and all other rare, threatened and endangered species of plants that represent Hawaiian ‘Aumakua and/or Kinolau.

- What occurrences of rare threatened and endangered species have been documented within PTA?
- Cultural monitors have testified that they have heard the singing of Palila in PTA construction areas. Please provide documentation of recent or previously undocumented occurrences of any rare, threatened, and endangered species.

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- I have read that historically, there may have been as many as 90,000 ‘Ua‘u nesting burrows. What is the current status and the future outlook for recovery of the ‘Ua‘u population? How are they affected by the noise and activity of military training?

**Invasive Species:** The EIS should fully disclose the extent of invasive species threats at PTA.

- What is the inventory and extent of invasive species threats at Pōhakuloa?
- What is the status of ungulates within the area used by the Army and what is the extent of damage they have caused?
- What is the Army doing to control these threats?
- Please provide any incident reports of damage to endangered species or habitats by invasive species.
- Please provide any incident reports of accidental releases or introductions of invasive species, such as: hitchhiking fountain grass or fireweed on vehicles or personnel or the introduction of invasive species such as fire ants, rodents, snakes, spiders, rhinoceros beetles as stowaways on cargo boats, vehicles, and aircraft.

**Wildfires:** The EIS must provide a complete history of wildfires at Pōhakuloa, including the dates, causes, extent of damage, and responses.

- How are wildfires documented, and where is this information reported and archived?
- What have been the impacts on fires to protected species and habitats?
- What have been the impacts of fires on cultural sites and resources?
- How have fire incidents affected the transformation of the ecology?
- How are biologists and cultural resources specialists documenting the impacts of fires?

## **Socioeconomics / Environmental Justice**

**Environmental Justice Analysis:** As mentioned above, the greatest environmental justice impacts will be borne by Kānaka ‘Ōiwi who have the most profound connection to the lands in question. The environmental justice analysis in the EIS must not use demographic data to claim that there are negligible environmental justice impacts because all ethnic groups are considered minorities on Hawai‘i island. The key considerations in determining environmental justice impacts include:

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- Who has the longest history, deepest connections, and profound knowledge about Pōhakuloa?
- Who has the greatest stake and is most directly affected by the environmental and cultural impacts there?
- Who has suffered the greatest historical injustice, cultural disintegration, and dispossession as a result of the history of the U.S.-backed overthrow of the Hawaiian Kingdom and the subsequent seizure of Hawaiian land by the federal government?
- Whose cultural practices are most adversely affected by Army activities in Pōhakuloa?
- Who is exposed to the greatest risk of exposure to toxins, injury, or death in the exercise of their cultural practices?
- How are subsistence hunters, la‘au lapa‘au practitioners, and Kanaka ‘Ōiwi religious practitioners affected by the access restrictions and hazards at PTA?

**Department of Hawaiian Homelands (DHHL):** Another important issue is the impact of military use of DHHL lands and Kanaka ‘Ōiwi beneficiaries. The EIS should include feedback from beneficiaries about the use of DHHL land by the military.

**Economic Costs:** Some questions about the economic impacts of the military activities at PTA:

- What are the costs of clean up and restoration of environmental damage caused by military activity?
- What is the depreciation in the land’s value as a result of military activities?
- How does the loss of value adversely affect the general public and Native Hawaiians as beneficiaries of the public land trust?
- What are the opportunity costs?
- What economic value can be gained by restoring the ecological and cultural integrity of Pōhakuloa?

## **Noise**

Noise is one of the major complaints about military training at PTA. The EIS should include consultations with residents of neighboring communities about the effects of noise.

- How does noise affect the value of homes?
- How does it affect quality of life?

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- What public health effects might be induced by chronic noise?
- How are veterans' mental health affected by the noise?
- How does noise affect the behaviors of animals, especially endangered species?

### **Air Quality**

The EIS must provide thorough data on air quality at Pōhakuloa.

- What kinds of documentation and reporting is conducted when there are incidents that may adversely affect air quality, such as a fire or training event?
- What emissions of air pollutants have been reported at PTA?
- What toxins or hazardous substances have been detected in airborne particulate matter during fires or training events?

### **Water Resources**

The ahupua'a of Ka'ōhe refers to bamboo, which is a kinolau of Kāne, a deity associated with sources of fresh water.

- What is the history and status of aquifers in the vicinity of PTA?
- How has live fire training affected aquifers within PTA? Does the pulverization of lava in the impact areas increase the soil's permeability and the infiltration of contaminants into the groundwater?
- Where are the wells? What is the history of water usage? What has been the impact of past uses of aquifers on Mauna a Wākea?
- Did the Army request a UH researcher to conduct test drilling for water at Pōhakuloa? Was this research funded by the Army?
- What has been the role of the Hawai'i State Water Commission in approving or overseeing this prospecting activity?
- What is the Army's proposed water use at PTA?

### **Natural Hazards, Geology, and Soils**

- What are the impacts on lavas and soils in the impact range?
- Are they changing the permeability of the ground?
- What are the projected impacts if Mauna Loa erupts?

## **Visual Resources**

Wide open spaces and views of the mountains is part of the significance of Pōhakuloa. As a site that usually sits above the tradewind inversion layer, the skies are often clear.

- What are the Kanaka 'Ōiwi visual resources at Pōhakuloa?
- What is the cultural significance of different view planes?

## **Public Facilities and Infrastructure**

- What are the effects on the quality of roads?
- What are the impacts of military use on Kawaihae harbor facilities?
- How are convoys affecting traffic?
- How do residents feel about the traffic disruptions?

## **Toxic and Hazardous Substances**

The EIS must include comprehensive information characterizing toxic and hazardous substances in soil, groundwater, surface water runoff, uptake in plants and animals, air emissions, and air borne particulate matter. The Contaminants of Concern (COC) that should be investigated include, but are not limited to:

- Munitions and explosives of concern (MEC);
- Metals, including lead from small arms munitions, mercury, beryllium, cadmium, arsenic, copper, aluminum,
- Depleted uranium (DU), strontium 90, and other radioactive contaminants,
- PCBs, dioxins and furans,
- Energetics and explosive constituents and their byproducts,
- Per- and polyfluoroalkyl substances (PFAS) which is commonly found in fire-fighting foam,
- Perchlorate, a common chemical in rocket fuels,
- Petroleum, oil, and lubricants (POLs),
- Volatile organic compounds (VOCs), including solvents, pesticides, and herbicides,
- Benzene, Toluene, Ethylbenzene, and Xylene (BTEX) and Polycyclic Aromatic Hydrocarbons (PAHs),

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- Asbestos,
- Various kinds of air pollution emissions.

### **Cumulative Impacts**

The EIS must incorporate data and analysis of the environmental effects of all past military activities at PTA, including:

- A comprehensive list of all military activities ever conducted at PTA, including any nuclear, biological, and chemical weapons tests and military activities by other service branches and foreign militaries.
- A comprehensive study of toxic and hazardous substances and their effects on the human and natural environment.
- A comprehensive list of federal actions since 2001 within the entire PTA boundary and at sites on Hawai'i Island which are connected to the affected environment in the EIS, and a summary of their environmental impacts.
- A description of all munitions used, the quantities used, the explosive yields, contaminants associated with these munitions, the extent of unexploded ordnance contamination, and the results of any removal actions.
- A comprehensive report on wildfires, their causes, responses, and environmental consequences.

The EIS must also take into account the combined environmental and cultural impacts of all past, present, and reasonably foreseeable future projects at or near the project area. Past projects include:

- Infantry Platoon Battle Course;
- Kawaihae Harbor improvements (state facilities);
- Stryker Brigade Combat Team training support facilities (prior to cessation of Stryker training at PTA)—with the removal of the Stryker Brigade from Hawai'i, why has there not been a reversion of land acquired and developed for the aborted project?;
- changes in military aircraft training at PTA, including the Urban Close Air Support Range and an Aviation Bulls-Eye Range;
- Multi-Purpose Range Complex facilities.

Present and reasonably foreseeable actions that must be taken into consideration include:

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- PTA Cantonment Facilities Improvement Program modernization projects;
- Daniel K. Inouye Highway extension;
- State small boat and commercial harbor improvements at Kawaihae Harbor;
- marine sciences center at Kawaihae Harbor;
- Department of Hawaiian Home Lands development plans;
- State airport plans;
- Mauna Kea Observatories Thirty-Meter Telescope—opposition to the telescope has sparked widespread protest across Hawai‘i and around the world; these energies will spill over into Pōhakuloa;
- and other recreational and residential community plans.

**Characterizing the Natural Resources, Cultural Resources, and Environmental Impacts within the Impact Area:** Given the dangers of the UXO in the impact area, this vast area remains a blank spot on the map. The absence of cultural and environmental resources on Army maps does not mean that there are no resources there. It simply reflects the fact that no one has looked or been able to look. It is a map of our ignorance about Pōhakuloa. As a result, any EIS for PTA without an investigation of the impact area will be fatally flawed because it will not provide a complete picture of the affected environment or the environmental impacts.

The present EIS must do better to characterize the cultural and natural resources and impacts within the impact area. The Army should explore different unmanned aerial vehicle technologies to conduct aerial surveys of the impact area. Aerial imagery and remote sensing technologies can detect and map the topography, differentiate between different types of vegetation and land composition, identify archaeological structures, and even detect UXO and munitions debris. As the landscape and hazards are mapped in finer detail, planners can begin to explore new techniques for removing UXOs, perhaps using robotics, or adopting creative demining techniques and technologies.

Again, the Army has a duty to clean up and restore the environmental damage caused by its activities. This EIS must begin the process of fulfilling those responsibilities.

### **Restoration of past environmental impacts**

General Lease 3849 requires that that the Army “make every reasonable effort to ...remove or deactivate all live or blank ammunition upon completion of a training exercise or prior to entry by the said public, whichever is sooner” and remove “all trash, garbage and other

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waste materials[.]” Cultural monitors, who spent extensive time on State lands at the PTA, observed military debris, including unexploded ordnance and spent shell casings, scattered across the area leased by the Army. The EIS should fully disclose the extent to which the Army has complied with this lease provision and should include a thorough investigation of the entire area to determine whether there is any military debris (including unexploded ordnance) on the land that the Army has been using. Further the EIS must outline plans for the clean up and restoration of state-owned land at PTA affected by military contamination.

The *Real Property Master Plan Pohakuloa Training Area, Hawai‘i Island - Final (Digest)* states that “Specific data on UXO at PTA is not available at the time of this study” (HHF Planners 2020, 35). All areas used for live munitions training in the past, present or foreseeable future must be surveyed and characterized for unexploded ordnance (UXO) hazards.

Therefore the Army should disclose its unexploded ordnances (UXO) protocol for full transparency, accountability and confidence of adequacy. Mālama ‘Āina (to care for), requires cleanup and restoration of the land, and therefore means:

- Pōhakuloa is to be restored to its natural habitat with healthy ecosystems that Kanaka Maoli can access and utilize as right holders/practitioners of the ‘āina.
- The process for clean-up must include restoring the ‘āina to its original condition and beauty.

**Former Bazooka Range:** In a draft document entitled "Action Memorandum for the Time Critical Removal Action", that was prepared in March 2015 by the United States Army Garrison at Wheeler Army Airfield on Schofield Barracks in Wahiawa, O‘ahu, Hawai‘i, it was reported that the former Bazooka Range MRS is located at the Pōhakuloa Training Area. The former Bazooka Range was apparently used as a military maneuver area through the early 2000s. During a site inspection of the Bazooka Range area that was jointly conducted by DLNR and the Army in 2014, the area was found to be "heavily contaminated on the surface with material potentially presenting an explosive hazard (MPPEH) and munition debris (MD)." (Emphasis added.) A subsequent inspection by two military explosive ordnance disposal units found that the following types of ordnance were observed to be present:

- M29A2 training rounds with dummy M405 fuse
- Practice 81mm mortars, and
- High explosive anti-tank (HEAT) rifle grenades.

Other suspected fired ordnance at the Bazooka Range area also included:

- M28A2 bazooka rounds with M404 fuse, and

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- M30 white phosphorus (WP) bazooka rounds.

The Army noted that the sheer densities and quantities of ordnance that are present on the ground at the former Bazooka Range area "coupled with the accessibility to the public make for the potential for significant danger to public health and welfare." The estimated cost of remediating the danger as of March 2015 was \$2,353,000. The Army recommended that the removal of ordnance danger because of the significant possibility that ordnance exists at the former Bazooka Range area that "presents an imminent and substantial endangerment to public health, or welfare, or the environment." Any EIS should disclose the status of the cleanup of the Former Bazooka Range:

- Has it been completely cleaned up?
- Is it safe to enter?
- How much waste was collected?
- What types of waste was removed?
- Where and how was it disposed of?

### **Failed Public Involvement**

Although the COVID-19 pandemic creates difficulties for in-person participation, new video conferencing technologies could have allowed for meaningful remote participation in public information sessions. Unfortunately, the virtual scoping open house session on September 23 failed to take advantage of the technology and instead offered the public what amounted to an audio-visual brochure. The posting of slides and the audio recordings of the text did not fulfill the need for public involvement. Many people had questions, but there was no way to ask questions of subject matter experts. The result was that members of the public who wished to participate went away frustrated and disillusioned by the process.

I have tried to obtain more background information on the proposed real estate action. My searches led me to a digest of the *Real Property Master Plan (RPMP) Pohakuloa Training Area, Hawai'i Island - Final* (HHF Planners 2020a). While this was helpful, I wished to study the full master plan. However, the document was not publicly available. Also, the RPMP makes reference to a number of documents that would be relevant to understanding the proposed action. Please make these documents publicly available:

- U.S. Army Engineering and Support Center Huntsville, Alabama. 2009. "Enhanced Area Development Plan, Pohakuloa Training Area, Hawai'i." Final Submittal.
- U.S. Army Garrison Hawaii. 2020. *Integrated Natural Resources Management Plan*.

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- U.S. Army Region Hawaii. 2015. "Memo for Commander, USARHAW, Approach to Training in Hawaii: A Strategy for PTA." October 25.
- U.S. Department of Defense, Assistant Secretary of Defense. 2018. "Approval of Major Land Acquisition Waiver Request - US Army Hawaii Training Sites, Hawaii." June 4.
- PTA Area Development Plan (ADP). 2015.

Thank you for your consideration of these comments.

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- Apology to Native Hawaiians*. 1993. Public Law 103-150. 103rd Congress.
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IN THE SUPREME COURT OF THE STATE OF HAWAII

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CLARENCE CHING and MARY MAXINE KAHAULELIO,  
Plaintiffs-Appellees,

vs.

SUZANNE CASE, in her official capacity as Chairperson  
of the Board of Land and Natural Resources and  
State Historic Preservation Officer, BOARD OF LAND AND NATURAL  
RESOURCES, and DEPARTMENT OF LAND AND NATURAL RESOURCES,  
Defendants-Appellants.

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SCAP-18-0000432

APPEAL FROM THE CIRCUIT COURT OF THE FIRST CIRCUIT  
(CAAP-18-0000432; CIV. NO. 14-1-1085-04)

AUGUST 23, 2019

RECKTENWALD, C.J., NAKAYAMA, McKENNA, POLLACK, AND WILSON, JJ.

OPINION OF THE COURT BY POLLACK, J.

**I. INTRODUCTION**

Under the Hawai'i Constitution, all public natural resources are held in trust by the State for the common benefit of Hawai'i's people and the generations to come. Additionally,

the constitution specifies that the public lands ceded to the United States following the overthrow of the Hawaiian Monarchy and returned to Hawai'i upon its admission to the Union hold a special status under our law. These lands are held by the State in trust for the benefit of Native Hawaiians and the general public. Accordingly, our constitution places upon the State duties with respect to these trusts much like those of a common law trustee, including an obligation to protect and preserve the resources however they are utilized.

Several parcels of ceded land on the island of Hawai'i that are indisputably held in public trust by the State have been leased to the federal government of the United States of America for military training purposes, subject to a number of lease conditions designed to protect the land from long-term damage or contamination. This case concerns the degree to which the State must monitor the leased trust land and the United States' compliance with the lease terms to ensure the trust property is ultimately safeguarded for the benefit of Hawai'i's people.

We hold that an essential component of the State's duty to protect and preserve trust land is an obligation to reasonably monitor a third party's use of the property, and that this duty exists independent of whether the third party has in fact violated the terms of any agreement governing its use of

the land. To hold otherwise would permit the State to ignore the risk of impending damage to the land, leaving trust beneficiaries powerless to prevent irreparable harm before it occurs. We therefore affirm the trial court's determination that the State breached its constitutional trust duties by failing to reasonably monitor or inspect the trust land at issue.

## II. BACKGROUND

### A. Lease No. S-3849

On August 17, 1964, the State of Hawai'i Department of Land and Natural Resources (DLNR) entered into a written agreement to lease three tracts of ceded land situated at Ka'ohē, Hāmākua and Pu'uānāhulu, North Kona, Hawai'i to the United States for military purposes.<sup>1</sup> The 22,900 acre tract of land, which is contained within the Pōhakuloa Training Area (PTA),<sup>2</sup> was leased to the United States for a term of sixty-five years, to expire

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<sup>1</sup> Hawaii's ceded lands are lands which were classified as government or crown lands prior to the overthrow of the Hawaiian monarchy in 1893. Upon annexation in 1898, the Republic of Hawaii ceded these lands to the United States. In 1959, when Hawaii was admitted into the Union, the ceded lands were transferred to the newly created state, subject to the trust provisions set forth in § 5(f) of the Admission Act.

Pele Def. Fund v. Paty, 73 Haw. 578, 585, 837 P.2d 1247, 1254 (1992).

<sup>2</sup> The PTA as a whole is approximately 134,000 acres and includes land ceded to the United States military by Presidential and Governor's Executive Orders, land purchased by the United States in fee simple from a private owner, and land that is leased from the State.

on August 16, 2029. In exchange, the United States paid the DLNR one dollar.

The lease gives the United States the right to "have unrestricted control and use of the demised premises." The lease also establishes several duties that the United States is obligated to fulfill during the course of the lease. Most notably for purposes of this appeal, Paragraph 9 of the lease requires that the United States "make every reasonable effort to . . . remove and deactivate all live or blank ammunition upon completion of a training exercise or prior to entry by the [] public, whichever is sooner."<sup>3</sup> In Paragraph 14 of the lease, the United States agrees to "take reasonable action during its use of the premises herein demised to prevent unnecessary damage to or destruction of vegetation, wildlife and forest cover, geological features and related natural resources" and to "avoid pollution or contamination of all ground and surface waters and remove or bury all trash, garbage and other waste materials

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<sup>3</sup> Paragraph 9 of the lease states the following:

In recognition of public use of the demised premises, the Government shall make every reasonable effort to stockpile supplies and equipment in an orderly fashion and away from established road and trails and to remove or deactivate all live or blank ammunition upon completion of a training exercise or prior to entry by the said public, whichever is sooner.

resulting from [the United States'] use of the said premises."<sup>4</sup>  
And, in Paragraph 29 of the lease, the United States agrees that, if required by the State upon the surrender of the property at the termination of the lease, it will "remove weapons and shells used in connection with its training activities to the extent that a technical and economic capability exists and provided that expenditures for removal of shells will not exceed the fair market value of the land."<sup>5</sup>

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<sup>4</sup> Paragraph 14 provides the following:

In recognition of the limited amount of land available for public use, of the importance of forest reserves and watersheds in Hawaii, and of the necessity for preventing or controlling erosion, the Government hereby agrees that, commensurate with training activities, it will take reasonable action during its use of the premises herein demised to prevent unnecessary damage to or destruction of vegetation, wildlife and forest cover, geological features and related natural resources and improvements constructed by the Lessor, help preserve the natural beauty of the premises, avoid pollution or contamination of all ground and surface waters and remove or bury all trash, garbage and other waste materials resulting from Government use of the said premises.

<sup>5</sup> Paragraph 29 provides the following:

The Government shall surrender possession of the premises upon the expiration or sooner termination of this lease and, if required by the Lessor, shall within sixty (60) days thereafter, or within such additional time as may be mutually agreed upon, remove its signs and other structures; provided that in lieu of removal of structures the Government abandon them in place. The Government shall also remove weapons and shells used in connection with its training activities to the extent that a technical and economic capability exists and provided that expenditures for removal of shells will not exceed the fair market value of the land.

The lease also places a number of corresponding rights and duties on the DLNR. The most relevant to the present case is established in Paragraph 18, in which the DLNR agrees to "take reasonable action during the use of the said premises by the general public, to remove or bury trash, garbage and other waste materials resulting from use of the said premises by the general public."<sup>6</sup> In Paragraph 19, the lease also grants the DLNR the "right to enter upon the demised premises at all reasonable times to conduct any operations that will not unduly interfere with activities of the [United States] under the terms of the lease," subject to "obtaining advance clearance" from the United States.<sup>7</sup>

Additionally, the lease provides in Paragraph 30 that any dispute over a question of fact regarding the lease must be

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<sup>6</sup> Paragraph 18 provides the following:

The Lessor hereby agrees that, commensurate with the public use of the premises herein demised, it will take reasonable action during the use of said premises by the general public, to remove or bury trash, garbage and other waste materials resulting from use of the said premises by the general public.

<sup>7</sup> Paragraph 19 provides the following:

Subject to obtaining advance clearance from the plans and training office of the Government's controlling agency, or any other designated Government agency, officials and employees of the Lessor shall have the right to enter upon the demised premises at all reasonable times to conduct any operations that will not unduly interfere with activities of the Government under the terms of this lease; provided however, that such advance clearance shall not be unreasonably held.

decided by the "Division Engineer, U.S. Army Engineer Division," with a right of appeal to the Secretary of the Army.<sup>8</sup> Paragraph 30 further provides that the decision of the Secretary or a duly authorized representative "shall be final and conclusive unless determined by a court of competent jurisdiction to have been fraudulent, or capricious, or arbitrary, or so grossly erroneous as necessarily to imply bad faith, or not supported by substantial evidence." The paragraph clarifies that questions

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<sup>8</sup> Paragraph 30 provides the following:

(a) That, except as otherwise provided in this lease, any dispute concerning a question of fact arising under this lease which is not disposed of by agreement shall be decided by the Division Engineer, U.S. Army Engineer Division, Pacific Ocean, Honolulu, Hawaii, hereinafter referred to as said officer, who shall within a reasonable time reduce his decision and the reasons therefor to writing and mail or otherwise furnish a copy thereof to the Lessor. The decision of the said officer shall be final and conclusive unless, within thirty (30) days from the date of receipt of such copy, the Lessor mails or otherwise furnishes to the said officer a written appeal addressed to the Secretary of the Army. The decision of the Secretary or his duly authorized representative for the determination of such appeals shall be final and conclusive unless determined by a court of competent jurisdiction to have been fraudulent, or capricious, or arbitrary, or so grossly erroneous as necessarily to imply bad faith, or not supported by substantial evidence. In connection with any appeal proceeding under this condition, the Lessor shall be afforded an opportunity to be heard and to offer evidence in support of its appeal.

(b) This Condition does not preclude consideration of law questions in connection with decisions provided for in paragraph (a) above: Provided, that nothing in this Condition shall be construed as making final the decision of any administrative official, representative, or board on a question of law.

(c) That all appeals under this provision shall be processed expeditiously.

of law may also be considered in connection with a dispute's resolution, but the decision of any administrative party on a question of law shall not be final. It further guarantees the State's right to be heard and to offer evidence in support of the appeal.

**B. The Plaintiffs' Request to Access Government Records**

In January 2014, Clarence Ching filed a request with the Chairperson of the Board of Land and Natural Resources (BLNR) to access government records. Ching requested the following government records:

1. Paragraph 9 of State General Lease No. S-3849 (with the U.S. Army relating to Pohakuloa) requires the United States Government to "make every reasonable effort to . . . remove or deactivate all live or blank ammunition upon completion of a training exercise or prior to entry by the said public, whichever is sooner." Please provide all government records that show (a) the U.S. Government's compliance or non-compliance with this lease term and (b) the Department of Land and Natural Resources or Board of Land and Natural Resources efforts at ensuring compliance with this term of the 1964 lease. This would include, but [is] not limited to, correspondence, inspection and monitoring reports, and meeting notes.

2. Paragraph 14 of the same lease requires the U.S. Government to "remove or bury all trash, garbage or other waste materials." Please provide all government records that show (a) the U.S. Government's compliance or non-compliance with this lease term and (b) the Department of Land and Natural Resources or Board of Land and Natural Resources efforts at ensuring compliance with this term of the 1964 lease. This would include, but [is] not limited to, correspondence, inspection and monitoring reports, and meeting notes.

The DLNR responded that the request would be granted in its entirety. The response stated that the DLNR was providing its

entire file on the lease (the lease file), which, based on its review, contained no records responsive to Ching's request.

### **C. The Circuit Court Action**

#### **1. Complaint**

Three months later, Ching and Mary Maxine Kahalelio (collectively, "the Plaintiffs") filed a complaint in the Circuit Court of the First Circuit (circuit court) against the BLNR, DLNR, and William J. Aila, Jr., in his official capacity as Chairperson of the BLNR and State Historic Preservation Officer (collectively, "the State").<sup>9</sup> In their complaint, the Plaintiffs alleged that the State, as trustee of the state's ceded lands, breached its trust duty "to protect and maintain the[] public trust lands" in the PTA. The complaint specified that it was not alleging that the United States had violated the terms of its lease, but rather that the State has reason to believe that the lease terms may have been violated and has a trust duty to investigate and take all necessary steps to ensure compliance with the terms of the lease.

According to the complaint, Ching is a descendant of the aboriginal people of Hawai'i and engages in native Hawaiian

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<sup>9</sup> Under Hawai'i Rules of Appellate Procedure Rule 43(c), a public officer named in a case is automatically substituted by his or her successor when the holder of the office ceases to hold office on appeal. Accordingly, Suzanne Case has been substituted for William J. Aila, Jr., whom she succeeded as Chairperson.

cultural practices, which includes walking in the footsteps of his ancestors on hiking trails located within the PTA. He also participates in other "traditional and customary services" within the PTA, the complaint explained. Kahalelio is also a descendant of the aboriginal people of Hawai'i, the complaint stated. She is at least 50% native Hawaiian and a beneficiary of the Hawaiian Home Lands Trust, the complaint continued, as well as a Hawaiian Home Lands lessee. The complaint further stated that both Ching and Kahalelio are beneficiaries of the ceded trust lands.

Citing a March 2013 letter by a DLNR staff member, the complaint alleged that the State was aware of the possibility that the land leased to the United States was littered with unexploded ordnance (UXO) and "munitions and explosives of concern."<sup>10</sup> The Plaintiffs asserted that the State did not know whether the United States had complied with the lease because they had taken "no concrete steps to investigate, monitor or ensure compliance" with the lease. Because the State was obligated to protect, care for, and maintain trust property by investigating the United States' compliance with the lease and

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<sup>10</sup> The Plaintiffs' First Amended Complaint added four paragraphs citing a state-run website and several federal cases that allegedly demonstrated that the State was aware that the United States' military had failed to clean up ordnance on other land leased to the United States.

failed to do so, the Plaintiffs contended that the State "failed to fulfill [its] trust duties with respect to the ceded land leased" to the United States.

The Plaintiffs requested a declaration that the State breached its trust obligations, an order to require the State to fulfill its trust duties with respect to the leased land, and an injunction to bar the State from negotiating an extension of the lease or from entering into a new lease of the PTA until the State ensures that the terms of the existing lease have been fulfilled.<sup>11</sup>

## **2. Motions for Summary Judgment**

### **a. The Motions**

After the State filed its answer, the Plaintiffs filed a Motion for Summary Judgment. In their motion, the Plaintiffs asserted that under article XII, section 4 and article XI, section 1 of the Hawai'i Constitution, the State is the trustee of the public ceded lands trust and of public natural resources, and it therefore has a trust duty to "monitor, inspect and investigate to ensure that public trust lands are not being

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<sup>11</sup> Approximately one month after the Plaintiffs filed their complaint, the State filed a notice of removal from the circuit court to the United States District Court for the District of Hawai'i. The Plaintiffs subsequently filed a motion to remand the case back to circuit court. The federal district court granted the Plaintiffs' motion, concluding that "at issue is a purely state-law breach of trust claim raising numerous questions of fact and substantial questions of Hawaii law regarding the State's obligations as to ceded lands."

damaged--particularly if [it] has reason to believe that trust property is at risk." Despite the State's awareness of the possibility that the terms of the lease may have been violated, the Plaintiffs argued, the State took no steps to ensure compliance with the lease terms. Its failure to investigate the condition of the land, the Plaintiffs contended, fell well below its standard of care and constituted a breach of its trust duties. The Plaintiffs concluded that the equitable relief requested was warranted because they were entitled to prevail on the merits, there was a grave risk posed to the ceded land, and the public interest weighed in their favor.

In its Memorandum in Opposition, the State argued that the Plaintiffs' Motion for Summary Judgment should be denied because the Plaintiffs did not allege that any provision of the lease had been violated, and it asserted that the United States' obligation to clean the leased property will not arise until 2029. In the absence of an alleged breach, the State maintained that the Plaintiffs' claims amounted to "speculation or predictions about future harm" that did not present an "actual controversy" suitable for judicial resolution.

The State also contended that the Plaintiffs were seeking relief that was unavailable under Hawai'i Revised Statutes (HRS) § 632-1 (1993), as the relief requested would not bring an end to the controversy or resolve the dispute with

finality.<sup>12</sup> The State posited that "even if the injunctive relief sought by Plaintiffs is ordered by the Court, Plaintiffs will still dispute the extent of any cleanup efforts by the United States" because the requested relief would require "the State to engage in some undefined form of oversight of the United States military." Therefore, the State concluded, the Plaintiffs' concerns and the underlying controversy did not meet the statutory requirements for declaratory relief.

Additionally, the State argued that the Plaintiffs were not entitled to declaratory relief because the declaratory judgment statute limits declaratory actions to claims for which no alternative statutory relief is available. Here, the State concluded, HRS § 673-1 (1993) provides a cause of action for native Hawaiians' to bring a claim for breaches of relevant

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<sup>12</sup> HRS § 632-1 provides the following in relevant part:

Relief by declaratory judgment may be granted in civil cases where an actual controversy exists between contending parties, or where the court is satisfied that antagonistic claims are present between the parties involved which indicate imminent and inevitable litigation, or where in any such case the court is satisfied that a party asserts a legal relation, status, right, or privilege in which the party has a concrete interest and that there is a challenge or denial of the asserted relation, status, right, or privilege by an adversary party who also has or asserts a concrete interest therein, and the court is satisfied also that a declaratory judgment will serve to terminate the uncertainty or controversy giving rise to the proceeding. Where, however, a statute provides a special form of remedy for a specific type of case, that statutory remedy shall be followed[.]

constitutional trusts, and the Plaintiffs were thus obligated to proceed under that statutory framework.<sup>13</sup>

In reply, the Plaintiffs contended that the State was incorrect in asserting that the duty of the United States to clean the property did not arise until the lease expired because Paragraph 9 of the lease required the United States to clean the land during the lease--specifically, when it completed a training exercise. The Plaintiffs also argued that injunctive relief is appropriate "in a case involving a traditional equitable claim when a trustee breaches its fiduciary obligations," noting that HRS § 632-3 (1993)<sup>14</sup> empowers courts to grant ancillary equitable relief. (Citing Food Pantry, Ltd. v. Waikiki Bus. Plaza, Inc., 58 Haw. 606, 613-14, 575 P.2d 869, 875-76 (1978); Natatorium Pres. Comm. v. Edelstein, 55 Haw. 55,

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<sup>13</sup> HRS § 673-1 provides in relevant part as follows:

(a) The State waives its immunity for any breach of trust or fiduciary duty resulting from the acts or omissions of its agents, officers and employees in the management and disposition of trust funds and resources of:

. . . .

(2) The native Hawaiian public trust under article XII, sections 4, 5, and 6 of the Constitution of the State of Hawaii implementing section 5(f) of the Admission Act[.]

<sup>14</sup> HRS § 632-3 provides that "[f]urther relief based on a declaratory judgment may be granted whenever necessary or proper, after reasonable notice and hearing, against any adverse party whose rights have been adjudicated by the judgment."

515 P.2d 621 (1973); King v. Oahu Ry. & Land Co., 11 Haw. 717, 738 (Haw. Rep. 1899).)

The State filed its own Motion for Summary Judgment that restated the arguments from the State's Memorandum in Opposition to the Plaintiffs' Motion for Summary Judgment verbatim.<sup>15</sup>

### **b. Supplemental Briefing**

After a hearing,<sup>16</sup> the Plaintiffs submitted a Supplemental Memorandum in Support of their Motion for Summary Judgment, which argued that further discovered evidence demonstrated that the DLNR had not conducted an inspection of the PTA since 1984. For example, between 1984 and the start of the current litigation, there had been no communication between the State and the United States regarding compliance with the lease, the Plaintiffs asserted.<sup>17</sup> This demonstrated that the

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<sup>15</sup> At a hearing regarding the motions, the State also argued that it should prevail on the merits because an internal memorandum attached to its Memorandum in Opposition showed that there were internal discussions at the DLNR regarding the monitoring of the United States' compliance with the lease. This memorandum was sent from the Acting Hawai'i Branch Manager of the Division of Forestry and Wildlife (DOFAW) to the DLNR regarding DOFAW's comments on cancellation and issuance of a new lease with the United States for the PTA. One concern noted by DOFAW was that the United States "should sweep the lands . . . for UXO and remove any UXO found at their expense to make the area safe for the public."

<sup>16</sup> The Honorable Gary W.B. Chang presided.

<sup>17</sup> On November 14, 2014, approximately one month after the hearing and one week before the Plaintiffs filed their supplemental memorandum, the DLNR sent a letter to a United States Army officer requesting the following:

(continued . . .)

State had not made a sufficient effort to protect the trust land, the Plaintiffs contended.

In the State's Supplemental Memorandum, it asserted that several records from the lease file showed that it had actively engaged in monitoring since the execution of the lease, including records of one formal inspection of the PTA, maps indicating locations where UXO may be located, reviews of the United States' compliance done in connection with amendments to the lease, and "informal communications" relating to the lease. The State also pointed to a written request it had sent to the United States for a description of its procedures to comply with the lease provisions at issue. The State asserted that the United States responded to the letter "with detailed information about their clean-up and post-training procedures." Because the letter demonstrated that the State had undertaken monitoring of the PTA, it concluded, there was no longer a justiciable controversy.

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(. . . continued)

[A] description of the procedures utilized to comply with the[] provisions of Lease No. S-3849, including detailed information about any action taken by the United States following training exercises to remove or deactivate ordnance, as well as actions taken to remove trash or garbage resulting from Government use of the lease premises.

In the Plaintiffs' Reply, they contended that even if the 1984 inspection was "complete and thorough," it is not sufficient to show that the State is currently fulfilling its trust duties because there was no evidence of an inspection since 1984. Thus, the State failed to demonstrate that it had fulfilled its trust duties, the Plaintiffs concluded.

**c. Orders Denying Summary Judgment**

The circuit court denied the Plaintiffs' Motion for Summary Judgment, stating that there were genuine issues of material fact as to whether the State had discharged its trust duties. The court also denied the State's Motion for Summary Judgment because the court found, inter alia, that there was an "actual controversy regarding whether or not the State ha[d] discharged its responsibilities as a trustee of public lands."

**3. Motions to Join the United States as a Party**

After its Motion for Summary Judgment was denied, the State filed a Motion to Add the United States as a Party or, in the Alternative, for Dismissal in which it argued that under Hawai'i Rules of Civil Procedure (HRCP) Rule 21 (1980), adding the United States was appropriate because, as the lessee of the leased land within the PTA, the United States had a legal and beneficial interest in the subject matter of the Plaintiffs' complaint. The State also contended that the United States was a necessary party under HRCP Rule 19(a) (2000) because complete

relief could not be accorded in its absence. Resolution of the action would necessarily include an interpretation of the lease provisions, the State contended, and the United States would not be able to defend its interests under the lease if it were not added as a party. And, asserted the State, in the context of leases, Hawai'i courts have held that all parties to a lease are necessary parties in any equitable action that interprets or touches upon the lease. (Citing Foster v. Kaneohe Ranch Co., 12 Haw. 363, 365 (Haw. Rep. 1900).)

Finally, the State argued that the United States is an indispensable party under HRCF Rule 19(b) and therefore the suit should be dismissed if it cannot be joined.<sup>18</sup> Under the first factor of HRCF Rule 19(b), a judgment rendered in the absence of the United States would be prejudicial to it because it "would be forced to accept factual findings that directly bear on whether the United States has breached the Lease," the State asserted. Under the rule's second factor, a court could not

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<sup>18</sup> HRCF Rule 19(b) provides that courts should weigh the following factors when determining whether a party is indispensable:

[F]irst, to what extent a judgment rendered in the person's absence might be prejudicial to the person or those already parties; second, the extent to which, by protective provisions in the judgment, by the shaping of relief, or other measures, the prejudice can be lessened or avoided; third, whether a judgment rendered in the person's absence will be adequate; fourth, whether the plaintiff will have an adequate remedy if the action is dismissed for nonjoinder.

shape the relief to ameliorate the prejudicial effect of the judgment because "[n]ew or different monitoring" or limitations on the United States' current use of the land were fundamental to the relief sought by the Plaintiffs, the State argued.

Applying the third factor, the State asserted that a judgment rendered in the absence of the United States would be inadequate because the United States was ultimately the party that the Plaintiffs sought to hold responsible for causing the waste of the trust property. And fourth, the State contended that the Plaintiffs had an alternate remedy for their breach of trust claims: an action in federal court that also names the United States or an action brought in state court pursuant to HRS § 673-1.

The Plaintiffs responded that the circuit court should deny the State's motion because, contrary to the State's argument that the Plaintiffs' complaint was based on a violation of the lease, they were asserting "a basic state-law breach of trust claim." The United States was not a necessary nor indispensable party to the case under HRCF Rule 19(a), the Plaintiffs argued, because any effect on federal interests was "purely speculative," and any relief that would require the State to increase its monitoring would not impinge on the United States' rights under the lease because the State already has a right of entry under the lease. And, even assuming the State

were to eventually take actions that affect the United States' interests as a result of a judicial ruling in this case, the United States was well protected because any dispute between it and the State would be decided by an agent of the United States under the lease, the Plaintiffs contended.

Next, the Plaintiffs contended that even if the United States was a party that should be joined if possible under HRCF Rule 19(a), it was not an indispensable party under HRCF Rule 19(b). The rule's first factor weighed against the State, the Plaintiffs argued, because a "judgment [would] not prejudice the interests of the U.S. whatsoever" as it would "not [be] bound by any findings made to a case in which it is not a party." Second, the Plaintiffs asserted that the court could fashion its relief to ensure that the United States does not suffer any prejudice by, for example, ordering the State to provide a report to the court thirty days prior to an annual evidentiary hearing to ensure the State's compliance with the lease. Third, the Plaintiffs stated that it would be able to obtain adequate relief in the absence of the United States. Fourth, the Plaintiffs asserted that they would be "deprived of their day in court if th[e] action were dismissed," which would be inconsistent with Hawai'i Supreme Court decisions holding that beneficiaries must be able to keep government trustees accountable.

The United States then filed a statement of interest in which it asserted that it "unquestionably has an interest" in the subject matter of the litigation that was "clearly sufficient" for joinder, if it were feasible.<sup>19</sup> But joinder was not feasible, it explained, because "such a state action against the United States is barred by its sovereign immunity" and neither party had identified a congressional waiver of sovereign immunity.<sup>20</sup> The United States asserted that disposition of the action in its absence may impair its ability to protect its interest, making it a necessary party under HRCF Rule 19(a).<sup>21</sup>

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<sup>19</sup> Prior to this filing, the court denied without prejudice the State's Motion to Add the United States as a Party, or in the Alternative, for Dismissal "because of the possibility that the United States will make a determination that it has a sufficient interest to appear in this case." After the United States filed its Statement of Interest, the State filed a Motion to Dismiss for Failure to Join an Indispensable Party, or in the Alternative, for Summary Judgment in which it made substantially similar arguments to those made in its first motion as to why the United States was a necessary and indispensable party under HRCF Rule 19. The latter motion also argued that the action was nonjusticiable because, *inter alia*, it presented a political question falling within the discretion of the executive branch and the court could not resolve an "actual controversy" due to the vagueness of the requested relief. For the sake of clarity, this opinion addresses the two motions together with respect to the necessity and indispensability of the United States as a party.

<sup>20</sup> The United States noted that filing a statement of interest neither constitutes a formal intervention nor makes the United States a party to the proceedings and thus does not amount to a waiver of sovereign immunity. (Citing M.R. v. Dreyfus, 697 F.3d 706, 735 (9th Cir. 2012).)

<sup>21</sup> The United States used the PTA, it stated, for "combined live-fire and maneuver training," which "is critical because military operations require significant coordination." Additionally, the United States explained that the PTA cannot operate as an effective training area without the land leased from the State, because, for safety purposes, the artillery firing ranges contained within the PTA must be situated so that the artillery lands in areas in which soldiers and the general public do not travel. The leased land provides such safety, the United States noted. The leased land was also

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The United States contended that the court could not assess the Plaintiffs' breach of trust claim without "directly or indirectly interpreting the lease and determining factual issues regarding whether the United States has complied with the lease." The Plaintiffs were therefore improperly asking a state court to interpret the United States' obligations under the lease, the United States argued.

The United States also maintained that when a non-party cannot be joined due to sovereign immunity, the first factor--the "extent a judgment rendered in the [party's] absence might be prejudicial to the [party] or those already parties"--takes primary importance and "should weigh heavily in the Rule 19(b) analysis." The Plaintiffs' relief would cause "serious harm" to it, the United States contended, for several reasons. An injunction barring the State from renegotiating the lease would seriously harm the United States because the PTA "is essential for readiness of all the forces" in the Pacific region and there is no other location in the Pacific at which the

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(. . . continued)

crucial to the United States training operations, it explained, because the land contains (1) a "Battle Area Complex," which "allows soldiers to train and test their ability to detect, identify, engage and defeat stationary and moving targets in both open and urban terrain environments," (2) a "Modular Military Operations in Urban Terrain," which "is designed to look like villages/towns and contains different types of buildings to practice military operations," and (3) the Cooper Airstrip, which "is used to practice launches and recovery of Shadow Unmanned Aircraft."

training done at the PTA could be accomplished, the United States asserted. Additionally, if the court instead ordered the State to conduct inspections of the leased land, such inspections could burden the United States, it contended, because it could disrupt critical training and raise safety issues.

As to the second factor in the HRCP Rule 19(b) analysis, the extent that prejudice can be avoided through the shaping of relief, the United States contended that the Plaintiffs' proffered shaping of relief would put the extension of the lease in doubt or disrupt the military's training.<sup>22</sup> And as to the fourth factor in the HRCP Rule 19(b) analysis, the adequacy of available remedies should the suit be dismissed, the United States argued that "[c]ourts have recognized . . . that the lack of an alternative forum does not automatically prevent dismissal of a suit where the inability results from the non-party's sovereign immunity."<sup>23</sup>

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<sup>22</sup> As stated, the Plaintiffs asserted that injunctive relief regarding the lease could be shaped by "enjoin[ing] the defendants from executing an agreement extending the lease or entering into a new lease until the defendants ensure that the terms of the existing lease have been fulfilled." They also contended that the court could shape relief in regards to monitoring by ordering that "the defendants provide a report to [the circuit] court thirty days prior to annual evidentiary hearings on defendants' efforts to ensure compliance with the lease."

<sup>23</sup> The United States did not address the third factor of HRCP Rule 19(b), the adequacy of a judgment rendered in the party's absence.

The United States further stated that, in the event the case were permitted to go forward and "relief were entered that impacted the interests of the United States," the United States "would at that time consider what action to take, including whether to file a motion to intervene as a party for the purpose of removing the case to United States District Court pursuant to 28 U.S.C. § 1442(a)."

The court denied the State's motion without prejudice, determining that "things may unfold as a matter of proof during the trial that may implicate some of the arguments being raised." Based on the pre-trial record, "the Court believe[d] it would be improvident to dismiss any of the claims."

#### **4. Trial**

A bench trial commenced, during which the Plaintiffs presented a series of witnesses who testified regarding the DLNR's management of the leased PTA lands.

The Plaintiffs first called Kevin Moore, the DLNR's custodian of records who responded to the request for government records that Ching filed before the start of litigation. Moore testified that although DLNR's normal practice is to attempt to inspect leased lands at least once every two years, the leased PTA land is more difficult to inspect and therefore inspections are conducted less frequently. Moore stated that the DLNR's lease file contained records of only three inspections of the

leased PTA land: one from 1984 that indicated the inspection lasted "no more than one day," which Moore acknowledged was not enough time for an inspector to inspect the 22,900-acre property on foot;<sup>24</sup> one from 1994 that was not signed and did not have anything written in the spaces denoted for the condition of the land or the findings of the inspection; and one from December 2014 that indicated that the premises were in unsatisfactory condition but did not contain any determination as to whether the United States was in compliance with the lease. Moore also testified that a 2013 memorandum circulated within the DLNR suggested the leased PTA land should be swept for UXO to be removed at the United States' expense, but DLNR did not ask the United States Army (Army) to clean up any ammunition as a result of the memorandum.

Moore related that the State had coordinated with the federal government and its various agencies to undertake a number of projects concerning the condition of the leased PTA land. Archeological surveys were done in 2001 as part of a Natural Resource Management Plan created by the United States, for instance, and a Programmatic Agreement between state and federal agencies permitted "cultural monitors" to be involved

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<sup>24</sup> Moore stated that it would be difficult for an inspector to inspect the leased land in a motor vehicle due to the rugged terrain.

with inspections. According to Moore, these plans and programs ultimately demonstrated that the Army was the agency primarily responsible for environmental cleanup of the PTA leased land, but they also established that the Hawai'i Department of Health shared responsibility by providing support and regulatory oversight.

The Plaintiffs also called Kealoha Pisciotta, a former cultural monitor for the battle area complex (BAX) within the PTA. Pisciotta testified that during her inspections she observed and noted in her reports a range of debris left over from military exercises, including munitions and UXO, stationary targets, junk cars, an old tank, crudely built rock shelters, and other miscellaneous military rubbish. She testified that some of her reports recommended that the debris be cleaned up, but not all of the UXO that she observed was removed.

Next, the Plaintiffs called Suzanne Case, Chair of the BLNR and the Director of the DLNR. Plaintiffs' counsel showed Case a 2014 action memorandum from the Army addressed to the DLNR stating that a bazooka range within the PTA was heavily contaminated with explosive hazards, ammunitions, and debris that posed a significant danger to public health and welfare. Case testified that she did not remember receiving or having been shown the memorandum by DLNR staff and that she was not aware of any lease compliance issues that had been raised to the

BLNR regarding the PTA lease during her tenure as Chair. She also testified that the DLNR did not have a written policy regarding when inspections of leased premises were to be conducted and instead chose which leases to inspect based on available resources, the risks involved, and whether the public had drawn attention to a specific property.

The Plaintiffs then called Deputy Attorney General William Wynhoff, who had previously testified in a pretrial deposition on behalf of the DLNR. Wynhoff testified that to the best of his knowledge, the DLNR did not have a written procedure to ensure compliance with all terms of the PTA lease. DLNR's practice, Wynhoff stated, is to keep all records related to leases in the lease file. Wynhoff acknowledged that prior to the filing of this suit, there were no documents in the PTA lease file indicating that the DLNR had asked for or received assurances from the United States that it was in compliance with the lease.

Ching testified next. Ching, who is part Hawaiian, stated he was a member of the Pōhakuloa Cultural Advisory Committee, which advised the Army of cultural concerns related to its activities within the PTA. Ching testified that, during his bimonthly trips to the PTA as a member of the committee, he witnessed blank ammunition and other trash and military debris

"strewn around" that negatively affected his spiritual and traditional practices.

After Ching's testimony, the Plaintiffs called Kahaulelio. Kahaulelio testified that she was at least fifty percent Hawaiian and that, to her, caring for the land at Pōhakuloa was a cultural practice. She explained that she and other Hawaiian practitioners participate in cultural ceremonies at Pōhakuloa, which she compared to going to church. Kahaulelio testified that, during one such cultural trip to Pōhakuloa in November 2014, she observed debris and blank ammunition on the ground and that this destruction of the land made her feel "angry" and "hurt."

The Plaintiffs' final witness was Russell Tsuji, a former Deputy Attorney General, State Land Administrator at the DLNR, and Deputy Director of the DLNR. Tsuji stated that, while he was employed at the DLNR, he was in charge of managing state-owned lands and was a custodian of records contained in the PTA lease file. None of the files in the PTA lease file, Tsuji testified, mentioned paragraphs 9 and 14 of the lease. He was also unaware of any conversations that occurred during his employment at the DLNR regarding compliance with these lease provisions. Tsuji explained that his goal was to have land agents inspect leases at least once every two years while he was employed at the DLNR, but he stated that this target was

"aspirational" rather than a mandatory rule. Tsuji acknowledged that prior to the initiation of the lawsuit, the leased PTA land had not been inspected during his tenure at the DLNR, which spanned ten years.

Tsuji testified that the DLNR's PTA lease file contained a series of letters and reports from the United States Army that documented a need to clean up the leased PTA land, including a 2006 report indicating that there was debris in the BAX within the PTA; a 2008 report stating that there may have been munitions on PTA land; a 2013 final environmental impact statement (EIS) stating that UXO was "known to exist in impact area" and that "there [was] also a medium risk of finding [UXO] outside [the construction] area"; and a 2014 report stating that "[t]he military need[ed] to implement some kind of clean-up process as part of their training in PTA" because "[r]emnants of military trash [was] everywhere . . . including unexploded ordnance that [was] carelessly discarded." When asked about the DLNR's response to one of the reports, Tsuji testified that he did not know if anyone at the DLNR "actually read" the report and noted that there was no record on file that the DLNR ever responded to the report.

Tsuji testified that, after the lawsuit was filed, he sent a letter to the Army requesting its procedures for cleaning munitions after training exercises. Tsuji indicated that the

Army responded by sending a letter setting forth its cleanup procedures. Tsuji also testified that he conducted an inspection of the leased PTA land in December 2014, approximately one year after receiving the Army's response. One of the reasons for the inspection was the lawsuit, Tsuji acknowledged. During this inspection, he observed trash, "[s]pent shells," "shell debris," and "derelict vehicles" used as target practice at the bazooka range. According to Tsuji, a draft inspection report was created after the inspection, which was revised after he conducted another inspection in January 2015. Tsuji indicated that the final report stated that the land condition was "unsatisfactory," but he testified that the DLNR did not issue a default notice to the Army.<sup>25</sup>

At the conclusion of Tsuji's testimony, the Plaintiffs rested. The State did not call any witnesses.

## **5. The Circuit Court Decision**

On April 3, 2018, the circuit court issued its Findings of Fact, Conclusions of Law and Order.

### **a. Findings of Fact**

The circuit court made the following relevant findings of fact.

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<sup>25</sup> Tsuji testified that the report was written by a land agent and that he had no input in the report's conclusion that the land was "unsatisfactory."

In 1964, the State entered into a sixty-five year lease of three parcels of land in the Pōhakuloa area with the United States for military training purposes. These land parcels are ceded lands owned by the State that are part of the public lands trust. The public trust lands are state-owned lands held for the use and benefit of the people of the State of Hawai'i, and the State is the trustee of such lands. Accordingly, the State has "the highest duty to preserve and maintain the trust lands."<sup>26</sup>

The Plaintiffs had in the past and continued to be actively engaged in cultural practices upon the leased PTA land. These cultural practices included song, dance, and chant about the PTA area, walking upon and celebrating the land and the flora and fauna that grow upon it, and honoring the current and historic cultural significance of the area.

The State was aware of the United States' failure to clean up other sites in the state<sup>27</sup> and of the possibility that

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<sup>26</sup> Throughout its findings of fact and conclusions of law, the circuit court referred to this obligation as the duty to "malama 'aina," which the court translated as "to care for the land."

<sup>27</sup> Specifically, the court found that the previous Chair of the DLNR, William Aila, Jr., was aware of the United States' failure to clean up other sites in the state such as Kaho'olawe, Mākua, and the Waikāne Valley, and the court imputed this knowledge to the State in this case. The court noted that a website maintained by the State contained a history of the island of Kaho'olawe that explained that the United States Navy did not clear all UXO from 25 percent of the surface of the island. Additionally the court found that the United States' failure to properly clean the Mākua area was

(continued . . .)

UXO and munitions were present on the leased PTA land. Cultural monitors spent "extensive time" at the leased PTA land and observed military debris on the ground, including UXO and "spent shell casings, scattered across" the land. The concerns of the cultural monitors were documented in a number of federal reports. For example, the United States prepared a November 2010 report entitled "Final Archaeological and Cultural Monitoring of Construction of Battle Area Complex (BAX) for Stryker Brigade Combat Team (SBCT), Pohakuloa Training Area, Hawaii Island, Hawaii" that included a recommendation from cultural monitors that "[t]he Military needs to implement some kind of cleanup process as part of their training in PTA. Remnants of military trash are everywhere." (Emphasis omitted.) The report also stated that the cultural monitors voiced the following: "Another major concern is the military debris that is left behind after training including [UXO] that is carelessly discarded. There is a need to have some type of cleanup plan implemented in the military training process."

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(. . . continued)

documented in the federal court decisions in Makua v. Rumsfeld, 163 F. Supp. 2d 1202 (D. Haw. 2001), Makua v. Gates, Civ. No. 08-00327 SOM/LEK, 2009 WL 196206 (D. Haw. Jan. 23, 2009), and Makua v. Gates, Civ. No. 00-00813 SOM, 2008 WL 696093 (D. Haw. Mar. 11, 2008).

These concerns were reiterated four years later in a second, similarly titled report. This report contained observations from cultural monitors who stated that "[r]emnants of live fire training are present within the BAX, including stationary targets, junk cars, an old tank, crudely built rock shelters, and miscellaneous military rubbish. Spent ammunition is scattered across the landscape." The report noted the cultural monitors feared that if the litter continued to remain on the land, "the land will be rendered unusable forever--one eighth of our island will become unavailable for use by any of our future generations." The cultural monitors therefore "strongly recommend[ed] the Army begin now to seek funding to initiate a serious cleanup effort throughout the leased training areas." (Emphasis in report.)

Additionally, a March 2015 draft report stated that, based on a 2014 inspection by the DLNR and the Army, a bazooka range contained on the leased PTA land was "heavily contaminated on the surface with material potentially presenting an explosive hazard [] and munition debris []." A subsequent inspection of the bazooka range by military explosive ordnance disposal units found mortars, bazooka rounds, and white phosphorous on the land. The Army determined that the debris found at the bazooka range "coupled with the accessibility to the public make for the potential for significant danger to public health and welfare."

The State's awareness of the potential contamination of the leased PTA land was also demonstrated by a March 2013 letter from the Acting Hawai'i Branch Manager for the DLNR to the State Lands Assistant Administrator. The Branch Manager recommended that "PTA should sweep the lands North of the saddle road for UXO and remove any UXO found at their expense to make the area safe for the public."<sup>28</sup> Additionally, a March 2013 Final EIS stated that "[d]ecades of using PTA as a training area have introduced a significant risk of encountering [munitions]/UXO. [Munitions]/UXO [are] known to exist in the impact area and [are] expected to be encountered during range construction activities; but there is also a medium risk of finding [munitions]/UXO outside the impact area." The EIS also stated that "[p]ast and current activities at PTA have resulted in contamination of soil by explosives and other chemicals." Therefore, the State was aware that military training activities on the leased PTA land "pose[d] a significant and substantial risk of harm or damage to [the PTA], and persons who may come upon" the land, and "to public health, safety, and welfare, as well as to the Plaintiffs' cultural interests in the [land]."

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<sup>28</sup> Although the letter stated, "PTA should sweep," it appears that the Branch Manager was referring to the United States.

Proper stewardship of the leased land includes "periodic and meaningful inspection and monitoring of the military training activities and their aftermath upon the Subject Lands and reasonably accurate documentation of such activities and the effects of such activities to achieve transparency of [the State's] inspection and monitoring actions." Inspections must occur with "a reasonable frequency" for the State to satisfy its duty. The DLNR did not meet its informal goal of inspecting the leased PTA land once every two years, nor did it adequately document its inspection efforts "so as to provide rudimentary transparency into the DLNR's efforts." An inspection of the PTA occurred on December 19, 1984, for which a "sparse" report was generated that stated only the following: "Property being used for Military training purposes per lease terms." Another inspection "appear[ed] to have been conducted" in 1994, although the "findings" and "inspected by" sections of the inspection form were blank.

A third inspection occurred on December 23, 2014, after the litigation in this case had begun, and this inspection resulted in a report that "contained much more information" than those created from the two previous inspections. The 2014 Inspection Report stated that the condition of the land was "not

satisfactory.”<sup>29</sup> The report indicated that debris was “extensive” at the bazooka range, that there were “derelict vehicles” at one of the target ranges, and that an area was used for dumping spent artillery shells.

“The lack of regular, meaningful inspection and monitoring of the” leased PTA land contributed to the breach of the State’s trust duties, which in turn “harmed, impaired, diminished, or otherwise adversely affected Plaintiffs’ cultural interest in the” leased land.

**b. Conclusions of Law**

The circuit court rendered the following relevant conclusions of law.

The Plaintiffs had standing to enforce a breach of trust claim against the State, and the United States was not an indispensable party to the case because the Plaintiffs’ claim concerned only the State’s trust obligations. The State, as trustee of the ceded land, owed a “high standard of care when managing public trust ceded lands.” The State’s trust duties include but are not limited to using “reasonable efforts” to (1) preserve and protect trust property, and (2) take a proactive

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<sup>29</sup> The court found that the Army’s assertion recorded in the report that it “regularly inspected and cleaned up after [an] exercise was complete” was contradicted by evidence that there was a significant amount of debris and ammunition on the land.

role in management and protection of the trust property. The State had a duty to consider the cumulative effects of the United States' use of the land upon the condition of the land and upon "the indigenous plants, animals, and insects, as well as the invasion to Plaintiffs' cultural interests in the Subject Land." Additionally, the State had a duty to determine whether the lessee was in compliance with the terms of the lease. And the Chair of the BLNR specifically had a duty to "[e]nforce contracts respecting . . . leases . . . or other disposition of public lands." (Quoting HRS § 171-7(5).<sup>30</sup>)

As part of its trust duties, the State was required, to enforce paragraphs 9, 14, 18, and 19 of the PTA lease. The State's records regarding its efforts to inspect the leased land and report its findings "were spotty at best" and in some cases "grossly inadequate."<sup>31</sup> Although there were studies and inspections completed regarding "other business" on the leased land, such as the EIS, these were not conducted to fulfill the State's trust duties.

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<sup>30</sup> HRS § 171-7(5) (2011) provides, in relevant part, "Except as provided by law the board of land and natural resources through the chairperson shall: . . . (5) Enforce contracts respecting sales, leases, licenses, permits, or other disposition of public lands[.]"

<sup>31</sup> The court found that, given "the virtual nonexistent nature of the 1994 inspection report" and "the sparse and incomplete nature of the 1984 inspection report," there was an un rebutted presumption that the State had failed to conduct any inspections prior to December 2014 to monitor or confirm the United States' compliance with paragraphs 9, 14, 18, and 19.

The State therefore breached its duties by failing to (1) conduct reasonable (in terms of frequency and scope) inspections of the condition of the leased PTA land or observations of the military training exercises, (2) ensure that the terms of the lease were being followed, (3) take prompt and appropriate follow-up steps with the United States when the State became aware of potential violations of the lease, (4) create detailed reports of the State's efforts to ensure compliance with the lease, and (5) initiate or assist with the appropriation of necessary funding to conduct cleanup or maintenance activities on the land. The court stated that the State would further breach its trust duties "if they were to execute an extension, renewal, or any other change to the State General Lease No. S-3849, or enter into a new lease of the PTA, without first determining (in writing) that the terms of the existing lease have been satisfactorily fulfilled."

**c. Order**

The court explained that because the Plaintiffs prevailed on the merits, the appropriate remedy was for the court to issue an order directing the State to perform its trust duties with respect to the leased PTA land. The court concluded that the balance of harm favored the issuance of a mandatory injunction and that protection of the public trust lands was in the public interest. The court therefore ordered that the State

promptly initiate affirmative activity at the PTA in accordance with its trust duties by developing a written plan to fulfill such duties. The plan was required to include provisions for (1) on-site monitoring and inspections, (2) the creation of written inspection reports with recommendations, (3) a written protocol of appropriate action to be taken if the United States is to be found to be in breach of the lease, (4) a procedure to provide for "reasonable transparency" to the Plaintiffs and the general public with respect to compliance with the injunction, and (5) all steps that the State takes to "secur[e] adequate funding, from any and all appropriate funding sources, to plan, initiate, and conduct all appropriate comprehensive cleanup." The plan was required to be submitted to the court for approval. Additionally, the court ordered the State to create contested case procedures pursuant to HRS Chapter 91, if not already in existence, "for Plaintiffs or any member of the general public with standing to initiate such process in the event that Plaintiffs or other interested party may contest the decisions made by the [State] in the course of discharging" their trust duties.

The circuit court entered Final Judgment on April 24, 2018.

#### D. The Appeal and Motions to Dismiss

The Department of the Attorney General (AG) filed a timely Notice of Appeal. The Plaintiffs filed a Motion to Dismiss the Appeal and argued that the AG did not have the authority to file an appeal "on behalf of BLNR or DLNR without BLNR's consent."<sup>32</sup> (Citing Chun v. Bd. of Trs. of the Emps.' Ret. Sys., 87 Hawai'i 152, 952 P.2d 1215 (1998).) The State replied that the AG was authorized to appeal the decision because the AG "has authority to manage and control all phases of litigation" in suits against state officials. (Citing Island-Gentry Joint Venture v. State, 57 Haw. 259, 554 P.2d 761 (1976).)

The Plaintiffs filed an application for transfer to this court, which the State did not oppose. This court granted the application on December 20, 2018.

#### IV. STANDARD OF REVIEW

Certain decisions regarding the orderly administration of trial and the selection of an appropriate remedy to redress an injury "rest[] with the sound discretion of the trial court[,] and the trial court's decision will be sustained absent

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<sup>32</sup> The Plaintiffs later filed a second motion to dismiss to "follow[] up" on the first, making substantially similar arguments with respect to the AG's authority to appeal on behalf of the Chair of BLNR without her express consent.

a showing of manifest abuse of discretion.” Hawaii Pub. Emp’t Relations Bd. v. United Pub. Workers, Local 646, 66 Haw. 461, 467, 667 P.2d 783, 788 (1983). For instance, this court applies an abuse of discretion standard when it reviews a trial court’s determination as to whether to dismiss a case pursuant to HRCF Rule 19(b) for a party’s failure to join an indispensable party. UFJ Bank Ltd. v. Ieda, 109 Hawai‘i 137, 142, 123 P.3d 1232, 1237 (2005) (citing Takabuki v. Ching, 67 Haw. 515, 529, 695 P.2d 319, 328 (1985)). Similarly, a trial court’s grant of equitable relief, including a declaratory judgment or a mandatory injunction, will be upheld unless an abuse of discretion is demonstrated. Kau v. City & Cty. of Honolulu, 104 Hawai‘i 468, 473, 92 P.3d 477, 482 (2004) (citing Shanghai Inv. Co. v. Alteka Co., 92 Hawai‘i 482, 492, 993 P.2d 516, 526 (2000)); United Pub. Workers, 66 Haw. at 467, 667 P.2d at 788.

By contrast, we review a trial court’s conclusions of law de novo. Narayan v. Ass’n of Apartment Owners of Kapalua Bay Condo., 140 Hawai‘i 75, 83, 398 P.3d 664, 672 (2017) (citing Nordic PCL Constr., Inc. v. LPIHGC, LLC, 136 Hawai‘i 29, 41, 358 P.3d 1, 13 (2015)). Thus, a trial court’s grant or denial of summary judgment is reviewable using our independent judgment under the right/wrong standard, as are the statutory and constitutional interpretations underlying the court’s

determinations. Id.; State v. March, 94 Hawai'i 250, 253, 11 P.3d 1094, 1097 (2000). But this court will uphold the findings of fact to which the trial court applies these interpretations unless they are clearly erroneous. Noel Madamba Contracting LLC v. Romero, 137 Hawai'i 1, 8, 364 P.3d 518, 525 (2015).

## V. DISCUSSION

### A. The Motions to Dismiss

Before addressing the merits of the State's appeal in this case, we must first consider the Plaintiffs' motions to dismiss asserting that the AG lacked authority to bring the appeal without the express authorization of the BLNR and, derivatively, the authorization of the Board's Chairperson and the DLNR, which the Board heads. This court first addressed the allocation of litigation authority between the AG and other government agencies in Island-Gentry Joint Venture v. State, 57 Haw. 259, 264, 554 P.2d 761, 765 (1976). In Island-Gentry, the BLNR agreed to a financial settlement with a landowner after it breached a purchase agreement to acquire the owner's property in order to build a school. Id. at 261, 554 P.2d at 763. Upon discovering that the landowner had thereafter sold the land to a third party for over twice the BLNR's agreed-upon purchase price, the AG declined to pay the agreed-upon settlement, reasoning that the landowner had "suffered no damage resulting from [the] State's failure to honor its agreement to purchase

the land.” Id. at 262, 554 P.2d at 764. The landowner brought suit to enforce the settlement.

This court held that under the general grant of authority contained in HRS § 26-7 (Supp. 1975),<sup>33</sup> the AG “has exclusive authority to control and manage for the State all phases of civil litigation in which the State has an interest, unless authority to do so in specific matters has been expressly or impliedly granted to another department or agency.” Id. at 264-65, 554 P.2d at 765-66. We held that this authority necessarily includes the authority to control the settlement of actions against the State. Id. at 265, 554 P.2d at 766. The same section also grants the AG “exclusive authority to approve as to the legality and form of all documents relating to the

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<sup>33</sup> The portions of HRS § 26-7 cited in Island-Gentry have not been amended since this court’s decision in the case. The statute provides in relevant part as follows:

The department of the attorney general shall be headed by a single executive to be known as the attorney general.

The department shall administer and render state legal services, including furnishing of written legal opinions to the governor, legislature, and such state departments and officers as the governor may direct; represent the State in all civil actions in which the State is a party; approve as to legality and form all documents relating to the acquisition of any land or interest in lands by the State; and, unless otherwise provided by law, prosecute cases involving violations of state laws and cases involving agreements, uniform laws, or other matters which are enforceable in the courts of the State. The attorney general shall be charged with such other duties and have such authority as heretofore provided by common law or statute.

acquisition of any land or interest in land by the State," we noted. Id. This court held that implicit in these express grants of authority was the "sole power to approve or to refuse to approve as to the legality and form of any compromise settlement effectuated by the [BLNR] in regards to the [BLNR]'s breach of a contract to purchase land for the State." Id. Because the record identified that "no other department or agency ha[d] been expressly or impliedly granted the authority to approve or to disapprove as to the legality and form of the settlement in question," we held that the BLNR was without authority to bind the State to the settlement. Id.

Chun v. Board of Trustees of the Employees' Retirement System, 87 Hawai'i 152, 952 P.2d 1215 (1998), on which the Plaintiffs rely, stands in tension with Island-Gentry. In Chun, the circuit court vacated a decision of the Board of Trustees of the Employees Retirement System concerning the retirement benefits of a group of teachers and school administrators, finding that the Board had miscalculated the benefits as a result of its misinterpretation of the applicable statute. Id. at 158, 952 P.2d at 1221. During the pendency of the case, the composition of the Board had changed, and the newly constituted Board deadlocked in a four-to-four vote on a motion to authorize an appeal of the circuit court's decision. Id. at 160, 952 P.2d at 1223. The Chairperson of the Board thus sent a letter

informing the AG that the "motion failed because it did not receive the necessary majority vote." Id. at 161, 952 P.2d at 1224. When the AG nevertheless filed a notice of appeal, the retirees filed a motion to dismiss the appeal, arguing that the AG had no independent authority to pursue it without the Board's consent. Id.

This court held that a distinction exists between, on the one hand, the AG's duty under HRS § 28-1 (1993)<sup>34</sup> and the common law to represent the State in furtherance of the public interest as the AG deems it to be, and on the other hand, the AG's duty under HRS § 26-7 to serve as legal counsel to the public officials and instrumentalities of the State, inter alia, when they are sued in their professional capacity. Id. at 170, 952 P.2d at 1233. Extensively quoting the Supreme Court of West Virginia, we stated,

When the Attorney General appears in a proceeding on behalf of the state in her name, she exercises her discretion as to the course and conduct of the litigation. She assumes the role of a litigant and she is entitled to represent what she perceives to be the interest of the state and the public at large.

. . . .

The Attorney General performs quite a different function when she appears to defend a state officer or

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<sup>34</sup> HRS § 28-1, which has not been amended since this court's decision in Chun, provides as follows: "The attorney general shall appear for the State personally or by deputy, in all the courts of record, in all cases criminal or civil in which the State may be a party, or be interested, and may in like manner appear in the district courts in such cases."

instrumentality sued in their official capacity. In this circumstance the Attorney General does not appear as a party to the action. That role is filled by the state officer or instrumentality against whom the suit is brought. Rather, the Attorney General's function is to act as legal advisor and agent of the litigant and to prosecute or defend, within the bounds of the law, the decision or policy of such officer or instrumentality which is called into question by such lawsuit.

. . . .

The Legislature has designated the Attorney General as the legal representative of state officers and instrumentalities sued in their official capacities. In the absence of other statutory or constitutional provision to the contrary, she is their sole legal representative in the courts and they are her clients. When the Attorney General appears in litigation in this capacity, she does so as a lawyer and an officer of the court. Her primary responsibility is to provide proper representation and competent counsel to the officer or instrumentality on whose behalf she appears. The Attorney General's role in this capacity is not to make public policy in her own right on behalf of the state. It is presumed, in the absence of a contrary showing, that the officer made a party to the suit has, in the performance of his or her official duties, acted in contemplation of the relevant laws and in the best interests of the state. The Attorney General's role and duty is to exercise her skill as the state chief lawyer to zealously advocate and defend the policy position of the officer or agency in the litigation.

The Legislature has thus created a traditional attorney-client relationship between the Attorney General and the state officers or instrumentalities she is required to represent. It is well settled that in the control of litigation, the Attorney General has the duty to conform her conduct to that prescribed by the rules of professional ethics. As a lawyer and an officer of the courts of this State, the Attorney General is subject to the rules of this Court governing the practice of law and the conduct of lawyers, which have the force and effect of law.

Id. at 171-73, 952 P.2d at 1234-36 (quoting Manchin v. Browning, 296 S.E.2d 909, 918-20 (W. Va. 1982)) (alterations omitted) (emphases added). This court thus held that when the AG represents a state official or instrumentality in its official capacity, the official or instrumentality is the AG's client and

the allocation of authority in that relationship is governed by at least some provisions of the Hawai'i Rules of Professional Conduct (HRPC). Id. at 173-74, 952 P.2d at 1236-37.

Applying HRPC Rule 1.7, which governs conflicts, this court held that, once the AG has informed the state official or instrumentality of the different legal strategies and defenses available and provided a professional opinion as to their advisability, the AG "should then stand aside and allow [the] client to exercise [] independent judgment on which course to pursue." Id. at 174, 952 P.2d at 1237 (emphasis and alterations omitted) (quoting Manchin, 296 S.E.2d at 920). Because the AG's position in pursuing the appeal was at odds with the Board's wishes, this court held that the AG "was ethically obligated to recommend the retention of other counsel to represent the Board and to take such other action as, in her opinion, the circumstances required." Id. at 176, 952 P.2d at 1239. The AG lacked authority, however, to pursue the appeal without the Board's consent. Id. at 177, 952 P.2d at 1240.

In a footnote in Chun, the court asserted that its holding was consistent with Island-Gentry, focusing on the Island-Gentry court's statement that the AG has ultimate authority to make litigation decisions "unless authority to do so in specific matters has been expressly or impliedly granted to another department or agency." 87 Hawai'i at 171 n.21, 952

P.2d at 1234 n.21 (emphasis omitted) (quoting Island-Gentry, 57 Haw. at 264-65, 554 P.2d at 765-66). The court stated that, unlike with the BLNR in Island-Gentry, the legislature had enacted a series of laws that conferred upon the Board of Trustees of the Employees Retirement System "the powers and privileges of a corporation," including the powers to "sue or be sued and transact all of its business." Id. (citing HRS §§ 88-22, 88-23, 88-110). These statutes acted to divest the AG of the authority to control litigation with respect to the Board, the court reasoned. Id.

This distinction is problematic, however. Analogous statutes existed conferring substantially the same authority on the BLNR at the time Island-Gentry was decided. See, e.g., HRS § 171-7(8) (1968) ("Except as provided by law the board of land and natural resources through the chairman shall: . . . (8) Bring such actions and proceedings as may be necessary to carry out the powers and duties of the board in the name of the State and to defend such actions brought against the State as may be authorized[.]"). Moreover, the Chun court based its analysis not on the withdrawal of the general authority of the AG under HRS §§ 28-1 and 26-7 by another statute, but rather on the distinction between the different aspects of that authority. See 87 Hawai'i at 169-70, 952 P.2d at 1232-33 ("Thus, by [its] terms, HRS § 26-7 . . . designate[s] the attorney general as

legal counsel for 'public officers' and instrumentalities of the state[.] . . . At the same time, however, HRS § 28-1 mandates that the attorney general 'represent the State in all . . . civil matters where the State . . . may be an interested party.'" (some alterations original)).

The cases can be more logically reconciled in two ways. First, because Island-Gentry concerned the settlement of litigation arising directly from a breach of a contract to acquire public lands, approval of the settlement agreement fell within the AG's "exclusive authority" under HRS § 26-7 "to approve as to the legality and form of all documents relating to the acquisition of any land or interest in land by the State." And second, the settlement agreement essentially "commit[ed] the State to an obligation to pay a sum of money out of State funds"--which was authority that had not been granted to BLNR. Island-Gentry, 57 Haw. at 264, 554 P.2d at 765.

Thus, Chun should be read as limiting Island-Gentry to situations when the AG appears on behalf of the State generally (as opposed to on behalf of a specific State public official or instrumentality), when the action falls within the AG's exclusive statutory authority, or when the result of the action would commit the State to pay public funds that have not been appropriated to the represented State official or instrumentality. By contrast, when the AG appears on behalf of

a specific State official or instrumentality and the above exceptions do not apply, the AG has a duty to comply with the wishes of the represented party that is loosely analogous to the duty a private attorney owes a client under the HRPC and other professional standards.<sup>35</sup> Chun, 87 Hawai'i at 173, 952 P.2d at 1236.

The Plaintiffs argue that, in the absence of an affirmative vote by the BLNR, the AG was not authorized to bring an appeal in the present case. Yet our precedent and legal professional standards more generally permit--and in some cases require--an attorney to take the procedural steps necessary to protect a client's right to appeal. See Maddox v. State, 141 Hawai'i 196, 204, 407 P.3d 152, 160 (2017) ("Defense counsel should take 'whatever steps are necessary' to protect the client's right to appeal . . . ." (quoting ABA Standards for Criminal Justice: Prosecution and Defense Function, Standards 4-8.2(b), 4-8.3(c) (3d ed. 1993))). Unlike in Chun, in which the Chairperson of the Board sent a letter "informing [the AG] of

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<sup>35</sup> By so holding, the autonomy of the various agencies that are headed by boards instead of a single executive is preserved, as the framers intended such boards to maintain a level of independence from the governor and officials like the AG who are directly answerable to the governor. See Stand. Comm. Rep. No. 67 in I Proceedings of the Constitutional Convention of Hawaii of 1950, at 217 (1960) ("Your committee has followed the principle that the Governor should be strong in his branch of the government but that he should be precluded from infringing upon the other branches, for example, the power to remove members of the boards and commissions.").

the Board's refusal to authorize an appeal of [the circuit court's] decisions," there is no indication in the record that the BLNR communicated to the AG a desire not to pursue the present appeal--nor is there any evidence that the appeal is at odds with the BLNR's wishes. 87 Hawai'i at 161, 952 P.2d at 1224 (second alteration original). "[W]here no conflict plainly appears . . . it is generally presumed 'that the actions and determinations of the Attorney General in . . . a lawsuit are made both as a representative of the public interest and as counsel for the state agency or officer.'" Id. at 170, 952 P.2d at 1233 (some alterations in original) (quoting D'Amico v. Bd. of Med. Exam'rs, 11 Cal.3d 1, 112 (1974)). Accordingly, we deny the Plaintiffs' two motions to dismiss the appeal.

#### **B. The State's Appeal**

The State argues that the circuit court erred by failing to dismiss the case or grant summary judgment to the State on the grounds that 1) the United States was a necessary and indispensable party under HRCF Rule 19 whose joinder was not feasible due to its sovereign immunity; 2) the case presented a nonjusticiable political question regarding how the State should manage the leased PTA land; and 3) the case did not present an "actual controversy" in which a declaration could "terminate the

uncertainty or controversy giving rise to the proceeding" as is required for declaratory relief under HRS § 632-1.<sup>36</sup> The State additionally challenges the circuit court's findings and conclusions insofar as the court found that the State breached its trust duties by failing to perform adequate inspections of the leased PTA land and declined to consider the State's cooperative activities with entities other than the State in determining whether the State had violated its trust obligations. Lastly, the State argues that the injunctive relief granted by the circuit court was improper because it was tantamount to an award of damages barred by the State's sovereign immunity and the order granting relief was vague, overbroad, and improperly intruded on legislative prerogatives.

This opinion will address the State's contentions alleging related errors together.

**1. The United States Is Not a "Necessary" Party and Therefore Is Not "Indispensable"**

The State contends that the United States is a necessary and indispensable party to the present case under HRCP Rule 19 and that the circuit court reversibly erred by failing

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<sup>36</sup> Under Hawai'i law, the denial of a summary judgment motion can be appealed following a trial on the merits only if the appeal centers on a question of law rather than the existence of a disputed material fact. See Larsen v. Pacesetter Sys., Inc., 74 Haw. 1, 17-18, 837 P.2d 1273, 1282-83 (1992). Here, the State's contentions are rooted in questions of law, and we accordingly conclude that it is entitled to review of the circuit court's denial of its summary judgment motion on the challenged grounds.

to either join the United States or dismiss the case due to its absence. Under our precedents, an analysis under HRCP Rule 19 follows two steps. Kellberg v. Yuen, 135 Hawai'i 236, 250-51, 349 P.3d 343, 357-58 (2015). First, courts must determine if the party is a "necessary" party under part (a) of the rule, and if so, whether joinder of the party is feasible. Id. If the court finds that a party is necessary and joinder is not feasible, it then proceeds to part (b) of the rule, under which it analyzes whether "in equity and good conscience" the case can continue in the party's absence. Id. at 252, 349 P.3d at 359 (quoting HRCP Rule 19(b)). "If, under this second step, the court dismisses the action rather than moving forward without the absent party, the nonparty is described as 'indispensable.'" Id. (quoting Marvin v. Pflueger, 127 Hawai'i 490, 499, 280 P.3d 88, 97 (2012)).

HRCP Rule 19(a) sets forth a number of factors for courts to consider in evaluating whether an entity is a necessary party who should be joined if feasible. The rule provides, in relevant part, as follows:

(a) Persons to be joined if feasible. A person who is subject to service of process shall be joined as a party in the action if (1) in the person's absence complete relief cannot be accorded among those already parties, or (2) the person claims an interest relating to the subject of the action and is so situated that the disposition of the action in the person's absence may (A) as a practical matter impair or impede the person's ability to protect that interest or (B) leave any of the persons already parties subject to a substantial risk of incurring double,

multiple, or otherwise inconsistent obligations by reason of the claimed interest.

With respect to HRCP Rule 19(a)(2),<sup>37</sup> this court does not need to speculate as to the interest claimed by the United States in the subject matter of this case because the United States filed a statement of interest in the circuit court. Before this court, the State repeats the United States' assertion that "[t]he action here relates to the public land leased by the State to the United States for military purposes and puts directly at issue the United States' compliance with the terms of the lease." The State contends that the United States clearly has an interest in an action "forcing the State to initiate rigorous enforcement action against" the United States.

But determining whether the State fulfilled its duties as trustee in this case does not require determining whether the United States in fact complied with the lease, however, and if a breach of the State's trustee duties is found, the appropriate remedy would not be an order requiring the State to initiate an enforcement action. Article XI, section 1 of the Hawai'i Constitution places upon the State a fiduciary duty analogous to

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<sup>37</sup> Neither the State nor the United States make any arguments with respect to HRCP Rule 19(a)(1), under which the court would consider whether the United States' absence would prevent complete relief from being afforded in this case.

the common law duty of a trustee with respect to lands held in public trust. See In re Conservation Dist. Use Application HA-3568 (In re TMT), 143 Hawai'i 379, 400, 431 P.3d 752, 773 (2018); State ex rel. Kobayashi v. Zimring, 58 Haw. 106, 121, 566 P.2d 725, 735 (1977). Article XII, section 4 imposes a similar duty regarding lands ceded to the State under Section 5(b) of the Admission Act. It is undisputed that the leased PTA land at issue in this case is trust land within the meaning of these constitutional provisions.

The most basic aspect of the State's trust duties is the obligation "to protect and maintain the trust property and regulate its use." Zimring, 58 Haw. at 121, 566 P.2d at 735; accord Restatement (Second) of Trusts § 176 (1959) ("The trustee is under a duty to the beneficiary to use reasonable care and skill to preserve the trust property."). Under the common law, this obligation includes an obligation to reasonably monitor the trust property. See Restatement (Third) of Trusts § 90 cmt. b (2007); Tibble v. Edison Int'l, 135 S.Ct. 1823, 1828 (2015). This duty exists regardless of whether the property is being used by a third party pursuant to a lease.

Reasonable monitoring ensures that a trustee fulfills the mandate of "elementary trust law" that trust property not be permitted to "fall into ruin on [the trustee's] watch." United States v. White Mt. Apache Tribe, 537 U.S. 465, 475 (2003). To

hold that the State does not have an independent trust obligation to reasonably monitor the trust property would be counter to our precedents and would allow the State to turn a blind eye to imminent damage, leaving beneficiaries powerless to prevent damage before it occurs. Cf. Kelly v. 1250 Oceanside Partners, 111 Hawai'i 205, 231, 140 P.3d 985, 1011 (2006) (holding that the Department of Health's article XI, section 1 public trust duty to protect coastal waters required it to "not only issue permits after prescribed measures appear to be in compliance with state regulation, but also to ensure that the prescribed measures are actually being implemented." (emphasis added)).

Thus, the State might breach its fiduciary duty by failing to reasonably monitor public ceded lands, including the public ceded lands within the PTA that the United States utilizes pursuant to its lease with the State. Such a breach would be complete upon the State's failure to reasonably monitor the ceded land--irrespective of whether the United States actually violated the lease. A determination of whether the State breached its duty by failing to monitor the United States' compliance with the lease therefore will not require a subsidiary determination that the United States breached the terms of the lease, and thus it will not impair the United States' ability to defend itself against any such speculative

future claim. And because the court would not be determining whether the United States violated the terms of the lease, the appropriate remedy for the alleged breach of the State's trust duties would be an order requiring the State to initiate appropriate monitoring--and not an order requiring the State to initiate an enforcement action.

The United States further asserted in its statement of interest that an order requiring the State to inspect or monitor the United States' use of the PTA "at specified times" has the potential to disrupt critical training exercises. In a similar vein, the State argues that the disposition of the case could put the State at risk of incurring inconsistent obligations because the United States may deem the required monitoring to be "[un]reasonable" or determine that it "unduly interfere[s]" with training operations, ultimately leading to a separate determination under the lease's dispute resolution mechanism. However, these concerns were speculative. Under paragraph 19 of the lease, the State "shall have the right to enter upon the demised premises at all reasonable times to conduct any operations that will not unduly interfere with activities of the [United States]." And while this right of entry is subject to advance clearance from the United States, the lease specifies "that such advance clearance shall not be unreasonably held." There was no indication at the time the State's motions were

determined that the extent of the monitoring the court might order would necessarily be inconsistent with the State's rights under the lease so as to prejudice the United States' interests or subject the State to conflicting obligations.<sup>38</sup>

The United States also asserted in its statement of interest that courts have recognized that all parties to a contract are necessary parties in any equitable action that requires interpretation of the contract. As an initial matter, a reading of the unambiguous text on the face of the lease does not require "interpretation" of the contract. See Airgo, Inc. v. Horizon Cargo Transp., Inc., 66 Haw. 590, 594, 670 P.2d 1277, 1280 (1983) (stating that a contract is ambiguous "when the terms of the contract are reasonably susceptible to more than one meaning"). Further, the cases cited by the United States are inapposite and do not support its position. Each case involved an action that sought to invalidate, enforce, or

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<sup>38</sup> Even if concerns that the State would be subject to inconsistent obligations resulting from the dispute resolution mechanism were sufficient to make the United States a necessary party, the United States correctly asserts that it is not feasible to join it as a party because Congress has not waived sovereign immunity to allow the United States to be involuntarily made a party to the case in Hawai'i state courts. See Minnesota v. United States, 305 U.S. 382, 388 (1939). In determining whether a case should be dismissed for failure to join an indispensable party under HRCF Rule 19(b), courts must consider "the extent to which, by protective provisions in the judgment, by the shaping of relief, or other measures, the prejudice can be lessened or avoided." In this case, the remedy could be tailored to avoid subjecting the State to inconsistent obligations by simply ordering the State to engage in monitoring consistent with its rights under the lease. Thus, dismissal would not be warranted even if the United States were to be considered a necessary party.

establish a breach of the terms of the contract at issue.<sup>39</sup>

These cases did not hold that parties to a contract must be joined in any action regarding a trustee's duty to reasonably monitor the property that is the subject of the contract.

Unlike the cited cases, this action seeks neither to invalidate the lease nor to directly enforce its terms but rather to require the State to monitor the leased PTA land and the United States' compliance with the lease. The cited cases thus do not apply.<sup>40</sup>

The United States contended and the State similarly argues that an injunction barring the State from renegotiating the lease until any breach of its terms is cured would adversely impact the United States' interests directly by inhibiting its right to renew the lease and indirectly by undermining its ability to make future plans for the PTA. This presumes,

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<sup>39</sup> See Dawavendewa v. Salt River Project Agr. Imp. & Power Dist., 276 F.3d 1150, 1157 (9th Cir. 2002) (holding that a Native American tribe was necessary and indispensable in a suit alleging that hiring preference for Native Americans in contract between the tribe and public power company violated civil rights laws); McClendon v. United States, 885 F.2d 627, 633 (9th Cir. 1989) (holding a Native American tribe indispensable in an action to enforce the terms of a rental lease to which the tribe was a party); Queen's Med. Ctr. v. Kaiser Found. Health Plan, Inc., 948 F.Supp.2d 1131, 1165 (D. Haw. 2013) (holding that a health management network was a necessary party in a suit that required demonstrating it had breached the contract to which it was a party).

<sup>40</sup> To be clear, this opinion does not find or conclude that the United States has breached the lease, nor does it enforce or invalidate any provision of the lease. To the extent any portion of the circuit court's judgment can be interpreted as rendering such a finding, conclusion, or order, we hold that this interpretation is incorrect, and the circuit court's judgment shall be construed consistent with this opinion.

however, that the court was required to provide all of the precise remedies that the Plaintiffs requested. It is well settled that in an equitable action, a court has "broad discretionary power to . . . craft remedies to preserve equity." Ito v. Inv'rs Equity Life Holding Co., 135 Hawai'i 49, 62, 346 P.3d 118, 131 (2015). Courts may use this discretion to devise remedies that avoid prejudicing the rights of an absent party, and this latitude should be considered in determining whether a party is necessary and should be joined if feasible. See Salt Lake Tribune Pub. Co. v. AT&T Corp., 320 F.3d 1081, 1097 (10th Cir. 2003) ("Tribune Publishing mistakenly assumes that the only remedy that will give it complete relief is an order compelling KTLCC to specifically perform under the Option Agreement with respect to every Tribune Asset it owns. An order of complete specific performance is one way in which Tribune Publishing can receive complete relief, but it is not the only way."). Thus, the fact that the Plaintiffs requested a remedy barring the renegotiation of the lease does not alter our determination that the circuit court did not abuse its discretion in concluding that the United States is not a necessary party to the action. (Indeed, the circuit court did not ultimately issue an injunction barring the State from renegotiating the lease until it determines that the United States has complied with its terms, notwithstanding the Plaintiffs' request for such relief.)

Lastly, it is noted that the United States stated in its filing that "if relief were entered that impacted the interests of the United States, the Government would at that time consider what action to take, including whether to file a motion to intervene as a party for the purpose of removing the case to United States District Court pursuant to 28 U.S.C. § 1442(a)." And, in denying the State's motion to add the United States as a party without prejudice, the circuit court stated that the United States would have an "automatic right to intervene" if it chose to. Nevertheless, the United States has not filed a motion to intervene in the present case, nor even requested permission to participate as amicus curiae--which would avoid any waiver of sovereign immunity. See Sch. Dist. of Pontiac v. Sec'y of U.S. Dept. of Educ., 584 F.3d 253, 266 (6th Cir. 2009). In determining whether the circuit court erred in permitting the case to proceed in the United States' absence, it is appropriate for this court to consider that, "even if the [United] States ha[d] a particular interest in this dispute, [it] had the opportunity to intervene to protect that interest but declined to participate." Id. "[I]t would turn Rule 19 analysis on its head to argue that the [United] States' interests are now impaired because [it] declined to participate in this much-publicized case." Id.

Based on the foregoing, we affirm the circuit court's denial of the State's motions to join the United States as a necessary party and to dismiss the case for failure to join an indispensable party.

## **2. The Case Presents a Justiciable Controversy**

### **a. The Alleged Breach of Trust Is an Actual Controversy for Purposes of HRS § 632-1**

The State argues that, because the Plaintiffs have not alleged that the United States actually violated the terms of the lease, there is no controversy between the parties of sufficient immediacy and reality to warrant declaratory judgment.<sup>41</sup> The State relies on Asato v. Procurement Policy

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<sup>41</sup> In response, the Plaintiffs argue that the court's jurisdiction over their claims is not dependent on HRS § 632-1. This court has recognized that the beneficiaries of the article XII, section 4 ceded land trust possess a constitutional cause of action against state officials to prospectively enjoin violations of their trust duties. Pele Def. Fund v. Paty, 73 Haw. 578, 601-06, 837 P.2d 1247, 1261-64 (1992). Thus, the Plaintiffs' request for an order requiring the State to prospectively fulfill its trust duties and enjoining future trust violations is not dependent on HRS § 632-1.

We have clarified, however, that the implied constitutional right of action does not permit a court to "turn back the clock" to grant retrospective relief for "actions already taken by the State." Id. at 601, 837 P.2d at 1262. And we have indicated that suits seeking retrospective declaratory relief based on an alleged constitutional violation that has already occurred are governed by HRS § 632-1. See Nelson v. Hawaiian Homes Comm'n, 127 Hawai'i 185, 205, 277 P.3d 279, 299 (2012) (applying HRS § 632-1 in a suit seeking a declaration that the State had violated its duty to afford "sufficient sums" to the Office of Hawaiian Affairs under article XII, section 1 of the Hawai'i Constitution); Kaho'ohanohano v. State, 114 Hawai'i 302, 332, 162 P.3d 696, 726 (2007) (applying HRS § 632-1 in a suit seeking a declaration that the State had violated the article XVI, section 2 prohibition on the impairment of accrued retirement system benefits). Therefore, to the extent the Plaintiffs are seeking a declaration that the State has already violated its trust duties, this relief is dependent on satisfying the requirements of HRS § 632-1.

Board, 132 Hawai'i 333, 322 P.3d 228 (2014) and Kau v. City and County of Hawai'i, 104 Hawai'i 468, 92 P.3d 477 (2004), which it contends demonstrate that the Plaintiffs' claim is too speculative to qualify for declaratory relief under HRS § 632-1.

Recently, this court considered the requirements that must be met to demonstrate a controversy that is subject to a request for declaratory relief under HRS § 632-1(b). We held that

a party has standing to seek declaratory relief in a civil case brought pursuant to HRS § 632-1 (1) where antagonistic claims exist between the parties (a) that indicate imminent and inevitable litigation, or (b) where the party seeking declaratory relief has a concrete interest in a legal relation, status, right, or privilege that is challenged or denied by the other party, who has or asserts a concrete interest in the same legal relation, status, right, or privilege; and (2) a declaratory judgment will serve to terminate the uncertainty or controversy giving rise to the proceeding.

Tax Found. of Hawai'i v. State, 144 Hawai'i 175, 202, 439 P.3d 127, 154 (2019).<sup>42</sup> It is clear that the Plaintiffs' assertion that the State breached the trust duty that it owes to them as beneficiaries meets these requirements, and additionally, the cases relied upon by the State are inapposite.

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<sup>42</sup> Hawai'i state courts are not subject to a constitutional "case or controversy" jurisdictional limitation. See Haw. Const. art. VI, § 1 ("The several courts shall have original and appellate jurisdiction as provided by law . . . ."); Trs. of Office of Hawaiian Affairs v. Yamasaki, 69 Haw. 154, 170 n.17, 737 P.2d 446, 456 n.17 (1987); Tax Found., 144 Hawai'i at 190, 439 P.3d at 142.

In Asato, the plaintiff brought suit seeking to invalidate an administrative rule relating to the State's contracting policies and to void every contract that the State had entered into under the regulation. 132 Hawai'i at 337, 322 P.3d at 232. Notably, the claim in Asato was brought under HRS § 91-7(a), which allows "any interested person" to challenge an agency rule.<sup>43</sup> Asato did not concern HRS § 632-1, and it thus does not provide guidance herein. See Tax Found., 144 Hawai'i at 194-95, 439 P.3d at 146-47 (discussing the requirements of HRS § 91-7 and HRS § 632-1 separately).

Further, even if Asato had been brought under HRS § 632-1, its holding is not helpful to the State. Although the Asato court invalidated the challenged administrative rule, it declined to declare that the contracts entered into under the regulation were void, noting that no connection had been alleged between the plaintiff and any of the individual contracts. Id. at 355, 322 P.3d at 250. The court determined that, without

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<sup>43</sup> HRS § 91-7(a) provides as follows:

(a) Any interested person may obtain a judicial declaration as to the validity of an agency rule as provided in subsection (b) by bringing an action against the agency in the circuit court or, if applicable, the environmental court, of the county in which the petitioner resides or has its principal place of business. The action may be maintained whether or not the petitioner has first requested the agency to pass upon the validity of the rule in question.

knowing the plaintiff's relation to each contract, it could not identify any controversy that could be ended by a declaration that the contracts were void. Id. ("Absent any rendition of the circumstances surrounding each contract, it cannot be determined from the allegations whether there is a substantial controversy as to a particular contract that is of sufficient immediacy and reality to warrant a declaratory judgment." (internal quotations omitted)).

By contrast, the Plaintiffs here are connected to the PTA and the manner in which the State manages it because the PTA is held in trust by the State for the Plaintiffs' benefit. This is to say that the trust duty that the Plaintiffs allege the State has breached is a duty the State owes to the Plaintiffs, and a declaration regarding whether the State has breached that duty would terminate the controversy by clarifying the contours of that duty.

The State also relies on Kau, in which this court considered a Honolulu ordinance that permitted the lessees of condominium units to purchase fee simple interests through a condemnation proceeding. 104 Hawai'i at 472, 92 P.3d at 481. The case began when the fee simple owners of a condominium project brought an action seeking a declaration that the subdivision of the property into individual units would end upon the expiration of the developer's master lease in 2014, and thus

the sublessees of the individual units would not acquire fee simple interests in their individual units if they were condemned under the ordinance. Id. The Kau court held that, because the fee simple owners were "requesting a judgment based on the expiration of the Master Lease, an event that [would] occur at some time in the future; there [wa]s no actual controversy in existence at th[at] time." Id. at 475, 92 P.3d at 484. Specifically, the court noted that the declaration would require speculation as to the conditions that would exist when the master lease expired. Id. During the interim, the court reasoned, the city could condemn the fee owner's interest or the fee owners could make the appropriate filings to make the subdivision permanent, thereby avoiding the situation that the fee simple owners wished the court to rule on. Id.

Unlike in Kau, the Plaintiffs' breach of trust claim based on a failure to reasonably monitor the United States' compliance with the lease does not require the court to speculate about future conditions--nor even the present likelihood that the United States is currently in breach of the lease.<sup>44</sup> Rather, the Plaintiffs alleged that the State has

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<sup>44</sup> The circuit court additionally determined that the State would further breach [its] trust duties if [it] were to execute an extension, renewal, or any other change to the State General Lease No. S-3849, or enter into a new lease of the

(continued . . .)

already breached its duty as a trustee by failing to monitor compliance with the provisions of the lease, irrespective of whether the United States actually complied with the lease terms. This case thus presents the type of controversy that is necessary to qualify for relief under HRS § 632-1(b).

**b. The Alleged Breach of Trust Does Not Present a Political Question**

Under the political question doctrine, courts refrain from deciding certain matters that are committed to the discretion of the other branches of government, reasoning that government action in these areas is properly addressed through democratic processes. See Trs. of Office of Hawaiian Affairs v. Yamasaki, 69 Haw. 154, 171, 737 P.2d 446, 456 (1987). This court has adopted the test for identifying a political question articulated by the United States Supreme Court in Baker v. Carr, 369 U.S. 186, 217 (1962). Under the Carr formulation, a political question may be found when "on the surface of [a] case" there is 1) "a textually demonstrable constitutional

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(. . . continued)

PTA, without first determining (in writing) that the terms of the existing lease have been satisfactorily fulfilled, particularly with respect to any lease provision that has an impact upon the condition of the [PTA] leased lands.

As discussed in more detail infra, Part V.B.4, any breach of trust claim regarding the State's renewal of the lease is speculative and not ripe for review, and thus this aspect of the Plaintiffs' claim does not present a controversy susceptible to declaratory relief under HRS § 632-1.

commitment of the issue to a coordinate political department;" 2) "a lack of judicially discoverable and manageable standards for resolving it;" 3) "the impossibility of deciding without an initial policy determination of a kind clearly for nonjudicial discretion;" 4) "an unusual need for unquestioning adherence to a political decision already made;" or 5) "the potentiality of embarrassment from multifarious pronouncements by various departments on one question." Yamasaki, 69 Haw. at 169-70, 737 P.2d at 455 (quoting Carr, 369 U.S. at 217).

The State contends that Plaintiffs' claim that it violated its constitutional public trust duties is a nonjusticiable political question under Yamasaki and Nelson v. Hawaiian Homes Commission. In Yamasaki, the Trustees of the Office of Hawaiian Affairs brought suit seeking 20% of the proceeds derived by the State as damages from an illegal sand mining operation taking place on ceded lands. 69 Haw. at 165-67, 737 P.2d at 452-54. Although HRS § 10-13.5 provided that "[t]wenty per cent of all funds derived from the public land trust . . . shall be expended by the [O]ffice of Hawaiian Affairs," the court held that the case presented a political question because no judicially discoverable and manageable standards existed for determining whether the damages amounted to "funds derived from the public land trust." Id. at 174, 737 P.2d at 458. Resolving the case would require an initial policy

determination that was typically reserved for nonjudicial discretion, the court held. Id. at 174-75, 737 P.2d at 458. In Nelson, the court held that determining what constitutes "sufficient funds" for three of the four purposes set forth in article XII, section 1 of the Hawai'i Constitution<sup>45</sup> was a political question not suited for judicial resolution. 127 Hawai'i at 188, 277 P.3d at 282. The court held that, even were it to declare that the amount of funds currently dedicated to three of the four purposes was insufficient, there were no discoverable standards in the text or constitutional history of the provision for a court to affirmatively determine the amount that would be sufficient. Id. at 206, 277 P.3d at 300.

These cited cases are plainly distinguishable. Unlike in Yamasaki and Nelson, this court's precedents interpreting the State's constitutional trust obligations and the widely developed common law of trusts provide many judicially

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<sup>45</sup> Article XII, section 1 of the Hawai'i Constitution provides in relevant part as follows:

The legislature shall make sufficient sums available for the following purposes: (1) development of home, agriculture, farm and ranch lots; (2) home, agriculture, aquaculture, farm and ranch loans; (3) rehabilitation projects to include, but not limited to, educational, economic, political, social and cultural processes by which the general welfare and conditions of native Hawaiians are thereby improved; (4) the administration and operating budget of the department of Hawaiian home lands; in furtherance of (1), (2), (3) and (4) herein, by appropriating the same in the manner provided by law.

discoverable and manageable standards for determining whether the State breached its trust duties. "It is well settled that the determination of whether or not a particular proposed action, by the trustee of a charitable trust, would constitute a breach of that trust, is a matter to be determined by the courts, as a part of their inherent jurisdiction." Kapiolani Park Pres. Soc. v. City & Cty. of Honolulu, 69 Haw. 569, 571, 751 P.2d 1022, 1024 (1988) (citing 15 Am.Jur.2d Charities § 135 (1976); 14 C.J.S. Charities § 49 (1939)).

The State points to the Ninth Circuit decision in Price v. Hawaii, in which the court held that as a matter of federal law, section 5(f) of the Admission Act<sup>46</sup> did not incorporate "all provisions of the common law of trusts" because to do so "would manacle the State as it attempted to deal with the vast quantity of land conveyed to it." 921 F.2d 950, 954-56 (9th Cir. 1990). While this court has approvingly quoted this passage when examining the State's obligations when administering a different, statutorily created trust, see

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<sup>46</sup> "Article XII, § 4 was added to the Hawaii Constitution to expressly recognize the trust purposes and trust beneficiaries of the § 5(f) trust, clarifying that the State's trust obligations extend beyond the Hawaiian Homes Land Trust." Pele Def. Fund, 73 Haw. at 603, 837 P.2d at 1263 (citing Stand. Comm. Rep. No. 59 in I Proceedings of the Constitutional Convention of Hawai'i of 1978, 643-44 (1980)). "In article XVI, [section] 7, referred to by article XII, [section] 4, the State affirmatively assumes the [section] 5(f) trust responsibilities." Id. at 586 n.2, 837 P.2d at 1254 n.2.

Awakuni v. Awana, 115 Hawai'i 126, 133, 165 P.3d 1027, 1034 (2007), this does not establish that the common law of trusts is wholly inapplicable. This is to say that a ruling that not all provisions of the common law apply does not equate to a ruling that none of the provisions of the common law apply. Indeed, the same year that the Ninth Circuit decided Price v. Hawaii, it relied in part on the common law of trusts when it held in a related case that the same plaintiff stated a claim against the Office of Hawaiian Affairs based on an alleged breach of its section 5(f) trust duties. See Price v. Akaka, 928 F.2d 824, 826-27 (9th Cir. 1990) ("In addition, allowing Price to enforce § 5(f) is consistent with the common law of trusts, in which one whose status as a beneficiary depends upon the discretion of the trustee nevertheless may sue to compel the trustee to abide by the terms of the trust." (citing Restatement (Second) of Trusts §§ 214(1) cmt. a, 391)).

Further, this court may draw upon its own case law interpreting the State's constitutional trust obligations for administrable standards, including instances in which we have explicitly stated that beneficiaries of the ceded land trust may bring actions to determine whether executive branch agencies have breached their constitutional trust duties. See, e.g., Pele Def. Fund, 73 Haw. 578, 605, 837 P.2d 1247, 1264 (1992) ("We find that the actions of state officials, acting in their

official capacities, should not be invulnerable to constitutional scrutiny. Article XII, § 4 imposes a fiduciary duty on Hawai'i's officials to hold ceded lands in accordance with the § 5(f) trust provisions, and the citizens of the state must have a means to mandate compliance."). The State's contention that this case presents a nonjusticiable political question is thus without merit.

**3. The Circuit Court Did Not Err in Concluding the State Breached Its Trust Duties**

**a. The Circuit Court Correctly Determined that the State has a Trust Duty To Reasonably Monitor the Trust Property, Including the United States' Compliance with the Terms of the Lease that Protect the Trust Property**

In its conclusions of law, the circuit court determined that the State's trust duties include using "reasonable efforts" to preserve trust property and to take a proactive role in the management and protection of the leased PTA land. The court ruled that one aspect of this duty is an obligation "to use reasonable efforts to ensure that Said Lease provisions that affect or impact the condition of ceded lands and all living things thereon are being followed and discharged." Further, the court concluded that the State has a duty to consider the cumulative effects of the United States' use of the land upon the condition of the land and upon "the indigenous plants, animals, and insects, as well as the invasion to Plaintiffs' cultural interests in the Subject Land."

Although the State blends its arguments regarding the nature of its legal trustee duties with those regarding the underlying justiciability of the case, the State appears to dispute these rulings and to argue that its trustee duties do not include an obligation to reasonably monitor the leased PTA land.

The State's duties with respect to the leased PTA land are derived in part from the properties' status as "ceded land"-which are lands that were held by the civil government or the monarchy of the Hawaiian Kingdom at the time of the 1893 overthrow of the Hawaiian monarchy. See Pele Def. Fund, 73 Haw. at 585, 837 P.2d at 1254. When the United States annexed Hawai'i by a joint resolution of Congress in 1898, real property that had been classified as government lands or crown lands was ceded to the federal government. Id. Recognizing their special character, the Joint Resolution of Annexation exempted these lands from the general laws of the United States that governed federal land. State ex rel. Kobayashi v. Zimring, 58 Haw. 106, 124, 566 P.2d 725, 736 (1977) (citing Joint Resolution of July 7, 1898, 30 Stat. 750). Instead, the resolution specified that these lands should be held in a "special trust" for the benefit of the people of Hawai'i. Id. When Hawai'i was admitted into the Union as a state in 1959, these ceded lands were transferred back to the newly established state, subject to the trust provisions set forth in section 5(f) of the Admission Act. Pele

Def. Fund, 73 Haw. at 585, 837 P.2d at 1254 (citing Hawaii Admission Act, Pub. L. No. 86-3, 73 Stat. 4, 6 (1959)). Article XII, section 4 was later added to the Hawai'i Constitution to formally recognize these responsibilities, specifying that the land "shall be held by the State as a public trust for native Hawaiians and the general public."<sup>47</sup> Id. at 586, 837 P.2d at 1254 (quoting Haw. Const. art. XII, § 4). At that same time, the framers and the people of Hawai'i adopted article XI, section 1, which created a public trust consisting of "all public natural resources" to be administered by the State for the benefit of the people.<sup>48</sup> Haw. Const. art. XI, § 1.

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<sup>47</sup> Article XII, section 4 of the Hawai'i Constitution provides in full as follows:

The lands granted to the State of Hawaii by Section 5(b) of the Admission Act and pursuant to Article XVI, Section 7, of the State Constitution, excluding therefrom lands defined as "available lands" by Section 203 of the Hawaiian Homes Commission Act, 1920, as amended, shall be held by the State as a public trust for native Hawaiians and the general public.

<sup>48</sup> Article XI, section 1 of the Hawai'i Constitution provides in full as follows:

For the benefit of present and future generations, the State and its political subdivisions shall conserve and protect Hawaii's natural beauty and all natural resources, including land, water, air, minerals and energy sources, and shall promote the development and utilization of these resources in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State.

All public natural resources are held in trust by the State for the benefit of the people.

As the State concedes, our case law and the common law of trusts make the State "subject to certain general trust duties, such as a general duty to preserve trust property." See, e.g., Zimring, 58 Haw. at 121, 566 P.2d at 735 ("Under public trust principles, the State as trustee has the duty to protect and maintain the trust property and regulate its use."); Kaho'ohanohano v. State, 114 Hawai'i 302, 325, 162 P.3d 696, 719 (2007) ("[It] is always the duty of a trustee to protect the trust property . . . ." (quoting Brenizer v. Supreme Council, Royal Arcanum, 53 S.E. 835, 838 (N.C. 1906))); In re Estate of Dwight, 67 Haw. 139, 146, 681 P.2d 563, 568 (1984) ("A trustee is under a duty to use the care and skill of a [person] of ordinary prudence to preserve the trust property." (citing Bishop v. Pittman, 33 Haw. 647, 654 (Haw. Terr. 1935))); Restatement (Second) of Trusts § 176 ("The trustee is under a duty to the beneficiary to use reasonable care and skill to preserve the trust property.").<sup>49</sup> As trustee, the State must

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<sup>49</sup> The State's duty of care is especially heightened in the context of ceded land held in trust for the benefit of native Hawaiians and the general public under article XII, section 4. This court has approvingly quoted the following in considering the ceded land trust:

The native Hawaiian people continue to be a unique and distinct people with their own language, social system, ancestral and national lands, customs, practices and institutions. The health and well-being of the native Hawaiian people is intrinsically tied to their deep feelings and attachment to the land. 'Aina, or land, is of crucial importance to the native Hawaiian people--to their

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take an active role in preserving trust property and may not passively allow it to fall into ruin. United States v. White Mt. Apache Tribe, 537 U.S. 465, 475 (2003) ("[E]lementary trust law, after all, confirms the commonsense assumption that a fiduciary actually administering trust property may not allow it to fall into ruin on [the fiduciary's] watch."). It is self-evident that an obligation to reasonably monitor trust property to ensure it is not harmed is a necessary component of this general duty, as is a duty to investigate upon being made aware of evidence of possible damage. This obligation inherently includes a duty to make reasonable efforts to monitor third-parties' compliance with the terms of agreements designed to protect trust property.

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culture, their religion, their economic self-sufficiency and their sense of personal and community well-being. 'Aina is a living and vital part of the native Hawaiian cosmology, and is irreplaceable. The natural elements—land, air, water, ocean—are interconnected and interdependent. To native Hawaiians, land is not a commodity; it is the foundation of their cultural and spiritual identity as Hawaiians. The 'aina is part of their 'ohana, and they care for it as they do for other members of their families. For them, the land and the natural environment is alive, respected, treasured, praised, and even worshiped.

Office of Hawaiian Affairs v. Hous. & Cmty. Dev. Corp. of Hawai'i, 121 Hawai'i 324, 333, 219 P.3d 1111, 1120 (2009) (alterations omitted) (quoting Office of Hawaiian Affairs v. Hous. & Cmty. Dev. Corp. of Hawai'i, 117 Hawai'i 174, 214, 177 P.3d 884, 924 (2008)).

This court held as much in Kelly v. 1250 Oceanside Partners, in which it considered the article XI, section 1 public trust duties of the Hawai'i Department of Health (DOH) with respect to a private development abutting coastal waters that the State had classified as "AA," meaning the waters were legally required to be kept as nearly as possible in their natural, pristine condition. 111 Hawai'i 205, 227-29, 140 P.3d 985, 1007-09 (2006). Although DOH had issued a permit to the developer that included provisions requiring the developer to abide by State regulations prohibiting the pollution of AA waters, this court held that including the provisions in the permit was not the end of DOH's duties as trustee. Id. Under public trust principles, we held, DOH was required to "not only issue permits after prescribed measures appear to be in compliance with state regulation, but also to ensure that the prescribed measures are actually being implemented after a thorough assessment of the possible adverse impacts the development would have on the State's natural resources." Id. at 231, 140 P.3d at 1011 (emphasis added). We thus effectively held that the State had a continuing public trust duty to reasonably monitor the developer to ensure it was complying with the permit. See id.

The present case presents close parallels to Oceanside Partners. As in Oceanside Partners, the State entered into an

agreement to allow a third party to use land for a particular purpose provided the third party complied with certain conditions intended to protect trust property. And as in Oceanside Partners, the State has a continuing trust duty to make reasonable efforts to ensure that the third party actually complies with those conditions. Thus, the State has a constitutional trust obligation to reasonably monitor the United States' compliance with the lease.

The State's attempts to distinguish Oceanside Partners are unavailing. As a threshold matter, the State is incorrect that no statute exists setting forth the State's obligations with respect to ensuring the United States' compliance with the lease; HRS § 171-7(5) provides that, "[e]xcept as provided by law the board of land and natural resources through the chairperson shall: . . . [e]nforce contracts respecting sales, leases, licenses, permits, or other disposition of public lands[.]" Moreover, this court has made clear that while overlap may occur, the State's constitutional public trust obligations exist independent of any statutory mandate and must be fulfilled regardless of whether they coincide with any other legal duty. Kauai Springs, Inc. v. Planning Comm'n of Kauai, 133 Hawai'i 141, 172, 324 P.3d 951, 982 (2014) ("As the public trust arises out of a constitutional mandate, the duty and authority of the state and its subdivisions to weigh competing

public and private uses on a case-by-case basis is independent of statutory duties and authorities created by the legislature.”); see also In re TMT, 143 Hawai‘i 379, 416, 431 P.3d 752, 789 (2018) (Pollack, J., concurring) (“Thus, although some congruence exists, BLNR’s and the University of Hawai‘i at Hilo’s public trust obligations are distinct from their obligations under [Hawai‘i Administrative Rules] § 13-5-30(c).”).

Additionally, the fact that Paragraph 9 of the lease only requires the United States to “make every reasonable effort to . . . remove or deactivate all live or blank ammunition upon completion of a training exercise or prior to entry by the said public, whichever is sooner” does not render the State powerless to respond to a breach of this provision as the State contends. It is well settled that an agreement by one party to use “reasonable” or “best efforts” generally creates an enforceable obligation as a matter of contract law. See, e.g., Sorroof Trading Dev. Co. v. GE Fuel Cell Sys., LLC, 842 F.Supp.2d 502, 511 (S.D.N.Y. 2012) (“New York courts use the term ‘reasonable efforts’ interchangeably with ‘best efforts’ . . . [and] a ‘best efforts’ clause imposes an obligation to act with good faith in light of one’s own capabilities.” (quoting Monex Fin. Serv. Ltd. v. Nova Info.

Sys., Inc., 657 F.Supp.2d 447, 454 (S.D.N.Y. 2009)); Allview Acres, Inc. v. Howard Inv. Corp., 182 A.2d 793, 796 (Md. 1962) ("What will constitute reasonable efforts under a contract expressly or impliedly calling for them is largely a question of fact in each particular case and entails a showing by the party required to make them of 'activity reasonably calculated to obtain the approval by action or expenditure not disproportionate in the circumstances.'" (quoting Stabile v. McCarthy, 145 N.E.2d 821, 824 (Mass. 1957))). And, while the lease may not contain a provision expressly allowing the State to terminate the lease, it does contain a dispute resolution mechanism in Paragraph 30. This mechanism appears to specifically contemplate the possibility of judicial enforcement, setting forth the conditions under which "a court of competent jurisdiction" may set aside the administrative factual findings and specifying that administrative decisions on questions of law shall not be final.

Moreover, the State errs by presuming that initiating a formal action to enforce the lease is the only possible response it could undertake to preserve and protect the PTA land if it discovers the United States is in noncompliance with the relevant provisions of the lease. A range of other options may be available that could satisfy its public trust obligations under the circumstances, including seeking to

obtain the United States' voluntary cooperation. As the Plaintiffs argued during the summary judgment hearing, how the State responds if reasonable monitoring and investigation lead to a discovery that the United States is not in compliance with the lease could potentially be a separate breach of the State's public trust duties, and this court need not speculate about what hypothetical future actions are reasonable in order to resolve this case.

The State is therefore wrong to suggest that reasonably monitoring the United States' compliance with the lease is a futile or pointless endeavor, and Oceanside Partners' holding that the State has an ongoing trust obligation to ensure third-party compliance with provisions designed to protect trust property is dispositive as to the existence of this obligation.

**b. The Circuit Court Did Not Err in Determining that the State Did Not Reasonably Monitor the Trust Property, Including the United States' Compliance with the Lease Terms that Protect Trust Property**

The State appears to argue next that, even if it does have a trust duty to reasonably monitor the United States' compliance with the lease, the circuit court erred in finding that it breached that duty by failing to conduct regular inspections of the PTA and by failing to investigate when it was made aware of evidence that the United States may have violated

provisions of the lease designed to protect the leased PTA land. "Typically, whether a fiduciary acted prudently--or in other words, as a reasonably prudent fiduciary--is a question of fact." Harley v. Minn. Mining & Mfg. Co., 42 F.Supp.2d 898, 907 (D. Minn. 1999); see also Knodle v. Waikiki Gateway Hotel, Inc., 69 Haw. 376, 385, 742 P.2d 377, 383 (1987) ("Whether there was a breach of duty or not, i.e. whether there was a failure on the defendant's part to exercise reasonable care, is a question for the trier of fact."). Accordingly, the circuit court's determination that the State did not reasonably monitor the United States' compliance with the lease terms must be upheld if it is not clearly erroneous.

The circuit court specifically found that the State had breached its trust duties by failing to, inter alia:

- (a) conduct regular reasonable (in terms of frequency and scope), periodic monitoring and inspection of the condition of subject public trust lands . . . ;
- (b) ensure that the terms of the lease that impact the condition of the leased lands or preserving Plaintiffs' cultural interests are being followed;
- (c) take prompt and appropriate follow up steps with military or other federal government officials when [the State] obtain[s] or [is] made aware of evidence or information that the lease may have been violated with respect to protecting the condition of the [PTA] leased lands[.<sup>50</sup>]

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<sup>50</sup> The circuit court additionally found that the State had breached its trust duties by failing to consistently make reasonably detailed and complete records of its actions to ensure compliance with the lease and by failing to initiate or assist with the appropriation of necessary funding to

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(Line breaks added.) In making this determination, the court relied on the fact that “[o]nly three [inspection] reports of any significance, for 1984, 1994, and 2014, were introduced into evidence.” Of these, “[t]he 1984 and 1994 reports were grossly inadequate and, in the case of the 1994 report, virtually nonexistent because of its lack of information pertaining to the 1994 inspection.” The court stated that it was not considering “other studies or site visits in connection with other business regarding the [PTA], such as environmental impact statements, [because] the court did not view these events as being undertaken as part of [the State’s] effort to discharge” its trust duties.

The State argues that the circuit court’s determination was clearly erroneous because it explicitly disregarded the State’s reliance on cooperative agreements, environmental reports, and archeological surveys to supervise

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undertake cleanup of the PTA. And the court held that the State would breach its trust duties if it were to extend or renew the lease “without first determining (in writing) that the terms of the existing lease have been satisfactorily fulfilled, particularly with respect to any lease provision that has an impact upon the condition of the” PTA. The State does not appear to challenge these conclusions on appeal, raising in their point of error regarding the breach only that “[t]he circuit court erred in finding that the State breached its trust duties by failing to perform adequate inspections of the Subject Land.” Nevertheless, as discussed below, the circuit court’s order regarding the securing of funding for cleanup was not suited to remedy the breach alleged by the Plaintiffs, and any holding regarding a future breach of the State’s trust duties is speculative.

the United States' use of the PTA.<sup>51</sup> Under the circumstances, the State contends, it was reasonable for the State to delegate its duties<sup>52</sup> and rely on its review of ancillary documents to monitor the PTA.

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<sup>51</sup> These documents included a copy of the United States training regulations and procedures from 1970, an environmental assessment for a training exercise in 1982, a 1984 archeological survey report, a 2002 Integrated Natural Resources Management Plan, a 2004 environmental impact statement, and a 2004-2010 "Programmatic Agreement" to provide additional protection to cultural sites.

<sup>52</sup> The State cites Restatement (Second) of Trusts § 171 for the proposition that a trustee has authority to cooperate, consult, and delegate to others tasks relating to trust administration when it is reasonable to do so. However, this is not an accurate description of Restatement (Second) of Trusts § 171, which is entitled "Duty Not to Delegate." (Emphasis added.) Under the approach taken by the First and Second Restatement, "[t]he trustee is under a duty to the beneficiary not to delegate to others the doing of acts which the trustee can reasonably be required personally to perform." Id.; Restatement (First) of Trusts § 171. However, "[t]he position of The American Law Institute was fundamentally changed in 1992," and Restatement (Third) of Trusts § 80, "Duty with Respect to Delegation," provides as follows:

(1) A trustee has a duty to perform the responsibilities of the trusteeship personally, except as a prudent person of comparable skill might delegate those responsibilities to others.

(2) In deciding whether, to whom, and in what manner to delegate fiduciary authority in the administration of a trust, and thereafter in supervising or monitoring agents, the trustee has a duty to exercise fiduciary discretion and to act as a prudent person of comparable skill would act in similar circumstances.

Restatement (Third) of Trusts § 80 and Reporter's Notes on § 80. Hawai'i courts have not explicitly adopted either the Restatement's original position or the new position set forth in the Third Restatement, though many older cases make clear that at least some of a trustee's duties are non-delegable. See Hartmann v. Bertelmann, 39 Haw. 619, 627 (Haw. Terr. 1952) ("[T]he primary responsibility of administering the trust is the trustee's, which he cannot delegate . . . ."); In re Banning's Estate, 9 Haw. 453, 463 (Haw. Rep. 1894) ("The duties and powers of trustees cannot be delegated.").

To the extent the State argues that it can delegate its public trust duty to reasonably monitor the PTA to protect and preserve trust property, this contention is squarely counter to our precedent indicating that the State may not delegate its constitutional duties to third-parties. See Ka Pa'akai O Ka'Aina v. Land Use Comm'n, 94 Hawai'i 31, 50-51, 7 P.3d 1068, 1087-88 (2000) (holding that the Land Use Commission improperly delegated its article XII, section 7 "responsibility for the preservation and protection of native Hawaiian rights" by authorizing a land reclassification on the promise that the developer would later create a program to accommodate native practitioners, as the "balancing of the developer's interests with the needs of native Hawaiians should have been performed, in the first instance, by the" State agency). The Ka Pa'akai court held that the Hawai'i Constitution places "an affirmative duty on the State and its agencies to preserve and protect traditional and customary native Hawaiian rights." Id. at 45, 7 P.3d at 1082 (emphasis added). At the core of this affirmative duty, as explained by the Ka Pa'akai court, is the responsibility of the State and its constituent agencies to act only after "independently considering the effect of their actions on Hawaiian traditions and practices." Id. at 46, 7 P.3d at 1083.

An affirmative duty of the State to protect and preserve constitutional rights is by its very nature non-delegable.

Even if such a delegation were not inherently invalid under the Hawai'i Constitution and permitted under our common law of trusts, that delegation would itself have to be reasonable under the prudent person standard, and the State would maintain a trust duty to reasonably supervise the agent in its performance of the monitoring. See supra note 52. It is self-evident that, as a general matter, it is not reasonable for a trustee to delegate the supervision of a lessee's compliance with the terms of a lease of trust property to the lessee. Cf. Halderman v. Pennhurst State Sch. & Hosp., 526 F. Supp. 428, 433 (E.D. Pa. 1981) ("The Commonwealth defendants appear to take the position that they should be able to monitor their own compliance with the Court's Orders. This would be somewhat akin to requesting the fox to guard the henhouse."). This is especially true given the circuit court's findings that the State was aware of the United States' history of failing to prevent environmental damage and clean up the remnants of military exercises on other State-owned land that it leases, including Mākua and the Waikāne Valley.

Nevertheless, it is generally not considered a breach of duty for a fiduciary to rely in part on reports prepared by a person as to matters that the fiduciary reasonably believes to

be within that person's expertise. Cf. HRS § 414D-155(b) (2) (Supp. 2018);<sup>53</sup> HRS § 414D-149(b) (2) (Supp. 2018).<sup>54</sup> Democratic principles and the checks and balances of government may arguably serve to make a governmental entity like the United States more accountable than the average lessee, and some of the documents authored on behalf of the United States included observations by independent third parties. If the State took appropriate action to verify the content, it may have reasonably concluded that the reports were reliable, and it could have validly considered them in the course of fulfilling its non-delegable trust duties. The circuit court therefore appears to have erred in disregarding the State's review of these ancillary documents in assessing whether the State had fulfilled its trust duty to reasonably monitor the PTA solely on the basis that these other reports were not "undertaken as part of [the State's] effort to discharge" its trust duties.

But the State's efforts were clearly inadequate in any event. The ancillary reports occurred very infrequently and in

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<sup>53</sup> HRS § 414D-155(b) (2) provides that, in the course of discharging the officer's duties, an officer of a nonprofit corporation may "rely on information, opinions, reports, or statements, including financial statements and other financial data, if prepared or presented by . . . [l]egal counsel, public accountants, or other persons as to matters the officer reasonably believes are within the person's professional or expert competence."

<sup>54</sup> HRS § 414D-149(b) (2) provides the same right to rely on information from professionals regarding matters within their expertise to directors of a non-profit corporation.

some cases cited evidence of damage and suggested that the United States may not have been in compliance with the lease. Indeed, the circuit court made specific findings regarding adverse environmental information included in two of the United States' reports. It noted that a 2010 archaeological and cultural monitoring report stated,

The Military needs to implement some kind of cleanup process as part of their training in PTA. Remnants of military trash is everywhere.

. . . .

Another major concern is the military debris that is left behind after training including [UXO] that is carelessly discarded. There is a need to have some type of cleanup plan implemented in the military training process.

(Emphasis omitted.) The court also found that a second archaeological and cultural monitoring report made four years later expressed many of the same concerns with specific regard to the United States' obligations under the lease:

Remnants of live fire training are present within the BAX, including stationary targets, junk cars, an old tank, crudely built rock shelters, and miscellaneous military rubbish. Spent ammunition is scattered across the landscape.

. . . .

This lease . . . requires the land to be restored to its original state when returned. This cannot occur if the land remains so littered with UXO that it is unsafe for anyone to go on the land. If this is the case, the land will be rendered unusable forever--one eighth of our island will become unavailable for use by any of our future generations. This is not acceptable nor could it be construed in any way to be in compliance with the Statehood compact.

Therefore, in order for the Army to meet the lease termination deadline, we strongly recommend the Army begin now to seek funding to initiate a serious cleanup effort

throughout the leased training areas bounding the impact areas: that major impact/UXO areas be subjected to thorough cleanup[.]

(Emphasis and some alterations in original.)<sup>55</sup> There was no indication the State ever followed up on these reports.

The circuit court found that the State breached its trust duties: by failing to conduct regular monitoring and inspections that were reasonable in frequency and scope to examine the condition of the leased PTA land; by failing to ensure that the terms of the lease that impact the condition of the leased PTA land were being followed; and by failing to take prompt and appropriate follow-up steps when it was made aware of evidence that the lease may have been violated with respect to protecting the condition of the leased PTA land. In light of the foregoing, the circuit court did not err in these findings.

#### **4. The Injunctive Relief Ordered by the Circuit Court Was Not Entirely Suited To Remedy the Demonstrated Breach**

The circuit court ordered the State to rectify its breach of its constitutional public trust duties by "promptly initiat[ing] and undertak[ing] affirmative activity to malama

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<sup>55</sup> Although the court did not make any specific findings regarding the other reports on which the State claims it relied, several of these also documented substantial environmental problems with the leased PTA land. For example, the 2002 Integrated Natural Resources Management Plan noted in a section setting forth the "Adverse Effects" of the "Military Mission on Natural Resources" that 22.9% of the ground cover in the surveyed area consisted of litter and "[t]here was virtually no evidence of maintenance activity."

'aina the" PTA. According to the court, this includes but is not limited to developing a written plan to care for the land. The court stated that the plan must include the following:

- regular, periodic on-site monitoring and inspection;
- the making of inspection reports that at minimum include a set of specified information, recommendations for appropriate action, and a nonbinding estimated timeline for when such action should be undertaken;
- a protocol of appropriate action that will be undertaken if the State discovers an "actual, apparent, or probable breach of any provision" of the lease by the United States, [UXO] or debris deposited during training exercises, any other foreign or non-natural item or contaminate connected with the lease, or any other condition adversely affecting the PTA;
- a protocol or other assurance to bring any nonconforming condition found that is likely caused by the United States under the lease into pre-lease condition on a reasonable timetable;
- a set of steps the State will take to obtain or assist in securing adequate funding for a comprehensive cleanup of the PTA; and
- a procedure to provide reasonable transparency to the Plaintiffs and the general public with regard to the State's progress in fulfilling the court's order.

The court also ordered the State to initiate HRS Chapter 91 rulemaking to establish a contested case procedure, if not already in existence, through which the Plaintiffs or any member of the general public with standing could challenge the State's decisions in the course of discharging its trust duty to care

for the leased PTA lands. Lastly, the court ordered that the State submit its plan to care for the land to the court for approval prior to executing it.

The form and scope of injunctions issued by Hawai'i courts are governed by HRCF Rule 65(d), which provides as follows:

Every order granting an injunction and every restraining order shall set forth the reasons for its issuance; shall be specific in terms; shall describe in reasonable detail, and not by reference to the complaint or other document, the act or acts sought to be restrained; and is binding only upon the parties to the action, their officers, agents, servants, employees, and attorneys, and upon those persons in active concert or participation with them who receive actual notice of the order by personal service or otherwise.

(Emphases added). We have stated that, when granting an injunction, a court should adopt relief and "mold[] its decree to satisfy the requirement[s] of th[e] particular case and thereby conserve the equities of all of the parties." Fleming v. Napili Kai, Ltd., 50 Haw. 66, 70, 430 P.2d 316, 319 (1967); see also Moffat v. Speidel, 2 Haw. App. 334, 335, 631 P.2d 1205, 1206 (1981) (holding that a court's failure to "mold its decree and the relief granted to satisfy the requirements of the case" violates HRCF Rule 65(d)). In interpreting the substantively identical federal rule, federal courts have consistently held that injunctions must "remedy only the specific harms shown by the plaintiffs." Price v. City of Stockton, 390 F.3d 1105, 1117 (9th Cir. 2004) (internal quotes and citations omitted). An

overbroad injunction is an abuse of discretion. Kohl v. Legoullan, 936 P.2d 514, 519 (Alaska 1997).

As discussed supra, the circuit court correctly determined that the State breached its constitutional trust duties by failing to reasonably monitor the PTA, including by failing to inspect the land to ensure the United States' compliance with the lease terms intended to protect and preserve trust property. Much of the circuit court's order was appropriately tailored to address this breach. By requiring the State to develop and execute a plan to conduct regular, periodic monitoring and inspection, the court's order ensured that the State would fulfill its trust duty to inform itself of the present condition of the leased PTA land and whether the United States was in compliance with the relevant terms of the lease so that it might take further action if needed to protect and preserve trust property.<sup>56</sup> By requiring these inspections to be

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<sup>56</sup> The circuit court's order included several specific details as to how the inspections should be carried out, including that

the monitoring should involve direct (in person) or indirect (via videographic or live remote viewing) observation of actual military training exercises (including live fire exercises of all types using live and/or explosive munitions, as well as the use of heavy vehicles or equipment above and upon the land) so that the monitors and/or inspectors can observe and appreciate the destructive effects, if any, of all such training and use of equipment[.]

While these measures may represent the quality of monitoring that the State should aspire to, we hold that the circuit court's order should be

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documented in detailed inspection reports, the order assures that the inspections are meaningful and allows trust beneficiaries to evaluate the State's response to what it discovers, enabling the bringing of a future action to enforce the State's trust duties if it fails to fulfill them. And by requiring the State to establish a procedure to ensure reasonable transparency to the Plaintiffs and general public regarding the State's progress with complying with the court's order, the order ensures its own effectiveness through public oversight.

The State contends that because the circuit court's order does not specify how often the periodic inspections must take place, it is impermissibly vague.<sup>57</sup> But it is not uncommon for courts to issue generally-stated orders requiring government agencies to submit plans to remedy constitutional violations and then evaluate the adequacy of the plans prior to their

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interpreted to require monitoring to the fullest extent consistent with the State's right of reasonable entry under the lease and no more.

<sup>57</sup> The State argues that this requirement ensures further litigation and indicates the relief does not "terminate the uncertainty or controversy giving rise to the proceeding" as required by HRS § 632-1. As stated, however, the Plaintiffs have a constitutional cause of action for prospective injunctive relief that exists independently of HRS § 632-1. See *supra* note 41.

implementation.<sup>58</sup> And this court has prescribed substantially more intensive monitoring to ensure specific compliance with terms of a broadly phrased order. See Konno v. Cty. of Hawai'i, 85 Hawai'i 61, 79, 937 P.2d 397, 415 (1997) ("We further instruct the circuit court to fashion injunctive relief requiring the landfill to be transferred from private operation to County operation as rapidly as possible but consistent with practical and public interest concerns. The circuit court shall also monitor the transition and may impose sanctions for non-compliance."); see also Tugaeff v. Tugaeff, 42 Haw. 455, 459 (Haw. Terr. 1958) ("A court of equity, having once assumed jurisdiction of a case, will retain the case to afford complete relief.") The State's objections are thus without merit. Under the circumstances of this case, the court did not abuse its discretion in ordering these remedies.

Many other portions of the circuit court's order, however, appear designed to remedy breaches of the State's trust duties that the Plaintiffs did not allege, including some that have not and may not occur. Foremost among these is the circuit

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<sup>58</sup> See, e.g., Sanchez v. McDaniel, 615 F.2d 1023, 1024 (5th Cir. 1980) ("The district court determined that the 1968 Kleberg County, Texas, apportionment plan violated the constitutional principle of one man, one vote. It directed the appellees to submit a proposed reapportionment plan by November 13, 1979."); Bd. of Pub. Instruction of Duval Cty. v. Braxton, 326 F.2d 616, 619-21 (5th Cir. 1964) (affirming court order requiring school board "to submit to the Court for its consideration a detailed and comprehensive plan" for ending school segregation).

court's statement that its order to care for the land "includes, but is not necessarily limited to" the measures specifically described therein. Courts have generally held that injunctions cannot be "so vague that they have no reasonably specific meaning." E. & J. Gallo Winery v. Gallo Cattle Co., 967 F.2d 1280, 1297 (9th Cir. 1992). "The aims of Rule 65(d) are to minimize the occasion for follow-on proceedings to the issuance of an injunction and to protect defendants from being held in contempt for failure to follow a directive that was a trap because of its ambiguity." United States v. Apex Oil Co., 579 F.3d 734, 739 (7th Cir. 2009). The circuit court's order did not give the State any notice of what other, unstated measures the State was required to comply with, and the order thus must be limited to those remedies it expressly described.

Additionally, a number of the remedies ordered by the circuit court were unconnected with the State's breach of its duty to monitor and inspect the leased PTA land. The court ordered the State to develop and potentially execute a protocol to obtain, or assist in securing, adequate funding for a comprehensive cleanup of the leased PTA land. And the circuit court ordered the State to initiate rulemaking to establish a contested case procedure through which the public could challenge the State's decisions in generally caring for the leased PTA land, if such a procedure did not already exist. Yet

the Plaintiffs in this case did not allege that the State had violated its trust duties by allowing or failing to rectify damage to the leased PTA land. Nor did the Plaintiffs contend that the State was constitutionally required to allow the public a voice in its general decisions regarding its care for the leased PTA land. Rather, the Plaintiffs argued only that the State breached its duty to inspect and monitor the leased PTA land. The State may very well have a public trust obligation to rectify damage to the leased PTA land, and the public may have some right to be heard on decisions that implicate the State's trust obligations with respect to the leased PTA land. But these are not the claims that were brought in this case, and the remedies ordered by the circuit court are thus not "tailored to eliminate only the specific harm alleged."<sup>59</sup> Quiksilver, Inc. v. Kymsta Corp., 360 F. App'x 886, 889 (9th Cir. 2009) (quoting E. & J. Gallo, 967 F.2d at 1297).

The circuit court also ordered a range of injunctive relief concerning the State's duties upon discovering damage or noncompliance during its inspections. The court required the State to set forth a binding plan of action that it would

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<sup>59</sup> Because these remedies are not tailored to address the specific breaches identified by the circuit court, we need not address the State's contention that the circuit court's cleanup orders violated sovereign immunity or that the order to initiate rulemaking impinged on the legislatures exclusive authority.

undertake if it were to discover unexploded ordnance, debris, or any other foreign or non-natural item or contaminate connected with the lease, as well as a plan to bring any "nonconforming" condition likely caused by the United States into pre-lease condition. And the circuit court ordered the State to set forth in a binding plan the actions that it would take upon specifically discovering a breach of the lease terms by the United States. However, as stated, the Plaintiffs have not alleged any breach of trustee duties related to the State's allowance or failure to rectify actual damage, and the Plaintiffs have adamantly maintained throughout these proceedings that they are not alleging that the United States has actually breached the lease. Rather, the Plaintiffs argued only that the State had a trust duty to "determine for itself whether the terms of the lease are being fulfilled."

As the Plaintiffs acknowledged during the hearing on their motion for summary judgment, how the State responds if it does later determine that the United States is not in compliance with the lease may result in a separate breach of the State's trust duties. The same holds true for any other damage to the leased PTA land the State may discover during its monitoring and inspections. Evaluating this hypothetical separate breach would require the circuit court to speculate about various questions that it cannot currently resolve, including whether the State's

monitoring will lead to the discovery of damage or noncompliance of lease terms by the United States, whether the United States will cure the damage or noncompliance on its own accord, and whether any further action by the State will be reasonable given the circumstances at that time. As this court has held, courts are not at liberty to grant relief based on "an event that [may] occur at some time in the future" because "there is no actual controversy in existence at this time." Kau v. City & Cty. of Honolulu, 104 Hawai'i 468, 472, 92 P.3d 477, 481 (2004). For the same reason, the circuit court's conclusion that the State would breach its trust duties if it were to renew the lease without first determining that the United States was in compliance with the existing lease was impermissibly speculative.

Thus, to the extent the circuit court made the provisions of its order that were not tailored to address the established breach binding upon the State, it strayed beyond its valid discretion in fashioning the injunction. Nevertheless, given the circumstances, including the length of time during which the State has failed to fulfill its trust duties and the State's claim to having near total discretion in its management of the public ceded land at issue in this case, it was not inappropriate for the circuit court to provide guidance as to how the State may fulfill its trust obligations in the future. See Beneficial Hawaii, Inc. v. Kida, 96 Hawai'i 289, 312, 30 P.3d

895, 918 (2001) ("Equity jurisprudence is not bound by strict rules of law, but can mold its decree 'to do justice[.]'" (quoting Bank of Hawaii v. Davis Radio Sales & Serv., Inc., 6 Haw. App. 469, 481, 727 P.2d 419, 427 (1986))). We therefore hold that the portions of the court's order directing the State to undertake specific actions that were not tailored to remedy the established breach of the State's trust duties are nonbinding recommendations to be considered by the State going forward in its management of the leased PTA lands.

#### VI. CONCLUSION

Based on the foregoing, the Plaintiffs' motions to dismiss the appeal respectively filed on July 27, 2018, and August 10, 2018, are denied. The circuit court's January 14, 2015 Order Denying Defendants' Motion for Judgment on the Pleadings, or in the Alternative, for Summary Judgment, Filed October 7, 2014 is affirmed. The circuit court's April 24, 2015 Order Denying Defendants' Motion to Add United States as a Party, or in the Alternative, for Dismissal Filed February 26, 2015 is also affirmed. This court rules as follows regarding the circuit court's April 3, 2018 Findings of Fact, Conclusion of Law and Order and the circuit court's April 24, 2018 Final Judgment:

- Denial of the State's motion to add the United States as a party: **Affirmed**

- Denial of the State's motion to dismiss the case for failing to join an indispensable party: **Affirmed**
- Denial of the State's motion for summary judgment: **Affirmed**
- Finding that the State had breached its trust duties: **Affirmed**
- Order requiring the State to undertake any activities not expressly stated therein: **Vacated**
- Order requiring the State to submit a plan that must include the following:
  - o Regular, periodic on-site monitoring and inspection of the leased PTA land and the United States' compliance with relevant lease provisions: **Affirmed**
  - o The making of detailed reports for each such monitoring or inspection event: **Affirmed**
  - o A protocol of appropriate action in the event the State discovers an actual or apparent breach of lease terms, any condition or situation adversely affecting the PTA, unexploded ordnance or debris, or any other foreign or non-natural item or contaminant: **Vacated with Instructions to Render as a Non-binding Recommendation**
  - o A plan or other assurance that any nonconforming condition likely caused by the United States be reasonably brought to pre-lease condition: **Vacated with Instructions to Render as a Non-binding Recommendation**
  - o A procedure to provide reasonable transparency to the Plaintiffs and the general public with respect to the requirements of the order: **Affirmed**
  - o If not already in existence, the institution of a contested case procedure adopted pursuant to HRS Chapter 91 for Plaintiffs or other members of the public to contest the State's decisions in

managing the PTA: **Vacated with Instructions to  
Render as a Non-binding Recommendation**

o The steps the State shall take to explore, evaluate, make application for, or secure adequate funding to conduct a comprehensive cleanup of the PTA: **Vacated with Instructions to  
Render as a Non-binding Recommendation**

- Order requiring the State to execute the plan once it is approved by the circuit court: **Affirmed**

This case is accordingly remanded to the circuit court for further proceedings consistent with this opinion.

Ewan C. Rayner  
(Daniel A. Morris, Clyde J.  
Wadsworth, and William J.  
Wynhoff with him on the briefs)  
for appellants

David Kimo Frankel  
(Summer L.H. Sylva with him on  
the briefs)  
for appellees

/s/ Mark E. Recktenwald

/s/ Paula A. Nakayama

/s/ Sabrina S. McKenna

/s/ Richard W. Pollack

/s/ Michael D. Wilson



FIRST CIRCUIT COURT  
STATE OF HAWAII  
FILED

2018 APR -3 AM 8:10

F. OTAKE  
CLERK

IN THE CIRCUIT COURT OF THE FIRST CIRCUIT

STATE OF HAWAII`I

CLARENCE CHING and MARY MAXINE ) CIVIL NO. 14-1-1085-04 GWBC  
KAHAULELIO, ) (Declaratory Judgment)  
)  
Plaintiffs, )  
vs. )  
) FINDINGS OF FACT, CONCLUSIONS  
SUZANNE CASE, in her official ) OF LAW AND ORDER; NOTICE OF  
capacity as Chairperson of the ) ENTRY  
Board of Land and Natural )  
Resources and state historic )  
preservation officer, BOARD OF )  
LAND AND NATURAL RESOURCES, ) Jury-waived trial:  
DEPARTMENT OF LAND AND NATURAL ) Dates: Sept. 29, 30, Oct. 1,  
RESOURCES, ) and 2, 2015  
) Time: 8:30 a.m.  
Defendants. ) Judge: Gary W.B. Chang  
)  
)

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FINDINGS OF FACT,  
CONCLUSIONS OF LAW AND ORDER

The above-entitled action came on for jury-waived trial before the Honorable Gary W.B. Chang, in his courtroom, on September 29, 30, October 1, and 2, 2015, plaintiffs CLARENCE

CHING and MARY MAXINE KAHAULELIO [hereinafter "**Plaintiffs**"] being represented by David Kimo Frankel, Esq., and Summer L.H. Sylva, Esq., and defendants SUZANNE CASE, BOARD OF LAND AND NATURAL RESOURCES, and DEPARTMENT OF LAND AND NATURAL RESOURCES [hereinafter collectively "**Defendants**"] being represented by Daniel A. Morris, Esq., Deputy Attorney General.

The court having heard the evidence and argument of counsel and good cause appearing therefor, the court hereby makes the following findings of fact and conclusions of law and order.

**FINDINGS OF FACT:**

**Parties:**

1. If any of these findings of fact are conclusions of law, then they shall be so construed.
2. Plaintiffs Clarence Ching and Mary Maxine Kahalelio are residents of the State of Hawaii. They have in the past and are currently actively engaged in cultural practices upon the Pohakuloa Training Area that is the subject of this action. Cultural practices may include, but are not necessarily limited to, (1) song, dance, and chant about Pohakuloa and its history, (2) walking upon the lands at Pohakuloa, feeling, showing, and experiencing reverence, respect, and celebration of said lands, (3) honoring the rich cultural history, significance of, and sacredness of Pohakuloa, Hualalai, Mauna Loa, and Mauna Kea,

(4) enjoying the native plants, animals, and insects that reside in Pohakuloa, and (5) recognizing what a precious cultural jewel Pohakuloa is to all of the people of Hawaii and their ancestors.

3. Defendant Suzanne Case is the chair of the Board of Land and Natural Resources and the State Historic Preservation Officer. She is sued in her official capacities. Suzanne Case's predecessor was William Aila Jr.

4. Defendant Board of Land and Natural Resources [hereinafter "**Board**"] is an administrative board that heads the official business of the Department of Land and Natural Resources for the State of Hawaii.

5. Defendant Department of Land and Natural Resources [hereinafter "**DLNR**"] is a cabinet level department of the executive branch of the State of Hawaii. The DLNR manages and administers the public lands for the State of Hawaii. The DLNR's mission is to enhance, protect, conserve, and manage Hawaii's unique and limited natural, cultural, and historic resources held in public trust for current and future generations of the people of, and visitors to, Hawaii nei in partnership with others from the public and private sectors.

**Introduction:**

6. This is a declaratory judgment action in which Plaintiffs seek a determination of Defendants' obligations, if any, to maintain and care for the leased lands under a government lease of public ceded lands at Pohakuloa on Hawaii Island. The lease that is involved in the instant action is State General Lease No. S-3849 [hereinafter "**Said Lease**"]. The State of Hawaii is the owner of these leased ceded lands.

7. Under Said Lease, the State of Hawaii (as lessor) leased three parcels of land in the Pohakuloa area on the Island of Hawaii to the United States of America ["**USA**"] to use for military training. Some of the training included live ammunition fire into a specific area referred to as the "Impact Area."

8. Defendant William Aila Jr., in his official capacity as the then-chair of DLNR, believes that military training activities have caused damage to public land, natural resources, and cultural sites in Hawaii.

9. According to the website maintained by the State's Kaho'olawe Island Reserve Commission at <http://kahoolawe.hawaii.gov/history.shtml>, the U.S. Navy did not clear all unexploded ordinance from 25% of the surface of the island and these areas remain unsafe.

10. Defendant Case's predecessor William Aila Jr. through the federal court's decision in *Malama Makua v. Rumsfeld*, 163 F. Supp. 2d 1202 (D. Haw. 2001) and subsequent decisions in that same case (*Malama Makua v. Gates*, 2008 U.S. Dist. LEXIS 19201 (D. Haw. Mar. 11, 2008) and *Malama Makua v. Gates*, 2009, U.S. Dist. LEXIS 5050 (D. Haw. Jan. 23, 2009)), is aware of the difficulties encountered in getting the federal military to clean up the unexploded ordinance in Makua.

11. Defendant William Aila Jr., in his official capacity as the then-chair of DLNR, is aware that the military has failed to clean up all the ordinance remaining after the military's use of the land it leased in Waikane Valley.

12. All of the information and knowledge acquired by and known to William Aila Jr. is imputed to Defendants.

13. Plaintiffs, in the past and currently, use the subject lands at Pohakuloa for Hawaiian cultural purposes.

14. The USA uses the Pohakuloa Impact Area portions of the leased lands for live fire training grounds. As a result, Plaintiffs allege that the amount of ordinance remnants, debris, and trash strewn about the subject leased lands are not insignificant.

15. Plaintiffs have filed this lawsuit to determine whether the Defendants have any obligation to maintain and/or clear the leased lands of said ordinance remnants and trash or otherwise cause the same to be accomplished.

16. It should be noted that lessee USA under Said Lease is not a party to this action since Plaintiffs are not seeking any relief directly against lessee USA.

**The Lease:**

17. In August 1964, the State of Hawaii, represented by the Board, entered into a sixty-five (65) year lease with the USA, which lease is designated as State General Lease No. S-3849 (also referred to herein as "Said Lease"), to use three parcels of land consisting of 22,971 acres of land at Pohakuloa on Hawaii Island for military training purposes for the total cost of one dollar (\$1.00) for the entire 65 year lease period ending on August 16, 2029. [Hereinafter "**Subject Lands**".]

18. The lease contained the following provisions of particular significance herein:

9. In recognition of public use of the demised premises, the [USA] shall make every reasonable effort to . . . remove or deactivate all live or blank ammunition upon completion of a training exercise or prior to entry by the said public, whichever is sooner.

. . . .

14. In recognition of the limited amount of land available for public use, of the importance of forest reserves and watersheds in Hawaii, and of the necessity for preventing or controlling erosion, the [USA] hereby agrees that, commensurate with training activities, it will take reasonable action during its use of the premises herein demised to prevent unnecessary damage to or destruction of vegetation, wildlife and forest cover, geological features and related natural resources and improvements constructed by the Lessor, help preserve the natural beauty of the premises, avoid pollution or contamination of all ground and surface waters and remove or bury all trash, garbage and other waste materials resulting from [USA] use of the said premises.

. . . .

18. The Lessor hereby agrees that, commensurate with the public use of the premises herein demised, it will take reasonable action during the use of the said premises by the general public, to remove or bury trash, garbage and other waste materials resulting from use of the said premises by the general public.

19. Subject to obtaining advance clearance from the plans and training office of the [USA's] controlling agency . . . officials and employees of the Lessor shall have the right to enter upon the demised premises at all reasonable times to conduct any operations that will not unduly interfere with activities of the [USA] under the terms of this lease; provided, however, that such advance clearance shall not be unreasonably withheld.

19. The lease is silent with respect to any extension of the lease term. Therefore, at this time, the lease terminates by its express terms on August 16, 2029, the end of the 65 year lease period. However, nothing in the lease prohibits the parties thereto from extending the lease term by mutual agreement.

20. The Subject Lands are public, ceded lands, and are

owned by the State of Hawaii. As such, the Subject Lands are part of the public lands trust. Public trust lands are state-owned lands that are held for the use and benefit of the people in general of the State of Hawaii. The State of Hawaii is the trustee of these public lands in the public trust. The trustee of the public lands trust has the highest duty to preserve and maintain the trust lands. This duty is broadly coined in the concept of "malama `aina"--to care for the land.

21. The USA has allowed for inspections of the Subject Lands. However, only a minimal number of inspections by the State of the Subject Lands have occurred to date.

22. In 1964, the lawyers representing the Board during the negotiation of Said Lease with the USA expressed a desire to have the USA include in Said Lease a provision that required the USA to restore the leased premises upon termination of the lease. Ultimately, the lease did not include such a provision. At best, the USA agreed to include paragraphs 9, 14, 18, and 19 in Said Lease.

23. Paragraph 9 obligates the USA to make every reasonable effort to remove or deactivate all live or blank ammunition upon completion of a training exercise or prior to entry by the public.

24. Paragraph 14 obligates the USA to take reasonable action to avoid pollution or contamination of the lease premises

and to remove or bury trash, garbage, and other waste materials resulting from the USA's use of the leased premises.

25. Paragraphs 18 and 19 provides for various rights of entry by the Defendants.

26. Apparently, the negotiations between the State and the USA regarding the Pohakuloa lands were very broad, covering the full range of options, including the possible transfer to the federal government of title to the subject Pohakuloa leased lands. The State of Hawaii eventually elected not to deed title to the Subject Lands to the federal government. Instead, the State chose to enter into a 65 year lease for the Subject Lands. The State thought that a lease, instead of a deed, offered the State greater control over the condition of the land because a lease protects the public interest in the Subject Lands since the State will get the land back after the lease expires. J.M. Souza, Jr., stated this in his March 9, 1965 letter to James J. Detor, the Head of the Land Management Division of DLNR.

27. The State of Hawaii never abandoned its interest in protecting and preserving the condition of the Subject Lands. On or before April 4, 1973, in connection with a maneuver permit applied for by the federal military, Tom K. Tagawa, a State Forester from DLNR, recommended that, as a condition to the issuance of such a permit to the military, the State demand that the military "clean up debris." By letter dated June 28, 1974,

James J. Detor, a Programs Administrator for DLNR, wrote to defendant BLNR and recommended that the BLNR grant the maneuver permit, subject to certain conditions. One of the conditions is to clean up all materials the military deposits upon the land:

The [military] shall, within a reasonable time after completion of the maneuvers, remove all equipment or other materials placed by it in the permit area, and shall remove, bury or otherwise satisfactorily dispose of all trash, garbage, etc., resulting from the permitted uses . . . .

**Condition of Subject Lands:**

28. The USA has in the past, and currently does, engage in military training exercises upon the Subject Lands. This area is generally referred to as the Pohakuloa Training Area ["PTA"]. The training includes live fire training that uses live and blank ammunition as well as live explosive munitions.

29. Cultural monitors, who spent extensive time on State lands at the PTA, observed military debris, including unexploded ordnance and spent shell casings, scattered across the Subject Lands.

30. Defendants are aware that there is a possibility that unexploded ordinance (UXO) and munitions and explosives of concern (MEC) are present on the state-owned ceded PTA Subject Lands.

31. A November 2010 report was prepared by the United States Army Corps of Engineers, and is entitled "Final-  
Archaeological and Cultural Monitoring of Construction of Battle  
Area Complex (BAX) for Stryker Brigade Combat Team (SBCT),  
Pohakuloa Training Area, Hawai'i Island, Hawai'i." It addressed  
the conditions upon the PTA and some of the cultural concerns.  
This report (exhibit 27) included the following observations and  
recommendation from cultural monitors:

## 6.2 History

Information regarding song, dance, and chant passed down through many generations will express the most profound understanding of such a wonderful place. This is a profound understanding that gives life, that gives respect, and that builds relationships with what we know as our environment, our elements, and our God.

In oral traditions of the Hawaiians, the high peaks are considered to be a place for the Gods. These peaks and places are very sacred. Mauna Kea, Mauna Loa, and Hualalai are the peaks that border Pohakuloa Training Area (PTA).

From the ice age until today, many people, native vegetation and animals have lived in PTA. It has also been recorded and written that many functions and events occurred in PTA. The native ua`u bird, feral pigs and ungulate ["hoofed"] animals became the permanent residents. High concentrations of native plants and insects live here. At one time, it was the residency of a great leader and chief `Umi and his army.

Exh. 27 at 67.

### 6.3.1 Introduction

The perspective and understanding of the land to the Hawaiian People is the base of our existence,

resources, generally food and the resources are all connected. The `aina (land) means plentiful "food." To develop unconsciously, to destroy and to misuse the land in ways that are not good for the land is not appreciated. The land is a God, an entity of energy that has life and gives life.

The questions are asked: "Why do they have to train here in Hawaii" and "how is the training done?" As we experienced on Kaho`olawe Island, Makua Valley, and other places in Hawaii, impacts of the military are critical. The land will never be the same. Some areas will never be used again, and all areas are considered hazardous.

Id. at 68.

#### 6.3.2 Impacts

The Military has been operating for half a century at Pohakuloa. Their impacts are damaging in many ways. Training of military causes displacement of native vegetation and destroying of land that will never be safe for future generations.

Ungulates have overpopulated the land (figure 57). The lack of control of ungulates leads to an imbalance of the land, animals, and people. The result of an imbalance causes deficiency of, or a lack of, a system that doesn't work for the community of all plants, animals and people.

Id.

#### 6.3.3 Archaeology Sites

There are varieties of sites in PTA BAX that have been protected and cared for with temporary fencing. Policies and procedures need to be developed and/or reviewed to be in accordance with cultural input. Proper cultural procedures and policies in place will provide a sense of integrity and respect for the

archaeological sites and the valuable flora and fauna for the life of the living.

Id.

### 6.3.5 Recommendations

. . . .

As cultural monitors we would like to see military impacts stopped at Pohakuloa as well as other places in Hawaii. Thoughts of training with environment friendly munitions might be something to explore.

Reforestation and ungulate control projects are strongly suggested to remedy damages already done to the land in BAX area. The Military needs to implement some kind of cleanup process as part of their training in PTA. Remnants of military trash is everywhere.

Id. at 72 (emphasis added).

### 6.3.6 Expressions

. . . .

My name is Leina`ala Benson. My husband and I raised our children in Honaunau . . . . Being of Hawaiian ancestry and having a "war veteran" father, allows me to have a view of this project on both sides of the spectrum. I understand the need to have our young men and women trained for service. I also feel the need to conserve what is left of our native resources.

. . . .

I can't even begin to explain the dire need for mass ungulate control. In the past 8 months I have observed the increase of this population by at least one third. They are destroying our precious native ecosystem. Immediate attention to this matter is imperative to the restoration in order for native plants that inhabit these beautiful mountains to have their chance to thrive again. Another major concern is the military debris that is left behind after training including unexploded ordinance that is carelessly discarded. There is a need to have some type of cleanup plan implemented in the military training process.

Id. at 73 (emphasis added).

32. Four (4) years later, a September 2014 report entitled "Archaeological and Cultural Monitoring Report for Activities Related to Construction of the Proposed Battle Area Complex (BAX) for the Stryker Brigade Combat Team (SBCT), U.S. Army Pohakuloa Training Area (PTA), Island of Hawai'i, Hawai'i TMK: (3) 4-4-016:005" [hereinafter this report is referred to herein as "**2014 Cultural Monitoring Report**" or "**2014 CMR**"] was prepared for the United States Army Corps of Engineers, Honolulu District, by Cultural Surveys Hawai'i, Inc. [hereinafter "**CSH**"]. This report was prepared after CSH completed monitoring fieldwork in connection with the proposed construction of a Battle Area Complex (BAX) within the PTA. Some relevant findings or recommendations in the 2014 CMR includes the following.

Remnants of live fire training are present within the BAX, including stationary targets, junk cars, an old tank, crudely built rock shelters, and miscellaneous military rubbish. Spent ammunition is scattered across the landscape.

Exhibit 38 at 5.

While many people have expressed that they generally support the training of our troops, there is ongoing concern that such training should necessarily require destruction of the land.

The impact of the live fire training extends beyond the limits of the Impact Area. For example, materials such as white phosphorous can travel well beyond the projectile impact site, and UXO [unexploded ordinance] can be transported unintentionally from one

area to another. . . . This lease . . . requires the land to be restored to its original state when returned. This cannot occur if the land remains so littered with UXO that it is unsafe for anyone to go on the land. If this is the case, the land will be rendered unusable forever—one eighth of our island will become unavailable for use by any of our future generations. This is not acceptable nor could it be construed in any way to be in compliance with the Statehood compact.

Therefore, in order for the Army to meet the lease termination deadline, **we strongly recommend** the Army begin now to seek funding to initiate a serious cleanup effort throughout the leased training areas bounding the impact areas: that major impact/UXO areas be subjected to thorough cleanup . . . .

Id. at 75-76 (emphasis added) (bold in original).

33. The recommendation to begin seeking funding to initiate serious clean up is of particular significance because paragraph 32 of the Said Lease states: "The Lessor's compliance with any obligations which may be placed on it by this lease shall be subject to the availability of funds and/or personnel." Therefore, the foresight to consider the availability of federal funds to undertake any clean up activity is a significant consideration in any effort or plan to clear the Subject Lands of the military training remnants and trash.

34. In addition to the Subject Lands, there are lands that appear to have been used as a former bazooka range Munitions Response Site [hereinafter "**MRS**"] from 1950 through the mid-1960s—this use predates the inception of the Said Lease.

35. In a draft document entitled "Action Memorandum for the Time Critical Removal Action," that was prepared in March 2015 by the United States Army Garrison at Wheeler Army Airfield on Schofield Barracks in Wahiawa, Oahu, Hawaii, it was reported that the Former Bazooka Range MRS is located at the Pohakuloa Training Area. As of the March 2015 draft report, the bazooka range was designated as a non-operational range and is off limits to training units. However, notwithstanding this "non-operational" status, the bazooka range was apparently used as a military maneuver area through the early 2000s. During a site inspection of the bazooka range area that was jointly conducted by DLNR and the Army in 2014, the area was found to be "heavily contaminated on the surface with material potentially presenting an explosive hazard (MPPEH) and munition debris (MD)." (Emphasis added.) A subsequent inspection by two military explosive ordinance disposal units found that the following types of ordinance were observed to be present:

1. M29A2 training rounds with dummy M405 fuse,
2. Practice 81mm mortars, and
3. High explosive anti-tank (HEAT) rifle grenades.

Other suspected fired ordinance at the bazooka range area also included:

1. M28A2 bazooka rounds with M404 fuse, and
2. M30 white phosphorus (WP) bazooka rounds.

The Army noted that the sheer densities and quantities of ordinance that are present on the ground at the former bazooka range area "coupled with the accessibility to the public make for the potential for significant danger to public health and welfare." The estimated cost of remediating the danger as of March 2015 was \$2,353,000. Of course, costs would have significantly increased as of the date of the instant decision. The Army recommended that the removal of ordinance danger because of the significant possibility that ordinance exists at the former bazooka range area that "presents an imminent and substantial endangerment to public health, or welfare, or the environment."

36. The Defendants are aware that military training activities on the Subject Lands pose a significant and substantial risk of harm or damage to Said Lands, and persons who may foreseeably come upon Said Lands, which includes harm or damage to the cultural use of the Subject Lands.

37. In a March 13, 2013 memorandum from Steve Bergfeld (Acting Hawaii Branch Manager for DLNR) to Kevin Moore (State Lands Assistant Administrator), DLNR stated: "PTA should sweep the lands North of the saddle road for UXO and remove any UXO found at their expense to make the area safe for the public."

38. A true and correct copy of the Final Environmental Impact Statement for Construction and Operation of an Infantry

Platoon Battle Course at Pohakuloa Training Area (March 2013)

[hereinafter "**Final EIS**"] can be found at

[http://www.garrison.hawaii.army.mil/pta Peis/documents.htm](http://www.garrison.hawaii.army.mil/pta%20Peis/documents.htm).

39. Page ES-8 of the Final EIS states: "Decades of using PTA as a training area have introduced a significant risk of encountering MEC/UXO. MEC/UXO is known to exist in the impact area and is expected to be encountered during range construction activities; but there is also a medium risk of finding MEC/UXO outside the impact area."

40. The types of weapons that have been used at Pohakuloa Training Area may include small arms, grenades, machine guns, shotguns, antitank weapons, howitzers, mortars, field artillery, air defense artillery, explosives, rockets, missiles, and/or weapons using ammunition containing depleted uranium.

41. Page 3-64 of the Final EIS states: "Past and current activities at PTA have resulted in contamination of soil by explosives and other chemicals."

42. The Army has applied to the Nuclear Regulatory Commission for a license to possess Davy Crockett M101 spotting round depleted uranium on ranges at the Pohakuloa Training Area.

43. Defendants are aware that military training activities on the Subject Lands that deposit live or dummy ordinance or debris upon the Subject Lands pose a risk to public health,

safety, and welfare, as well as to the Plaintiffs' cultural interests in the Subject Lands.

44. Defendants are aware of challenges in securing action (not just representations and assurances) from the military to fully comply with provisions of Said Lease that are intended to (1) maintain the condition of the Subject Lands or (2) enable Defendants to malama `aina the Subject Lands.

45. Proper stewardship of the Subject Lands pursuant to Defendants' public land trust duties include, but are not necessarily limited to, periodic and meaningful inspection and monitoring of the military training activities and their aftermath upon the Subject Lands and reasonably accurate documentation of such activities and the effects of such activities to achieve transparency of Defendants' inspection and monitoring actions.

46. Inspections inform and educate Defendants about the nature and extent of the activities taking place in the PTA and the effects of such activities upon the Subject Lands and enable the Defendants to effect compliance with lease terms and safeguard the condition and integrity of state lands. Inspections must occur with a reasonable frequency that will enable Defendants to meet their obligations to malama `aina the Subject Lands.

**INSPECTION OF SUBJECT LANDS:**

47. An inspection of the Subject Lands by Defendants was conducted on December 19, 1984. The "Inspection Report for General Leases" for that 1984 inspection stated the following:

FINDINGS

1. Property being used for Military training purposes per lease terms.

INSPECTED BY: /s/ Samuel Lee

Exhibit 13.

48. An inspection of the Subject Lands appears to have been conducted ten years later in 1994. The "Inspection Report for General Leases" for that 1994 inspection stated the following:

FINDINGS

(Blank)

INSPECTED BY: (Blank)

Exhibit 14.

49. The complaint was filed in the instant lawsuit on April 28, 2014. The first amended complaint was filed herein on May 12, 2014.

50. Defendants removed the instant case to federal court on May 29, 2014. The federal court remanded the case back to state court on August 22, 2014.

51. Defendants filed their answer to first amended complaint herein on September 19, 2014.

52. Then, Defendants caused an inspection of the Subject Lands to be conducted on December 23, 2014. Unlike the Inspection Reports from 1984 and 1994, the Inspection Report for the December 2014 inspection was not as sparse as compared to those from 1984 and 1994. The 2014 Inspection Report (Exhibit 16) contained much more information. After noting that the condition of the leased premises were "not satisfactory," the Report proceeded to quote, verbatim, the text of paragraphs 9 and 14 of the Said Lease. Then, the Report continued to posit a number of remarks that can be summarized as follows (language in quotation marks are taken, verbatim, directly from the Report):

- a. [Verbatim from Report:] "Army personnel explained that areas used for combat training are regularly inspected and cleaned up after the exercise is complete. It was speculated that [the area located adjacent to the Daniel K. Inouye Highway fka Saddle Road] may have been used for night training and the material found may have been overlooked and will be remediated."

Court's findings (not in report): The court finds that this comment by the Army personnel is contradicted by other entries in this Report

(which are noted hereinbelow). Contrary to the representation that the Army "regularly inspected and cleaned up after the exercise is complete," the Report appears to indicate that a significant amount of debris and ammunition remnants remain present upon the Subject Lands. This obviously calls into question the veracity and reliability of the Army's representation in the Report that the areas of military exercises and training are "regularly" cleaned up.

- b. [Verbatim from Report:] "The first location was a former bazooka target range. . . . spent shell casings found at the target site. . . . The debris area was extensive and the army indicated it will take several months to properly restore the area to a condition acceptable to DLNR."

Court's findings (not in report): This is an example of a representation in the Report that is inconsistent with the representation that the Army "regularly" cleans up an area after an exercise is completed. Obviously, these shell casings were not cleaned up after the training exercise was completed.

- c. [Verbatim from Report:] "Another location brought to staff's attention was a shooting range where many derelict vehicles were brought in for live fire targets. Staff was told this area will also be cleaned up with the removal and proper disposal of the vehicles."

Court's findings (not in report): This is another example of a representation in the Report that is inconsistent with the representation that the Army "regularly" cleaned up an area after an exercise is completed. Obviously, these derelict vehicles were not cleaned up after the training exercise was completed.

- d. [Verbatim from Report:] "A third location brought to staff's attention was an area used for the dumping of spent artillery shells. This area will also be cleared of all ordinance debris and miscellaneous material."

Court's findings (not in report): This is another example of a representation in the Report that is inconsistent with the representation that the Army "regularly" cleaned up an area after an exercise is completed. Obviously, these spent artillery shells were not cleaned up after the training exercise was completed.

53. DLNR has not met its informal goal of inspecting the Subject Lands once every two (2) years. Additionally, DLNR has also not provided adequate documentation of any inspection efforts so as to provide rudimentary transparency into the DLNR's efforts to inspect the Subject Lands so that it can malama `aina.

54. Defendants do not appear to be well-informed of the state of military training exercises and its effects upon the Subject Lands. The lack of regular, meaningful inspection and monitoring of the Subject Lands by Defendants have contributed toward Defendants' failure to malama `aina the Subject Lands under the Said Lease.

55. Defendants have failed to execute their rights and obligations under paragraphs 9, 14, 18, and 19 of the Said Lease, to the extent that those paragraphs enable Defendants to malama `aina the Subject Lands.

56. As of the date the instant lawsuit was filed (April 28, 2014), Defendants have failed to preserve and protect the Subject Lands as required by their duties as a trustee of the public land trust. Defendants have failed to malama `aina the Subject Lands under the Said Lease. These failures constitute a breach of Defendants' trust duties that apply to the Subject Lands. This failure has harmed, impaired, diminished, or otherwise adversely affected Plaintiffs' cultural interests in the Subject Lands. Plaintiffs have been harmed by said failures of the Defendants.

57. Plaintiff Clarence Ching has hiked through various areas within the Subject Lands. One of his cultural practices is to malama `aina the Subject Lands to the extent that he is able. (The court notes that plaintiff Ching's ability to malama

`aina the Subject Lands is very different from the duty of Defendants to malama `aina those lands, by virtue of the fact that plaintiff Ching is not a trustee of the public land trust of which the Subject Lands are a part. Plaintiff Ching's interest in providing malama `aina to the Subject Lands is to the extent that he is an individual cultural practitioner, not the State trustee.) The `aina is of crucial importance to him, his culture, and to his well-being. The `aina is irreplaceable to him. The `aina is the foundation of his cultural and spiritual identity as a Hawaiian. It is part of his ohana. The land and the natural environment is alive, respected, and treasured. Hawaii's state motto embodies a recognition of the significance of `aina to the people of Hawaii.

58. Plaintiff Clarence Ching has a deep and abiding personal and ancestral attachment to the Subject Lands. He is part Hawaiian by his ethnicity and lineage, who engages in traditional and customary practices within and around the Subject Lands. Mr. Ching is a descendant of chiefs, who at one time exercised dominion over Pohakuloa, walking the same `aina over which he, Mr. Ching, now walks and seeks protection.

59. While hiking upon the Subject Lands, plaintiff Clarence Ching has come across spent rifle casings, machine gun cartridge links, unfired blanks, and other military ammunition and other discarded debris. His ability to enjoy the beauty,

majesty, and aura of the Subject Lands without fear or concern for risks to his health, to engage in the cultural practices of his ancestors, and to ensure the long-term health of the `aina have been impaired by the littering of and damage to the landscape, vegetation, animals, and insects of the Subject Lands while under Defendants' watch.

60. Plaintiff Mary Maxine Kahaulelio is a native Hawaiian with at least fifty percent (50%) Hawaiian ancestry by her ethnicity and lineage. She lives in Waimea on Hawaii Island on Hawaiian Home Lands in a community not far from the Subject Lands. Plaintiff Kahaulelio has participated in Hawaiian cultural ceremonies at Pohakuloa. The `aina is central to her existence. Part of her kuleana is to be a steward of the land. It hurts Ms. Kahaulelio to see Defendants' failure to discharge their duties as a trustee of the public land trust for the Subject Lands. This results in the desecration of the Subject Lands. Her ability to enjoy the beauty, majesty, and aura of Pohakuloa, engage in the cultural practices of her ancestors on the Subject Lands, and ensure the long-term health of the `aina has been impaired by the littering of and damage to the landscape of the Subject Lands while under the Defendants' watch.

**CONCLUSIONS OF LAW**

1. If any of these conclusions of law are findings of fact, then they shall be so construed.

2. The Plaintiffs have standing to enforce their breach of trust claim.

3. Plaintiffs are asserting a state-law breach of land trust claim against Defendants for failing to carry out its duty as a state land trust trustee with respect to the Pohakuloa lands.

4. Lessee United States of America is not a party to this action because the state-law land trust claim does not assert any claim for relief against the United States of America or otherwise necessarily raise any federal or breach of contract issues against it. The Plaintiffs are only asking that the Defendants fulfill their obligations to Plaintiffs to satisfy their trust duties.

5. The United States of America is not an indispensable party to the resolution of this case.

6. All public land natural resources are held in trust by the State for the benefit of the people of the State of Hawaii.

7. The Subject Lands granted to the State of Hawaii by Section 5(b) of the Admission Act and pursuant to Article XVI, Section 7, of the State Constitution, excluding therefrom lands defined as "available lands" by Section 203 of the Hawaiian

Homes Commission Act, 1920, as amended, shall be, and are held by the State as a public trust for native Hawaiians and the general public of the State of Hawaii.

8. Ceded lands are held by the State as a public trust for Plaintiffs and others. The Subject Lands are ceded lands of the State.

9. Defendants are trustees of State ceded lands for the benefit of the general public of the State of Hawaii.

10. As trustees, Defendants owe a high standard of care when managing public trust ceded lands.

11. As trustees, Defendants owe an undivided duty of loyalty to the people of the State of Hawaii and to the Plaintiffs as beneficiaries of the ceded lands trust.

12. As trustees, Defendants' trust duties include, but are not necessarily limited to, the Defendants' reasonable efforts to achieve the following: (a) preserve and protect trust property and (b) take a reasonable, proactive role in the management and protection of trust property. In exercising these duties, Defendants have a duty to consider the cumulative effects of current usage of the Pohakuloa lands for military training and the use of live ammunition and the running of heavy military vehicles and other equipment upon the condition of the land and upon the indigenous plants, animals, and insects, as

well as the invasion to Plaintiffs' cultural interests in the Subject Lands.

13. As trustees of the public ceded lands trust, these duties and obligations described hereinabove, that are owed by Defendants, are collectively referred to as being included as part of Defendants' duty to malama `aina the Subject Lands. The Defendants' duty to malama `aina the Subject Lands is not an absolute duty or a guarantee. Instead, the Defendants have an obligation as trustees to use their best reasonable efforts to discharge their duties and obligations. If factors beyond their control (such as congressional and presidential funding approval) prevent Defendants from achieving their plan objectives under the law, that must be considered in determining whether Defendants, or any of them, have discharged or breached their trustee duties under the law. Any determination regarding whether Defendants met their obligations as trustees of a public land trust must necessarily be a qualitative determination made upon a determination of all relevant factors, not just a mechanical formulation. Any such determination is not a decision that is free from difficulty. Sincerity and genuineness of good faith actions are factors to be considered, as well as actions, obstacles, and considerations that are shown to be pretextual. There was no evidence admitted in this trial to indicate that lack of congressional or presidential

appropriation or approval is preventing anyone from undertaking any action to remove remnants of military training or other trash from the Subject Lands.

14. As trustees, the Defendants are obligated to use reasonable efforts to ensure that Said Lease provisions that affect or impact the condition of ceded lands and all living things thereon are being followed and discharged. The State's obligations and duties under Said Lease augment Defendants' trust duties to malama `aina. This duty to malama `aina includes both the duty to determine whether a lessee is in compliance with the terms of its lease (through monitoring and inspections) and to follow up to effect compliance once there is evidence that provisions of the lease are not being followed.

15. The BLNR, through its chairperson, is also obligated to enforce leases that constitute a disposition of public lands under HRS § 171-7(5): "Except as otherwise provide by law the [BLNR] through the chairperson shall: . . . (5) Enforce contracts respecting . . . leases . . . or other disposition of public lands . . . ."

16. Defendants are obligated to enforce provisions of Said Lease with the United States of America for the subject Pohakuloa lands, particularly as any such provision implicated Defendants' duty to malama `aina those lands.

17. As part of their trust duties herein, Defendants were obligated to enforce paragraphs 9, 14, 18, and 19 of the Said Lease. Paragraph 9 states (emphasis added):

9. In recognition of public use of the demised premises, the Government shall make every reasonable effort to stockpile supplies and equipment in an orderly fashion and away from established roads and trails and to remove or deactivate all live or blank ammunition upon completion of a training exercise or prior to entry by the said public whichever is sooner.

Paragraph 14 states (emphasis added):

14. In recognition of the limited amount of land available for public use, of the importance of forest reserves and watersheds in Hawaii, and of the necessity for preventing or controlling erosion, the Government hereby agrees that, commensurate with training activities, it will take reasonable action during its use of the premises herein demised to prevent unnecessary damage to or destruction of vegetation, wildlife and forest cover, geological features and related natural resources and improvements constructed by the Lessor, help preserve the natural beauty of the premises, avoid pollution or contamination of all ground and surface waters and remove or bury all trash, garbage and other waste materials resulting from Government use of the said premises.

Paragraph 18 states (emphasis added):

18. The Lessor hereby agrees that, commensurate with the public use of the premises herein demised, it will take reasonable action during the use of the said premises by the general public, to remove or bury trash, garbage and other waste materials resulting from use of the said premises by the general public.

Paragraph 19 states (emphasis added):

19. Subject to obtaining advance clearance from the plans and training office of the [USA's] controlling agency . . . officials and employees of the Lessor shall have the right to enter upon the demised premises at all reasonable times to conduct any operations that will not unduly

interfere with activities of the [USA] under the terms of this lease; provided, however, that such advance clearance shall not be unreasonably withheld.

18. Defendants had these duties, and they continue to have these duties, as trustees from the inception of the Subject Lease and for the entire duration of the life of Said Lease.

19. As trustees, the Defendants also have a duty to maintain a record of their actions to malama `aina. Without sufficient records of all of Defendants' observations and actions, if any, to discharge its duty to malama `aina the Subject Lands, there is no way for Defendants to demonstrate that it did, in fact, discharge its duties as trustee of public land trust. The absence of meaningful records negate transparency of Defendants' observations and actions.

20. The records relating to Defendants' efforts to inspect and report upon its findings were spotty at best. Only three reports of any significance, for 1984, 1994, and 2014, were introduced into evidence. The 1984 and 1994 reports were grossly inadequate and, in the case of the 1994 report, virtually nonexistent because of its lack of information pertaining to the 1994 inspection. There were other studies or site visits in connection with other business regarding the Subject Lands, such as environmental impact statements, but the court did not view these events as being undertaken as part of Defendants' effort to discharge their duty to malama `aina the

Subject Lands. The absence of any inspection or monitoring reports for years other than 1984, 1994, and 2014 creates a presumption that no action to malama `aina in the form of monitoring and inspections were taken, to the extent that any such records were not admitted into evidence herein.

21. In addition to the relevant findings of fact hereinabove, the presumption is that prior to December 2014 (more than seven months after this suit was filed), the Defendants failed to conduct any inspections to monitor or to confirm the United State' compliance with paragraphs 9, 14, 18, and 19 of the Said Lease given: (a) the summary nature of the 2014 report, (b) the virtual nonexistent nature of the 1994 inspection report; (c) the sparse and incomplete nature of the 1984 inspection report; and (d) the absence of any other records regarding inspections or monitoring of the condition of the Subject Lands by the Defendants.

22. Because the Defendants act as trustees when managing the Subject Lands, when Defendants conduct an inspection in the course of discharging their duties as trustees, they must record findings or observations of sufficient detail regarding the United States' activities upon the Subject Lands that will enable one to determine from the content of the report the nature, scope, and extent of the United States' activities upon

the Said Lands, provided that, no military secrets or matters of national security are breached or compromised.

23. The Defendants breached their trust duties by failing to: (a) conduct regular reasonable (in terms of frequency and scope), periodic monitoring and inspection of the condition of subject public trust lands (the monitoring should involve direct (in person) or indirect (via videographic or live remote viewing) observation of actual military training exercises (including live fire exercises of all types using live and/or explosive munitions, as well as the use of heavy vehicles or equipment above and upon the land) so that the monitors and/or inspectors can observe and appreciate the destructive effects, if any, of all such training and use of equipment); (b) ensure that the terms of the lease that impact the condition of the leased lands or preserving Plaintiffs' cultural interests are being followed; (c) take prompt and appropriate follow up steps with military or other federal government officials when Defendants obtain or are made aware of evidence or information that the lease may have been violated with respect to protecting the condition of the Pohakuloa leased lands; (d) consistently make reasonably detailed and complete records (including contemporaneous photographic or videographic depictions) of Defendants' actions to memorialize the efforts, results, and/or actions undertaken to ensure compliance with the terms of the

lease that are intended to protect the condition of the Pohakuloa leased lands and concomitant cultural interests; and (e) to initiate or assist with the appropriation of necessary funding to undertake clean up or other maintenance activities to locate and remove used, spent, discarded, or deposited remnants of military training activities of any kind (including unexploded ordinance or ammunition) and trash upon the Subject Lands.

24. The terms of the order of the court regarding this matter shall not be vitiated, modified, changed, altered, amended, or otherwise affected by any lease renegotiation, modification, assignment, extension, amendment, or other change or cancellation of the Said Lease

25. The Defendants would further breach their trust duties if they were to execute an extension, renewal, or any other change to the State General Lease No. S-3849, or enter into a new lease of the PTA, without first determining (in writing) that the terms of the existing lease have been satisfactorily fulfilled, particularly with respect to any lease provision that has an impact upon the condition of the Pohakuloa leased lands.

26. The Defendants breached their trust duty to malama `aina with respect to the Pohakuloa leased lands.

27. Plaintiffs are seeking injunctive relief compelling the Defendants to affirmatively perform its duty to malama `aina

the Pohakuloa leased lands by affirmatively enforcing the provisions of the subject lease that impact or affect the condition of the Pohakuloa leased lands.

28. Therefore, Plaintiffs are not seeking an injunction order to stop Defendants from doing something. They seek an order directing Defendants to undertake affirmative action to discharge their duty to malama `aina the Pohakuloa leased lands.

29. A prohibitory injunction prohibits the performance of certain acts to preserve the status quo, whereas a mandatory injunction goes well beyond the status quo and commands the performance of affirmative action to do or undo an act.

30. Therefore, a mandatory injunction is particularly disfavored in law and should not issue during the preliminary injunction phase of a case, unless the facts and the law clearly favor the moving party. However, unless prohibited by some constitutional or statutory provision, a court of equity can, and in the proper case will, award mandatory injunctive relief.

31. The instant proceeding involved the trial on the merits and not just an interim motion for a temporary restraining order or a preliminary injunction. When it comes to interim relief pending the outcome of the trial on the merits, there is a general reluctance by courts to issue a mandatory injunction because the purposes of a temporary restraining order or a preliminary injunction are to preserve the status quo until

the ultimate disposition by a trial on the merits. Mandatory injunctive relief is seen as often compelling an act that is well beyond preserving the status quo. Therefore, a temporary restraining order or a preliminary injunction in the form of a mandatory injunction is highly discouraged during the interim stages of a case. However, the trial on the merits is not an interim stage of the life of a civil action. It is the ultimate adjudication of the merits of the case. As such, there is less of a disincentive by a court to consider issuing a mandatory injunction upon the trial on the merits. The court has much more latitude to issue a mandatory injunction if the ultimate adjudication of the merits justifies such relief.

32. Plaintiffs bring the instant action alleging that Defendants breached their trustee duties. Plaintiffs have met their burden of proof that Defendants breached their trust duties by failing to discharge their obligations as trustees of a public land trust. The appropriate remedy is for this court to issue an order directing Defendants to perform their trust duties with respect to the Pohakuloa leased lands. This requires the court to issue relief that is in the nature of a mandatory injunction compelling Defendants to affirmatively perform their trustee duties and malama `aina the Pohakuloa leased lands.

33. Injunctive relief is appropriate when the Plaintiffs have prevailed on the merits, the balance of harms favors injunctive relief, and the issuance of injunctive relief is in the public interest.

34. The Plaintiffs have prevailed on the merits.

35. The balance of harm favors the issuance of mandatory injunctive relief.

36. Protection of the public trust ceded lands is in the public interest.

37. Plaintiffs have proved by a preponderance of the evidence and by clear and convincing evidence that the Defendants have breached or violated their duties and obligations as a trustee of the Subject Lands, which are public, State-owned ceded lands.

38. Mandatory injunctive relief is appropriate here. Plaintiffs complain that, if Defendants are not compelled to malama `aina the Pohakuloa leased lands, they may forever be deprived of the right to use and enjoy said leased lands for religious and cultural purposes. This justifies the imposition of a mandatory injunction that requires Defendants to malama `aina the Pohakuloa leased lands. Otherwise, it is possible that Plaintiffs' use and enjoyment of the Pohakuloa leased lands could be lost in the foreseeable future or possibly forever due to contamination due to the presence of unexploded ordinance or

other life threatening military hazards or dangers that cannot be eliminated or cleaned up.

39. It is within the trial court's sound discretion to fashion appropriate injunctive relief based on the specific facts of the case.

40. In the exercise of its sound discretion, the court concludes that an appropriate mandatory injunction against the Defendants includes the following relief.

**ORDER**

Based upon the foregoing, and any other good cause shown herein, and good cause appearing therefor,

IT IS HEREBY ORDERED, ADJUDGED, AND DECREED that:

1. Judgment shall enter in favor of Plaintiffs and against Defendants as to all claims that Defendants breached their trust obligations by failing to malama `aina the Subject Lands.

2. Defendants are ordered to fulfill their trust obligations by doing the following:

A. Defendants shall promptly initiate and undertake affirmative activity to malama `aina the Subject Lands.

B. Malama `aina of the Subject Lands by Defendants includes, but is not necessarily limited to:

1. To develop a written plan to malama `aina the Subject Lands; and
2. The plan shall include regular, periodic on-site monitoring and inspection of the Subject Lands; and
3. For each such monitoring or inspection event of the Subject Lands that Defendants undertake, the plan shall provide that the Defendants, or any of them, shall promptly prepare a written inspection report that provides, at a minimum, all of the information that was called for in the "INSPECTION REPORT" that was introduced as Exhibit 16. In addition, each inspection report shall also contain "RECOMMENDATIONS" by the inspection team for appropriate action to malama `aina the Subject Lands. The recommendations shall also state a projected or reasonable estimated time within which the Defendants should be able to act upon the recommendation. This estimated time is not binding upon the Defendants. However, any enforcement tribunal may consider the time recommendation in determining whether Defendants have met their

trust obligations to malama `aina the Subject Lands.

4. The plan shall include a protocol of appropriate action by Defendants to malama `aina the subject lands in the event that Defendants find:

a. Any actual, apparent, or probable breach of any provision of State General Lease No. S-3849 by the federal government that does or may adversely affect the condition of the Subject Lands or Plaintiffs' cultural use of such lands, and/or

b. Any condition or situation that may adversely affect the condition of the Subject Lands or may otherwise adversely impact Defendants duty to malama `aina the Subject Lands, and/or

c. Unexploded ordinance and any debris deposited upon the Subject Lands by the federal or state military or any other form of training or exercises that take place upon the Subject Lands by, under, pursuant to, or in connection with the State General Lease No. S-3849; and/or

- d. Any other foreign or other non-natural item or other contaminant or debris that is found on the Subject Lands that is present or existing thereon by reason of or in connection with the State General Lease No. S-3849.
5. A plan or other assurance that any nonconforming condition found upon the Subject Lands that was likely caused by the lessee under Said Lease and that threaten the condition or nature of the Subject Lands will be reasonably brought to pre-lease condition and a reasonable timetable for the same.
6. A procedure to provide reasonable transparency to Plaintiffs and the general public with respect to the instant mandatory injunction and all of the requirements of this order.
7. If not already in existence, the institution of a contested case procedure adopted pursuant to Chapter 91 of the Hawaii Revised Statutes for Plaintiffs or any member of the general public with standing to initiate such process in the event that Plaintiffs or other interested party may contest the decisions made by the Defendants

in the course of discharging its duty to malama  
`aina the Subject Lands.

8. That the plan developed by Defendants pursuant to this order shall first be approved by the above-entitled court before the plan is put into action, unless otherwise authorized by the above-entitled court. Defendants shall have a reasonable length of time within which to submit a proposed plan for the court's approval, which time shall expire on December 28, 2018; unless such deadline shall be extended by the above-entitled court for good cause shown. Good cause should not include any factor, condition, or situation over which Defendants have control. In other words, good cause for extending the deadline should only include factors, conditions, or situations over which Defendants have no control.
9. The plan shall also include any and all steps Defendants shall take to explore, evaluate, make application for or assist or support the making of such an application for, and securing adequate funding, from any and all appropriate funding sources, to plan, initiate, and conduct

all appropriate comprehensive cleanup of the Subject Lands in order to discharge Defendants' duty to malama `aina the Subject Lands.

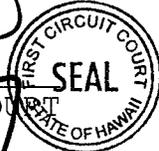
10. The plan shall be approved by the court upon notice and hearing to all parties herein.

3. Defendants shall execute the plan to malama `aina once it is approved by the court.

4. Plaintiffs are directed to prepare and file, consistent with the above, and in accordance with Rule 58 of the Hawaii Rules of Civil Procedure and Rule 23 of the Rules of the Circuit Courts of the State of Hawaii, a separate final judgment. Said final judgment shall also specifically provide that any and all remaining claims, if any, shall be and hereby are dismissed with prejudice.

DATED: Honolulu, Hawaii, APR - 3 2018.

  
JUDGE OF THE ABOVE-ENTITLED COURT



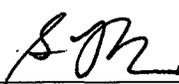
NOTICE SENT TO:

DAVID KIMO FRANKEL, ESQ.  
SUMMER L. H. SYLVA, ESQ.  
NATIVE HAWAIIAN LEGAL CORPORATION  
1164 BISHOP STREET, SUITE 1205  
HONOLULU, HAWAII 96813  
Via U.S. Mail, Postage Prepaid  
ATTORNEYS FOR PLAINTIFFS

DANIEL A. MORRIS, ESQ  
DEPUTY ATTORNEY GENERAL  
DEPT OF THE ATTORNEY GENERAL,  
STATE OF HAWAII  
465 KING STREET, ROOM 300  
HONOLULU, HAWAII 96813  
Via U.S. Mail, Postage Prepaid  
ATTORNEYS FOR DEFENDANTS

NOTICE OF ENTRY

The foregoing Findings of Fact, Conclusions of Law and Order in Civil No. 14-1-1085-04 (GWBC) has been entered and copies thereof served on the above-identified parties by placing the same in the United States mail, postage prepaid, on March 28, 2018.

  
\_\_\_\_\_  
Clerk, Fourteenth Division



PCL:es  
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STATE OF HAWAII  
DEPARTMENT OF THE ATTORNEY GENERAL  
HONOLULU

July 2, 1964

Mr. H. H. de Vis-Norton  
Acting Chief, Real Estate Division  
U. S. Army Engineer Division,  
Pacific Ocean  
Corps of Engineers  
Building 96, Fort Armstrong  
Honolulu 13, Hawaii

Dear Mr. de Vis-Norton:

I am transmitting herewith drafts of four leases from the State to the United States, covering the following training areas: Makua, Kahuku, Kawaihoa and Pohakuloa. With the exception of those areas of disagreement hereinafter specified, the drafts represent the cumulative results of a series of meetings held with personnel representing the Division Engineer, U. S. Army Hawaii and U. S. Army Pacific.

I am in receipt of a draft document prepared by your office covering each of the aforementioned training areas. It is my understanding that this document reflects the terms and conditions which would be acceptable to the Division Engineer, U. S. Army Hawaii and U. S. Army Pacific. The numbering of the provisions in the enclosed drafts is similar to that in your drafts except where additional, disputed provisions are involved. These provisions, as well as those where only a partial disagreement exists in a provision, are delineated by red brackets. The ~~four~~ areas where a difference of opinion exists involve three general provisions and two which are applicable to the Pohakuloa document only.

The first problem involves a provision whereby the State is requiring the United States to restore the premises at the termination of the lease, this provision appearing specifically as number 28 in the Kahuku, Kawaihoa and Pohakuloa leases and number 25 in the Makua lease. A

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CIVIL NO. 14-1-1085-04 GWBC  
PLAINTIFFS EXHIBIT 2  
IN EVIDENCE FOR IDENTIFICATION  
REC'D \_\_\_\_\_, 2015

CLERK, 14<sup>th</sup> DIVISION

restoration provision of this type is typical of those found in many leasing arrangements including those entered into previously by the United States. This would appear to be a token gesture when one considers that the United States is being given the use of the land for a 65-year period for the nominal consideration of \$1. The only explanation given the State for refusing to agree to such a provision is that a directive has been sent down by Washington to the effect that no restoration provision should be included in the leases.

At the risk of making some broad presumptions, it seems that the rationale for most of the disputed provisions lies in the feeling that since the United States can set these lands aside without any conditions, it is in a strong bargaining position and does not have to accept provisions it might otherwise be willing to accept under normal leasing arrangements. Where equity would otherwise dictate that these areas of disagreement be resolved in favor of the State, there would seem to be no justification for a contrary result in the present situation.

Two other areas of disagreement relating to restoration, both involving reforestation, have been included because of the question which has been raised by the Army whether reforestation constitutes a form of restoration, thus falling within the category of the aforementioned restoration provision. Before discussing the question of reforestation, it should be noted that it is the opinion of the undersigned that the subject reforestation provisions do not constitute restoration provisions.

The first reforestation issue appears in the "fire prevention" provision of three of the leases, this involving provision number 11 of the Kahuku and Kawaihoa leases and number 13 of the Pohakuloa lease. It should be noted that this particular obligation is at best a contingent one which would only be effectuated if "an area is damaged by fire started by or resulting from Government activities." In the Kawaihoa lease and Parcel 2 of the Kahuku lease, the land involved constitutes a valuable watershed for the public water supply and it is extremely important that this asset be protected. If a fire were to destroy a significant portion of the subject premises and no steps were taken to reforest the land, serious erosion could take place with its accompanying and far-reaching effects. Turning to Parcel 1 of the Kahuku lease and the Pohakuloa area in its entirety,

July 2, 1964

although not at this time serving as a valuable watershed, these areas are presently subject to a considerable number of problems involving wind and rain erosion. The trees must be replaced if destroyed by fire to prevent both of the subject areas from being subsequently denuded completely by the forces of nature.

The other reforestation provision which appears in provision number 27 of the Kahuku, Kawailoa and Pohakuloa leases covers all instances where trees are destroyed due to causes other than fire and is likewise restricted to "areas where the forest cover has been destroyed as the result of Government activities." In both of the above cases, the obligation to reforest--to an even lesser extent than the aforementioned general obligation to restore--would seem to constitute a token consideration for the Government's use of the premises. Furthermore, the obligation only covers damage caused by the activities of the Government and thus cannot be considered a carte blanche credit card for reforestation regardless of the cause of the destruction.

The second general area where a difference of opinion exists involves Government liability for damage caused to improvements erected by the State, this appearing in provision number 16 of the Pohakuloa lease and number 17 of the Kahuku and Kawailoa leases and number 14 of the Makua lease. In keeping with the concept of joint use of the subject lands, it can be expected that at some future date public changing and sanitary facilities and possibly mountain cabins or similar items may be constructed on the leased premises. Under the terms of the leases, the State cannot indiscriminately place these improvements anywhere it wishes, but rather it must coordinate with and obtain the prior approval of the controlling Government agency before initiating any such action. Thus, the State may not place its improvements in the middle of a tank maneuvering ground or similar type of maneuver area and then require the Government to repair any damage caused to the said improvements. On the contrary, these improvements are required to be located in such a manner as to cause the minimum amount of interference with military training activities and only after the approval of the Government's controlling agency has been obtained. Consequently, there appears to be a certain lack of equity involved to permit a situation where the Government can approve the location of an improvement and then turn around and be able to damage or destroy the said improvement without at least subjecting itself to the obligation to restore

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or repair the damage it has caused. Once again the Government's obligation runs only to damage caused by the activities of the Government. The language used in the applicable portion of the subject provisions is similar to that already agreed upon in a license agreement between the State and the Air Force for a portion of Bellows Air Force Station beach which is likewise being made available to the public on weekends and national holidays except when military training activities prohibit said use. It seems difficult to distinguish the analogy between the Bellows license and the subject leases, and where the principles of equity prevailed without any disagreement by either party in the former, it is felt that they should likewise prevail in the latter case. As with the restoration provision, the State has only been told that a liability provision of this nature is prohibited by a directive from Washington.

The third major area of disagreement centers around the State's insistence on a revocation provision which appears in provision number 29 of the Pohakuloa, Kahuku and Kawaiiloa leases and provision number 26 of the Makua lease. The subject provision has purposely been written so that a lease can be revoked only for a substantial and willful violation of the terms of the lease and one that persists for a long period. Thus, the provision cannot be used arbitrarily for some minor deviation from the terms of the lease. Without a revocation provision the rest of the terms of the lease lose much of their meaning, as the State's only remedy for a breach, regardless of its magnitude, would be to go to a court of law and ask for damages, and in cases where public enjoyment is concerned these may conceivably be without monetary value or at best very difficult to prove. It can be analogized that to eliminate the revocation provision would be like enacting a criminal law without providing a sanction, with the result that the law becomes practically meaningless. Since the United States is acting in good faith in accepting the undisputed terms of this lease, it would not seem to place an excessive burden on it to accept a provision which would call for revocation only in the event of a substantial and willful violation of the terms of the lease and one which is not corrected for a period of sixty days after notice of such a violation. As in the previous instances, the only explanation given the State is that a directive from Washington prohibits the inclusion of such a provision.

A fourth area of disagreement involves the time.

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permitted for exclusive use of Parcel C of the Pohakuloa lease, this appearing as provision number 17 of the subject lease. At the present time Parcel C is reserved exclusively for the State for a three-month period beginning October 15 and terminating January 15. This three-month reservation has been in effect for a number of years. Furthermore, the Army has managed to live with the existing conditions even after a build-up in troops brought about by the ROAD re-organization. Also, any discussion of a military expansion of any magnitude at Pohakuloa must necessarily be preceded by a solution to the water shortage problem. It is recognized that the Army has had to come up with an efficient utilization plan in order to complete its annual training requirements within the allotted time. Nevertheless, the problem has been solved before, and undoubtedly will continue to be solved in the future. It should be noted, however, that the State has offered a compromise solution whereby it will have exclusive use of the area for two-thirds of the time it presently enjoys with an additional month's use on weekends only. This compromise was offered to make available more time for Government use of Parcel C. Considering the fact that very few public hunting areas are available in the islands and that Parcel C offers one of the prime areas, plus the fact that it is immediately adjacent to the State Park Department's cabins, it is critical to the recreational program of the State that this area remain available for hunting at least during the times specified in provision number 17.

A fifth area of disagreement, involving a property alignment next to the State's cabins at Pohakuloa, is still the subject of negotiations here in Hawaii. An on-the-site inspection next week by the parties concerned may resolve the issue to the mutual satisfaction of all concerned. Because of the considerable amount of dust and noise from one of the main access routes between Tract A and Tract C, which is only a quarter of a mile from the State Park Department's cabins, the State is insisting that a greater buffer zone be established and the radial boundary be moved from a quarter of a mile to three-quarters of a mile from the cabins. It is inconceivable for one to imagine the volume and intensity of the lava dust which permeates the State camp area from the present Army access road. As the present road is only a quarter of a mile from the camp, the existing buffer zone is practically useless. Three-quarters of a mile, although far from satisfactory, would considerably help to alleviate the problem. The Army has pointed out

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that this present area along the Saddle Road, where one crosses from Parcel C to the rest of the training area, already constitutes a bottle-neck and tends to detract from the realism of a training problem. The State contends, however, that since the realism has already been lost, an additional half-mile will not significantly change the situation. Another obstacle pointed out by the Army is the fact that a lava ridge exists on the western side of the Saddle Road and this would have to be traversed in order to provide a new access road. This has already been done by the Army in the past and it is presumed that it can be done again if the circumstances so dictate. From the beginning, the State has indicated its flexibility and shown a willingness to negotiate a possible compromise boundary which would help alleviate the State's dust and noise problem, while at the same time providing a more satisfactory route to the Army than the rigid three-quarters of a mile boundary. As indicated above, this matter may be resolved next week.

Having outlined the various items where a difference of opinion exists between the State and the Army, it is my understanding that the next step will involve the transmission of the Army's lease and comments along with the State's lease and comments to the Department of the Army in Washington for its review and comment. Subsequently, it is anticipated that the Department of Defense will review the leases and, following this, the Bureau of the Budget, in consultation with the Department of Defense, will render a decision on each of the disputed items. It is the State's understanding that the Bureau of the Budget's decision on each of the disputed items will be final and binding on both the State and the Department of the Army and that subsequently a lease will be executed by the State which will reflect the said decision. Thus, the necessity or possibility of using a set-aside action will no longer be applicable for any of the subject areas.

Once the decision has been rendered by the Bureau of the Budget, the State will proceed expeditiously to consummate the subject leases prior to August 21, 1964. In fact, a presentation will be made to the Board of Land and Natural Resources on July 24, 1964, requesting the Board to authorize the Chairman of the Board to execute the leases regardless of the outcome of the decision by the Bureau of the Budget on any or all of the disputed areas. It is, however, expected that in those few instances where a

Mr. H. H. de Vis-Norton

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difference of opinion presently exists, the issues will be resolved amicably to the best interest of all parties concerned.

Sincerely,

/s/ BERTRAM T. KANBARA  
Deputy Attorney General

for

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PETER C. LEWIS  
Deputy Attorney General

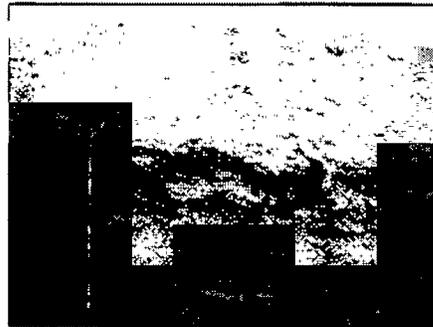
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~~DRAFT~~—Archaeological and Cultural Monitoring of  
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Island, Hawai'i

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CEPOH-EC-E  
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**November 2010**

## MANAGEMENT SUMMARY

At the request of the U.S. Army Corps of Engineers, Pacific Ocean Division, Honolulu, Garcia and Associates (GANDA) conducted archaeological and cultural monitoring of activities related to construction of Battle Area Complex (BAX) at Pōhakuloa Training Area (PTA), Hawai'i Island, Hawai'i. Development of this facility is one element of the transformation of the 2<sup>nd</sup> Brigade of the 25<sup>th</sup> Infantry Division (Light) to a Stryker Brigade Combat Team. Archaeological and cultural monitoring was conducted in accordance with Stipulation V.A. of the Stryker Brigade Combat Team Programmatic Agreement and complies with Section 106 of the National Historic Preservation Act, as amended, and Army Regulation 200-1.

The Stryker Brigade project area is in Training Areas 5, 7, and 8 and Range 11T at PTA. The roughly 751-acre project area comprises roads, multiple Live Fire Villages, maneuver areas, firing points and targets, protective barriers, and a new Range Operations facility.

Representative soil profiles and photographs were recorded during ground-disturbing activities.

Eight sites were previously identified in the project area prior to the BAX construction. The sites consist of seven pre-Contact sites (Sites 19490, 23455, 23457, 23462, and 24326–24328) and one post-contact site (Site 23451). Six new features were identified during monitoring activities within the BAX project area. These features are subsumed under Site 19490 as Features Q–V.

The BAX layout was redesigned in areas to avoid impacting identified cultural resources; thus the preservation practice of avoidance was implemented when required.



## HŌ'ULU'ULU ALAKA'INA HANA KAHU NĀNĀ

Na ka nonoi o ka 'Ahahui Pū'ali Koa Wilikī o ka mahele Moana Pakipika i Honolulu, ua kahu nānā hulikoehana a kahu nānā kilo maoli o Garcia a me nā Hoahui i nā hana kūkulu o ka 'Alea Kahua Kaua ma ke Kahua Ho'oma'a Kaua ma Pōhakuloa, ma ka mokupuni 'o Hawai'i, i Hawai'i. Ke ho'omohala nei i keia pono lako, he ho'okahi mokuna o ka loli 'ana o ka Pū'ali Koa Lua o ka 'Aha Pū'ali Kaua Ka'i Wawae Iwakālua Kūmālima i ka 'Ahahui Pū'ali Kaua Paio Stryker. Ua kahu nānā na ka 'ōlelo ho'opa'a V.A. a ka palapala 'aelike Pū'ali Kaua Paio Stryker; e 'aelike kēia hana me ka 'āpana Ho'okahi Haneli 'Eono a ke Kānāwai Aupuni Mō'aūkala Mālama 'Ana, a me ka Lula Pū'ali Koa 'Elua Haneli-'Ekahi.

Aia ka 'alea papa hana na ka Pū'ali Kaua Paio Stryker ma Kahua Ho'oma'a Kaua 'elima, 'ehiku, a 'ewalu, a me 'Alea Umikūmākahi ma ke Kahua Ho'oma'a Kaua i Pōhakuloa. Ma kēia 'alea papa hana he mau 'ehiku haneli kanalimakūmākahi 'eka, aia he mau alanui, he mau kaiāulu ho'opaikau, he mau 'alea ka'a kaha, he mau kī paikau a kīkī māka, he mau mea pale, a me he pono lako Hale Ho'oma'a Kaua.

Ua hana i nā hāpana huihuina lepo a me na ki'i 'oia i nā hana 'eli lepo.

He 'ewalu mau kahua hulikoehana i 'ike 'ia a hō'ōia 'ia ma mua o ke kūkulu papa hana 'Alea Kahua Kaua. No nā kahua, he 'ehiku mau kahua hulikoehana mai ka wā kahiko mamua o ka hō'ea 'ana Pelekane. Eia nāna helu: nā helu 19490, 23455, 23457, 23462, a me 24326-24328). Ua hō'ōia 'ia i ho'okahi kahua mai ka wā kahiko mahope o ka hō'ea 'ana Pelekane, ke kahua i helu 'ia 23451. Ua hō'ōia 'ia he 'eono mau kahua hulikoehana hou 'oia i ka hana kahu nānā. A kēia mau kahua ihola i waiho ma lalo ke kahua hulikoehana 19490, he mau hi'ona Q ā hiki i V.

Ua ho'ohuli papa hana no kēia 'Alea Kahua Kaua ma kekahi mau 'alea no ka hō'alo 'ia e nā kahua hulikoehana apau; no laila, ua ho'ohana 'ia ka hō'alo 'ia i ka manawa pono.



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Garcia and Associates acknowledges the assistance of Army Corps of Engineers archaeologist Mr. Kanalei Shun, U.S. Army Garrison Cultural Resources Chief Dr. Laurie Lucking, and PTA archaeologist Dr. Julie Taomia.

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Army Corps of Engineers Mr. Michael Lum was an asset to the archaeological and cultural monitoring program at PTA BAX by ensuring that the project design effectively avoided all cultural resources and coordinating various work tasks with the on-site contractors.

Amanda Sims and Nicole Vernon prepared the site maps and soil profiles included in this report. The authors are also grateful for the editorial assistance of Amanda Sims.



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Ho'omaika'i nā mea kākau i nā kanaka e kokua mai ma kēia papa hana, a me nā kanaka e kāko'o i nā po'e hana iā Garcia a me nā Hoahui. A pela aku, ho'omaika'i nui nā mea kākau i nā po'e hana iā Garcia a me nā Hoahui; ua hana'i'o lākou he mau pule hana kanalima hola i ke anilā 'ino pinepine, me ka ho'oikaika, me ka hālana ka mana'o pau 'ole. Eia nā po'e hana: Leina'ala Benson, Ashton Dircks, Johnny Dudoit, Gary T. Kupa'a Garmon, Leiola Garmon Mitchell, Jesse Gunnels, Annamarie Kon, Jenna Matthews, a me Elizabeth Witkowski.

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## 1.0 INTRODUCTION

Garcia and Associates (GANDA) conducted archaeological and cultural monitoring for construction of the Battle Area Complex (BAX), Pōhakuloa Training Area (PTA), Hawai'i Island (Figures 1 and 2). Development of the PTA BAX is one element of the 25<sup>th</sup> Infantry Division's transformation to a Stryker Brigade Combat Team (SBCT). The project is being conducted under contract to the U.S. Army Corps of Engineers (USACE), Pacific Ocean Division (POH) (Contract No. DACA83-03-D-0011, Task Order No. 0016). The monitoring plan followed in this project was developed in accordance with Section III.E of the SBCT Programmatic Agreement (PA) and in coordination with local community groups.

All aspects of the monitoring project were conducted in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended, Army Regulation 200-1, and the Secretary of Interior's Guidelines for Historic Preservation.

The draft and final monitoring reports may be used for coordination with the Hawai'i State Historic Preservation Division (SHPD), the President's Advisory Council on Historic Preservation, appropriate U.S. Army authorities, the Office of Hawaiian Affairs, and other historic preservation agencies and interested parties.

Because of the delay in the startup of BAX construction, the contract for this monitoring project terminated on 15 August 2010—prior to completion of the construction work—requiring GANDA to cease all field operations. All required deliverables, including this report, were submitted to the USACE Contract Manager.

### 1.1 Cultural Monitoring Program

The Cultural Monitor Program for SBCT transformation is intended as an opportunity to facilitate protection of historic properties and areas of traditional religious and cultural importance as required by the SBCT PA. The Cultural Monitor Program has been developed in accordance with Section III.E of the SBCT PA and in coordination with the PTA Cultural Advisory Committee.

As part of the Cultural Monitor Program, coordination with the Native Hawaiian community was encouraged through promotion and recruitment of monitors by the initial contact groups for the area, training of cultural monitors, and sharing of cultural knowledge where appropriate.

### 1.2 Monitoring Area Description

The PTA BAX project area is located in the northern portion of PTA within Training Areas 5, 7 and 8 and Range 11T. The BAX construction elements include Live Fire Villages, Moving Armor Targets (MATs), new or enhanced roads, firing points and targets, and the new Range Operations Center (ROC). Construction of a Tactical Vehicle Wash within the BAX footprint was also monitored under the current contract; results of this work are presented in a separate report (Robins and Desilets 2010).

### 1.3 Project Personnel

The project was conducted from 21 January to 15 August 2010 under the direction of Jennifer Robins, BA (Project Director), and Michael Desilets, MA (Principal Investigator). The field crew consisted of archaeologists Ashton Direks, BA, Johnny Dudoit, BA, Jesse Gunnels, BA, Jenna Matthews, BA, and Elizabeth Witkowski, BA. The cultural monitors on the project were approved by the PTA Cultural Advisory Committee and consisted of Leina'ala Benson, BA, Gary T. Kupa'a Garmon, Leiola Garmon Mitchell, and Annamarie Kon.

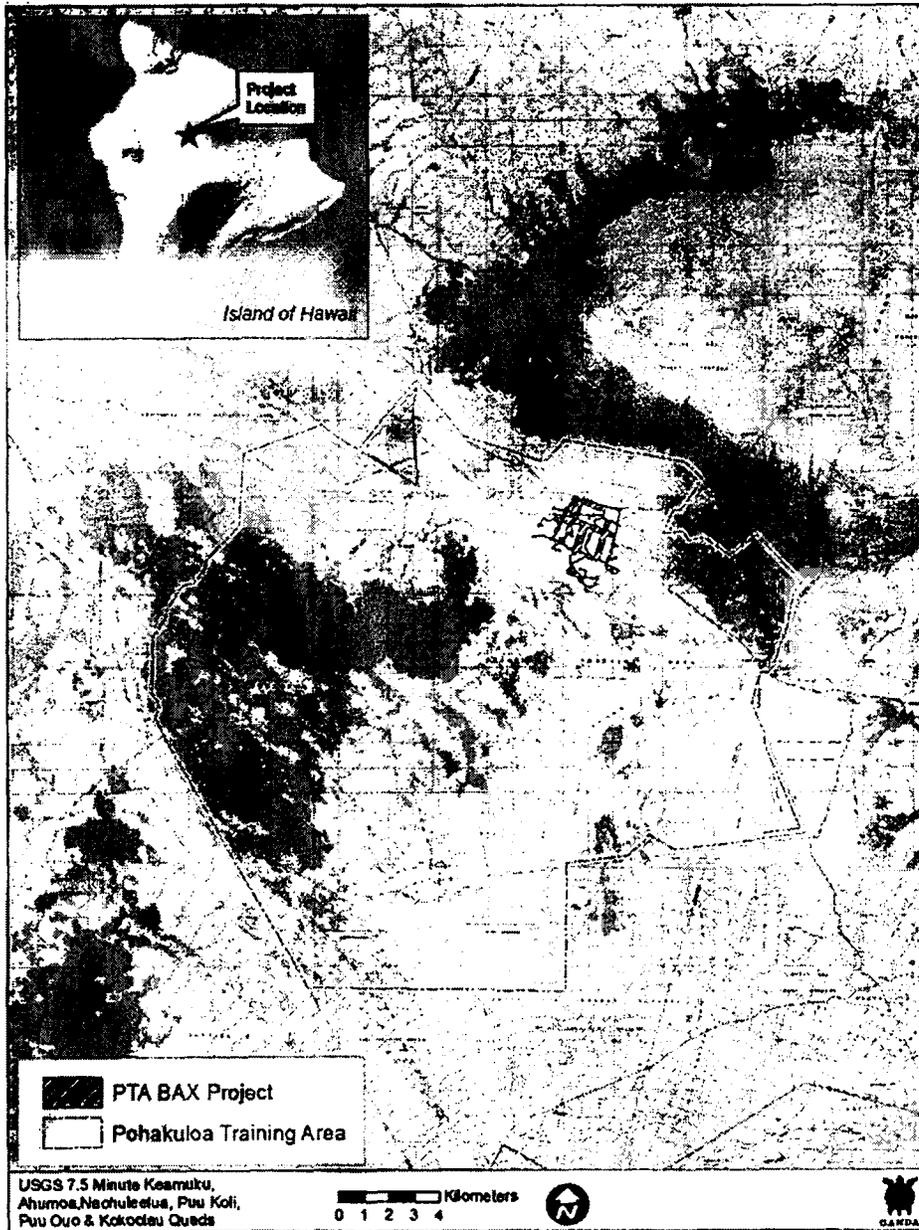


Figure 1. USGS quads and Hawai'i Island inset showing location of Battle Area Complex (BAX) at Pōhakuloa Training Area (PTA).

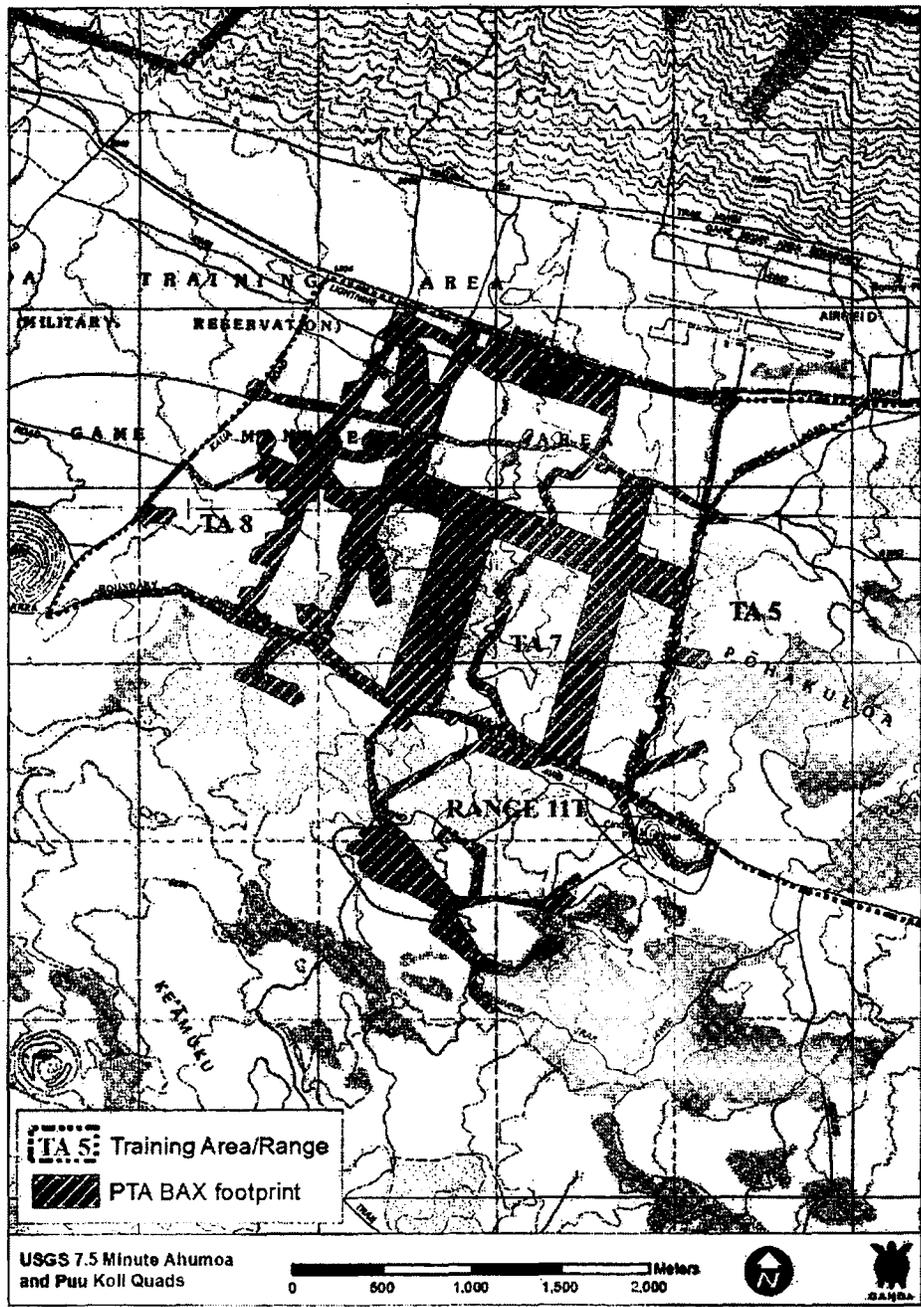


Figure 2. USGS quad maps showing limits of PTA BAX project area.

Contact was maintained throughout the duration of the project with Army Corps archaeologist Mr. Kanalei Shun and Directorate of USAG-HI Public Works Environmental Division personnel Dr. Laurie Lucking (Chief of Cultural Resources) and Dr. Julie Taomia (PTA archaeologist).

#### **1.4 Project Constraints**

A portion of the project area south of Lava Road is deemed high risk for encountering unexploded ordnance (UXO), including rounds potentially containing depleted uranium (DU). Because of stringent health and safety requirements, all GANDA personnel monitoring the BAX construction activities in this area followed strict safety procedures specified by the U.S. Army Corps of Engineers. These procedures are detailed in the Methods section of this report.

## 2.0 ENVIRONMENTAL BACKGROUND

The following background (in sections 2.0 and 3.0) provides a brief summary of the environmental, cultural, historical, and archaeological context of the present project area.

### 2.1 Environment

PTA lies in the Saddle Region of Hawai'i Island between the volcanic mountains of Mauna Kea to the north, Mauna Loa to the south, and Hualālai to the west. The project lies between roughly 6,000 and 6,600 ft above mean sea level.

### 2.2 Topography and Geology

The landscape in the project area is composed of level and undulant lava flows associated with Mauna Loa (*k2* lava type) and Mauna Kea eruptions (*ac* and *l* lava types) (Figure 3). The lava flows were mapped by the U.S. Geological Society (USGS) and designated as either Laupahoehoe Basalt from Mauna Kea eruptions (prefixed by *l*) or Kau Basalt from the later Mauna Loa eruptions (prefixed by *k*) (Wolfe and Morris 1996); the *ac* lava type from Mauna Kea is a combination of lava flows and pyroclastic deposits. The Kau basalts consist of both 'a'ā and *pāhoehoe* lava, often mixed in single flows. The Mauna Kea lava flows in the project area predate the Mauna Loa flows (Table 1).

The *ac* lava type overlaps the north edge and northwest corner of the BAX project and is classified as a weakly consolidated alluvium and colluvium derived from lava flows and pyroclastic deposits. The type *ac* boundary corresponds to a broad soil expanse in this area of the BAX also designated as Keekee loamy sand in the Island of Hawai'i soil survey (Soil Survey Staff 2010). The Keekee loamy sand typically occurs in alluvial fans and consists predominantly of alluvium.

A thin surface mantle of volcanic glass, also referred to as chill glass (cf. Williams 2002), occurs intermittently on the surface of *pāhoehoe* lava (*k4* flow) south and east of the project area. The volcanic glass formation is characterized by "a very dense *pāhoehoe*, typical of that which has degassed during transit in lava tubes and subsequently oozed out down slope" (Sinton 2004, in Roberts et al. 2004a: Appendix C).

**Table 1. Geologic Classifications and Ages of Lava Flows (Wolfe and Morris 1996; Sinton 2004)**

| Designation                    | Age                               |
|--------------------------------|-----------------------------------|
| <i>L</i>                       | >10,000 yrs BP                    |
| <i>ac</i> - surficial deposits | Historic->10,000 yrs BP           |
| <i>Klo</i>                     | >5,000-10,000 yrs BP              |
| <i>Kly</i>                     | 3,000-5,000 yrs BP                |
| <i>k2</i>                      | >1,500-3,000 yrs BP               |
| <i>k3</i>                      | >750-1,500 yrs BP                 |
| <i>k4</i>                      | >400-750; 330 yrs BP <sup>1</sup> |
| <i>k5</i>                      | Historic-ca. 1843                 |

<sup>1</sup> Sinton 2004.

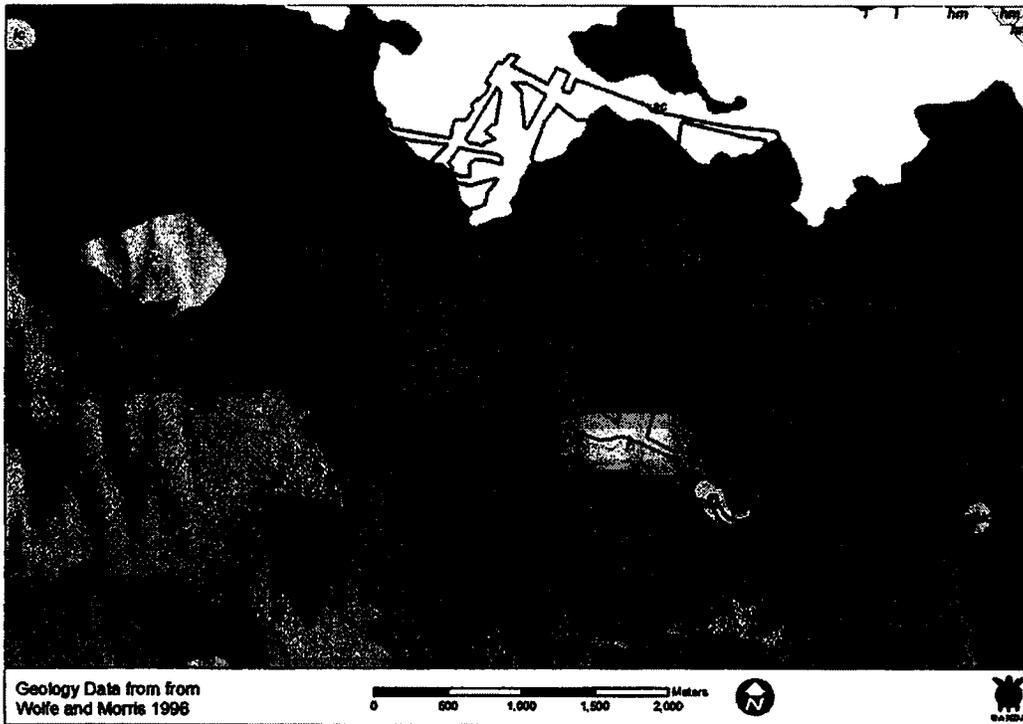


Figure 3. Geologic map showing lava flow types in vicinity of PTA BAX project.

Subterranean caverns, such as lava tube and blisters, are present in some of the *pāhoehoe* flows in the project area. Lava tubes are formed by quickly solidified underground rivers (MacDonald et al. 1983:23); whereas lava blisters are hollow swellings created by gas bubbles under the molten lava.

### 2.3 Vegetation

Vegetation at PTA and in the current project area is classified as montane dry and mesic forest grading to subalpine forest and shrubland. According to Shaw (1997), younger lava flows are relatively barren and support only limited vegetation such as *'ōhi'a* (*Metrosideros*). Older flows, with increasing soil development, support small trees and shrubs such as *māmāne* (*Sophora*), *naio* (*Myoporum*), *pūkiawe* (*Styphelia*), *'a'ali'i* (*Dodonaea*), and *'ūweoweo* (*Chenopodium*).



### 3.0 CULTURAL BACKGROUND

#### 3.1 Traditional History

The project area is located in the Saddle Region of Hawai'i Island bounded by the volcanic mountains of Mauna Kea, Mauna Loa, and Hualālai. The project is within the traditional land division, or *ahupua'a*, of Ka'ōhe and island district of Hāmākua. Ka'ōhe extends from the Hāmākua coast over the summit of Mauna Kea, encompassing most of the Saddle Region and the lower slopes of Mauna Kea (Figure 4).

The Hāmākua District was one of six pre-Contact districts on Hawai'i Island that, by ca. 1525 (cf. Maly and Maly 2002:5), represented autonomous polities under the reign of the paramount chief Līloa (Barrere 1983:25, Report 2 in Clark and Kirch 1983). During Līloa's reign, his ruling center was in western Hāmākua, one of the largest valleys on the island (Cordy 2000:100). Prior to Līloa's death, he claimed his son Hākau as heir and gave his other son 'Umi-a-Līloa ('Umi) "the duties of caring for the god Kūkā'ilimoku, maintaining the *heiau* and observing the rituals" (Cordy 2000:195). 'Umi eventually took over the reign of Hawai'i Island after slaying Hākau, his chiefs and attendants at Waipi'o (Kamakau 1992:14).

##### 3.1.1. Warfare, Travel and Ceremony

Oral traditions and ethno-historic references to traditional Hawaiian activity in the Saddle Region are few. Extant references deal primarily with warfare, travel, and establishment of ceremonial sites in the Saddle. Kamakau refers to 'Umi's preference for traveling through the Saddle during times of war:

'Umi went by way of the mountains to stir up fight with I-mai-ka-lani and the chiefs of Kona. He became famous as a chief who traveled through the mountains of Hawaii, and [its trails] became the routes by which he went to war (Kamakau 1992:18).

'Umi was known as a religious chief and according to a mid-19<sup>th</sup> century narrative by an elderly Hawaiian named Kanuha (recorded by the French botanist Jules Remy) four *heiau* were constructed in the Saddle and mountain slopes under 'Umi's direction (*Ke Au Okoa*; Mei 22, 1865; in Maly and Maly 2005:28–29). The four *heiau* include Ahu a 'Umi located in the upper Saddle portion of the North Kona District just west of Hāmākua District and Mauna Halepōhaku on the south slope of Mauna Kea between Hilo and Hāmākua districts; and the remaining two *heiau* were at Pu'u Keke'e or Pu'u Ke'eke'e near the boundary of South Kohala and Hāmākua districts and at Pōhaku Hanalei located either near the Kona-Hāmākua-Ka'ū district boundary or Hāmākua-Ka'ū-Hilo district boundary (see Figure 4)

The most well-known of 'Umi's *heiau* at Ahu a 'Umi, was built along the course of the Kona to Waimea trail in the upper elevations of Keauhou 2 Ahupua'a. 'Umi was known to have resided at Ahu a 'Umi, where he lived off tribute generated by chiefs from the six island districts (Fornander 1996:101). Although Fornander (1996:100) disputes some of its details (particularly that Keli'iokaloa was 'Umi's opponent), another narrative claims the *heiau* was constructed by 'Umi to commemorate the final battle that secured 'Umi's rule over Hawai'i Island. Maly and Maly (2005:28) provide a translation of the narrative as it was reported in the Hawaiian newspaper *Ke Au Okoa* in 1865. The translator's comments are shown in brackets:



Between Mauna Kea and Hualalai the chief and all his party traveled, with the thought of descending to Kailua. Keliokaloa did not wait though, but instead, traveled with his warriors to meet Umi in battle. The two armies met on an open broad plain, surrounded by the three mountains, at the place called Ahu a Umi.

There, Laepuni and them [people who were unattached to a chief] fought with Umi. Umi was almost killed, but Piimaiwaa leapt in and helped him, it was he who turned the battle in the favor of Umi's side. There is not much else that is said, but, it is known that a chief of Kailua died in the battle. Thus, with this battle, the entire kingdom was gained by Umi.

At least two main trails in the Saddle were referred to in 1873 Boundary Commission testimonies as 'Umi's trails that provided travel routes through the Saddle between the districts of Kona, Kohala and Ka'ū (Cordy 2000:210). One of these trails ran along the northwest boundary of Hāmākua between the uplands of Kona and Kohala districts, as described by Cordy (1994:106–107):

...the main inland route connecting Waimea, Kohala, and Hāmākua with Kona ran from Waimea up to the point near where Ka'ōhe of Hāmākua and Waimea of Kohala adjoin, then just along the Hāmākua-Kona border, and finally down through the Hualālai-Mauna Loa gap. Here the trail passed the Ahu a 'Umi heiau in upland Kona and dropped down to the shore.

The second of 'Umi's trails reportedly intersected the Kona-Waimea trail at Ahu a 'Umi and ran south to Ka'ū just south of the summit of Mauna Kea (Cordy 1994:107).

Later, 'Umi's son Keawenuiaumi also crossed the Saddle probably along the same Saddle routes to battle his older brother Keli'ioaloa:

Therefore he made himself ready with his chiefs, war lords, war leaders, and warriors from Hilo, Puna, and Ka-'u to make war on Kona. The war parties [met?] at the volcano (pit of Pele) before going on to battle along the southern side of Mauna Kea and the northern side of Mauna Loa. The mountain road lay stretched on the level. At the north flank of Hualālai, before the highway, was a very wide, rough bed of lava-barren, waterless, and a desert of rocks. It was a mountain place familiar to 'Umi-a-Liloa when he battled against the chiefs of Hilo, Ka-'u, and Kona. There on the extensive stretch of lava stood the mound (ahu), the road, the house, and heiau of 'Umi. It was through there that Keawe-nui-a-'Umi's army went to do battle against his older brother, Ke-li'i-o-kaloa (Kamakau 1992:35).

### 3.1.2 Avian Resources

The Saddle Region was a known habitat for a number of bird species hunted by Hawaiians, particularly for the meat of the larger *nēnē* (*Nesochen sandwicensis*), and 'ua'u<sup>2</sup> (*Pterodroma phaeopygia sandwicensis*). A post-Contact native testimony discussing the upland boundaries of

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<sup>2</sup> The 'ua'u is a nocturnal pelagic seabird that comes onto land from March to November. They can nest in a variety of environments and elevations and only require soil-covered slopes or irregular terrain for nest chambers. Chicks are hatched in late June and spend about four months in their burrows (Ziegler 1998; cited in Shapiro et. al. 1998: Appendix C).

Waikōloa Ahupua'a claimed he hunted *nēnē* and *'ua'u* in the region presumably beyond Waikōloa into neighboring Ka'ōhe and Saddle Region (Records from Proceedings of Boundary Commission; in Maly and Maly 2002:87). Malo (1971:37) reported that the *nēnē* were often captured in the uplands during their molting season for food and feathers, the latter of which was used in the making of *kahili* (Malo 1971:37).

The *'ua'u*, or Hawaiian petrel, were seasonally hunted in the Saddle Region by both pre-Contact and early post-Contact Hawaiians. A mid-19<sup>th</sup> century account stated that residents of Ka'ōhe Ahupua'a (including the Saddle) had the "sole privilege of capturing the *'ua'u*, a mountain-inhabiting sea-fishing bird" (Lyons 1875:111; cited in Hommon and Ahlo 1983:21). At the turn of the 20<sup>th</sup> century, it was noted the *'ua'u* once "nested in great numbers in the lava between Mauna Kca and Mauna Loa" but that the nesting sites were no longer occupied after being invaded by the mongoose (Henshaw 1902:120). Hawaiians also captured *'ua'u* with nets as the birds flew to the mountains in the evening (Handy and Handy 1972:259).

Juvenile *'ua'u* were considered a delicacy for Hawaiian *ali'i* and were extracted from their burrows with a long stick used to pierce the bird's down:

It is said that years ago the nestlings of the uuau were considered a great delicacy, and were tabooed for the exclusive use of the chiefs. Natives were dispatched each season to gather the young birds which they did by inserting into the burrows a long stick and twisting it into the down of the young which were then easily pulled to the surface (Henshaw 1902:102).

Hawaiians cooked birds by broiling their carcasses over hot stones or coals, or the birds were "cooked in ti leaves with young taro leaves (*lu'au*) and stems (*haha*)" (Handy and Handy 1972:259). Food items, including birds, were also cooked from the inside out, as described by Buck (1957:18):

The boiling method used throughout Polynesia consisted of applying heat from the inside instead of from the outside. The food was placed in wooden bowls with water, into which red hot stones were dropped. Heated stones termed *'cho* were also placed in the interior of fowls.

The upland forests, likely including the Saddle Region, supported a wide variety of songbirds, such as *apapane* (*Hiatone sanguinea*), *'amakihi* (*Hemignathus* spp.), and *i'iwi* (*Vestiara coccinea*), whose feathers were used in chiefly feather capes and helmets (Malo 1971:76–77). According to Emerson (1894; cited in Welch 1993:26), the collection of bird feathers was done by a specialist known as a *kia manu*, who captured a bird using a pole with a sticky gum-like substance derived from the *papala* or *oha* plants.

Although some of the birds with fewer colorful feathers survived the plucking, the *i'iwi* and *apapane* were inevitably cooked and eaten, having not survived the extensive plucking of their abundant red plumage (Buck 2003:217–218). *Pueo*, or Hawaiian owls, although considered an *aumakua*, a family or personal god, by many Hawaiians, were also captured for their plumage, commonly used in the making of feather *kahili* (Malo 1971:38).

### 3.2 Post-Contact History

Early historic accounts provide some insight into the remoteness of the Saddle Region and the difficulties exploring parties encountered when attempting to cross the Saddle. Hommon and Ahlo (1983:27) provide a summary of historic accounts that suggest the Saddle Region contained a scarcity of well-defined trails and those that existed were difficult to follow even with Hawaiian

guides present (Hommon and Ahlo 1983:28). The arid and rocky landscape was an added challenge for Western travelers, as accounted by J.S. Emerson (1885) during his journey from Waimea to Ke‘āmuku, and his final destination at the Judd Trail, located on the southwest corner of the Saddle:

The terminus of the Judd Road among the other points is carefully located. No expedition which I have ever conducted has caused me such anxiety and has attended with such loss as this. It was a frightful trip, the remembrance of which haunts me. The water holes were dry and the country parched with drought. At Waimea we encountered a cold storm of wind and rain. At Keamuku the animals drank too freely of bad water. Used up with hunger, thirst, cold and improper drink, they fell by the way. Though I did my best to save them, I lost my poor old horse at Waimea and left the old Waawaikinaauao to die on the flow of 1859 along with a mule belonging to my man (J.S. Emerson, 8 December 1885).

### 3.2.1 Transportation Routes

Despite the difficulty of traveling in the Saddle, it is clear from ethno-historic accounts that exploitation of and movement through the region was accomplished with the aid of a system of trails. During the mid 19<sup>th</sup> century, the Hawaiian Kingdom ordered the construction of the Alanui Aupuni (Government Roads) specifically to facilitate horse and horse-drawn cart travel between the population centers and important resource areas, such as outlying ranch lands on the Saddle (Maly and Maly 2002:116–117). One such Alanui Aupuni was constructed across the Saddle on the south side of Mauna Kea for travel between Kawaihae to Hilo. In 1862, Surveyor Samuel Wiltse described the intended route of this Government Road along an existing cart road between Kawaihae and Waimea and “good surface and easy grades” from Waimea to Kalai‘eha in Humu‘ulu Ahupua‘a on the southeast side of Mauna Kea (Maly and Maly 2002:118).

Local informants associated with cattle ranching in the uplands of Kohala and North Kona districts recount an early 20<sup>th</sup> century trail that spanned between the historic cattle station of Waiki‘i in upper South Kohala to Ahu a ‘Umi at the back of Hualālai. The trail was referred to as a “sleeping place trail” and reported by others as having shelters along its length; intermittent sections of this trail apparently appear on early USGS Quadrangle maps (Puu Anahulu 1923 and Keamuku 1927 7.5 minute series) (Langlas et al. 1998:F-1).

### 3.2.2 Sandalwood

Between approximately 1815 and 1826, sandalwood or ‘*ilahi* (*Santalum* spp.) was actively harvested in the upland forest lands of the Hawaiian Islands for export to China (Cuddihy and Stone 1990:38). Thousands of trees were taken from the upland slopes of Kohala and Mauna Kea and transported by foot to Kawaihae for shipping to Honolulu and beyond. A Native testimony described the boundary of Waikōloa bordering Ka‘ohe Ahupua‘a on the west and speaks of cutting sandalwood in the region:

*Kiai, sworn* . . . I am well acquainted with that part of the boundary and the rest of it also. I have travelled the whole line personally. Used to hunt for uwau and neenee [nēnē], and to cut sandal wood in that part of the country. . . (Records from Proceedings of Boundary Commission; in Maly and Maly 2002:87)

The 1845 U.S. Exploring Expedition made reference to caves along the Waimea to Kona Trail and near ‘Umi’s Heiau that were supposedly used by sandalwood collectors (McEldowney 1979). Bundles of sandalwood have been found in a lava tube (Site 19491) in the western portion of

Ka'ohe. However, the small size of the sandalwood cache suggests the wood was not intended for export (Shapiro and Cleghom 1998:48).

### 3.2.3 Cattle/Sheep Industry

Cattle first arrived in Hawai'i in 1793 as a gift from George Vancouver to Kamehameha I. At the request of Vancouver, these animals were protected under *kapu* for ten years to ensure their multiplication. The herds reproduced rapidly in the Waimea region and mountain slopes, and by 1802 the animals had become so wild "that none of the natives dare approach them" (Turnbull 1813:243; cited in Kelly 1974:44). Crops were being destroyed by cattle despite the construction of fencing.

By 1818, Kamehameha sought to control the sizable herds of roaming cattle by hiring foreign "bullock hunters" to hunt the feral beasts. One of the first bullock hunters was John P. Parker, the founder of Parker Ranch (Kelly 1974:44). By 1837, bullock hunting had become an industry in itself, with over 60 operators reported, and the use of bullock pits being the common method for catching cattle (Bergin 2004:28). The Reverend William Ellis described early bullock hunting observed by his companion Mr. Goodrich upon descending Mauna Kea:

... he saw at a distance several herds of wild cattle, which are very numerous in the mountains and inland parts of the island. . . They first carry all the salt to the mountains. When they have killed the animals, the flesh is cut off the bones, salted immediately, and afterwards brought on the men's shoulders ten or fifteen miles to the sea-shore (Ellis 1984:402).

Early ranching sites in the Saddle are typically related to sheep operations in Humu'ulu Ahupua'a, including a station at Kalai'eha just northeast of PTA. The original lease was sold to Waimea Grazing and Agriculture Company (WGAC) in 1856, who developed the parcel into three distinct stations at Kalai'eha, Lahohinu and Keanakolu (Bergin 2004:229–231). The Kalai'eha station is described by Charles De Varigny in 1857:

Kalaieha [*sic*] is neither a town, nor a village, nor even a huddled corral of grass huts. It is an immense plain which sprawls between two mountains. At certain periods of the year, especially in July and August the plain abounds in wild geese attracted by the ohelo, small red berries with a rather insipid flavor. The shrub bearing this fruit is more plentiful in Kalaieha than anywhere else. Moreover, during the period of our excursion, sportsmen and amateur hunters looking for game pay frequent visits to Kalaieha for the pleasure of shooting.

Unfortunately, wild geese begin to spoil very quickly and cannot stand being shipped to Honolulu...The plain was entirely deserted and the bushes were stripped of their fruits. In compensation, though the geese were missing, the wild bullocks, boars, and stray dogs who had reverted to a state of nature were present in hoards. The place swarmed with wild boars (De Varigny 1981:90–91).

In 1857, the WGAC also purchased leases to Ka'ohe Ahupua'a extending between the mountain lands of Mauna Kea, the Saddle and north slope of Mauna Loa (Maly and Maly 2005:15). In 1870, Parker Ranch acquired most of the Ka'ohe leases to be used for sheep and cattle ranching.

The Humu'ulu sheep station operation was eventually bought by James Gay in 1876 and later mortgaged to a German businessman named Hackfeld in 1885 (Bergin 2004:231). Hackfeld's holdings were managed by the Haneburg brothers, who eventually purchased the Humu'ulu Sheep Station Company by 1893 (Bergin 2004:231). Ranch walls, many of which can still be seen from

Saddle Road, were laid out by A. Haneburg and built by Japanese immigrants in 1895; the south wall south of Saddle Road was built to keep sheep from wandering into the rugged Mauna Loa lava flows (Langlas et al. 1998:51).

In 1900, Samuel Parker Sr. purchased the Humu'ula Sheep Station Company, which by 1902 was running 20,000 to 30,000 sheep under the management of his son, Samuel Parker Jr. (Langlas et al. 1998:50). The sheep farm was expanded to five stations, likely at Kalai'eha, Pu'u Ō'ō, Laumai'a, Hopuwai and Keanakolu (Langlas et al. 1998:50). A 1910 census shows 20 people living at the main station at Kalai'eha in addition to Samuel Parker Jr. and his brother (Langlas et al. 1998:50).

In the 1930s, informants recalled cowboys driving sheep across the Saddle from Humu'ula to Kawaihae for shipping to Honolulu (Langlas et al. 1998:53).

We used to bring the sheep down in the afternoon from Humu'ula, down to a corral they call Pu'u Mau [Mau'u]. And that hill is on the Humu'ula side of Pu'u Ke'eke'e on the right hand side of the Saddle Road as you come up Pu'u Mau, we used to put sheep in there and then ride back to Humu'ula, spend the night at Humu'ula and leave Humu'ula about 2:00 in the morning, ride down to Pu'u Mau, pick up the sheep and bring 'em down to Nohonaohae and leave 'em at Nohonaohae. . .

At the turn of the 20th Century, Alfred Carter became the manager of Parker Ranch, with Samuel Parker Jr. still owning half of the ranch assets. John Parker II's 50-percent interest was transferred through inheritance to John Parker III's 5-year-old daughter Annie Thelma Parker (Brennan 1974:115–117).

The current PTA portion of the Ka'ohē lease continued to be used as ranch lands by Parker Ranch until 1956 when the lease was released to the United States Army for military training (Maly and Maly 2005:15).

### 3.2.4 U.S. Military

During the World War II era (ca. 1943–1945) the U.S. military began training activities at an anti-tank range, artillery range and impact area at Pōhakuloa (Langlas et al. 1998:55). A local informant recalled an army camp had been established at Pōhakuloa during the war, which contained tents and Quonset huts (Langlas et al. 1998:55–56). Another informant remembered the Army used a CCC camp at Pōhakuloa during the war, apparently located at the current Mauna Kea State Park (Langlas et al. 1998:55–56).

The U.S. Government constructed Saddle Road in 1943 to allow troops to move into the interior in case of a subsequent attack (Langlas et al. 1998:55). PTA was established as a training facility in 1956, which at that time included over 116,000 acres of land under lease and ownership by the U.S. Government.

### 3.3 Previous Archaeology at PTA

The previously documented site types in PTA include traditional Hawaiian sites associated with ceremony, transportation, possible bird catchment, quarrying, and lithic workshops. Post-Contact ranching walls and infrastructure are also present within the northern portion of PTA and the former cattle/sheep station (Kalai'eha), located just east of PTA. U.S. military structures attributable mainly to recent training activities have been observed throughout PTA. These site categories are summarized below.

### 3.3.1 Occupation

Occupation sites in the Saddle are typically classified as either limited-use or repeated-use sites. Limited-use sites were occupied on a short-term basis, such as an overnight stay (Streck 1992:102) in surface structures (e.g., rock-constructed enclosures) and natural shelters formed in lava flows, such as caves and rock shelters. The limited-use occupations are defined by sparse amounts of cultural material, often limited to charcoal scatters or shallow ash deposits, limited artifact scatters, or sparse midden. Limited-use occupation sites are generally located near trails running through the Saddle Region (Athens and Kaschko 1989; Cordy 1994:206; Hommon and Ahlo 1983).

Repeated-use sites contain midden deposits, features, and exhibit structural modifications, such as platforms, walls, terraced areas, and cupboards. Cultural deposits at repeated-use sites are stratified and typically contain a wide range of well-preserved artifacts (Athens and Kaschko 1989; Haun 1986; Shapiro et al. 1998; Shapiro and Cleghorn 1998; Streck 1986). Faunal assemblages at repeated-use sites are dominated by bird bone, particularly those of adult 'ua'u (Hawaiian petrel), though marine shell and fish bone also occur in limited quantities (Athens and Kaschko 1989; Ziegler 1993, in Shapiro et al. 1998 [Appendix C]). Some repeated-use sites may represent base camps for groups exploiting resources in the area (Reinman and Schilz 1993:116-118).

Of the 188 radiocarbon dates obtained from occupation sites at PTA, the majority fall within the period AD 1400 to 1700, with one of the earliest dates (AD 780 to 1020) obtained from a lava tube site (Site 18672) south of the project area (Shapiro et al. 1998: 30).

### 3.3.2 Excavated Pāhoehoe Pits

A multitude of excavated pits are present at PTA. Moniz-Nakamura et al. (1998) and Hu et al. (2001) suggest that excavated pits represent efforts to create nesting habitat for 'ua'u or to enlarge natural burrows to retrieve nestlings. Pāhoehoe pits are often present in areas where the flow surface formed a small blister but are also found on level lava flows. The pāhoehoe surface was apparently broken and the slab material overturned, scattered around the lip of the blister and occasionally piled inside and outside the pits.

Both Moniz-Nakamura et al. (1998) and Hu et al. (2001) consider it unlikely that the pits were used for sweet potato. As Hu et al. note (2001:9):

... using the pits for growing crops ... is unlikely. Hawaiian varieties of sweet potato, the most likely crop, cannot tolerate the combination of cold aridity and lack of soil evident at this altitude on Mauna Loa.

If excavated pits at PTA functioned as bird nesting sites, their abundance tends to support previous land-use interpretations that bird hunting was the primary resource activity at PTA during the prehistoric period (cf. Athens and Kaschko 1989; Hommon and Ahlo 1983; Shapiro et al. 1998).

Two possible bird hunting sites (Site 23455 and Site 19490, Feature V) are located in the current project area in the *k2* lava flow and adjacent *l* type flow (cf. Wolfe and Morris 1996).

### 3.3.3 Transportation

Trails were identified at PTA in the form of isolated segments of worn lava paths, linear curbstone constructions, and alignments of cairns. Some of the sections near the western boundary of Ka'ohē are identified as the Nā'ōhule'elua Trail (SHPD Sites 5006-5008 and 19528) possibly representing a section of the 'Umi's Kona to Waimea trail route once passing on the back side of Hualālai or the Kona to Pu'u Ke'eke'e or Hualālai to Waiki'i trails documented by Langlas et al. (1998:25). At

least one trail section (Site 18679) was documented in 'a'ā lava near the southeast boundary of PTA around Pu'u Koli (Shapiro et al. 1998:18). Three traditional Hawaiian trail sections were located in the current project area (Site 19490, Features F and K, and Site 23457) (Roberts et al. 2004c; Shapiro and Cleghorn 1998).

### 3.3.4 Volcanic Glass Quarries and Basalt Reduction Sites

The Saddle region is one of Hawai'i's most abundant volcanic glass sources. The area's relatively recent *pāhoehoe* flows contain a great number of volcanic glass outcrops, most of which have been exploited. Perhaps the largest of these is Site 21666, a quarry complex first identified by Ogden Energy and Environmental Services (Williams 2002), which encompasses approximately 16.8 hectares. Because of time limitations, Ogden was only able to make preliminary estimates of the number of quarries and the size of the overall complex. GANDA subsequently re-surveyed the area in an effort to document and evaluate the quarry complex (Roberts et al. 2004a). As a result of this work, at least 525 individual quarries were documented on the *k4*<sup>3</sup> flow east of Redleg Trail. Twenty-two additional quarries occur within the Impact Area where the *k4* flow extends west across Redleg Trail; another ten occur within an isolated lobe of the same *k4* flow north of Saddle Road in Training Area 3 (Roberts et al. 2004b:16–17). Volcanic glass quarries also occur on the *k3* flow in western PTA (Reinman and Schilz 1993).

The occurrence of volcanic glass is directly tied to the geology and flows of Mauna Loa. A geologic summary of the *k4* flow's *pāhoehoe* portion, where the majority of volcanic glass quarries occur, was recently prepared by Dr. John Sinton (Roberts et al. 2004a:Appendix C [no page nos.]). An excerpt of his findings helps explain the unique geology of these features:

... The flow field is a complex of individual flow lobes that range in character from brown-weathering areas with only very thin glass crusts, to blue-black-weathering units that are characterized by conspicuous glass surface crusts ranging up to ~3 cm in thickness. It is within the latter units that specific areas were exploited as glass quarries. The black-weathering units are very dense *pāhoehoe*, typical of that which has degassed during transit in lava tubes and subsequently oozed out down slope. . The quarried lava is basalt with scattered micro-phenocrysts of olivine ranging up to ~1 mm in size.

The outcrop of dense *pāhoehoe* containing the quarries is dominated by relatively thin *pāhoehoe* flow lobes up to ~30 cm thick. Some of the flatter lobes have conspicuous ropy surfaces. These ropes were heavily worked to produce elongate glassy blades up to ~10 cm long. *Pāhoehoe* toes without ropes also were quarried, to produce 5–15 cm chunks with 1–3 cm thick glassy rinds. The specific quarry area visited [Site 21666, Feature 161] contains one moderate size tumulus, the surface of which was quarried. There is, however, no evidence for preferential quarrying of the tumulus. Apparently flow surfaces within the outcrop area of dense black *pāhoehoe* were equally worked, irrespective of local flow morphology.

In addition to volcanic glass quarry debris, these sites also frequently contain hammerstones. Williams (2002:71) noted the use of "large hammerstones made of vesicular *pāhoehoe*" for initial quarrying of the material and small, dense basalt hammerstones derived from Mauna Kea basalt for secondary reduction activities. GANDA later identified hammerstones at 19% of the quarries recorded at Site 50-10-31-23856 (Roberts et al. 2004b:18). The majority were small, dense, water-

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<sup>3</sup> U.S. Geological Survey designation for a 330-year old Mauna Loa *pāhoehoe* flow that runs through PTA.

worn basalt hammerstones. Scarcity of larger vesicular basalt hammerstones suggests that these were removed or were of limited utility.

A number of basalt reduction areas are also present at PTA, such as Site 18675 at Pu'u Koli (Shapiro et al. 1998:36), Site 23465 north of Pu'u Koli (Robins et al. 2006:99), and Site 26730 recorded by PTA CR staff on the top of Pu'u (J. Taomia, review comments of current report, October 2010).

Debitage scatters are found in various contexts including repeated and limited-use occupation sites, cairn complexes, and as isolated scatters. The scatters likely represent reduction of adze blanks, retooling, or production of flake tools. Raw material is generally fine-grained basalt, much of derived from sources on Mauna Kea. It is not yet known whether this material is quarried directly from the Mauna Kea adze quarry near the summit, from drainages emptying into the Saddle, or both. No quarry sites are located in the current project area.

### 3.3.5 Ceremonial Sites

Sites containing evidence of ceremonial use are present at PTA, typically with traits similar to shrines on Mauna Kea, such as vertical or "upright" stones placed near platforms or lava tubes. Other ceremonial sites unique to PTA are represented by groupings of cairns and individual cairns containing stones with cup-like depressions (Williams 2002:14). No ceremonial sites were identified within the current project area.

### 3.3.6 Historic Ranching Sites

As noted above, ranching sites within PTA are likely related to mid-19<sup>th</sup> and 20<sup>th</sup> century sheep and cattle operations at the Humu'ula Sheep Station northeast of PTA and Parker Ranch operations within Ka'ohē Ahupua'a, including the PTA Saddle Region. A fence line with wooden posts and intermittent rock wall foundation is aligned roughly east-west or parallel with Saddle Road inside the current project area (Site 23451) (Brown et al. 2008). This fence line might represent the "walls" laid out by the Humu'ulu sheep station owners in 1895 to keep sheep from wandering into the rugged Mauna Loa lava flows (Langlas et al. 1998:51) but was later upgraded to its current wire-fence construction by Parker Ranch.

### 3.3.7 U.S. Military Training Structures

A common problem for archaeologists working in former and current U.S. military training areas, particularly at PTA, is differentiating between traditional Hawaiian temporary habitations and modern military training structures. Both functional types are constructed of local rock materials, are generally small in size, and have been expediently built for short-term use. They exhibit similar architectural forms, such as C-shapes, U-shapes, circular enclosures, wall sections, and cairns.

Several variables have been identified that distinguish military structures from the short-term use Hawaiian structures (e.g., Clark and Kirch 1983, Clark 1987, Robins et al. 2000). These studies suggest that military training structures tend to lay directly on the ground surface, contain an excavated floor, are part of a larger complex of military structures, and often contain training debris on the surface (e.g., MRE, military equipment, ordnance, and scrap metal). Additional military characteristics observed at PTA include the incorporation of natural tree falls and branches into the structures.

In contrast, a traditional Hawaiian short-term habitation structure is commonly embedded in soil, is isolated or part of a small concentration of structures, and, in eroded landscapes, might contain traditional cultural material on the surface.

It is important to note the possibility of reuse or modification of traditional Hawaiian structures for military training activities. In these cases, a combination of traditional Hawaiian and military characteristics may be present. A multitude of U.S. military training structures were previously identified in the current project area (Figure 5).

#### **3.4 Previous Archaeology in the PTA BAX Area**

Eight archaeological sites were previously identified within the PTA BAX project area by BioSystems Analysis Inc., (Shapiro and Cleghorn 1998), GANDA (Brown et al. 2008; Roberts et al. 2004c; Robins et al. 2006) and PTA Cultural Resource Staff (Head et al. 2004) (Table 2; Figures 5 and 6). Each site is described in Appendix A of this report. GANDA also conducted archaeological and cultural monitoring for unexploded ordnance surface and subsurface clearance activities in the current PTA BAX project area (Desilets 2007) (Figure 8). The monitoring project resulted in the protection of all recorded sites in the BAX project area.

The Shapiro and Cleghorn (1998) survey involved aerial reconnaissance and pedestrian survey of two work areas; Work Area 2 included Training Areas 5 and 6. Site 19490 complex was identified as a result of the BioSystems survey in the southwest corner of Training Area 5. Site 19490 is a pre-Contact habitation cave and trail complex recommended as eligible for the National Register of Historic Places (NRHP).

GANDA identified eight new sites during archaeological Phase I and II survey of the original BAX project area, which was located further southeast of the current project area (Roberts et al. 2004c; Robins et al. 2006) (see Figure 7). The project area was moved to its current location to avoid Site 19490. The eight newly identified sites consisted of lava tube habitations, excavated pits, volcanic glass quarries, mounds, a habitation enclosure, and a trail. Phase II work was also conducted at Site 19490 to evaluate the nature and depth of subsurface cultural deposits. Three of these sites (Sites 23455, 23457, and 23462) are within the current BAX project footprint; all three sites were recommended as eligible for NRHP listing under Criterion D.

GANDA identified an historic fence line (Site 23451) during Phase I survey work in PTA Training Area 8, which overlaps the northwest portion of the current BAX project (Desilets et al. 2005). A subsequent Phase II survey conducted by GANDA recommended that Site 23451 was not eligible for NRHP listing because it lacked integrity due to its remnant condition (Brown et al. 2008:86). Because no formal eligibility determination has been made by the Army for Site 23451, the Army requested the site be treated as eligible and be placed under protective status during the BAX project.

PTA Cultural Resources Staff identified three archaeological sites (Sites 24326, 24327, and 24328) and a multitude of recent military training structures within the current BAX project (Head et al. 2004). The archaeological survey covered gaps in the previous BAX survey areas that resulted from moving the project footprint to the west to avoid Site 19490. The site records obtained from the PTA Cultural Resources staff provide descriptions and maps for the three sites (see Appendix A). All three sites were recommended as eligible for NRHP listing under Criterion D.

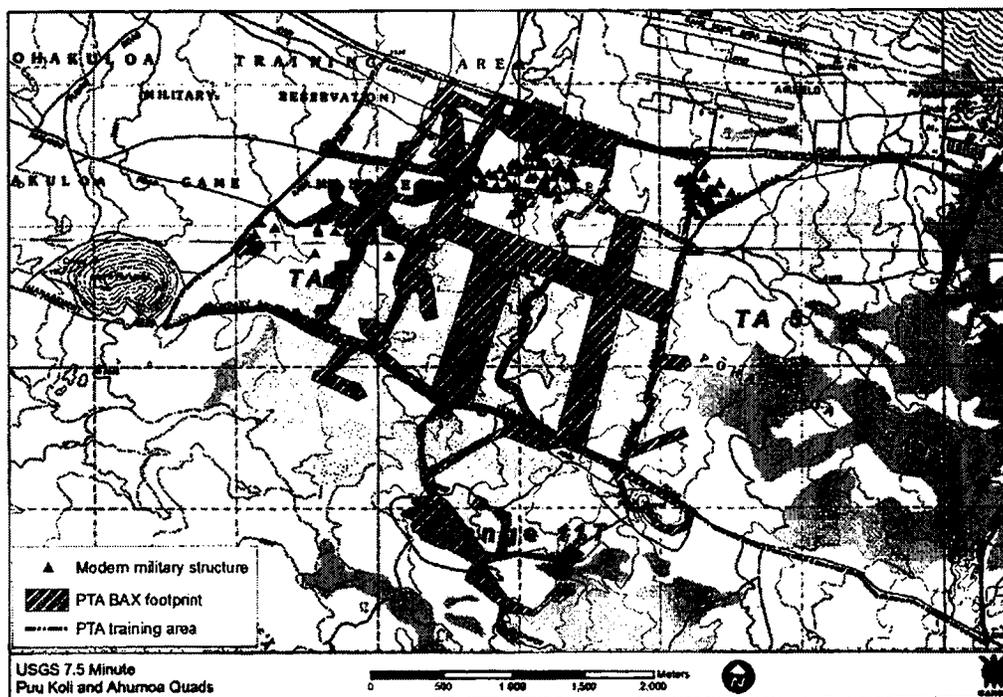
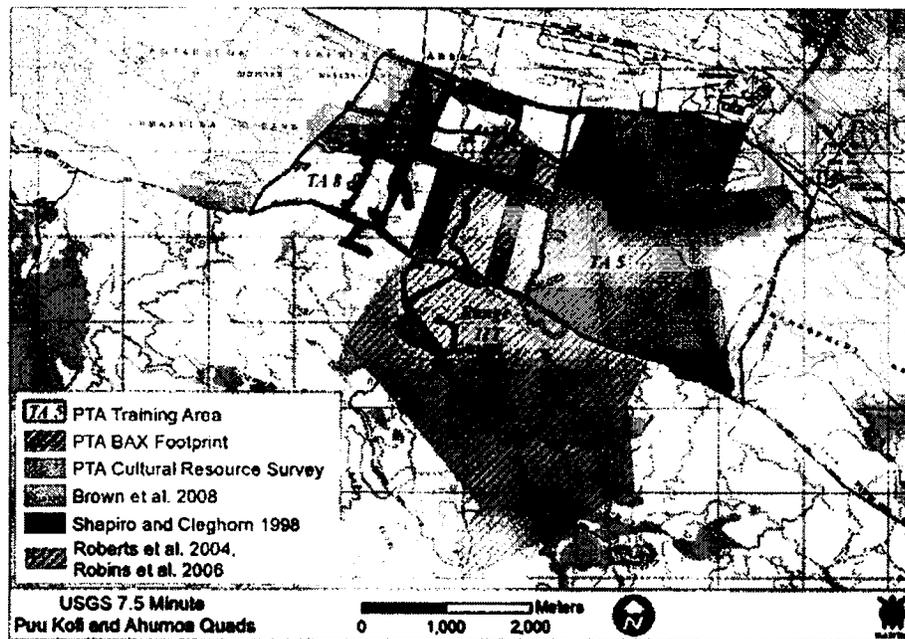


Figure 5. USGS map showing locations of recent military training structures in PTA BAX project.

**Table 2. Summary of Previously Identified Archaeological Sites in PTA BAX Project**

| SHPD No. (50-10-31) | Site Type             | Function                | Training Area | Reference                                |
|---------------------|-----------------------|-------------------------|---------------|------------------------------------------|
| 19490               | Habitation complex    | Repeated-use habitation | 5             | Shapiro and Cleghorn 1998                |
| 23451               | Historic fence/line   | Historic ranching       | 7, 8          | Brown et al. 2008                        |
| 23455               | Excavated pit complex | Possible bird catchment | 5, Range T11  | Roberts et al. 2004c; Robins et al. 2006 |
| 23457               | Trail and cairns      | Transportation          | 7             | Roberts et al. 2004c; Robins et al. 2006 |
| 23462               | Mounds                | Markers/land clearing   | 7             | Roberts et al. 2004c; Robins et al. 2006 |
| 24326               | Excavated pit complex | Possible bird catchment | 8             | APVG-GT-ENV 2004                         |
| 24327               | Cairns                | Markers                 | 8             | APVG-GT-ENV 2004                         |
| 24328               | Enclosures            | Habitation              | 8             | APVG-GT-ENV 2004                         |



**Figure 6. USGS quad maps showing locations of previous archaeological projects in and near the PTA BAX project.**

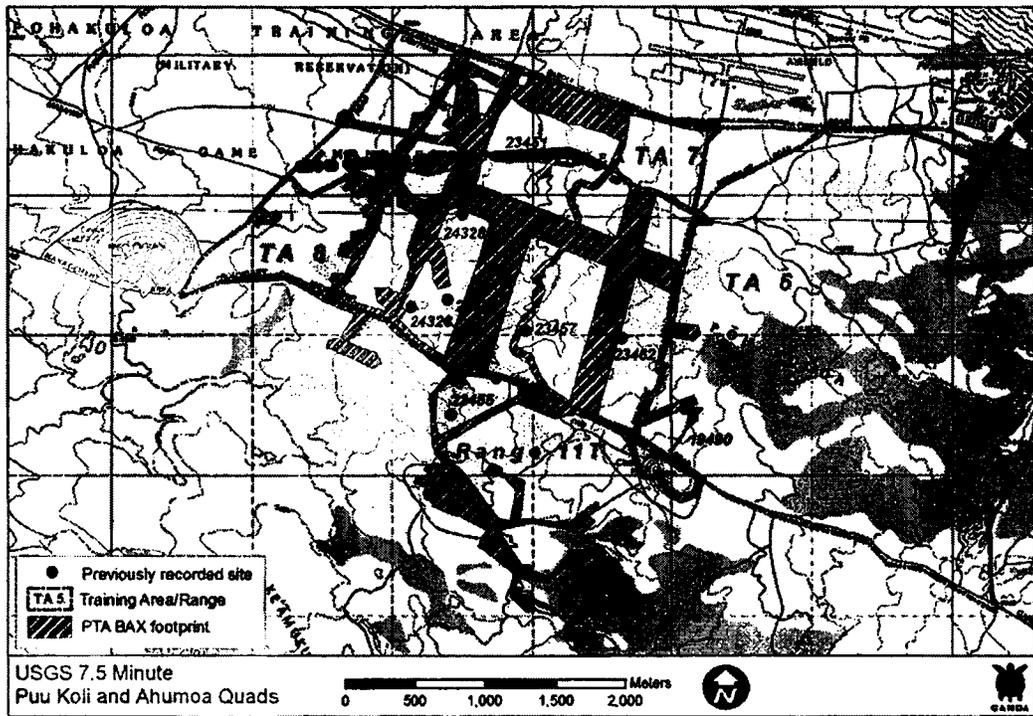


Figure 7. USGS quad maps showing previously identified archaeological site locations in PTA BAX project.

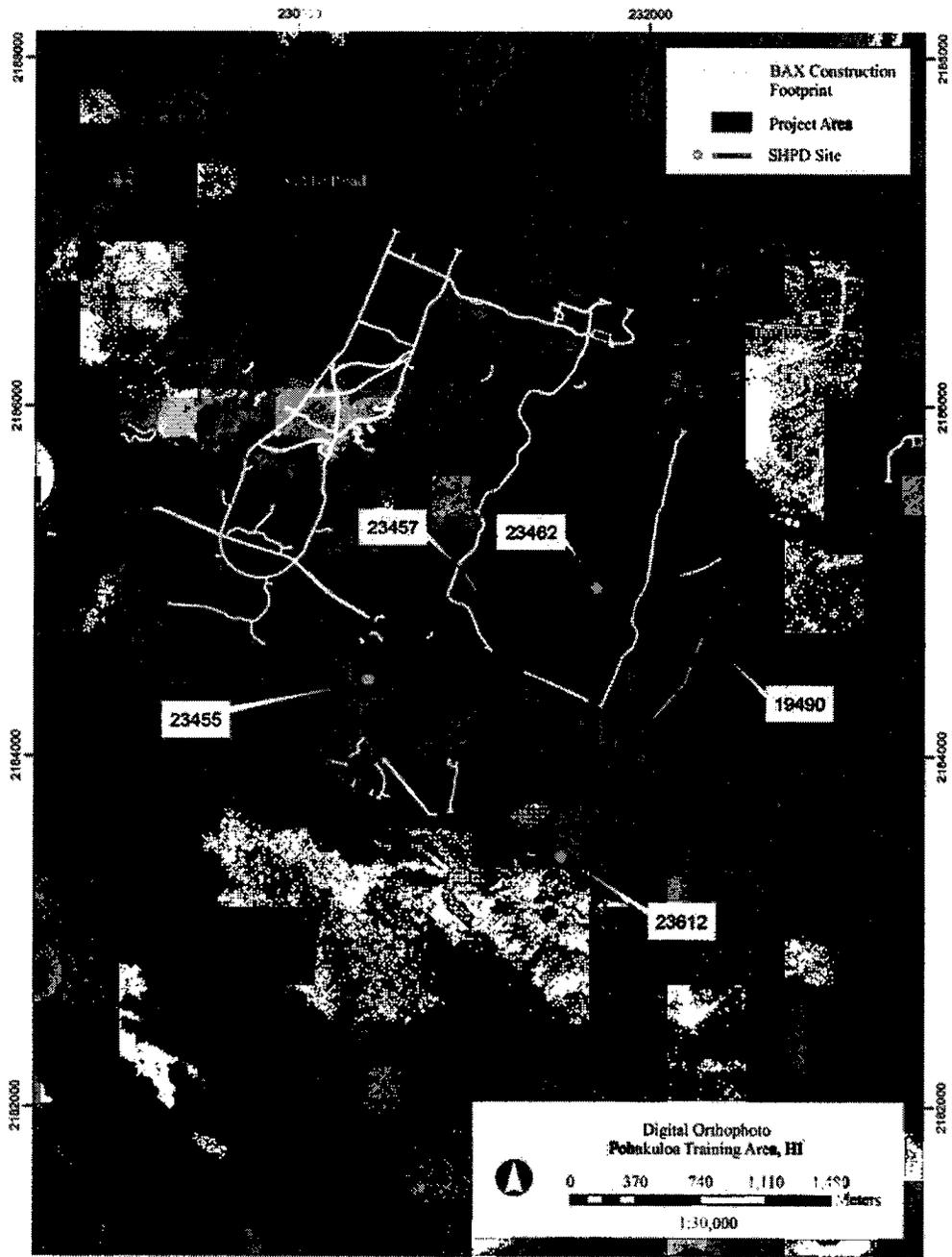


Figure 8. Orthophoto showing PTA BAX UXO clearance areas monitored by GANDA and site locations within 100 m from project footprint (from Desilets 2007:18) (note: Site 19490 location incorrect, see Figure 7 for correct placement; Site 23612 not included in current project.).



## 4.0 METHODS

### 4.1 Field Methods

During the course of the GANDA contract, all stages of ground-disturbing activities at the PTA BAX were fully documented in daily logs by the cultural and archaeological monitors. The daily log contained data indicating time spent monitoring, sampling, the amount of sediment removed and its location, the presence or absence of cultural remains and/or significant soil strata, and the locations of all sampled areas. Digital photographs were taken of representative work areas and documented on corresponding photograph logs.

All newly identified sites and component features were recorded and mapped to scale. Sub-meter-accurate site locations were determined using a hand-held Trimble GeoXH. The GPS positions were converted to ESRI shapefiles and projected to NAD 83, UTM Zone 5N.

Representative stratigraphic profiles were recorded of excavated areas to convey the general stratigraphy of the area for future management needs. If access to open trenches was possible, stratigraphic data were described in accordance with current National Soil Survey Center and Munsell Color Notation conventions (Schoenberger et al. 1998; Munsell Soil Color Chart 1992).

The archaeological sites were delineated in the field by orange plastic fencing placed as a buffer approximately 5 m from the site boundary or at a lesser distance to satisfy construction requirements.

### 4.2 Safety Practices

The GANDA field crew followed all safety practices required by the contractor, Kiewit Pacific. Because of the presence of unexploded ordnance in the project area, the GANDA field crew was certified with 40-hour HAZWOPER training and all field workers attended UXO recognition training by PTA Range Control staff and Depleted Uranium (DU) training with specialists from Cabrera Services.

The following guidelines were followed while working in the DU area of the BAX south of Lava Road:

- 1) Lunch breaks were coordinated with on-site UXO/DU support provided by USA Environmental.
- 2) Lunch was consumed at a common area near the work site and each person's hands were tested for DU (frisked) prior to eating.
- 3) All trash was deposited in a trash can and provided to UXO/DU personnel when exiting the area.
- 4) Drinking was only allowed from sealed, unopened bottles and consumed with gloves off.
- 5) Use of chewing gum or chewing tobacco was not allowed in the DU area.



## 5.0 ARCHAEOLOGICAL MONITORING RESULTS

A total of eight sites (Site 19490, 23451, 23455, 23457, 23462, and 24326–24328) are within or in close proximity to construction elements of the BAX project (Table 3; Figure 9). Six new features (Features Q–V) associated with Sites 19490 were newly recorded in the project area during a pre-construction walkover related to construction of a proposed protective berm (see Figure 9).

With the exception of a small section of the Site 23451 fence line that was consulted on and mitigated by documentation, the 11 project sites were protected from adverse impact by on-site monitoring and implemented protective measures. A description of all previously recorded sites in the BAX is presented in Appendix A of this report. Site descriptions of the six newly identified features (Features Q–V) associated with Site 19490 are presented in Section 5.2 below.

**Table 3. Archaeological Site Inventory and Implemented Protective Measures at PTA BAX**

| <b>SHIPD No.<br/>(50-10-31-)</b> | <b>Temp.<br/>Site No.</b> | <b>Site Type</b>                         | <b>Nearest BAX<br/>Construction Area</b> | <b>Conflicts and Protective Measures<br/>Implemented During Construction</b>                  |
|----------------------------------|---------------------------|------------------------------------------|------------------------------------------|-----------------------------------------------------------------------------------------------|
| 19490                            | G100–<br>G102             | Habitation-trail-<br>pāhoehoe<br>complex | Protective berm                          | On-site monitor; temporary fencing<br>pending redesign of protective berm                     |
| 23451                            | -                         | Historic<br>fenceline                    | MAT 1                                    | On-site monitor; temporary fence<br>buffer; permitted impact to portion of<br>site by Trail B |
| 23455                            | Multiple                  | Excavated pit<br>complex                 | Access south of<br>Lava Rd.              | On-site monitor                                                                               |
| 23457                            | G616                      | Trail and cairns                         | Tactical Road West                       | On-site monitor; temporary fencing;<br>protective buffer decreased to 2 m                     |
| 23462                            | G670                      | Mounds                                   | Spoil Area                               | Protective fencing; no construction<br>activities near site during contract                   |
| 24326                            | -                         | Excavated pit<br>complex                 | Trail A, targets                         | On-site monitor; temporary fence<br>buffer                                                    |
| 24327                            | -                         | Cairns                                   | Spoil area, targets                      | On-site monitor; temporary fence<br>buffer                                                    |
| 24328                            | -                         | Enclosures                               | Spoil area, Makai<br>Rd. improvements    | On-site monitor; temporary fence<br>buffer; moved spoil area boundary 25<br>m north of site   |

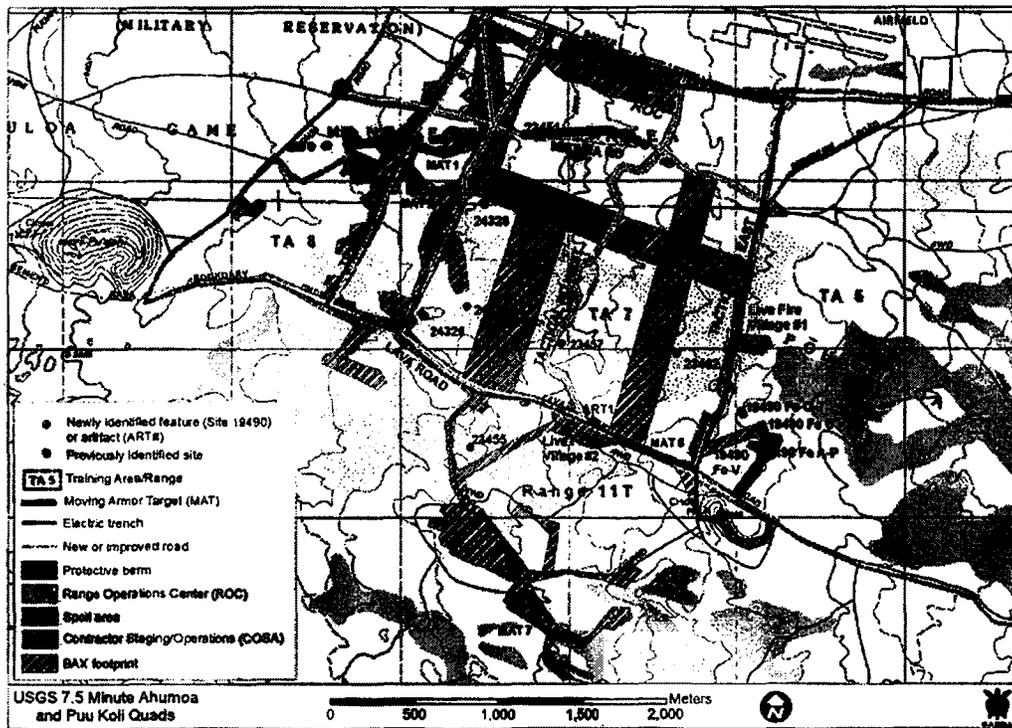


Figure 9. USGS quad maps showing main PTA BAX construction areas and locations of archaeological sites.

All ground-disturbing activities related to the BAX construction were monitored during the course of the GANDA contract, which was terminated on 15 August 2010. Ground-disturbing activities were carried out by a variety of heavy equipment operated by Kiewit Pacific and their subcontractors, including (but not limited to) excavators, backhoes, graders, bulldozers, drilling machines, augers, and scrapers. No cultural deposits were identified during any of the BAX construction activities monitored by GANDA.

### 5.1 Description of Work Areas

The main construction elements monitored at the BAX consisted of new roads and modifications of existing roads, a staging area (COSA), Moving Armor Targets (MAT1 and 2), Range Control Operations facility (ROC), spoil area and numerous targets, facades, bunkers, and training trenches constructed throughout the BAX (see Figure 9). These main construction elements are described below and include relevant soil descriptions and photographs of the work areas. A protective berm designed for construction in the southeast corner of the BAX was not constructed during the course of the GANDA contract partly because of newly identified site conflicts (see Section 5.4 of this report). The berm design was intended to provide a barrier between Site 19490 and live fire activities from the new BAX facilities.

#### 5.1.1 Roads and Power Line Trenches

The BAX construction at PTA included three new roads (Trail A, Trail B, and Tactical Road West), modifications to three existing roads (Lava Road, Menehune Road, and Mikilua Road), and construction of subsurface power lines next to the roads. All of these elements were monitored by GANDA archaeological and cultural monitors.

Construction of the new roads involved grubbing, excavating, filling, and compacting. The new roads averaged 5.0 m wide with wider sections occurring in specific topographic landforms to accommodate water runoff and slope retention (Table 4; Figures 10–15).

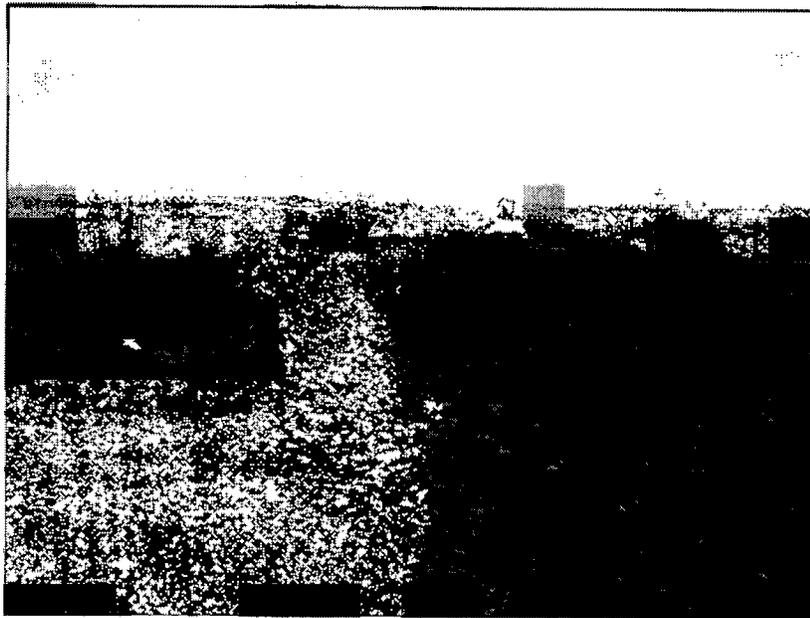
The power line trenches were excavated along the edge of Trail A, Trail B, Menehune Road, and a section of Mikilua Road between Trail B and Kaua Road. The trenches measured roughly 2.0 m wide by 1.5 m deep. Stratigraphic soil profiles were drawn for two of the power line trenches along Mikilua Road and Menehune Road (Figures 16 and 17). The trench profiles indicate the soils along Mikilua Road are composed mostly of eroded 'a'ā, with a greater amount of soil deposition present along Trail B further to the southeast. Both areas are within the lava type *ac* and described in the soil survey as Keekee loamy sand: a weakly consolidated alluvium-colluvium soil type (Soil Survey Staff 2010). Given the loose surface mantle of the Keekee loamy sand soil type, the soil-based landform is highly eroded from weathering and military training activities.

**Table 4. Soil Descriptions for Trench Profiles Recorded in PTA BAX Work Areas.**

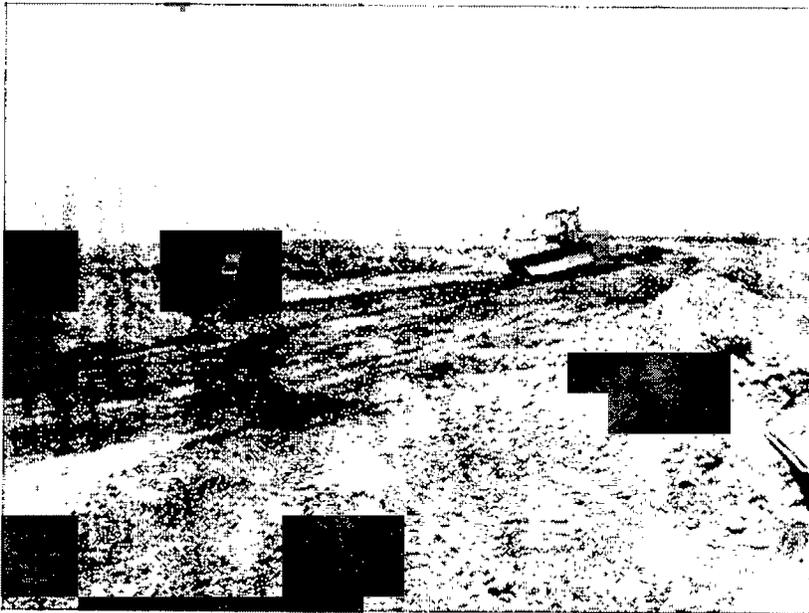
| Layer                          | Depth (cmbs) | Description                                                                                                                                      |
|--------------------------------|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Mikilua Electric Trench</i> |              |                                                                                                                                                  |
| I                              | 0–25         | Dark brown (10YR 3/3) silt loam                                                                                                                  |
| II                             | 25–75/125    | Yellowish brown (10YR 5/6) silt loam with 90% angular large cobbles                                                                              |
| III                            | 125–140      | Yellowish brown silt loam (10YR 5/6) with 95% compacted gravel and small cobbles                                                                 |
| <i>Trail B Electric Trench</i> |              |                                                                                                                                                  |
| I                              | 0–15         | Mechanically crushed gravel                                                                                                                      |
| II                             | 15–30        | Yellowish brown (10YR 5/6) silt with few cobbles in lower boundary; diffuse lower boundary                                                       |
| III                            | 30–110       | Yellowish brown (10YR 5/4) silt with sub-angular cobbles (eroding 'a' $\bar{a}$ )                                                                |
| <i>COSA Pond</i>               |              |                                                                                                                                                  |
| I                              | 0–120        | Brown (10YR 5/3) silt loam with 30–35% sub-angular pebbles and boulders                                                                          |
| <i>COSA Phone Line Trench</i>  |              |                                                                                                                                                  |
| I                              | 0–25         | Light brown (7.5YR 6/4) silt loam with 30% subangular pebbles and small cobbles                                                                  |
| II                             | 25–60        | Brown silt loam with 15% pebbles concentrated in silt-gravel lenses; mottled with dark silt loam.                                                |
| <i>MAT1 Trench</i>             |              |                                                                                                                                                  |
| I                              | 0–30         | Dark grayish brown (10YR 4/3) silt loam with organics; few sub-angular pebbles.                                                                  |
| II                             | 30–75        | Alternating beds of dark grayish brown (10YR 4/2) and light brown (7.5YR 6/4) silt loam; abrupt and smooth lower boundary.                       |
| III                            | 75–110       | Pale brown (10YR 6/3) silt loam with 60% saprolitic sub-angular cobbles and boulders.                                                            |
| <i>MAT2 Trench</i>             |              |                                                                                                                                                  |
| I                              | 0–15         | Silt loam (7.5YR 6/4) with 50% sub-angular 'a' $\bar{a}$ cobbles and boulders; wavy boundary.                                                    |
| II                             | 15–26        | Very pale brown (10YR 7/3) silt loam with 50% 'a' $\bar{a}$ sub-angular cobbles.                                                                 |
| III                            | 26–78        | Dark brown (7.5YR 3/2) silt loam mottled with reddish brown (5YR 4/4) and pale brown (10YR 6/3) silt loam; 50% 'a' $\bar{a}$ pebbles and cobbles |
| <i>ROC Trench</i>              |              |                                                                                                                                                  |
| Overburden                     | 100 high     | Pushed boulders on top of original ground surface mixed with silt and organics                                                                   |
| I                              | 0–60         | Dark brown (10YR 3/3) silt loam; 20% sub-angular medium to large boulders.                                                                       |

**Table 4. (continued)**

| <b>Layer</b>               | <b>Depth (cmbs)</b> | <b>Description</b>                                                           |
|----------------------------|---------------------|------------------------------------------------------------------------------|
| <i>Target F1-02 Trench</i> |                     |                                                                              |
| I                          | 0-120               | Brown (10YR 5/3) silt loam with organics.                                    |
| II                         | 120-200             | Light yellow brown (10YR 6/4) silt loam with lens of angular basalt cobbles. |
| <i>Target V-13 Trench</i>  |                     |                                                                              |
| I                          | 0-144               | Grayish brown silt loam with 90% 'a'ā cobbles                                |
| <i>Target F3-02 Trench</i> |                     |                                                                              |
| I                          | 0-53                | Dark brown (10YR3/3) silt loam with 50% 'a'ā cobbles.                        |
| II                         | 53-200              | Dark brown (10YR 3/3) silt loam with 20% 'a'ā cobbles and small boulders.    |
| <i>Target LV1-6 Trench</i> |                     |                                                                              |
| I                          | 0-29                | Brown (10YR 5/3) silt loam with 40% 'a'ā pebbles and few large 'a'ā cobbles. |
| II                         | 29-106              | Light yellow brown (10YR 6/4) silt loam with 50% 'a'ā pebbles and cobbles.   |
| <i>Target T-37 Trench</i>  |                     |                                                                              |
| I                          | 0-60                | Brown silt loam (10YR 4/3) with basalt cobbles and small boulders            |
| II                         | 60-160              | Basalt bedrock                                                               |



**Figure 10. Trail A showing compacted surface; view to southwest.**



**Figure 11. Excavator trimming Trail B; view to southeast.**



**Figure 12. Photograph of Tactical Road West; view to northwest.**



**Figure 13. Photograph of Tactical Road West; view to north.**



**Figure 14. Photograph of Menehune Road electrical trench; view to south.**



**Figure 15. Photograph of Lava Road modification near proposed MAT 6 construction; view to west.**



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REPLY TO  
 ATTENTION OF

Office of the Commander

JUN 04 2013

Mr. William Aila  
 State Historic Preservation Officer  
 State Historic Preservation Office  
 Kakuhihewa Building, Room 555  
 601 Kamokila Boulevard  
 Kapolei, HI 96707

Dear Mr. Aila:

Please find enclosed for your review and comment two draft final reports for the archaeological and cultural monitoring at the Pōhakuloa Training Area (PTA) Battle Area Complex (BAX) range prepared by Garcia and Associates, one dated November 2010 and the other dated April 2013. The opinions expressed in the reports are those of the contractor and not necessarily those of the government. All construction activities on the PTA BAX were recently completed. The archaeological and cultural monitoring was conducted by two different archaeological consulting firms under three different contracts due to the effects of the court injunction on the project. A third report, which describes the archaeological and cultural monitoring in the period between these two, is currently in preparation by Cultural Surveys Hawaii and will be provided for review and comment when the final draft is ready.

The archaeological and cultural monitoring was conducted and the reports developed under the Programmatic Agreement for the US Army's transformation of the 2<sup>nd</sup> Brigade, 25<sup>th</sup> Infantry Division (Light) to a Stryker Brigade Combat Team (SBCT).

A copy of this report is also being provided to the individuals and organizations on the enclosed distribution list. Please send comments within 30 days of receipt. Should you require additional information about this project, the point of contact is Dr. Julie M. E. Taomia, PTA Archeologist, at telephone number (808) 969-1966 or by email at julie.m.taomia.civ@mail.mil..

Sincerely,

Eric P. Shwedo  
 Lieutenant Colonel, US Army  
 Commanding

Enclosures

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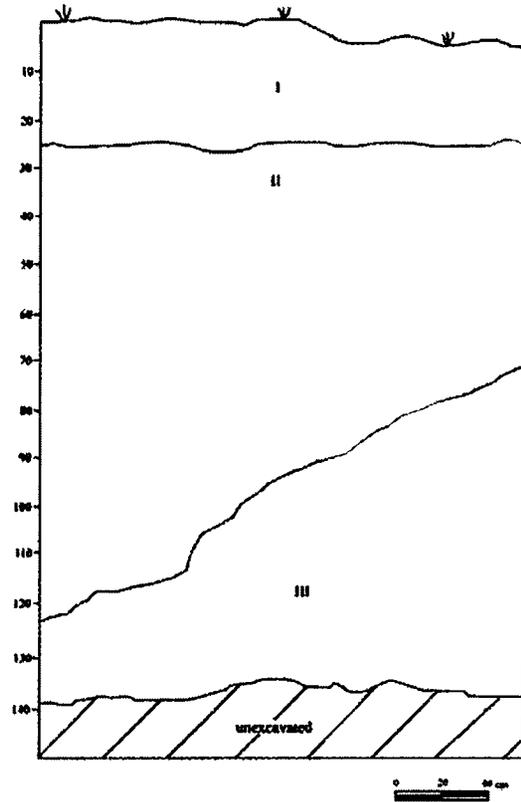


Figure 16. Representative profile and photograph of Mikilua Road electric line trench; north wall.

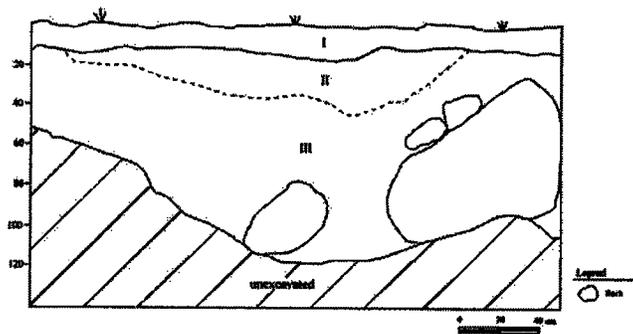


Figure 17. Representative profile and photograph of Trail B electric line trench; west wall.

### 5.1.2 Contractor Staging and Operations Area (COSA)

Construction activities associated with the Contractor Staging and Operations Area or COSA, were monitored by GANDA archaeologists and cultural monitors during the BAX construction. The COSA consists of office trailers, parking lots (Figure 18), storage facilities, and machinery maintenance structures covering an area of roughly 17 acres along the south side of Lightning Road. The access road into the BAX from Saddle Road intersects the old Saddle Road just northwest of the COSA. A coral-sand concentration was identified on the south side and later, elsewhere in the northwest portion of the BAX. These occurrences were evaluated by GANDA and PTA archaeologists and determined to be recent deposits brought into the area possibly for aerial markers during U.S. military training activities. A cement-lined pond was constructed on the west side of the COSA and serves as the primary water source for dust control in the construction area (Figure 19). A stratigraphic soil profile of the pond trench shows the presence of a single silt loam layer (Layer 1) with a wide mix of sub-angular pebbles, cobbles and boulders (Figure 20, see Table 4). This profile is consistent with the soil type Keekee loamy sand that is classified for this area and described as a weakly consolidated alluvium-colluvium soil type (Soil Survey Staff 2010).

At least three trenches were excavated south and southeast of the COSA to put in a buried phone line. The trenches averaged 1.5 m wide by 0.6–1.0 m deep. A stratigraphic soil profile was drawn for one of the phone line trenches (Figure 21, see Table 4). The soil profile shows the presence of a deep silt loam with alluvial lenses of gravel near the base of excavation. The phone line trench location is part of the same soil type (Keekee Loamy Sand) as the COSA described above and is described as a weakly consolidated alluvium-colluvium soil type (Soil Survey Staff 2010).

### 5.1.3 Moving Armor Targets (MAT)

Two Moving Armor Targets (MAT1 and 2) were monitored by GANDA archaeologists and cultural monitors during construction. MAT1 and 2 are roughly 250 m apart and span in an east-west direction between Trail A and Trail B in the western portion of the project area. Originally, the MAT locations were used as haul routes during construction of Trail A and B; subsequently, two large trenches were excavated as foundations for the targets. Each MAT is roughly 400 m long.

Stratigraphic profiles were drawn for both MAT1 and 2 (Figures 22 and 23, see Table 4). The MAT1 profile is indicative of its more northern location classified as Keekee loamy sand: a weakly consolidated alluvium-colluvium soil type (Soil Survey Staff 2010). The MAT2 profile contains abundant 'a'ā in the soil matrices, which corresponds to its overlapping location in lava type 1 (see Figure 3).

### 5.1.4 Range Operations Center

Construction of a new Range Operations Center (ROC) was monitored by GANDA during the BAX construction. The ROC consists of three building foundations (ROC, Battery Maintenance building, and Operations Storage Building) located on the northern edge of an 'a'ā flow (lava type 1) south of Lightning Road (Figures 24 and 25).

The construction activities included excavation of the building foundations and compaction test drilling. A stratigraphic profile was drawn of the Operations Storage Building trench. The profile contains a single stratum dominated by 'a'ā material, a characteristic indicative of the surrounding older lava flow or lava type 1 (Figure 26, see Table 4).

### 5.1.5 Spoil Area

A spoil area used for dumping excess excavation material from the BAX area was monitored by GANDA during the course of the contract. The original footprint of the spoil area was a double T-shaped configuration spanning between Makai Road on the west, Mikilua Road on the north, Menehune Road on the east, and Lava Road on the south (Figure 27).

The current spoil is a wide roadway extending between Makai Road on the west to Tactical Road West on the east (see Figure 27). The spoil area corridor crosses a rough 'a' flow over much of its course (Figure 28).



Figure 18. COSA construction area showing graded surface and gravel fill in parking area; view to west.



Figure 19. COSA construction area showing pond trench; view to south.

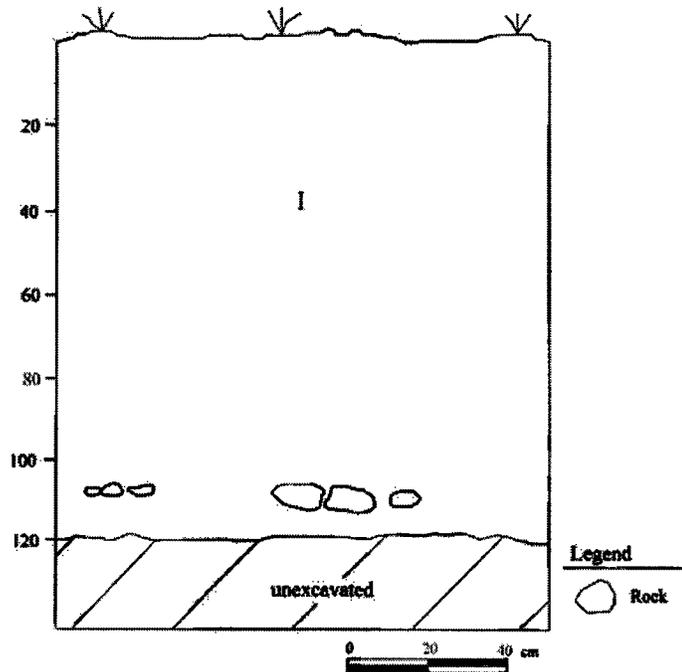


Figure 20. Representative profile of COSA pond trench; west wall.

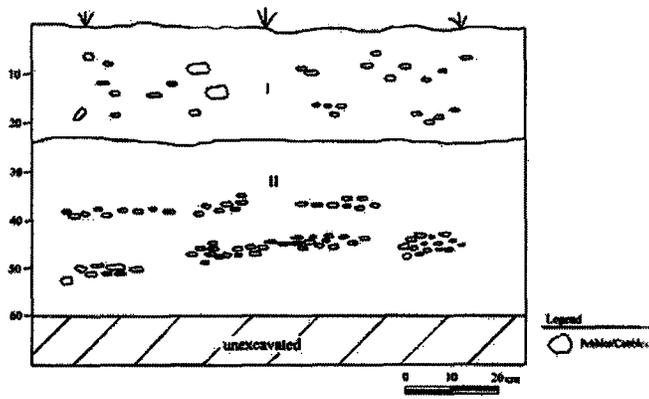


Figure 21. Representative profile and photograph of phone line trench; north wall.

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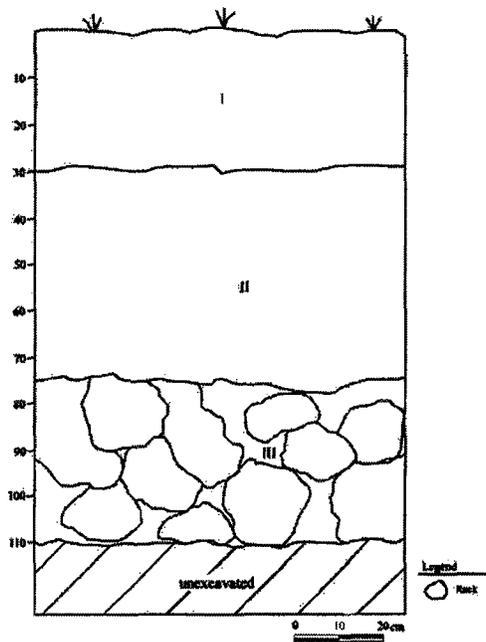


Figure 22. Representative profile and photograph of MAT1 trench; north wall profile.

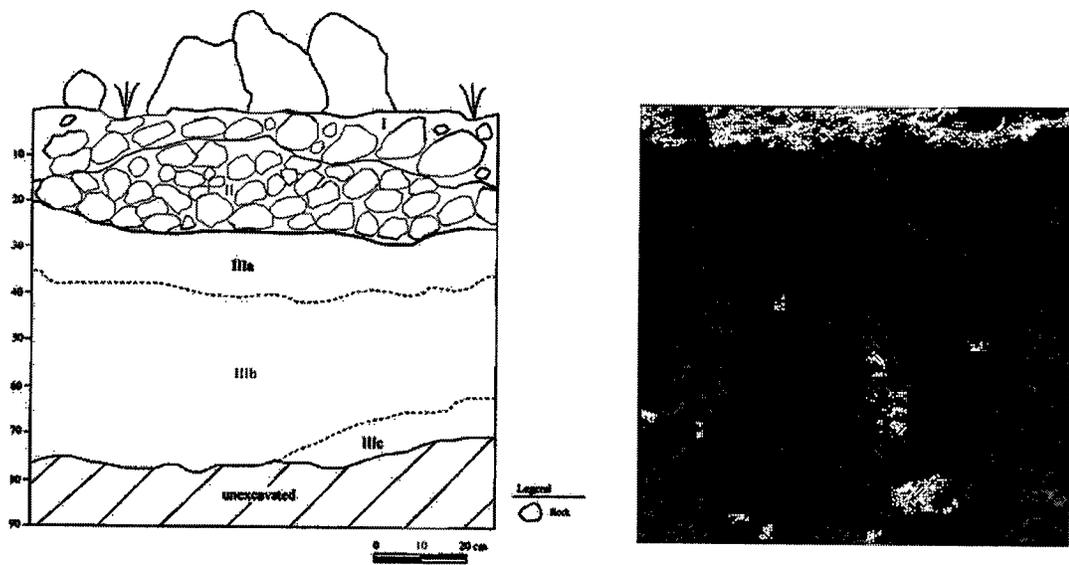


Figure 23. Representative profile and Photograph of MAT 2 trench; north profile.

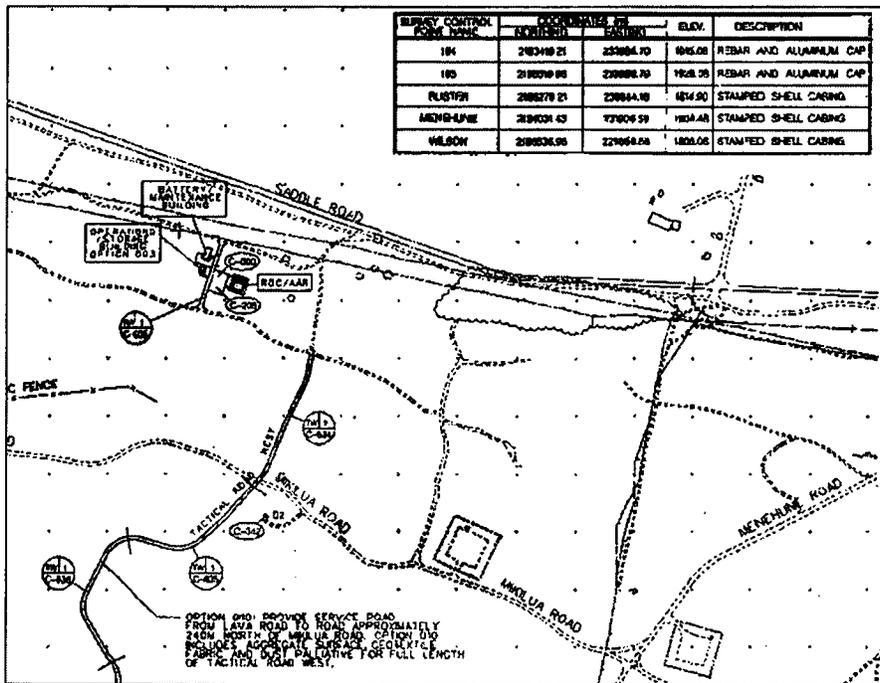
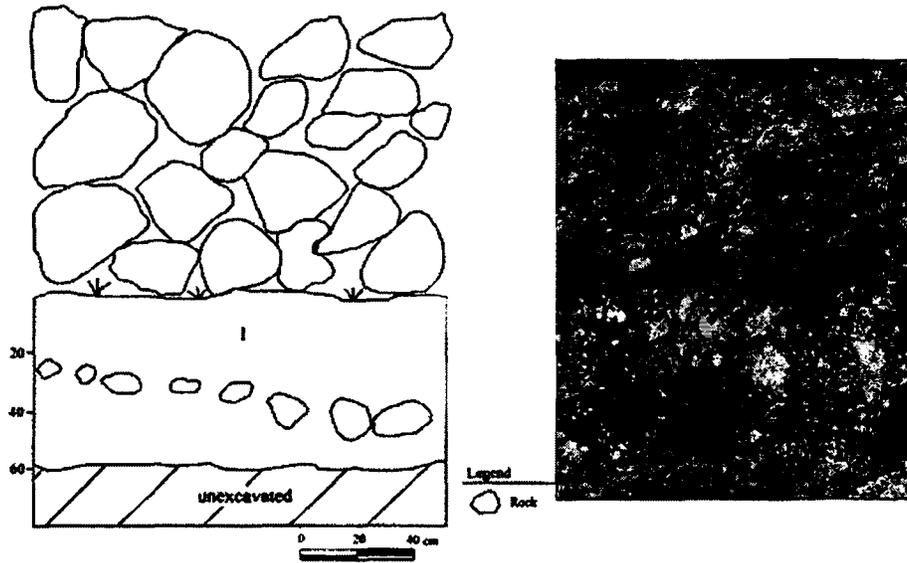


Figure 24. BAX construction plan map showing location and layout of Range Operations Center.



**Figure 25. Photograph of excavator at Range Operations Center; view to northwest.**



**Figure 26. Representative profile and photograph of ROC trench; north wall.**

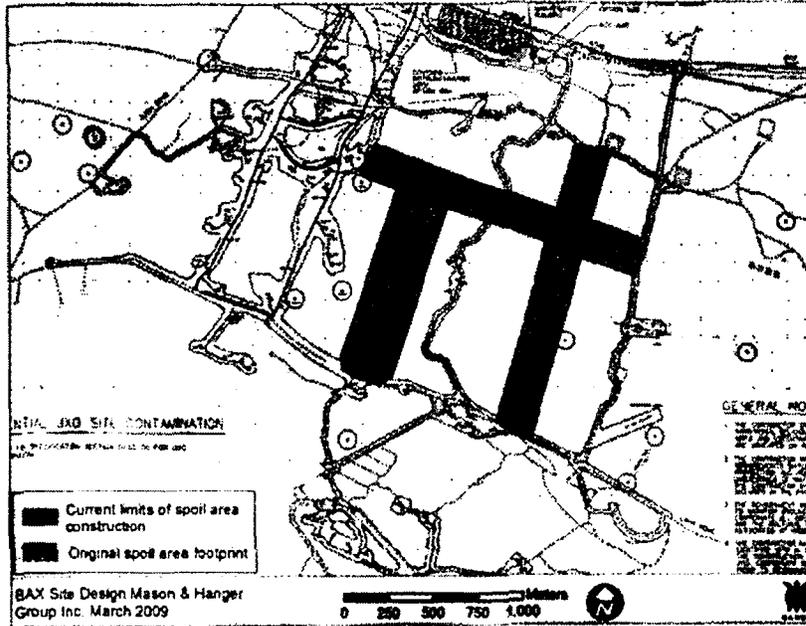


Figure 27. BAX plan map showing original footprint and current limits of spoil area.



Figure 28. Photograph of west portion of spoil area; view to southwest.

### 5.1.6 Targets and Bunkers

The construction of numerous targets and training bunkers were monitored by GANDA archaeologists and cultural monitors during the BAX construction. These construction elements are clustered off Trail A, Trail B, along an L-shaped access road south of Lava Road, within two Live Fire Villages (LFV#1 and LFV#2) located off Menehune Road and Lava Road (respectively) and at various locations in Range 11T south of Lava Road (Figure 29). The construction activities involved excavating foundations for the training structures, followed by grading, filling, and compacting of the surface.

Soil profiles were drawn at a selection of trenches from a diversity of landscapes across the project area, including off Makai Road (F1-02), Trail A (V-13, F3-02), in Live Fire Village #1 (LV1-6), and south of Lava Road at T-37. Samples of these five trench profiles are presented in Figures 30–35 and see Table 4.

The soil profiles are indicative of the lava flow types (*l* and *ac*) and soil type (Keekee Loamy Sand) classified for these locations (see Figure 29). The most-northern profile at Target F1-02 contains a deep soil deposit that corresponds to Keekee Loamy Sand soil type, defined as a weakly consolidated alluvium and colluvium (Soil Survey Staff 2010). Targets V-13 and F3-02 contain abundant 'a' 'ā lava material and little sedimentation, because both are located in a more recent and rocky 'a' 'ā lava flow classified as the *k2* flow. Targets LV1-6 and T-37 are situated in older Mauna Kea flow (*l* lava type) and as such, the profiles have a mixture of both rock material and sediments.

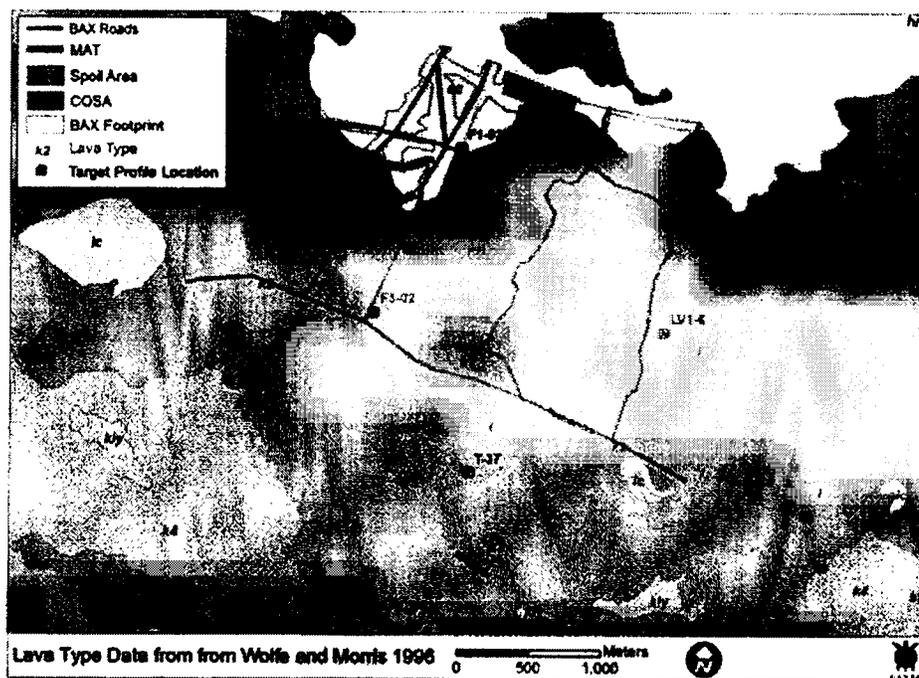


Figure 29. Geology map showing lava flow types and soil profile locations at constructed targets in BAX.

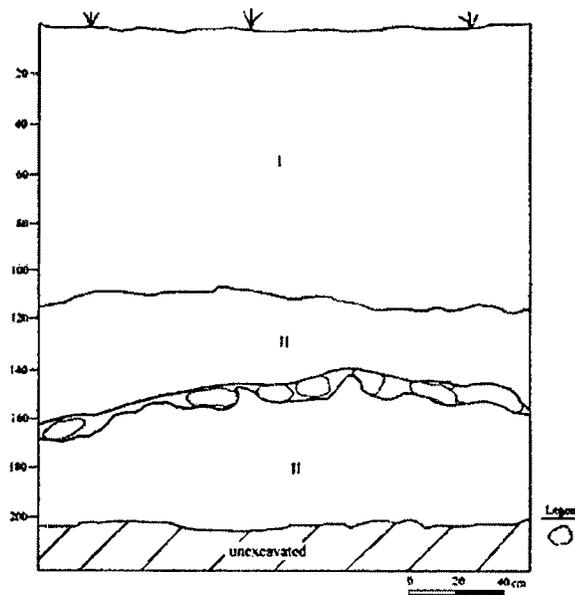


Figure 30. Representative profile of Target F1-02 trench.

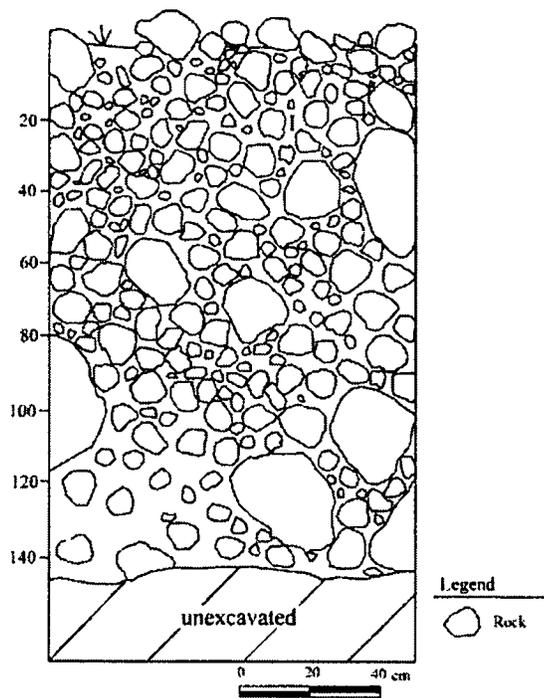


Figure 31. Representative profile of Target V-13 trench.

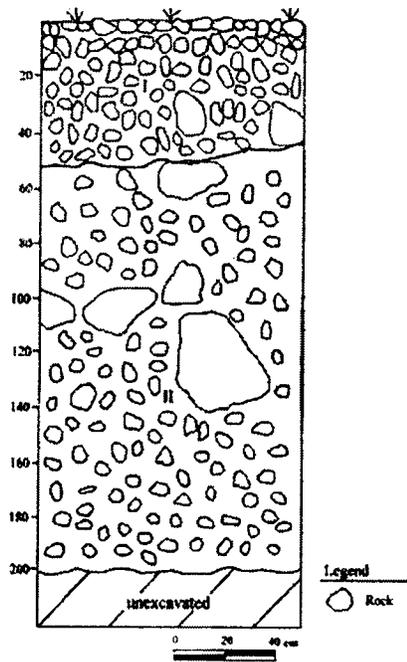


Figure 32. Representative profile of Target F3-02 trench.



Figure 33. Photograph of gravel fill being laid on Target F3-02; view to northeast.

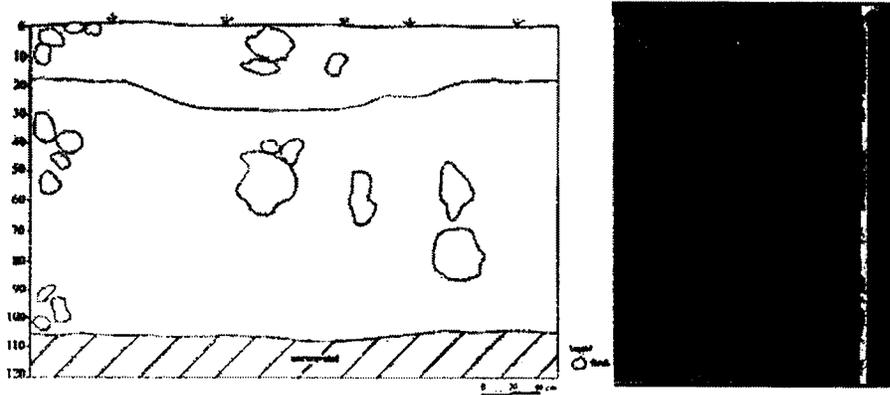


Figure 34. Representative profile and photograph of Target LV1-6 trench.

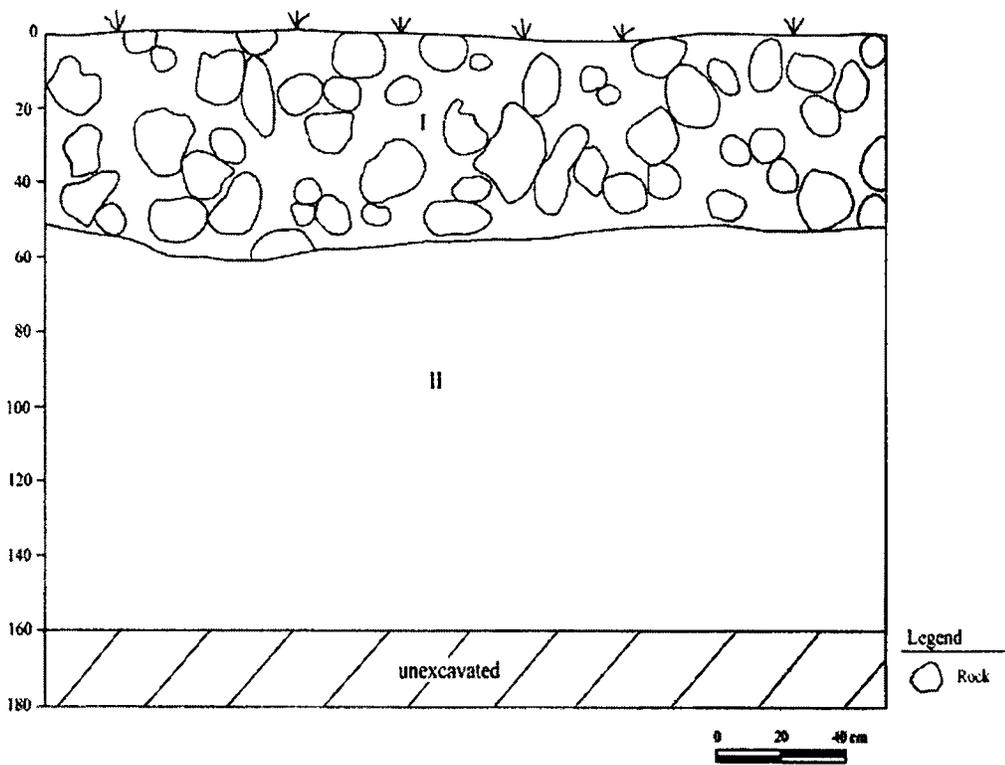


Figure 35. Representative profile of Target T-37.

## 5.2 New Archaeological Sites

Six new features (Features Q–V) associated with Site 19490 were identified in Training Area 5 in the vicinity of the proposed protective berm (see Figure 9). All six features were mapped, recorded and located with a sub-meter accurate Trimble GPS.

### SHPD 50-10-31-19490

|                           |                                                              |
|---------------------------|--------------------------------------------------------------|
| <b>GANDA Temp Site:</b>   | G100, G101, and G102                                         |
| <b>Site Type:</b>         | Complex of trails, mounds, and excavated <i>pāhoehoe</i> pit |
| <b>Function:</b>          | Transportation/markers/possible bird hunting                 |
| <b>Possible age:</b>      | Pre-Contact                                                  |
| <b>No. of Features:</b>   | 6                                                            |
| <b>Site Size:</b>         | 140 m (NE/SW) by 171 m (NW/SE)                               |
| <b>Cultural Material:</b> | None                                                         |
| <b>Condition:</b>         | Fair to good                                                 |
| <b>Historic Context:</b>  | Travel and resource procurement in Saddle (Pre-Contact)      |
| <b>Significance:</b>      | Recommend as eligible for NRHP based on Criterion D          |

#### Site Overview

Six additional features were identified in the Site 19490 complex, located in the southeast corner of the BAX project northeast of the Menchunc Road and Lava Road intersection (see overview of Site 19490 in Appendix A). The new features expand the northwest portion of the site and consist of two trails (Feature Q and U), three mounds (Features R–T) and one excavated *pāhoehoe* pit (Feature V). Features Q–U lie on undulating 'a'ā lava and Feature V is on a *pāhoehoe* flow immediately south of the 'a'ā lava flow. Modern military structures and material are present in the vicinity and include rock-constructed C-shaped structures and communication wire placed on cleared or trampled 'a'ā.

The six features were recorded in the field as three separate temporary sites designated G100–G102; Features Q–T were recorded as G100, Feature U as G101 and Feature V as G102. The Army requested that all six features be subsumed under Site 19490 (J. Taomia, review comments of current report, October 2010).

Features Q and U trails are traditional Hawaiian trail sections likely representing a northwest continuation of Feature K, located about 160 m south of Feature U. Features R–T were probably constructed to mark the location of Feature Q trail in the undulating topography. Feature V is similar to numerous excavated pits at PTA (such as Site 23455 northeast of the feature) that might be related to traditional Hawaiian bird hunting. No cultural material was observed at the new site features.

**Feature Descriptions:** Feature Q trail is defined by a worn linear surface and intermittent alignment of small boulder slabs extending roughly 30 m long (N/S) by an average 0.8 m wide (Figures 36–38). The south end of Feature Q dissipates at the base of the ridge; the north end terminates in uneven 'a'ā lava. Most of the trail is aligned along the crest of a low ridge. A 3-m gap in the trail occurs roughly 5 m from its southern terminus. Features R and S mounds are situated opposite each other just north of the gap in the trail.

Feature R mound is on the east side of Feature Q trail (see Figure 36). It is constructed of piled large 'a'ā cobbles and small boulders. Large cobbles form the base of the mound (Figure 39).

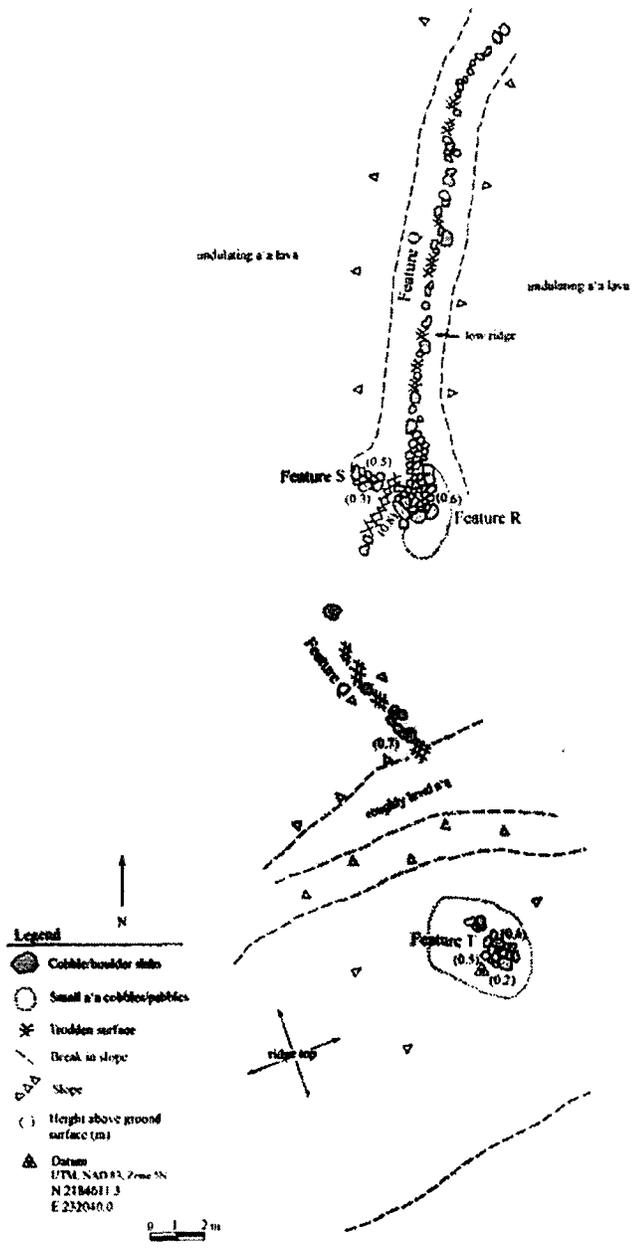


Figure 36. Plan view of Site 19490 Features Q-T.



**Figure 37. Photograph of Site 19490, Feature Q; view to north.**



**Figure 38. Photograph of Site 19490, Feature Q slab construction; view to north.**

Feature S mound is on the west side of Feature Q trail and Feature R mound (see Figures 36 and 39). The mound is poorly constructed of piled 'a'ā cobbles, with small boulders placed at the base.

Feature T mound is on the east slope of a prominent ridge top 7.0 m south of the south end of Feature Q trail (see Figure 36). The mound is composed of roughly piled 'a'ā cobbles with large cobbles placed at the base (Figure 40). A small cobble paving surrounds the mound. The paving might be intentional or the result of removing the larger cobbles to build the mound.

Feature U trail lies on undulating 'a'ā lava bounded on the southeast by a prominent ridge that was previously the north boundary of the Site 19490 complex (Figures 41–43). The trail is defined by a trodden or worn surface in 'a'ā lava with intermittent low rock piles (formed probably as a result of clearing the trail) along some of the trail's perimeter. Most of the trail is aligned along high points of the undulating landscape. Feature J cairn of Site 19490 is located near the top of the ridge roughly 10 m southeast of the trail's south end.

Feature V *pāhoehoe* excavation consists of a 2.5 by 1.5 m depression in the lava flow surface and two linear rock piles of excavated material on the east and north sides (Figures 44 and 45). The rock piles are roughly piled with block-shaped small boulders. The rock piles average 2.0 m long by 0.8 m wide, with heights between 0.2–0.4 m. A shallow 0.25 m high cavern or lava blister interior is exposed in the south side of the depression.

### 5.3 Artifact

One artifact (Art No. 1) was collected from the surface of an 'a'ā lava flow at the intersection of Tactical Road West and Lava Road, approximately 365 m southeast of the Site 23457 trail (see Figure 9). The artifact is a manuport defined by an unmodified waterworn coral pebble measuring 2.4 cm long by 1.6 m wide; it weighs 44 grams (Figure 46). Though the shoreline-based item was unequivocally brought to the project area by human hands, the lack of an archaeological context prohibits an interpretation of how the item was used and by whom. Given the presence of U.S. military personnel in the area and a possible use of beach sand for training activities, it is plausible that the manuport was brought to the project area by military personnel during recent times.

### 5.4 Site Conflicts

Two archaeological sites (Sites 23451 and 23457) and two features (Features Q and V) of Site 19490 were located within or in close proximity to BAX construction areas. Protective measures were implemented, if warranted, to avoid impact to the sites (Figure 47). Site 23457 is a traditional Hawaiian trail located on the edge of the Tactical Road West (TRW) corridor. Site 23451 is an historic fenceline located within the path of Trail B. Site 19490, Features U and V, were newly identified within the footprint of a proposed berm (see Figure 47). The conflicts and resolutions of these three sites and the BAX construction design are discussed below.



**Figure 39. Photograph of Site 19490 Feature R with tape and Feature S (upper left); view to north.**



**Figure 40. Photograph of Site 19490 Feature T mound; view to east.**

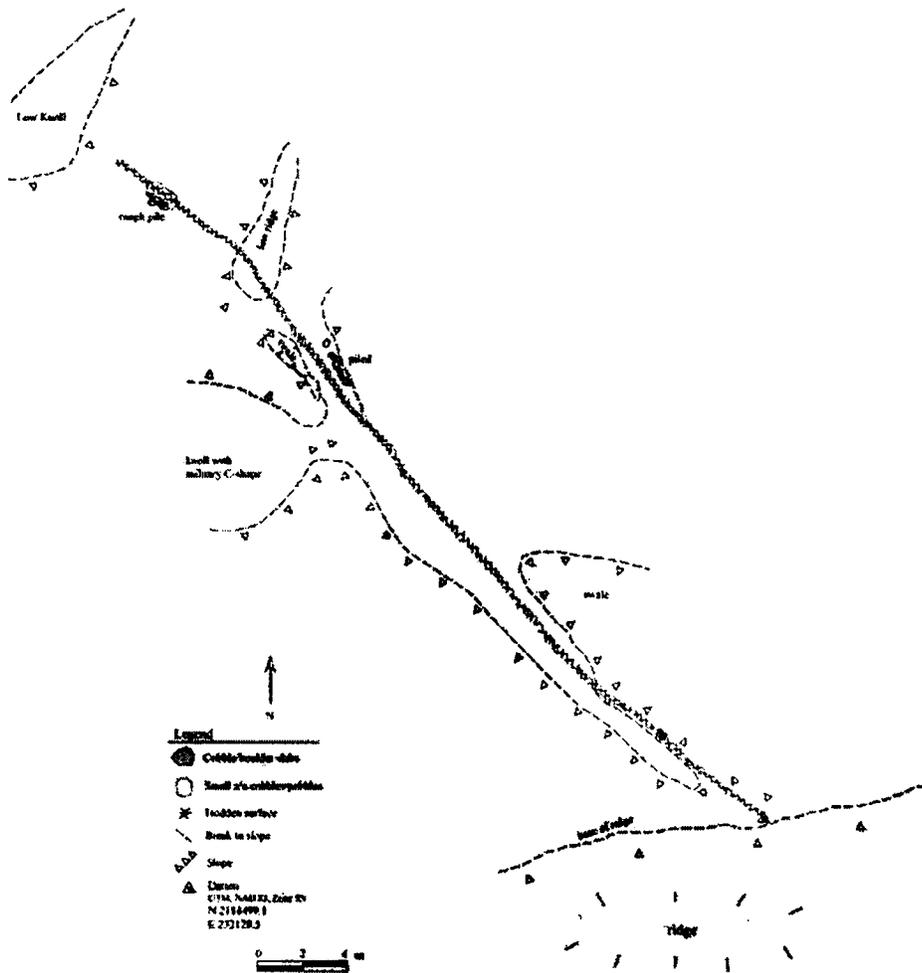


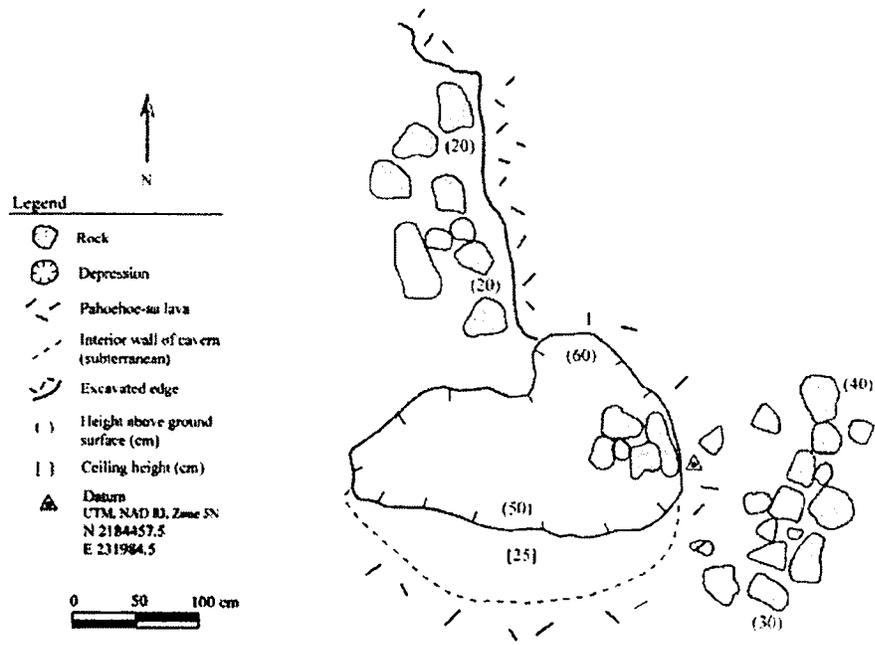
Figure 41. Plan view of Site 19490 Feature U.

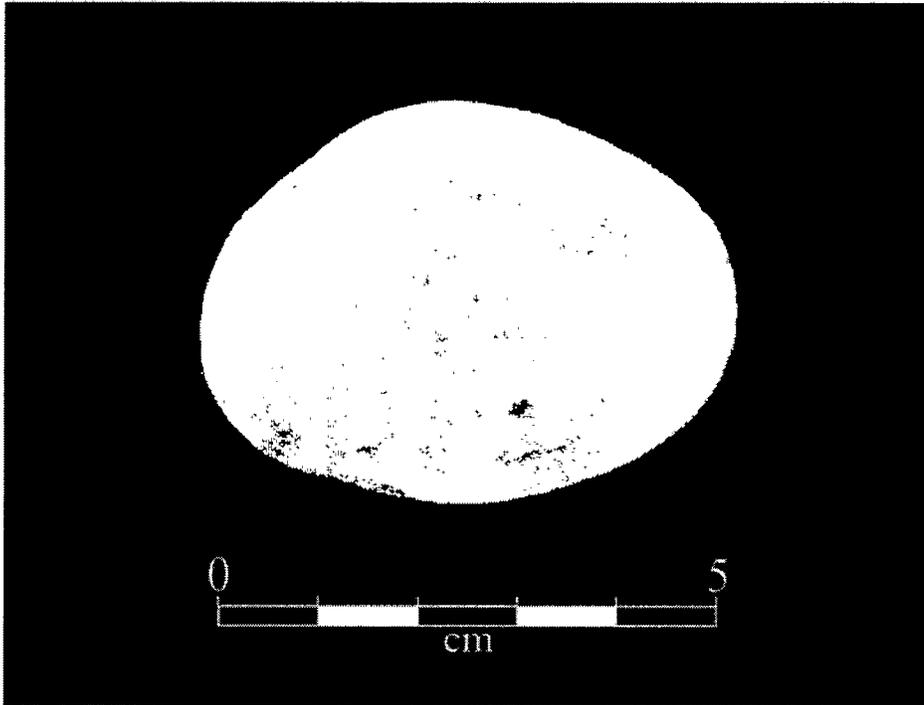


**Figure 42. Photograph of Site 19490, Feature U; view to northwest.**



**Figure 43. Photograph of Site 19490, Feature U; showing close-up of cleared and trodden surface.**





**Figure 46. Waterworn coral pebble (Art No. 1) collected from intersection of Lava Road and Tactical West Road.**

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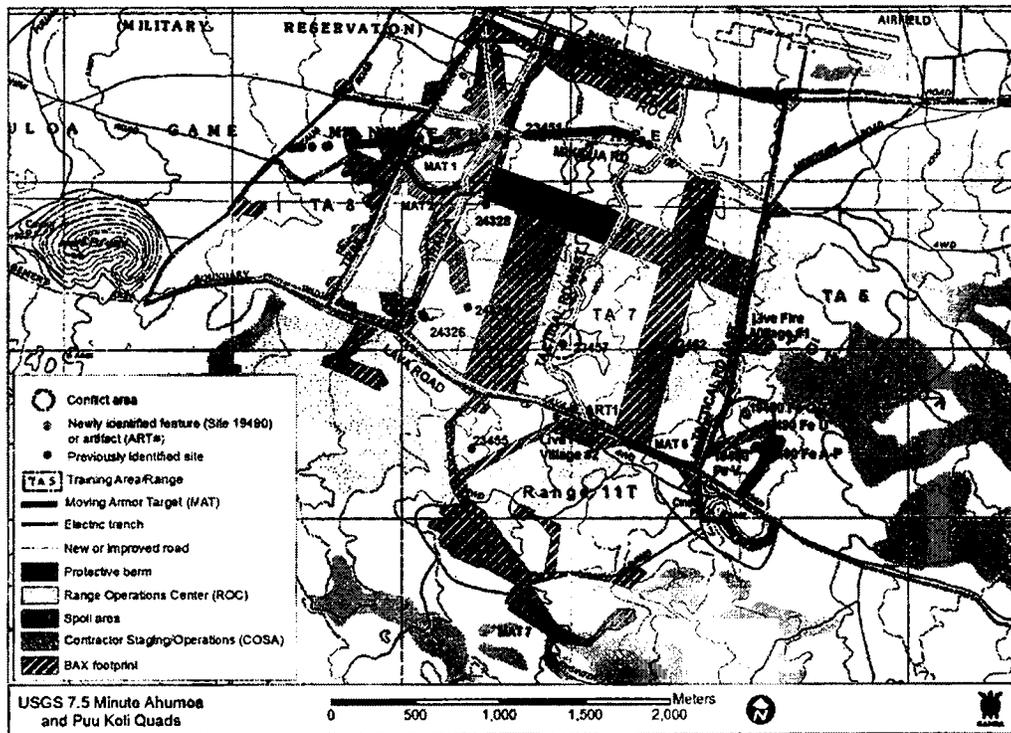


Figure 47. USGS map showing site conflict areas and PTA BAX construction elements.

#### 5.4.1 Site 19490

Two of the newly identified features (Features Q–V) associated with Site 19490 were identified in Training Area 5 in the vicinity of the proposed protective berm (see Figure 47). Because the berm was not staked during the course of the GANDA contract, the berm location was tentatively correlated with the site locations by geo-referencing the BAX design map with USGS quad maps using ArcGIS software.

No protective fencing was constructed around the newly identified sites because the final location of the berm had not been determined by the USACE engineers prior to completion of the GANDA contract. Therefore, no protective measures were required given the absence of BAX construction activities in the area. Section 7.2 of this report provides recommendations for relocating the protective berm around or within the newly identified site areas.

#### 5.4.2 Site 23457

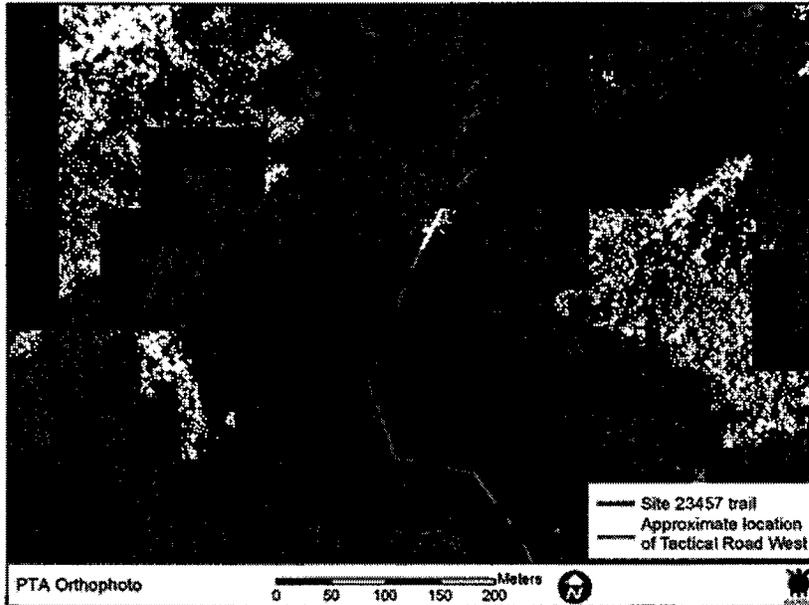
Site 23457 is a pre-Contact Hawaiian trail previously recorded during the original BAX Phase I/II survey (Roberts et al. 2004c; Robins et al. 2006) (see Site 23457 description in Appendix A). The site is currently defined by a roughly 98.3 m long section of a trodden or worn surface in the surrounding 'a'ā landscape. Four rock mounds (Features 2–5) are within the site area, two along the northwest end of the trail (Features 2 and 3) and two roughly 10 m to the southeast of the trail.

In the BAX design, the western portion of the TRW intersected the northwest end of the site, specifically the northwest end of Feature 2 mound and Feature 1 trail (Figure 48). A rough road cut in the rugged 'a'ā flow was apparently created by the U.S. Army Garrison Pōhakuloa prior to the BAX construction. The road cut appeared to follow the same alignment as the TRW between Lava Road and the north edge of the surrounding 'a'ā flow and was roughly 5.0 m west of north boundary of Site 23457.

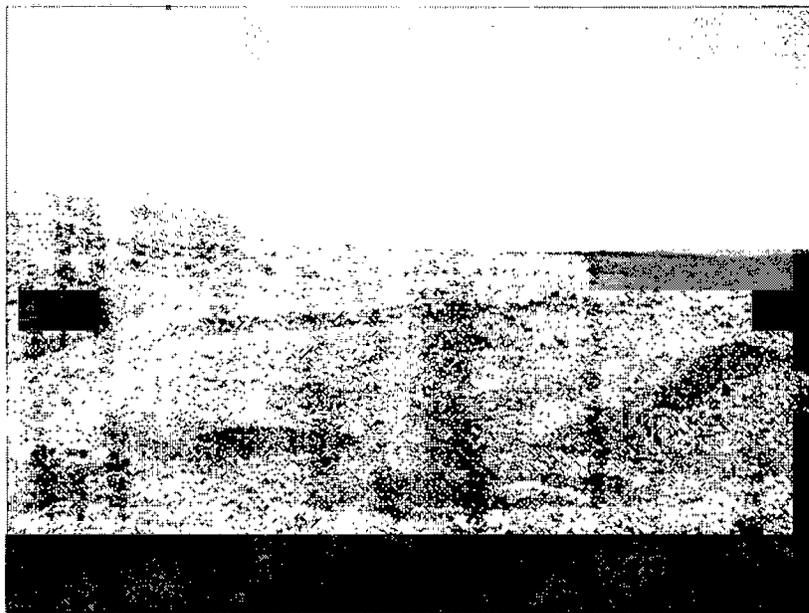
The site was initially fenced along the edge of the road cut to allow a 5.0 m-plus buffer between the site and the proposed TRW. To accommodate slope and construction of a water diversion ditch adjacent to the TRW (Figure 49), USACE engineers requested the site buffer be decreased to 2.0 m between the edge of construction and the northwest boundary of the site. Upon approval from the Army DPW Cultural Resources Manager and PTA archaeologist, and in consultation with the GANDA cultural monitors, the site buffer was adjusted to a distance of 2.0 m from the northwest edge of Site 23457. The orange protective fencing was moved to the northwest edge of Feature 2 to allow a decreased buffer, if needed, during construction. The construction footprint of the TRW was completed within the 2.0 m site buffer and, as a result of protective measures and on-site monitoring, no impact occurred to Site 23457 during the TRW construction during the course of the GANDA contract (Figure 50).

#### 5.4.3 Site 23451

Site 23451 is an historic fenceline aligned roughly east-west across the northern portion of PTA (see Figure 47; Appendix A). Based on the remnant alignment of fence posts and intermittent wire sections identified at PTA, the site once crossed the northern portions of Trail A and Trail B of the BAX project. Prior to the BAX construction, temporary orange fencing was erected around all fallen posts and wire concentrations that were defined as remnants of the site. None of the site components were located within the Trail A road; thus, no adverse impact to Site 23451 was caused as a result of the Trail A construction.



**Figure 48. Orthophoto showing the location of Site 23457 in proximity to Tactical Road West.**



**Figure 49. Photograph of the Tactical Road West construction area with Site 23457 protected behind orange fencing; view to northeast.**

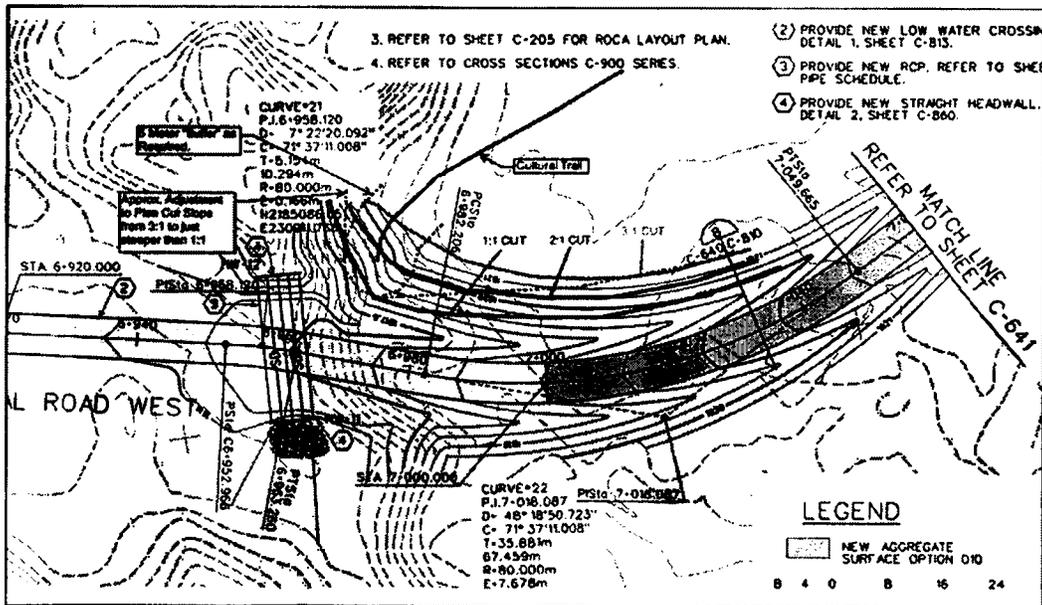


Figure 50. BAX design of TRW corridor in proximity to the 5 m buffer of Site 23457 (blue dashed line) showing the decreased buffer zone (red line) designed to accommodate slope in construction.

During survey staking for Trail B, GANDA archaeologists determined that one fallen pole and a remnant rock foundation of the Site 23451 fence line lay within the corridor of Trail B near its intersection with MAT 2 (see Figure 47). USACE engineers attempted to redesign Trail B around the Site 23451 elements by either narrowing the width of the road or moving the road corridor to the east. Neither design alternatives were favorable because adjusting the alignment to the east would impact an intact fence post of Site 23451, while decreasing the road width.

PTA archaeologist Dr. Julie Taomia later confirmed that a redesign of Trail B was unnecessary because the potential for adverse effects to this portion of Site 23451 was previously consulted on and mitigated through documentation during "proposed blasting" in the BAX (Figure 51). The consultation process determined that the site portion in the vicinity of Trail B was in poor condition and "any damage that may occur from the proposed blasting will remain insignificant to the overall integrity of this historic fenceline" (J. Taomia, personal communication 5 April 2010).

As a result of the previous consultation and mitigation, approval was received from the Army to impact an 8.0 m section of Site 23451 by the construction of Trail B. Prior to construction, the proposed impacted portion of the site was fully recorded by GANDA archaeologists (Figures 52 and 53) and the orange protective fencing was moved to the Trail B limits shown on Figure 50. As a result of the protective measures and on-site monitoring by GANDA archaeologists and cultural monitors, only the specified 8 m section of rock wall was disturbed during the Trail B construction. The fallen site post inside the construction area was moved to the west, beyond the Trail B road corridor.

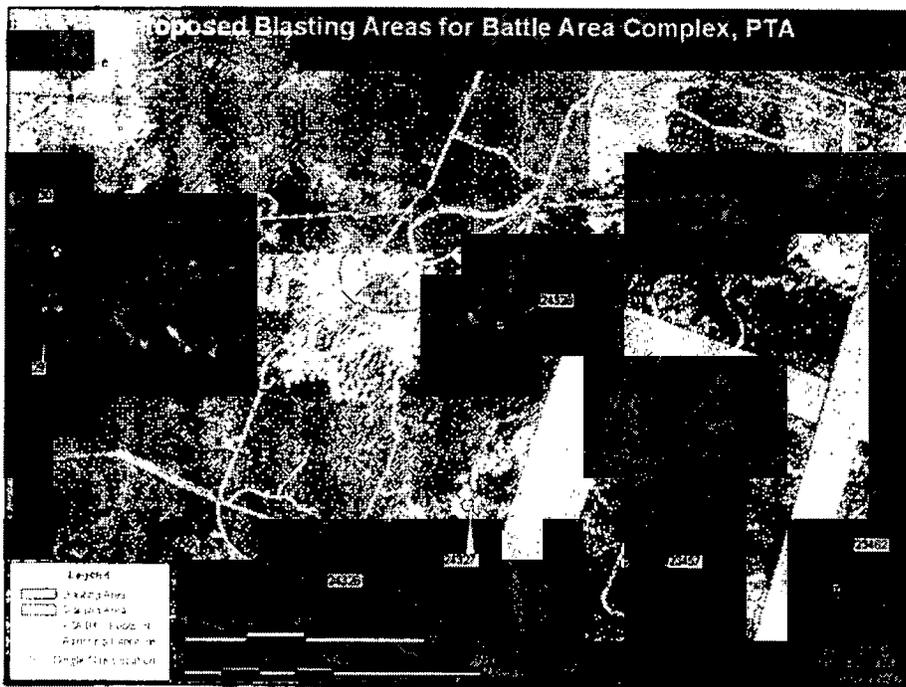


Figure 51. Orthophoto showing the proposed blasting areas evaluated under Section 106 consultation.

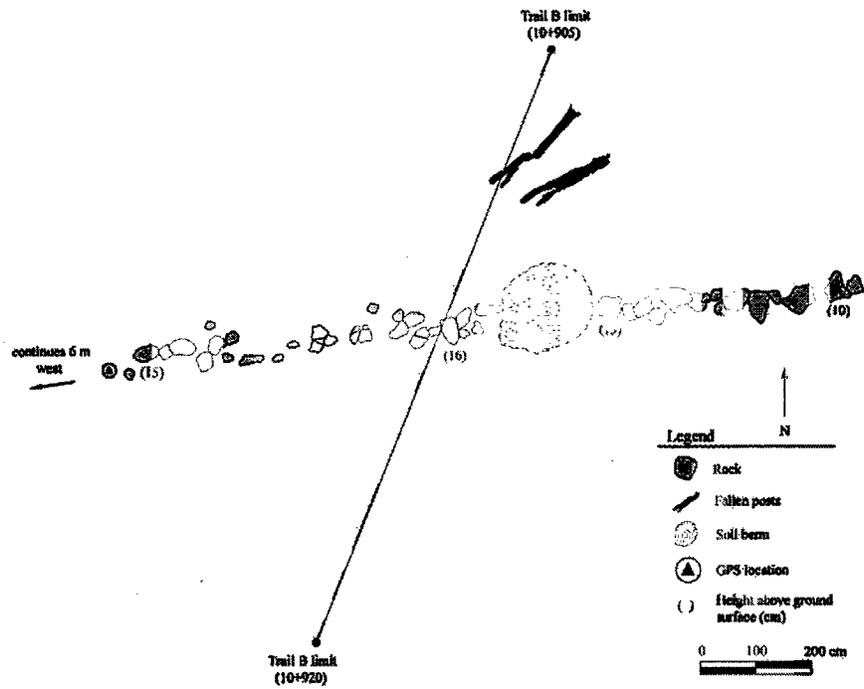
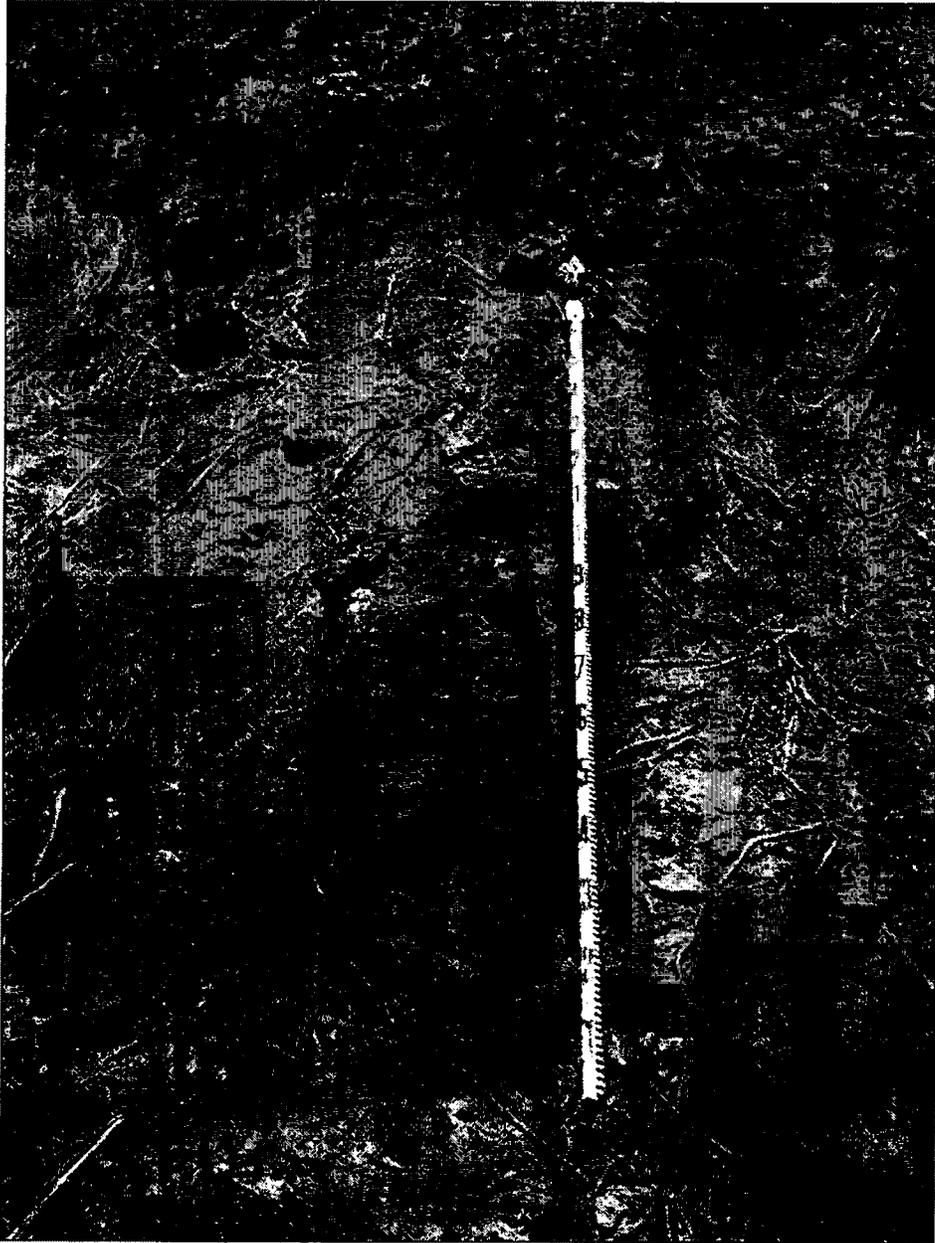


Figure 52. Plan map of a portion of Site 23451 wall foundation prior to Trail B construction east of staked limits.



**Figure 53. Photograph of preserved portion of Site 23451 wall (center) and edge of Trail B impact (top); view to east.**

## 6.0 CULTURAL MONITORING RESULTS

This report section was collaboratively authored by PTA BAX cultural monitors: Annamarie Kon, Leiola Garmon Mitchell, Leina'ala Benson, and Gary T. Kupa'a Garmon.

### 6.1 Genealogy chant

In this genealogy chant Mauna Kea is referred to as “Ka Mauna a Kea” (Wakea’s mountain) and it likened to the first-born of the island of Hawai’i (Pukui and Korn 1973). This is a mele hanau (birth chant) for Kauikoaouli, Kamchameha III that describes Mauna Kea in this genealogical context.

|                                              |                                   |
|----------------------------------------------|-----------------------------------|
| <i>O hanau ka mauna a Kea</i>                | Born of Kea was the mountain      |
| <i>'Opu'u a'e ka mauna a Kea</i>             | The mountain of kea budded forth  |
| <i>'O Wakea ke kane, 'O Papa</i>             | Wakea was the husband, Papa       |
| <i>'O Walinu'u ka wahine</i>                 | Walinu'u was the wife             |
| <i>Hanau Ho'ohoku he wahine</i>              | Born was ho'ohoku, A daughter     |
| <i>Hanau Haloa he ali'i</i>                  | Born was Haloa, a chief           |
| <i>Hanau ka mauna, he keiki mauna na Kea</i> | Born was the mountain, Son of Kea |

### 6.2 History

Information regarding song, dance, and chant passed down through many generations will express the most profound understanding of such a wonderful place. This is a profound understanding that gives life, that gives respect, and that builds relationships with what we know as our environment, our elements, and our God.

In oral traditions of the Hawaiians, the high peaks are considered to be a place for the Gods. These peaks and places are very sacred. Mauna Kea, Mauna Loa, and Hualālai are the peaks that border Pōhakuoa Training Area (PTA).

From the ice age until today, many people, native vegetation and animals have lived in PTA. It has also been recorded and written that many functions and events occurred in PTA. The native ua'u bird, feral pigs and ungulate animals became the permanent residents. High concentrations of native plants and insects live here. At one time, it was the residency of a great leader and chief 'Uni and his army.

### 6.3 Cultural Monitoring Program

The Cultural Monitoring Plan (CMP) was designed to facilitate and manage the monitoring of construction activities by knowledgeable Hawaiian cultural monitors at the Battle Area Complex (BAX), PTA, Hawai'i Island. The construction activities at PTA BAX are one element of the 25<sup>th</sup> Infantry Division's transformation to a Stryker Brigade Combat Team (SBCT). The project is being conducted under contract to the U.S. Army Corps of Engineers (USACE), Pacific Ocean Division (POH). The cultural monitoring program was developed in accordance with Section III.E of the Stryker Brigade Combat Team Programmatic Agreement and in coordination with local community groups. The program has been developed in coordination with Hawaiians who have *kuleana* (responsibility) and *malama I ka 'āina* (care for the land and resources) in and around PTA.

### **6.3.1 Introduction**

The perspective and understanding of the land to the Hawaiian People is the base of our existence, resources, generally food and the resources are all connected. The 'āina (land) means plentiful "food." To develop unconsciously, to destroy and to misuse the land in ways that are not good for the land is not appreciated. The land is a God, an entity of energy that has life and gives life.

The questions are asked: "Why do they have to train here in Hawaii" and "how is the training done?" As we experienced on Kaho'olawe Island, Mākua Valley, and other places in Hawaii, impacts of the military are critical. The land will never be the same. Some areas will never be used again, and all areas are considered hazardous.

### **6.3.2 Preservation, Conservation and Vegetation**

Preservation and conservation were some of the ideas that were discussed by the cultural monitors. According to the PTA Cultural Advisory Committee, areas exist at PTA that are protected from impact and development. More information on preservation and conservation in Pōhakuloa needs to be researched. Some reference information was made available to the Cultural Monitors by the Army Garrison to help understand the existence and protection of native vegetation at PTA.

The purpose of the land is to grow food, to build functional facilities that are conducive to the environment and to utilize resources that are needed for the health of the land and its people.

Cultural observance of the PTA BAX project in the past six months has emphasized the necessity for cultural monitors. Vegetation and land features have changed drastically (Figures 54–56). Plants and trees were bombed, excavated and debarked by ungulates. Concentrated areas of native plants are sparse and few. On occasion, cultural monitors recommended changing the route of the project to avoid native vegetation. In most cases these recommendations should have been discussed during the planning stage.

### **6.3.2 Impacts**

The Military has been operating for half a century at Pōhakuloa. Their impacts are damaging in many ways. Training of military causes displacement of native vegetation and destroying of land that will never be safe for future generations.

Ungulates have overpopulated the land (Figure 57). The lack of control of ungulates leads to an imbalance of the land, animals, and people. The result of an imbalance causes a deficiency of, or a lack of, a system that doesn't work for the community of all plants, animals and people.

### **6.3.3 Archaeology Sites**

There are varieties of sites in PTA BAX that have been protected and cared for with temporary fencing. Policies and procedures need to be developed and/or reviewed to be in accordance with cultural input. Proper cultural procedures and policies in place will provide a sense of integrity and respect for the archeological sites and the valuable flora and fauna for the life of the living.

### **6.3.4 Collaboration of Contractors and Sub-Contractors**

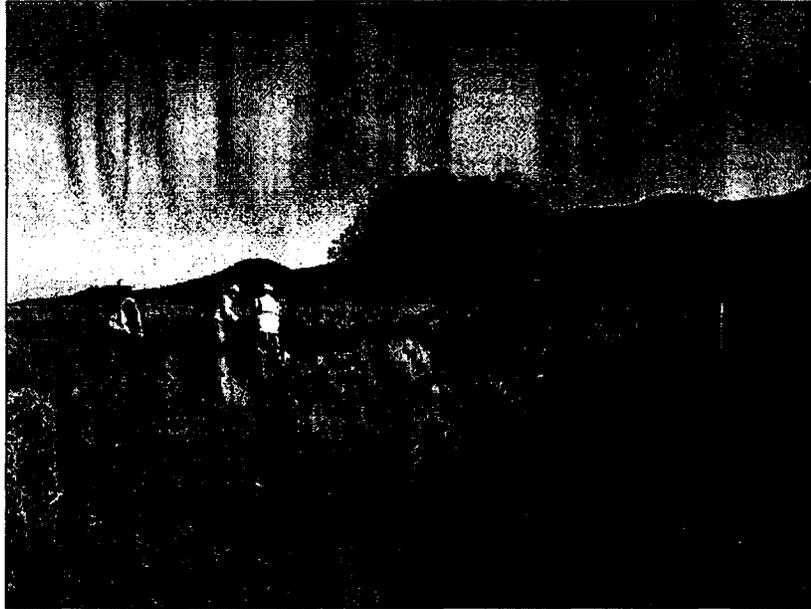
On 7 February 2010 all collaborating entities joined in the blessing of PTA BAX Project. This entailed a halt in work for a few hours and the participation of all individuals involved in the BAX Project. This blessing ceremony was wonderfully conducted by the cultural monitors of Garcia and Associates and greatly appreciated by all those involved (Figure 58). Throughout the duration of



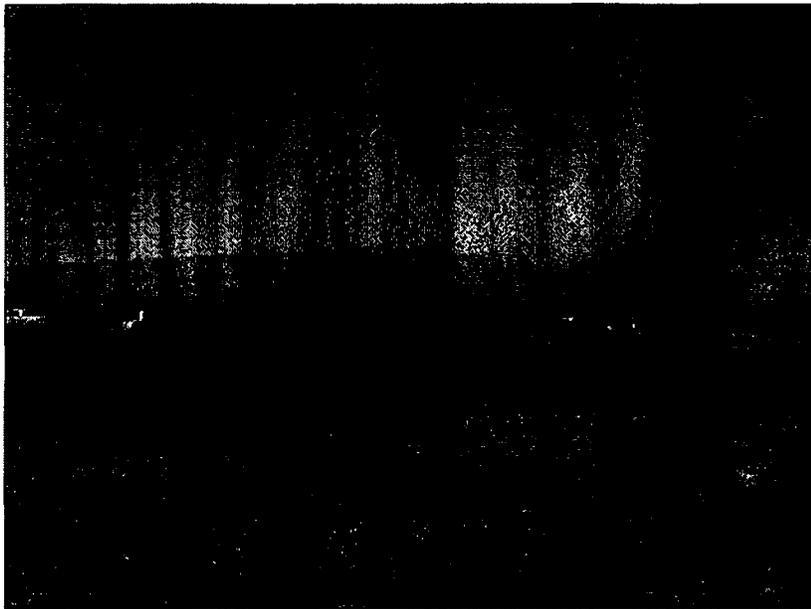
**Figure 54. 'A'ali'i bush in bloom at PTA BAX project area.**



**Figure 55. Māmane tree disturbed by construction activities in BAX project area.**



**Figure 56. Protective fencing placed around large *naiio* tree in PTA BAX project area.**



**Figure 57. Goat herd in PTA BAX project; view to south.**



**Figure 58. PTA BAX Cultural monitors (left to right) Leiola Garmon Mitchell, Annamarie Kon and Leina'ala Benson.**

the project all collaborating entities were excellent in maintaining their responsibilities and roles of action. At the start of the project, there were communication barriers that we all worked on to overcome.

#### **6.3.5 Recommendations**

Through the Cultural Monitor Program experience at the PTA BAX Project, we have come to realize the importance of implementing Cultural Monitor Programs into the framework of future projects at Pōhakuloa Training Area. A cultural monitor could facilitate projects and infer ideas that are culturally sensitive to area and space. This will help by avoiding future disappointments for the people of Hawaii and this island that is filled with valuable resources.

As the project progresses we start to develop strategic frameworks to implement into the project. These frameworks shall evaluate and articulate the reasoning of such decisions made for the PTA BAX area.

Culture assessments should be made before the project starts. UXO assessments, as well, should be done in advance. Also, cultural commendations should be implemented prior to the start of any project. High concentrations of native vegetation and archeology sites should have definite buffer zones and strict guidelines to ensure quality protection for all sites and native flora and fauna. Ongoing vegetation assessments should be done on a yearly basis.

Policies and programs need adjustments to better PTA. Developments similar to the BAX Project are not what we support. The land needs to be functioning in the capacity that is conducive to its health.

As cultural monitors we would like to see military impacts stopped at Pōhakuloa as well as other places in Hawaii. Thoughts of training with environment friendly munitions might be something to explore.

Reforestation and Ungulate control projects are strongly suggested to remedy damages already done to the land in BAX area. The Military needs to implement some kind of cleanup process as part of their training in PTA. Remnants of military trash is everywhere.

From a cultural perspective, we would rather not have any kind of military use on these lands. Again, this use doesn't support our understanding of the purpose of the land. The land should be used as a way to function, to live, and to survive with. It lives and produces. In destroying the land we destroy ourselves.

### 6.3.6 Expressions

Aloha, my name is Leiola Garmon Mitchell; I come from the community of Waimea and am a cultural monitor for the BAX Project at Pōhakuloa. I share with you some of my thoughts and feelings on this place known as PTA.

Pōhakuloa is a place that is very fitting for its name (long rock). Pōhakuloa sits smack dab in the middle of our mountains, Mauna Kea, Mauna Loa, and Hualālai. These mountains have maintained such sacredness for generations beyond our imagination, all the while it being accompanied with Observatory's at its highest peak, and right below it this area that for over 50 some years has been abused, desecrated and used as a military training camp and such.

So how do I feel, well at times I am angry and think why! Why does it have to be our land our sacred place that all of this military training has taken place, and then to be in close enough range to see actual bombs bounce off the pu'u as it leaves an imprint of what is taking place; it is disturbing and does indeed hurt my soul not only as a native Hawaiian but in general as a human being who consumes the earth and yes many times I think why? Then there are many times that I thank the special training that my father had as a marine that got him through his fighting duty, and brought him safely back to his 'Ohana after a hard long and tired war, and so I am grateful. And then there are times I ask myself at what expense should I be grateful that one person was sacrificed for another.

I am a native Hawaiian who believes in the right to preserve all things that was once a vital part to our survival as a people. 'Aina (land) the land is the key to our entire being, and so as a marine must leave his 'Ohana to fight for their freedom to live on the land that was put there for their survival, so shall we as a people.

Pōhakuloa has a few problems beside the military destroying the land, and the drought has been going on for many years in this region. Goats, sheep and feral pigs are a huge problem they are just as damaging as the military believe it or not! These are problems that can be remedied if taken care of in a constant manner, with huge eradications that are perhaps done on mass levels so that they are effective in some form. If we take care of the ungulate problem, then the vegetation will take care of its self with whatever seasonal rains that are here throughout the year, and then and only then can the 'āina start to heal itself.

This place is like no other in the world, in the summer months from Pōhakuloa you can see the sun rise over Humu'ulu, you can see the clouds of Ke'āmuku and the winds of Hualālai battle for the attention of Mauna Kea. The winds blow in all four directions at once in this land so amazing and rare and you are able to see clouds that are out of this world, and the rains of Hilo that ever so often creeps over the forest to visit Pōhakuloa for a moment and dampened the dry disturbed land.

These are a few gifts that are land naturally gives us as we malama it (to take care of it). The land is saying hello, I am here look up at the sky, look down on the ground, close your eyes and feel me against your skin, I am all around you please take care of me so I am able to return the gesture to you.

Welina me Ke Aloha

My name is Leina'ala Benson. My husband and I raised our children in Honaunau, and I am a descendent of the Kinimaka 'Ohana. Being of Hawaiian ancestry and having a "war veteran" father, allows me to have a view of this project on both sides of the spectrum. I understand the need to have our young men and women trained for service. I also feel the need to conserve what is left of our native resources.

Five years ago I started the first phase of the PTA BAX project that consisted of UXO clearance, then drill and geothermal testing and now the final phase of the construction. The more time I spend here, the closer I get to my ancestors, the surrounding mountain and this special place.

Participating in the BAX project blessing has taken me to a deeper understanding of my cultural responsibility to this 'āina. As a direct result of the blessing, it is my humble opinion that positive outcomes have occurred. There is cohesiveness on this project that is unparalleled in my years as an archaeologist and cultural monitor. We subcontractors and monitors have gained a mutual respect and appreciation for each other and their specific purpose of this job. We truly work well together and watch out for one another as an Ohana.

I can't even begin to explain the dire need for mass ungulate control. In the past 8 months I have observed the increase of this population by at least one third. They are destroying our precious native ecosystem. Immediate attention to this matter is imperative to the restoration in order for native plants that inhabit these beautiful mountains to have their chance to thrive again. Another major concern is the military debris that is left behind after training including unexploded ordnance that is carelessly discarded. There is a need to have some type of cleanup plan implemented in the military training process.

At times I sense my ancestor's presence. These feelings fuel the passion within me to preserve what is left for future generation! Whether it be archaeological sites, native plants, la'au or language. I am honored, grateful and blessed to be a humble steward of the land.



## 7.0 CONCLUSIONS AND RECOMMENDATIONS

GANDA conducted archaeological and cultural monitoring at PTA BAX from the beginning of construction activities on 21 January 2010 to the end of GANDA's contract on 15 August 2010. During the course of the contract, most of the major ground-disturbing construction areas were monitored by the GANDA teams, including roads, building foundations, power lines, and a multitude of targets and related training structures.

Supported by good communication and planning with the construction contractor, Kiewit Pacific, Inc. and on-site USACE engineers, GANDA archaeologists and cultural monitors ensured the protection of the 11 archaeological sites known to exist in the BAX project area. An unsuccessful effort was made by GANDA cultural monitors to enact the protection of less-frequent native plants in the BAX, because they considered the indigenous vegetation to be an important cultural resource for Hawaiians.

Seven of the BAX sites are pre-Contact sites consisting of an isolated trail section (Site 23457), excavated *pāhoehoe* pits (Sites 24326 and 23455), mounds or cairns (Sites 23462 and 24327), a possible habitation enclosure (Site 24328), and a habitation cave complex also containing trail sections and an isolated excavated *pāhoehoe* pit (Site 19490). The remaining site (23451) is an historic fenceline attributable to sheep and cattle ranching during the late 19<sup>th</sup> century to mid-20<sup>th</sup> century. One manuport artifact (Art No. 1) was collected from the 'a'ā flow roughly 365 m southeast of one of the trail sites (Site 23457). The function and cultural attribution of the manuport is undetermined given a lack of context and the possibility that the item was brought to the area during recent times.

The pre-Contact sites at BAX represent a typical cross-section of site functions and broad distribution of sites in the Saddle Region that generally indicate short-term occupation related to cross-island travel and the collection of significant resources (such as birds, lithic materials, and plant goods) specific to the Saddle and neighboring Mauna Kea and Mauna Loa.

With the exception of potentially deep soil deposits in the protected lava tube and blisters as seen during the excavations at Site 19490 (Robins et al. 2006:34–39), sedimentation among the dominant lava flows at PTA is sparse and the resulting soil horizons tend to be relatively undeveloped due to the absence of moisture and vegetation on the arid landscape. As such, the stratigraphic profiles recorded in the trenches often exhibited diffuse layer boundaries, lacked well-defined soil horizons, and contained very stony material either from the parent 'a'ā lava flows or from surficial deposits (*ac* type) distributed by water, wind, or slope movement (Wolfe and Morris 1996).

Ten of the sites (excluding Site 23451) were recommended by consulting firms or PTA CR staff as being potentially eligible for NRHP listing under Criterion D. Site 23451 was recommended by Brown et al. (2008) as being not eligible for NRHP listing based on its poor condition and lack of integrity. Because the Army has not yet made formal determinations of eligibility for any of the 11 project sites, all 11 sites were treated as if eligible for nomination to the NRHP.

The Cultural Monitor Program at PTA BAX was perceived by all involved parties as beneficial to the project, especially in its educational capacity for on-site UXO personnel, construction workers, and GANDA archaeologists involved in the BAX project. The cultural monitors' knowledge of the PTA region and generosity in sharing their knowledge were essential elements for the success of this Cultural Monitor Program.

## 7.1 Recommendations

The PTA BAX monitoring project provided an extraordinary opportunity for the GANDA archaeologists and cultural monitors to experience on a daily basis the beauty and uniqueness of the Saddle Region. Collectively, the GANDA crew witnessed the area as a special place that deserves oversight and continued protection of its valuable resources and sacred places.

In light of potentially valuable information that Native Hawaiian cultural monitors can provide to archaeological projects, it is recommended that Hawaiian practitioners or *kama'āina* with a deep knowledge of the pre-Contact and/or post-Contact background of the region be included as consultants during earlier phases of archaeological investigations at PTA. This inclusion might allow input on the functional analysis of sites and provide an insight into cultural resources and sacred entities not easily discernable in the archaeological landscape at PTA.

As discussed previously, a protective berm was proposed for construction in the southeast portion of the BAX with the intent to protect Site 19490 from being impacted by live fire from new firing points in the BAX. Two new features of Site 19490 (Features U and V) were recorded within the footprint of the berm and four features (Features Q–T) were recorded on the north side of the berm in the potential line of fire. To achieve protection of all six newly features of Site 19490, two alternatives are recommended. Alternative 1 is to build a protective berm on the north of all Site 19490 feature components (Figure 59). The less-optimal choice, Alternative 2 (see Figure 59), is to

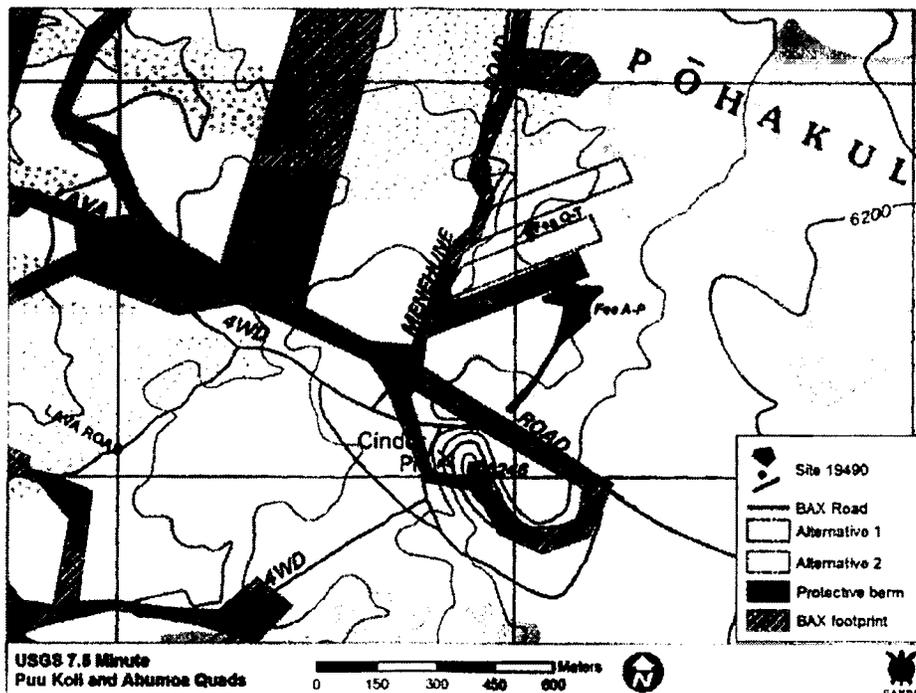


Figure 59. USGS quad map showing Site 19490 feature locations, current proposed berm and alternate berm locations outside of site area.

expose Features Q–T to potential live fire and build the berm in a gap between Features Q–T on the northwest and Features U and V on the southeast. According to the USACE engineers, an appropriate site for the protective berm is on an elevated topography, otherwise fill materials would be required if located on low landscapes.

Finally, an enclosure site in the BAX (Site 24328) previously recorded by PTA Cultural Resources staff has an uncertain function due to the lack of characteristics distinguishing it as a Hawaiian habitation site versus a recent U.S. military training structure. Thus, a program of subsurface testing is recommended at Site 24328 for a better understanding of the site's function and to facilitate long-term preservation plans, if necessary.



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**APPENDIX A: PTA BAX ARCHAEOLOGICAL SITE DESCRIPTIONS**



**SHPD Site 50-10-31-19490****Training Area: 5**

**Site Type:** Complex  
**Function:** Repeated-Use Habitation  
**Possible age:** AD 1480–Contact  
**No. of Features:** 15  
**Site Size:** 376 m (NE/SW) by 117 m (NW/SE)  
**Cultural Material:** Gourds, *ti* sandals, lithic and shell tools, midden, combustion features  
**Condition:** Fair to good; cave floor impacted by ungulates  
**Historic Context:** Traditional Hawaiian occupation (ca. AD 780 to Contact)  
**Significance:** D: *Information potential*; will likely yield intact cultural deposits indicative of Hawaiian occupation and resource exploitation in the PTA region.

**Previous**

**Recommendation:** Avoidance and protection during SBCT projects; long-term protection implemented to restrict human and animal access inside subterranean site components (Robins et al. 2006:28).

**Site Overview:** Site 19490 was originally recorded by BioSystems (Shapiro and Cleghorn 1998: 43–52) as a concentration of eleven features in an *'a'ā* flow underlain by exposures of *pāhoehoe* lava. The site features consist of four lava blisters/rockshelters (Features A, C, D, and E); a C-shape (Feature B); two trail sections (Features F and K); and four *ahu* or cairn (Features G–J) (Figure A-1 and Table A-1). The two trails intersect the site and consist of a short stepping-stone trail approaching from the west (Feature F) and a trodden and cleared trail in *'a'ā* lava (Feature K) approaching from the south. Several new features (Features L–O and K00 through K06, the latter K-series presumably Feature P) were later identified by PTA cultural resources staff and include lithic concentrations and cairns. Six additional features (Features Q–V) were identified during the current project and are described above (see Section 5.2 of this report)

Shapiro and Cleghorn (1998) recorded a variety of pre-Contact cultural material on the floor of the Feature C cave, including volcanic glass, basalt hammerstones, charcoal, bird bone, *kukui* nut, *'opihi* shells, matting, and a pair of well-preserved *ti*-leaf sandals, or *kāma'a*. The sandals are currently preserved in an acid-free box in a climate-controlled room at PTA. A burned firebrand recovered in the cave produced a C13 corrected radiocarbon age of 160±70 yrs BP, which was calibrated to a calendar date range of AD 1640–1950 (Shapiro and Cleghorn 1998:44).

Abundant cultural material similar to the surface material observed by Shapiro and Cleghorn (1998) was recovered from an excavation unit (TU1) in the main, eastern-most chamber of the Feature C lava blister (Robins et al. 2006). The test unit was placed over an ash deposit exposed within the light zone of the Feature C chamber roughly 0.5 m east of the chamber's entrance. The unit contained four soil layers (Layers I–IV) and a subsurface feature (SF1) to a maximum depth of 45 cm below ground surface.

SF1 consisted of multiple components (SF1a–f) defined best in profile by varying colors of ash (SF1a–c and e), ash mixed with charcoal (SF1f), and ash mixed with charcoal and fire-affected rocks (SF1d). All levels of SF1 yielded traditional cultural material that included marine shell, bird, mammal and fish bone, *kukui* nut shells, basalt and volcanic glass debitage and tools (blades, scrapers, cores, and adze fragments), bird cooking stones, and bone and shell artifacts, such as needles, awls, and scrapers.

Faunal remains, consisting of mammals, fish, and both sea and land birds, comprised a large part of the materials recovered from TU1, with most being bird bone (Table A-2). The small size of the

fishbone collected from TU1 suggests the remains were actually stomach contents of the Hawaiian petrel recently captured in the PTA region after feeding at the ocean (Ziegler 2003). Ziegler also noted phalanx splitting among the Hawaiian petrel and non-diagnostic medium procellariid bones, possibly indicating Hawaiians chewed raw, salted, or cooked bird feet. The presence of egg shell fragments might also indicate Hawaiians were actively collecting eggs from nearby burrows or nests used by the Hawaiian petrel, Hawaiian goose (*nēnē*), or Short-eared owl (*pueo*). Or the eggs were indirectly obtained in the ovum of Hawaiian petrels after the birds were captured for consumption (Zeigler 2003).

Three charcoal samples from SF1d consisted of one short-lived species of *'akoko* (*Chamaesyce* spp.) and longer-living trees of *naio* (cf. *Myoporum sandwicense*) and *māmāne* (cf. *Sophora chrysophylla*). The samples produced the following calibrated ( $2\sigma$ ) date ranges, with multiple date ranges produced from the longer-living tree species (*naio* and *māmāne*):

- AD 1480 to 1660 (*'akoko*)
- AD 1490 to 1680, AD 1770 to 1800, and AD 1940 to 1950 (*naio*)
- AD 1650 to 1890 and AD 1910 to 1950 (*māmāne*)

One sample of *naio* (cf. *Myoporum sandwicense*) from SF1f, the deepest feature layer, produced a calibrated ( $2\sigma$ ) date range of AD 1450 to 1660. The testing results suggest the primary site activities at Feature C were reduction of basalt and volcanic glass, and preparation and consumption of various types of birds, mainly Hawaiian petrel who nested in the Saddle. Smaller procellariids were also likely consumed at the site, such as the historically extinct Gracile petrel or Bonin petrel, Short-eared owl, Hawaiian Goose, and the extinct Hawaiian Flightless rail.

The volcanic glass material was probably quarried from the surface of the *k4* flow, with the closest known quarry site (Site 23458) roughly 2,000 m to the south. Some of the constructed tools and utilized flakes might have been used in the butchering of birds prior to cooking (cf. Ziegler 2003).

**Table A-1. Site 19490 Feature Details (from Shapiro and Cleghorn 1998:43-53 and PTA site records 7/21/05).**

| <b>Feature</b> | <b>Feature Type</b>          | <b>Function</b>         | <b>Dimensions</b>                                           |
|----------------|------------------------------|-------------------------|-------------------------------------------------------------|
| A              | Lava tube                    | Limited-use occupation  | 4 x 2 x 0.3 m                                               |
| B              | C-shape                      | Unknown                 | 2.1 x 0.7 m                                                 |
| C              | Lava tube                    | Repeated-use occupation | 3.5 x 6 m – collapsed sink<br>11 x 3 x 1.5 m – main chamber |
| D              | Rock-shelter                 | Limited-use occupation  | 3.3 x 2 x 1 m                                               |
| E              | Lava tube                    | Limited-use occupation  | 4 x 2 x 1 m                                                 |
| F              | Trail                        | Transportation          | 23.5 m                                                      |
| G              | Cairn                        | Marker                  | 0.6 x 0.6 m                                                 |
| H              | Cairn                        | Marker                  | 1.3 x 1.5 m                                                 |
| I              | Cairn                        | Marker                  | 0.5 x 0.5 m                                                 |
| J              | Cairn                        | Marker                  | 0.5 x 0.5 m                                                 |
| K              | Trail                        | Transportation          | ca. 250 m                                                   |
| L              | Lithic concentration         | Workshop                | 1.0 x 0.8 m                                                 |
| M              | Volcanic glass concentration | Workshop                | 0.15 m <sup>2</sup>                                         |
| N              | Lithic concentration         | Workshop                | 2.9 x 2.8 m                                                 |
| O              | Cairns/alignment             | Markers                 | Mixed sizes                                                 |
| K00            | Cairn                        | Marker                  | 1.6 x 0.7 x 0.8 m high                                      |
| K01            | Cairn                        | Marker                  | 0.9 x 0.7 x 0.6 m high                                      |
| K02            | Cairn                        | Marker                  | 0.5 x 0.5 x 0.6 m high                                      |
| K03            | Cairn                        | Marker                  | 0.4 x 0.5 x 0.2 m high                                      |
| K04            | Cairn                        | Marker                  | 0.3 x 0.4 x 0.12 m high                                     |
| K05            | Cairn                        | Marker                  | 0.6 x 0.55 x 0.3 m high                                     |
| K06            | Cairn                        | Marker                  | 0.2 x 0.2 x 0.25 m high                                     |

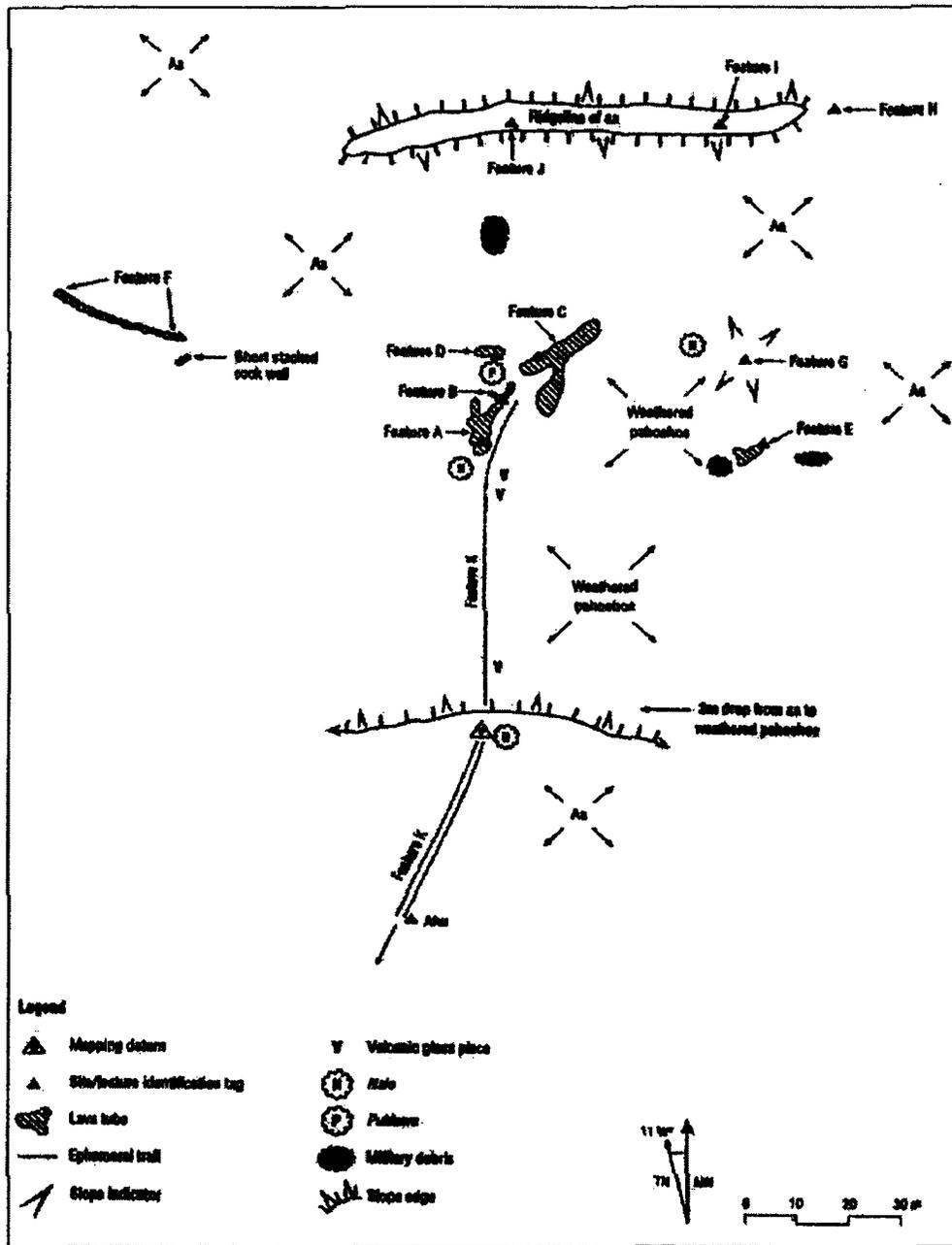


Figure A-1. Plan of Site 19490 complex (from Shapiro and Cleghorn 1998).

Table A-2. Volume of Faunal Remains in Site 19490 Subfeature 1 (from Robins et al. 2006:41)

| *Concentration Index | Weight (gm) | Common Name(s)                                                   | Class                    | Species                                 |
|----------------------|-------------|------------------------------------------------------------------|--------------------------|-----------------------------------------|
| 5                    | 1.7         | Short-eared Owl                                                  | Aves                     | <i>Asio flammeus</i>                    |
| 3                    | 1.1         | Hawaiian Goose                                                   | Aves                     | <i>Branta sanwicensis</i>               |
| 0.3                  | 0.1         | Turkey or Peafowl                                                | Aves                     | Large Galliform                         |
| 1                    | 0.2         | Band-rumped Storm Petrel                                         | Aves                     | <i>Oceanodroma</i>                      |
| 1                    | 0.3         | Perching bird or Songbird                                        | Aves                     | Passeriform – small                     |
| 4                    | 1.4         | Hawaiian Flightless Rail                                         | Aves                     | Porzana sp.                             |
| 42                   | 14.5        | Christmas Shearwater, Bulwer's Petrel et al.                     | Aves                     | Procellariid – small                    |
| 623                  | 213.2       | Wedge-tailed Shearwater, Newell's Shearwater and Hawaiian Petrel | Aves                     | Procellariid – medium                   |
| 150                  | 51.3        | Hawaiian Petrel                                                  | Aves                     | <i>Pterodroma phaeopygia</i>            |
| 0.3                  | 0.1         | Unidentifiable                                                   | Aves                     | Small bird                              |
| 5                    | 1.6         | Unidentifiable                                                   | Aves                     | Medium bird – poss. egg shell fragment  |
| 7                    | 2.3         | Unidentifiable                                                   | Aves                     | Large bird                              |
| 0.3                  | 0.1         | Domestic Dog                                                     | Mammalia                 | <i>Canis familiaris</i>                 |
| 60                   | 20.8        | Domestic Goat/Sheep                                              | Mammalia                 | <i>Capra hircus/Ovis</i> sp.            |
| 8                    | 2.7         | Mongoose                                                         | Mammalia                 | <i>Hesperstes auripunctatus</i>         |
| 10                   | 3.3         | Polynesian Rat                                                   | Mammalia                 | <i>Rattus Exulans</i>                   |
| NA                   | < 0         | Norwegian or Roof Rat                                            | Mammalia                 | <i>Rattus Norvegicus/ Rattus rattus</i> |
| 16                   | 5.4         | Unidentifiable                                                   | Mammalia                 | Small mammal                            |
| 242                  | 82.9        | Unidentifiable                                                   | Mammalia                 | Medium mammal                           |
| 0.6                  | 0.2         | Unidentifiable                                                   | Osteichthyes             | Unidentified fish                       |
| 4                    | 1.5         | Unidentifiable                                                   | Indeterminate vertebrate | Unidentifiable                          |

\*Concentration Index in grams/m<sup>3</sup> Volume = 0.342 m<sup>3</sup>

**SHPD 50-10-31-23451****Training Area: 7, 8**

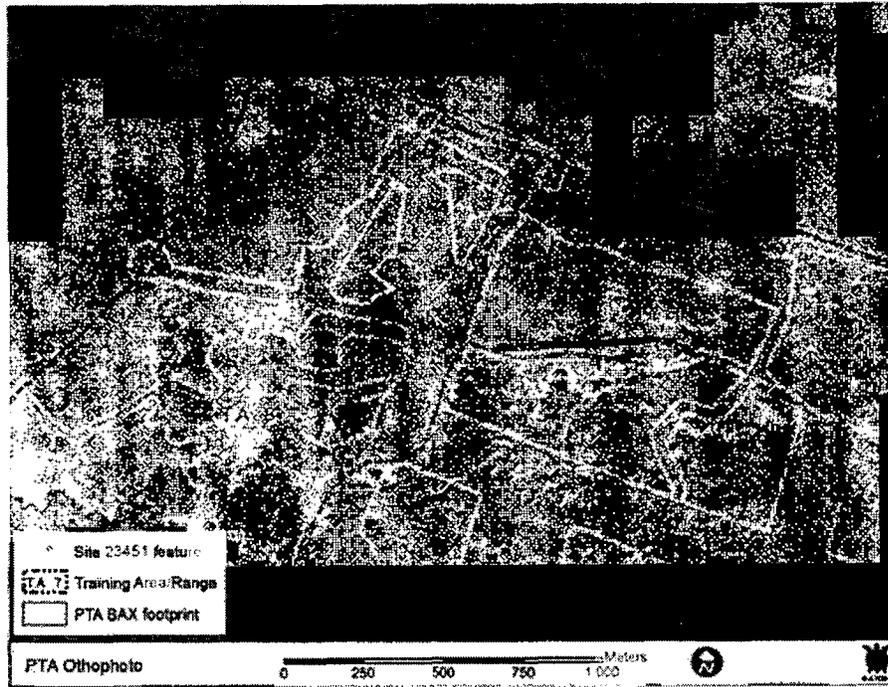
|                                 |                                                      |
|---------------------------------|------------------------------------------------------|
| <b>Site Type:</b>               | Fence line                                           |
| <b>Function:</b>                | Historic cattle enclosure                            |
| <b>Possible age:</b>            | Late 1800s to mid-1900s                              |
| <b>No. of Features:</b>         | None assigned                                        |
| <b>Site Size:</b>               | 2,165 m long in BAX                                  |
| <b>Cultural Material:</b>       | None observed                                        |
| <b>Condition:</b>               | Poor condition in BAX                                |
| <b>Historic Context:</b>        | Livestock Industry (ca. 1793–Present)                |
| <b>Significance:</b>            | Recommended as Not NRHP eligible (Brown et al. 2008) |
| <b>Previous Recommendation:</b> | None given                                           |

**Site Overview:** Site 23451 is a section of historical fenceline that crosses from east to west through PTA Training Areas 6 (Site 23452), 8, 9, and 113 (Site 23451) (Brown et al. 2008). Additional sections of Site 23451 fenceline were identified in Training Area 7 by PTA cultural resources staff. The sections recorded by Brown et al. (2008) and PTA cultural resources staff in Training Areas 7 and 8 are in the north-central portion of the BAX (Figure A-2). All GIS locations shown on Figure A-2 were derived from PTA cultural resources data provided to GANDA. The general characteristics of Site 23451 described by Brown et al. (2008:84) are as follows:

Site 23451 is a 5+ km historical fence line with a stone base-layer that runs through Training Areas 8, 9, and 13. . . The fence line is divided into two main sections, one crossing Training Areas 8 and 9 in a due east-west direction (measuring approximately 2.7 km in length), and another in Training Area 13 running northwest-southeast (measuring approximately 12.2 km in length).

Local landscape features include undulating lava, ridgelines, terraces, benches, and hillocks. Topography is dominated by nearly flat to gently rolling lava flows marked by cinder cones and tumuli. Vegetation is medium to heavy with brush, grasses, and floral detritus.

The fence line has been disturbed and is discontinuous. Sections of fence line have been cleared by dozer activity and the stone base-layer was occasionally dismantled to create defensive military positions. The site is in poor condition and lacks integrity in many places.



**Figure A-2. Orthophoto and USGS quads inset showing location of Site 23451 fence line in PTA BAX project.**

SHPD 50-10-31-23455

GANDA Site No: 607-615, 689

**Site Type:** Excavated pit complex  
**Function:** Possible bird catchments  
**Possible age:** Pre-Contact  
**No. of Features:** 24 in BAX (total 174)  
**Site Size:** 1,080 by 775 m (7.7 hectare – excludes isolated pit roughly 2,250 m west of cluster)  
**Cultural Material:** None  
**Condition:** Fair; impact from training activities  
**Historical Context:** Resource procurement in Saddle Region (Pre-Contact)  
**Significance:** D: *Information potential*; site yields information regarding possible methods of bird hunting and locations of former habitats.

**Training Area:** 5 and Range 11T

**Previous**

**Recommendation:** Avoidance and protection during all SBCT-related projects.

**Site Overview:** Site 23455 consists of a concentration of at least 24 excavated pit features northeast of the BAX project and an isolated pit complex within the southern Range 11T portion of the BAX project. The excavated pits are within the *k2* lava flow (dating 1,500 to 3,000 years ago) and typically occur in small blisters or caverns beneath the surface.

The 24+ pit features were grouped under a single site number due to their similar location on the *k2* lava flow and relatively clustered locations, with the exception of the isolated pits located in the southern portion of the project area. No Phase II work (Robins et al. 2006) was conducted at the site because it was determined that adequate data had been previously collected elsewhere at PTA to determine NRHP eligibility (i.e., Roberts et al. 2004c).

The pit features are tentatively classified as bird hunting pits created by pre-Contact Hawaiians around existing bird nesting areas in natural caverns. This interpretation fits well with the historic contact of the Saddle Region that indicates *'ua 'u* (Hawaiian petrel) was a primary food resource exploited by Hawaiians in the Saddle Region.

The pits are characterized by roughly circular or elongated depressions with excavated rock materials overturned inside and/or scattered (sometime roughly piled) along the perimeter of the pit. The caverns exposed in the pits average around 0.3 m high. The excavated areas range between 1.0 m and 2.0 m in diameter.

**SHPD 50-10-31-23457****GANDA Site: 616**

|                            |                                                                                                                                           |                       |   |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---|
| <b>Site Type:</b>          | Trail and cairns                                                                                                                          | <b>Training Area:</b> | 7 |
| <b>Function:</b>           | Transportation                                                                                                                            |                       |   |
| <b>Possible age:</b>       | Pre-Contact                                                                                                                               |                       |   |
| <b>No. of Features:</b>    | 5                                                                                                                                         |                       |   |
| <b>Site Size:</b>          | 95.0 x 15.0 m (0.01 hectare)                                                                                                              |                       |   |
| <b>Cultural Material:</b>  | None observed                                                                                                                             |                       |   |
| <b>Condition:</b>          | Fair to good; partly collapsed architecture                                                                                               |                       |   |
| <b>Historical Context:</b> | Travel and resource procurement in Saddle (Pre-Contact to ca. 1866)                                                                       |                       |   |
| <b>Significance:</b>       | D: <i>Information potential</i> ; site yields important location and construction data regarding pre-Contact travel routes in the Saddle. |                       |   |
| <b>Recommendation:</b>     | Avoidance and protection during all SBCT-related projects.                                                                                |                       |   |

**Site Overview:** Site 23457 is a trail (Feature 1) aligned NW/SE along the interface between an 'a'ā flow from Mauna Loa (*k2* flow) and an older 'a'ā flow from Mauna Kea (*l* flow). Four rock cairns are aligned along the southwest portion of the trail. Two of the cairns (Features 1 and 2) were identified during the Phase I survey (Roberts et al. 2004c) and the other two (Features 4 and 5) were documented by PTA Cultural Resources staff. The site boundary is determined by the locations of Feature 1 on the north, east, and south sides, and Feature 5 on the west side. No photographs were taken of Features 2 or 3 during the Phase I or II studies (Roberts et al. 2004c; Robins et al. 2006).

Feature 1 trail has a similar orientation as another Hawaiian foot trail (Site 19490, Feature F) located roughly 400 m to the southeast. Although no indications of the trail were found in the archival record (e.g., historic maps and oral traditions), it is plausible that Site 23457 once served as a pre-Contact travel route across the Saddle, partly to provide access to bird nesting areas (e.g., Sites 23455 in the BAX project) and volcanic glass quarries (e.g., Sites 23458 and 23669–23671) located beyond the current project area. The adjacent cairns may have been constructed as markers allowing wayward travelers to locate the trail section from afar.

Feature 1 trail is defined by a linear, trodden surface in the 'a'ā lined along the perimeter with larger cobbles (Figure A-3). The trail is 1.0 m wide and spans a maximum of 98.3 m long.

Feature 2 cairn is on the north side of the trail. It measures 0.75 by 0.70 by 0.70 m high. It is composed of three 'a'ā cobbles piled on top of each other.

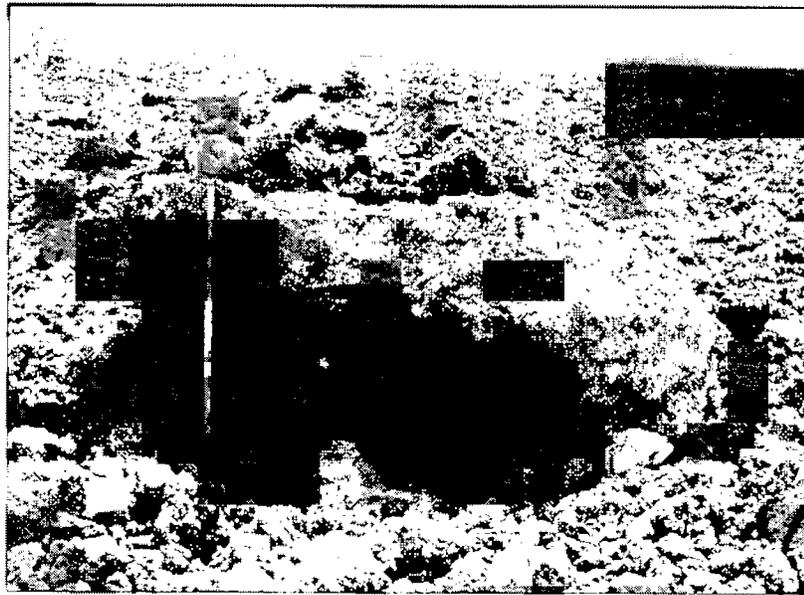
Feature 3 cairn is roughly 15 m southeast of Feature 2 and 1.6 m from the southwest edge of the trail. It is 0.6 by 0.5 m and is situated approximately 1.6 m from the southern trail edge. This feature is constructed of two 'a'ā cobbles piled on top of each other.

Feature 4 cairn is 7.0 m southwest of Feature 3. It is constructed of small-to-large 'a'ā cobbles piled two courses high. It is 1.0 by 0.8 by 0.45 m high.

Feature 5 cairn is 2 m west of Feature 4 (Figure A-4). It is constructed of medium-to-large 'a'ā cobbles piled two courses high. It is 1.0 by 0.8 by 0.25 m high.



**Figure A-3. Photograph of Site 23457 Feature 1 trail; view to east.**



**Figure A-4. Photograph of Site 23457 Feature 5 cairn; view to southeast.**

**SHPD 50-10-31-23462****GANDA Site: 670**

|                           |                                                                                                                                           |                       |   |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---|
| <b>Site Type:</b>         | Mound complex                                                                                                                             | <b>Training Area:</b> | 7 |
| <b>Function:</b>          | Possible trail marker                                                                                                                     |                       |   |
| <b>Possible age:</b>      | Undetermined                                                                                                                              |                       |   |
| <b>No. of Features:</b>   | 2                                                                                                                                         |                       |   |
| <b>Site Size:</b>         | 10.0 by 2.0 m (0.0001 hectare)                                                                                                            |                       |   |
| <b>Cultural Material:</b> | None                                                                                                                                      |                       |   |
| <b>Condition:</b>         | Fair; partly collapsed architecture                                                                                                       |                       |   |
| <b>Historic Context:</b>  | Possible travel and resource procurement in Saddle (Pre-Contact to ca. 1866).                                                             |                       |   |
| <b>Significance:</b>      | D: <i>Information potential</i> ; site yields important location and construction data regarding pre-Contact travel routes in the Saddle. |                       |   |
| <b>Recommendation:</b>    | Avoidance and protection during all SBCT-related projects.                                                                                |                       |   |

**Site Overview:** Site 23462 consists of two mounds (Features 1 and 2) in a grass-covered, weathered 'a'ā flow, roughly 290 m northwest of Menehune Road. Modern debris was observed in the site area. Feature 2, located 10.0 m from Feature 1, was originally classified as a "military marker" (Roberts et al. 2004c) but was been re-evaluated by PTA Cultural Resources Staff as a component of Site 23462. Both mound features may have served as markers for a pre-Contact transportation route. No test excavations were undertaken at the site because the mounds lie directly on outcrop. The site boundary is determined by the feature locations.

Feature 1 is a roughly circular mound constructed of 'a'ā cobbles and small boulders piled five to six high. The mound is 1.2 (E/W) by 1.8 m (E/W) and 0.7 m high (Figure A-5).

Feature 2 is constructed of rough pāhoehoe slabs and blocks piled two to three high. It measures 0.9 by 1.0 by 0.8 m high.

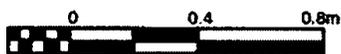
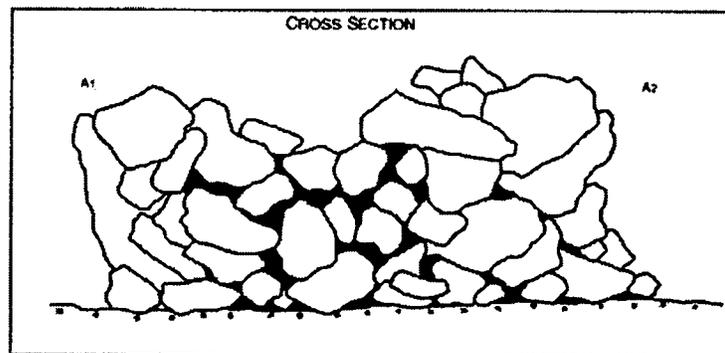
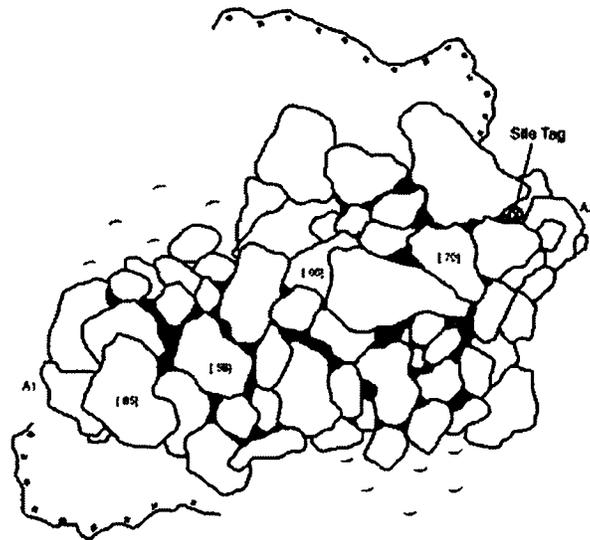
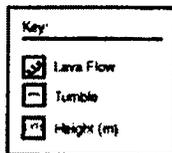


Figure A-5. Plan map of Site 23462, Feature 1 mound (from Robins et al. 2006:61)

**SHPD 50-10-31-24326**

**PTA Cultural Resource Site: T-101204-1**

**Site Type:** *Pāhoehoe* excavations      **Training Area:** 7  
**Function:** Possible bird catchment  
**Possible age:** Pre-Contact  
**No. of Features:** 2  
**Site Size:** No indicated  
**Cultural Material:** None  
**Condition:** Good  
**Historic Context:** Resource procurement in Saddle Region (Pre-Contact)  
**Significance:** Per PTA Cultural Resources staff; Criterion D: *Information potential*  
**Previous**  
**Recommendation:** None given

**Site Overview:** Site 24327 was previously recorded by PTA Cultural Resource staff on 12 October 2004. The following description and photographs (Figures A-6 and A-7) were taken from Head et al. (2004). Figure A-8 was drafted by GANDA based on a field map created by PTA Cultural Resources staff on 24 August 2005.

Site 24326 is a complex of pahoehoe excavations. Feature A is a small *pāhoehoe* excavation with a low overhang on the south. It appears too small for entry and there is a possible C-shape alignment of large cobbles – small boulders on the north side of the excavated area. Feature B are two additional pahoehoe excavations, both of which measure about 1.0 m<sup>2</sup> by 0.45 m deep. Both areas appear to have been cleared out with the materials spread to the north, and Feature C is a broken pahoehoe blister that also appears to have been cleared. The hole in the top of the blister measures about 0.70 by 0.40 with the blister about 0.75 m deep. This site is consistent with the typology described for bird-catching activities (Moniz-Nakumura et al. 1998).



Figure A-6. Site 24326, Feature B *pāhoehoe* excavation; view to west (source: PTA Cultural Resources staff).



Figure A-7. Site 24326, Feature C *pāhoehoe* excavation; view to south (source: PTA CR staff).

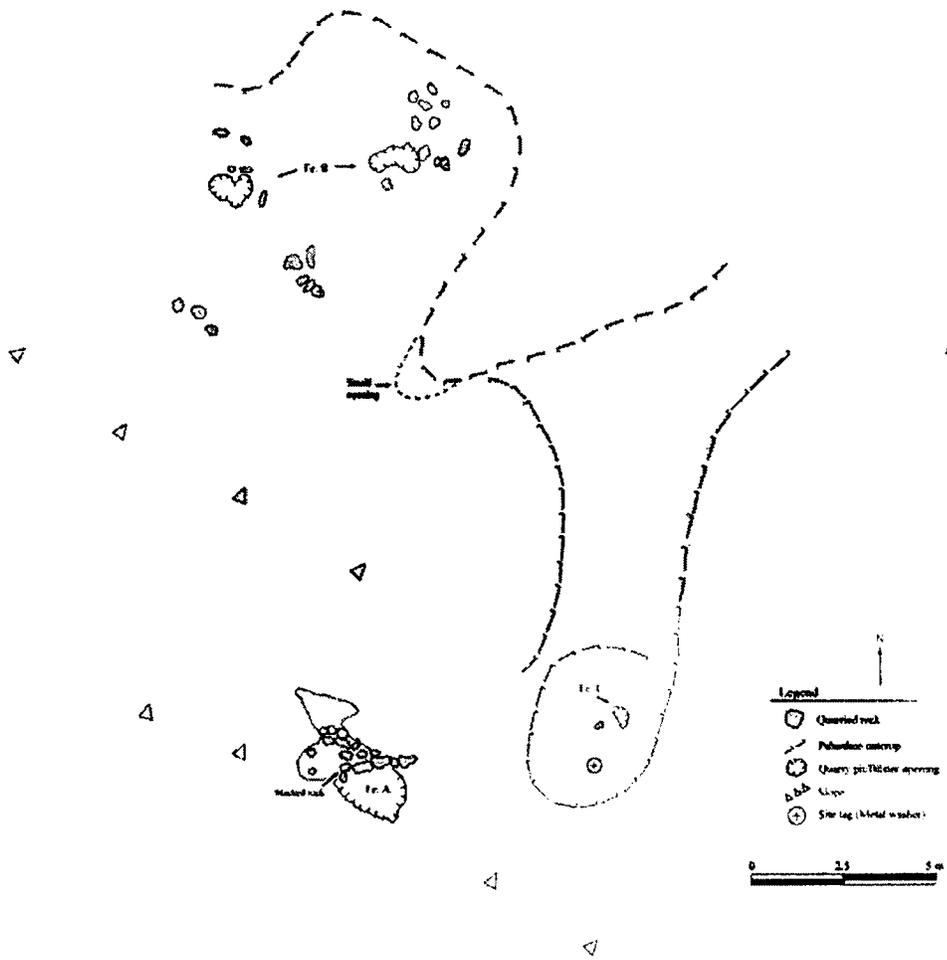


Figure A-8. Plan map of Site 24326, Features A-C; drafted by GANDA from PTA CR staff field records.

SHPD 50-10-31-24327

PTA Cultural Resource Site: T-101204-2

Site Type: Cairn complex

Training Area: 7

Function: Possible marker

Possible age: Undetermined

No. of Features: 2

Site Size: 3.5 m diameter

Cultural Material: None

Condition: Fair

Historic Context: Possible travel and resource procurement in Saddle Region (Pre-Contact to ca. 1866)

Significance: per PTA Cultural Resources staff; Criterion D: *Information potential*

Previous

Recommendation: None given

**Site Overview:** Site 24327 was previously recorded by PTA Cultural Resource staff on 12 October 2004. The following description and photograph (Figure A-9) were taken from Head et al. (2004). Figure A-10 was drafted by GANDA based on a field map created by PTA Cultural Resources staff on 24 August 2005.

Site 24327 is a stacked cairn built on mostly level pahoehoe and measures about 0.95m<sup>2</sup> and 0.90m high. It is constructed of small cobble to small boulder size pahoehoe stones stacked eight to nine courses high. There is another possible collapsed cairn about 2.5m away at 190°. One aluminum arrow shaft was found about 25m to the north, but no other cultural items were located.

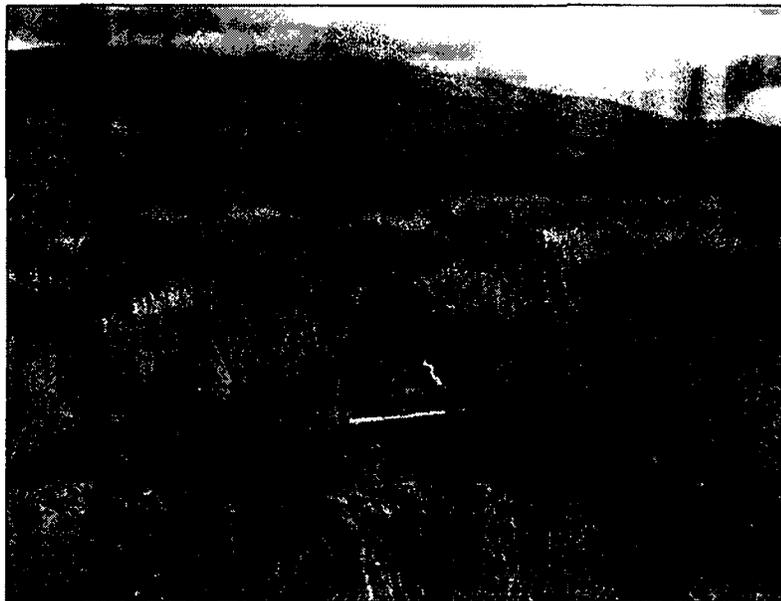


Figure A-9. Site 24327 cairn (center) and possible collapsed cairn (lower right); view to northeast (source: PTA CR staff).

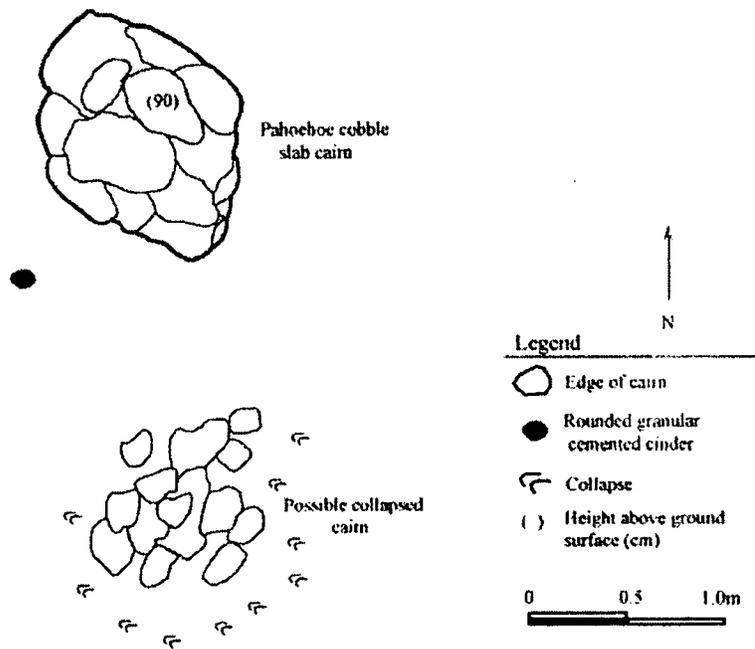


Figure A-10. Plan map of Site 24327 cairn (top) and possible cairn (bottom); drafted by GANDA from PTA Cultural Resources Staff field records.

|                            |                                                                             |
|----------------------------|-----------------------------------------------------------------------------|
| <b>SHPD 50-10-31-24328</b> | <b>PTA Cultural Resource Site: T-101204-3</b>                               |
| <b>Site Type:</b>          | Enclosure complex <b>Training Area:</b> 7                                   |
| <b>Function:</b>           | Habitation or U.S. military structures                                      |
| <b>Possible age:</b>       | Undetermined                                                                |
| <b>No. of Features:</b>    | 2                                                                           |
| <b>Site Size:</b>          | 20.0 by 5.0 m                                                               |
| <b>Cultural Material:</b>  | None                                                                        |
| <b>Condition:</b>          | Good                                                                        |
| <b>Historic Context:</b>   | Not evaluated                                                               |
| <b>Significance:</b>       | per PTA Cultural Resources staff; Criterion D: <i>Information potential</i> |
| <b>Previous</b>            |                                                                             |
| <b>Recommendations:</b>    | None given                                                                  |

**Site Overview:** Site 24328 was previously recorded by PTA Cultural Resource staff. The following description and photographs (Figures A-11 and A-12) were taken from Head et al. (2004). Figure A-13 was drafted by GANDA based on a field map created by PTA Cultural Resources staff on 13 October 2004.

This site may be composed of military features. There are no military items (cartridges, wire, food, packing items) but there is military debris to the south and southeast. Construction is heavy-duty for the usual "hasty fortification" associated with training

Feature A is a stacked rock enclosure measuring 4.0 m by 4.5 m by 1.4 m high. Walls are stacked 2–3 courses high and the southeast is built of medium-sized boulders.

Feature B is a stacked rock C-shaped structure with the opening to the NNW. A large boulder area forms the southwest and stacked walls are 1–2 courses high. Soil lies inside the structure.

Feature C is a low wall that crosses a lava channel. The wall runs almost due NW/SE. It is composed of large 'a'a cobbles stacked up 3 stones high.



Figure A-11. Site 24328, Feature A is the larger of the enclosures; note Feature B in the upper right corner.



Figure A-12. Site 24328; Feature B is the smaller of two enclosures in the site.

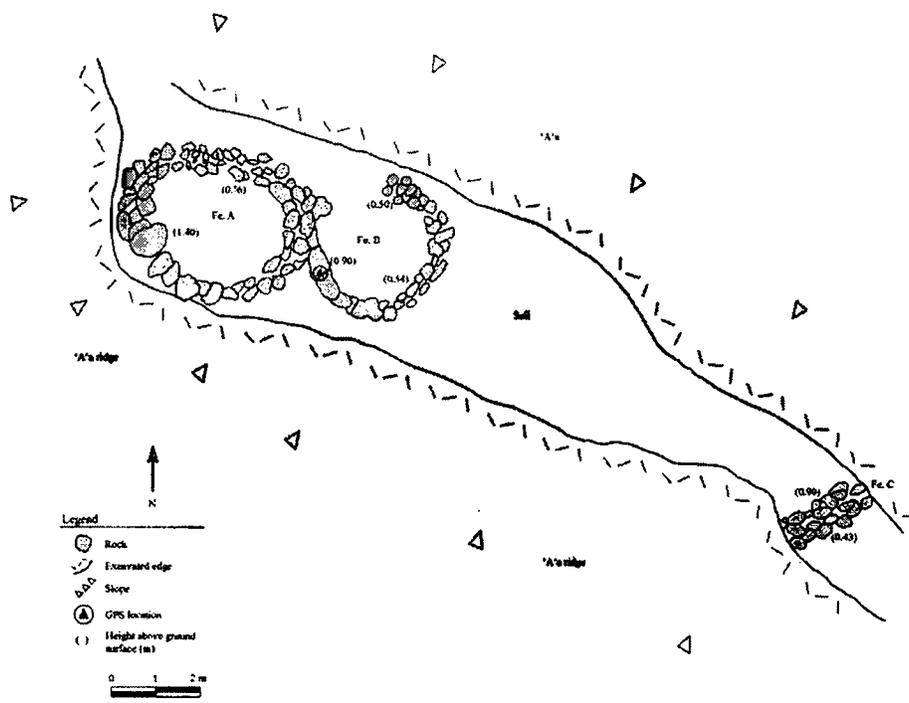


Figure A-13. Plan map of Site 24328 complex, Features A-C.

003308



its meeting held on September 11, 2009, has approved the amendment to General Lease No. S-3849 for the purposes of amending paragraph 22.

NOW, THEREFORE, the Lessor and Government covenant and agree that paragraph 22 of General Lease No. S-3849, is hereby deleted in its entirety and replaced with the following:

"The Lessor reserves unto itself all ground and surface water, ores, minerals and mineral rights of every description on, in or under the demised premises but shall exploit or permit others to exploit the said ores, minerals and mineral rights only with the consent of the Government. Notwithstanding the foregoing reservation, the Government shall have the right to develop and use coral, rock and similar materials occurring naturally on the said premises for the following construction activities; (a) road projects on the demised premises, (b) the Stryker Brigade Combat Team (SBCT) Battle Area Complex to be constructed partially on the demised premises and partially on lands set aside to the Government by Presidential Executive Order 11167 dated August 19, 1964; (c) the SBCT Tactical Vehicle Wash Facility to be constructed on lands set aside to the Government under Governor's Executive Order No. 1719 dated January 26, 1956; and (d) the SBCT Ammunition Holding Area #2 to be constructed on lands set aside to the Government under Presidential Executive Order 11167 dated August 19, 1964. In addition, the Government shall have the right to use ground and surface waters on, in or under the demised premises for purposes incident to the rights granted by this lease."

IN CONSIDERATION THEREOF, the Lessor and Government further agree that this Amendment of Lease Agreement is subject to all the covenants and conditions in the General Lease No. S-3849, except as herein provided.

This Amendment, read in conjunction with the General Lease No. s-3849 sets forth the entire agreement between the Lessor and Government; and the general lease as amended and modified hereby shall not be altered or modified in any particular except by a memorandum in writing signed by the Lessor and Government.

356925\_1.DOC

-2-

DEPARTMENT OF LAND AND NATURAL RESOURCES  
LAND DIVISION  
P.O. BOX 621  
HONOLULU, HAWAII 96809

PRELIM. APPR'D.  
Department of the  
Attorney General

IN WITNESS WHEREOF, the STATE OF HAWAII, by its Board of Land and Natural Resources, has caused the seal of the Department of Land and Natural Resources to be hereunto affixed and the parties hereto have caused these presents to be executed the day, month, and year first above written.

Approved by the Board of Land and Natural Resources at its meeting held on September 11, 2009.

STATE OF HAWAII

By   
Chairperson  
Board of Land and Natural Resources *KEM*

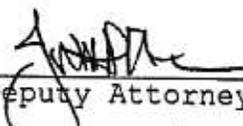
LESSOR

UNITED STATES OF AMERICA

By   
Michael Sakai  
US Army Corps of Engineers, Honolulu District  
Its Realty Contracting Officer

GOVERNMENT

APPROVED AS TO FORM:

  
Deputy Attorney General

Dated: 11/23/09

STATE OF HAWAII

CITY AND COUNTY OF HONOLULU

)  
) SS  
)

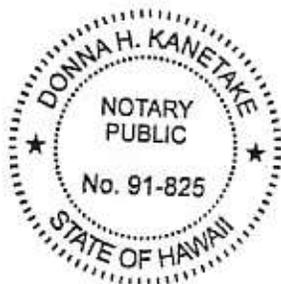
On this 9th Day of December 2009, in the First Circuit of the State of Hawaii, before me personally appeared Michael Sakai, to me known to be the person described in and who executed the foregoing instrument, a 3-page Amendment of General Lease No. S-3849, U.S. Lease, Contract No. DA-94-626-ENG-80, undated at time of notarization, plus this acknowledgment, and acknowledged that he executed the same as his free act and deed.

Witness my hand and seal.

*Donna H. Kanetake*

Donna H. Kanetake  
Notary Public, State of Hawaii

My Commission Expires: July 22, 2010





COPY

**STATE OF HAWAII**  
**OFFICE OF HAWAIIAN AFFAIRS**  
711 KAPI'OLANI BOULEVARD, SUITE 500  
HONOLULU, HAWAII 96813

HRD97/001

August 6, 2010

Colonel Douglas S. Mulbury  
U.S. Army Installation Management Command, Pacific Region  
United States Army Garrison-Hawai'i  
851 Wright Avenue, WAAF  
Schofield Barracks, Hawaii 96857-5000

**RE: Evaluation of the Historic Significance of the Potential Historic Properties Identified by the Office of Hawaiian Affairs (OHA) During Settlement Agreement Surveys, in Accordance with 36 C.F.R. 800.4(C).**

Aloha e Colonel Douglas S. Mulbury,

The Office of Hawaiian Affairs (OHA) requests that your agency promptly evaluate the historic properties identified by OHA staff, the lead archaeologist, and Army representatives during the Settlement Agreement surveys, which were concluded in 2009. As per the Settlement Agreement entered into between the U.S. Army and the Office of Hawaiian Affairs on October 31, 2008, "[a]fter receipt of the Lead Archeologist's report and any supplemental documentation submitted by OHA regarding potential Historic Properties, the Army shall, if requested by the Lead Archeologist's and/or OHA, promptly evaluate the historic significance of the potential Historic Properties identified by OHA in accordance with 36 C.F.R. 800.4(c). Based on the results of this evaluation, the Army will then follow the applicable provisions of 36 C.F.R. Part 800 to complete the evaluation, assessment and treatment process." Settlement Agreement, paragraph III.D.1 (emphasis added).

The site features identified during the Settlement Surveys that require formal evaluation are listed in the Lead Archaeologists report by SWCA Environmental Consultants, entitled "Cultural Resource Evaluations of Stryker Transformation Areas in Hawaii." The summary of the sites are listed in Table 2, pages 21-23 for Schofield Barracks, Table 4, page 221 for Kahuku (KTA) and pages 288-293 for Pohakuloa (PTA). This report describes each site feature and provides the interpretations and recommendations of the lead archaeologist Chris Monahan. In addition, our office will be submitting an independent report for your consideration. All of the sites and site features discussed in these reports were either previously unidentified by the Army or reevaluated by the Settlement Survey Team. Accordingly, these sites were not adequately

considered. Your agency now has the obligation to consider this new information when editing or creating all site protection/mitigation plans and consultation letters in order to address any potential adverse effects to these sites.

The Settlement Agreement states, “[i]f, in the course of OHA’s reviews of the survey areas, OHA discovers facts that were not previously disclosed to it, which reasonably lead OHA to conclude that Historic Properties or Cultural Items located on one or more other Stryker-related training facilities have been improperly identified or may be endangered, then the Army will accept written comments from OHA regarding the identification and treatment of Historic Properties or Cultural Items on the other Stryker-related training facilities.” It is our hope that the time, effort, and money utilized to reach this settlement was not wasted, and that the information obtained from our surveys will positively influence the Army’s Historic Preservation initiatives.

In the spirit of cooperation and in good faith, OHA would like to propose a continued collaboration between our office and your agency. The lead archaeologist’s report documents inadequate or inaccurate identification, evaluation, and assessment of historic properties on Stryker Brigade Transformation projects. The accomplishments of the settlement surveys have certainly begun to correct these deficiencies, yet the numerous undocumented sites within the Area of Potential Effects (APEs) of various Stryker Projects emphasizes the necessity for further identification efforts. As you know, one of the most integral parts of Section 106 is the identification, evaluation and assessment of historic properties within APEs. OHA staff members have first hand, in-depth knowledge of historic properties on many of the Stryker Brigade Projects. We are willing to offer our knowledge and expertise to preserve, protect and perpetuate our wahi pana and iwi kupuna to the highest degree possible.

Should you or your staff have questions or require further information, please contact Everett Ohta (808) 594-0231 or by email at everetto@oha.org.

‘O wau iho nō me ka ‘oia ‘i‘o,



Clyde W. Nāmu‘o  
Chief Executive Officer

C: Board of Trustees

## SETTLEMENT AGREEMENT

This Settlement Agreement ("Agreement") is made and entered into on October 31, 2008, by and among THE OFFICE OF HAWAIIAN AFFAIRS ("OHA"), on the one hand, and on the other hand ROBERT GATES, Secretary of Defense and PETE GEREN, Secretary of the United States Department of the Army, in their official capacities (together, "ARMY" and/or "Federal Defendants"). All parties are hereafter referred to collectively as "the Settling Parties."

### RECITALS

1. On November 14, 2006, OHA filed a complaint against the U.S. ARMY in the United States District Court for the District of Hawai'i in a matter entitled The Office of Hawaiian Affairs v. Robert Gates, et al., civil no. 06-00610 (the "Litigation"), alleging violations by the ARMY of Section 106 of the National Historic Preservation Act ("NHPA"), 16 U.S.C. §§ 470 et seq., and the Native American Graves Protection and Repatriation Act ("NAGPRA"), 25 U.S.C. §§ 3001 et seq. related to the transformation of the 2<sup>nd</sup> Brigade, 25<sup>th</sup> Infantry Division (Light) to a Stryker Brigade Combat Team in the State of Hawai'i.

2. The ARMY maintains that it has complied with the NHPA, NAGPRA and the Programmatic Agreement and denies that it has violated any law as alleged in OHA's complaint.

3. The Settling Parties wish to resolve their dispute in an amicable manner without the expense and time associated with litigation and without admitting liability or fault or conceding any issue of fact or law.

## AGREEMENT

NOW, THEREFORE, in consideration of the promises, covenants and representations contained herein, the Settling Parties agree as follows:

### I. DEFINITIONS

A. "Burial Council" shall mean any of the Burial Councils established pursuant to Hawaii Revised Statutes §6E-43.5.

B. "Cultural Items" has the meaning set forth in NAGPRA, 25 U.S.C. § 3001.

C. "Effective Date" means the date upon which this Agreement has been signed by all parties hereto.

D. "Historic Properties" has the meaning set forth in the NHPA, 16 U.S.C. § 470w(5).

E. "Programmatic Agreement" or "PA" means the Programmatic Agreement entered into on or about January 30, 2004 regarding the Army Transformation of the 2<sup>nd</sup> Brigade, 25<sup>th</sup> Infantry Division (Light) to a Stryker Brigade Combat Team (SBCT).

F. For purposes of this Agreement only, "survey" shall mean the physical inspection, examination and/or review of designated areas, sites or items by OHA's representatives under the terms of this Agreement.

### II. PROVISION OF INFORMATION TO OHA BY THE ARMY

Within twenty-one (21) days of the Effective Date, the ARMY shall deliver to OHA:

A. To the extent and in the format such information currently exists, Geographic Information Systems (GIS) data points and layers in electronic format showing the location of discovery for each of the actual and/or potential Historic Properties and Cultural Items identified by the ARMY and/or its representatives, employees, agents and/or contractors in the areas

identified in Appendix A to the Programmatic Agreement;

B. Information, except that which is privileged or the release of which is prohibited by law or regulation, in the possession, custody or control of the U.S. Army Garrison, Hawai'i (USAG-HI), its representatives, employees, agents and/or contractors reflecting only the location and description of Historic Properties and Cultural Items and/or artifacts identified in the October 2006 survey of the Schofield Barracks BAX that has not been previously provided to OHA, including but not limited to disclosure of the present location and description of items retrieved by the ARMY from Kamoā Quitevis on May 22, 2007.

C. A general schedule of anticipated SBCT-related construction and Stryker-specific training activities that will take place within the Survey Areas during the 210 to 240 day survey period. The schedule will include a description of the planned construction and training activities and the anticipated commencement date or timeframe.

D. The ARMY may mark any of the information identified in Sections II.A or II.B of this Agreement, which it is authorized by federal law, rule or regulation to withhold from public disclosure, as "Protected Pursuant to Settlement Agreement dated October 2008 ("Protected Information"). OHA agrees that any information provided by the ARMY pursuant to Sections II.A or II.B of this Agreement that is marked by the ARMY as Protected Information and information obtained during the surveys described in Section III, which the ARMY represents it is authorized by federal law, rule or regulation to withhold and therefore to require OHA to withhold from public disclosure, will be kept confidential and disclosure to the public or a third party is prohibited until such time as the ARMY has made the information available to the public. Before releasing any such information to the public or a third party, OHA will obtain confirmation in writing from the ARMY that the information or any portion thereof has been

made available to the public. The ARMY agrees to respond to OHA's confirmation requests within a reasonable period of time. If OHA desires to use such information in future mediation or a court proceeding, OHA shall seek leave of Court to file such information under seal unless written confirmation has been provided to OHA from the ARMY that the information has been made available to the public. If a legal or administrative proceeding is instituted by a third party to disclose the information provided pursuant to Sections II.A or II.B or obtained during the surveys described in Section III of this Agreement, OHA will immediately notify the ARMY and provide the ARMY with an opportunity to prevent disclosure. If disclosure is ordered by a court of competent jurisdiction or administrative body, OHA shall notify the ARMY before any disclosures are made and provide the ARMY an opportunity to prevent disclosure of the information provided to OHA if the ARMY so desires.

### III. ACCESS TO AREAS FOR SURVEYS

A. Surveys. The ARMY agrees to grant access during daylight hours to up to five (5) OHA employees, agents, consultants and representatives (including archaeologists) (collectively, "OHA representatives") at a time, who would constitute and work together as a single survey team led by a mutually acceptable Archeologist meeting Secretary of the Interior standards (hereinafter "Lead Archeologist"). Access shall be granted for no more than a total of fifty (50) days and shall occur in accordance with the schedule established by the Settling Parties pursuant to Section III.B. below. At OHA's expense, except for the cost of the Lead Archeologist, which shall be borne equally by the Settling Parties, surveys of the following locations (each hereinafter referred to as a "Survey Area") shall be permitted:

1. The Schofield Barracks Battle Area Complex (BAX). Notwithstanding the schedule as set forth in Sections III.A. and III.B. of this Agreement, the Army agrees to work

with OHA to facilitate completion of the OHA surveys at the BAX expeditiously, consistent with safety concerns and the Army's training requirements. To facilitate OHA's review of the Schofield BAX, the Army agrees that reasonable efforts will be made to provide initial access to Schofield BAX prior to November 8, 2008. OHA acknowledges that any additional reviews of the Schofield BAX after November 8, 2008 will be contingent upon the Settling Parties' abilities to agree on available dates and times that will not interfere with construction, training and/or other operational and safety requirements.

2. Pohakuloa Training Area Ranges 1, 8, 10 and 11T.
  3. QTR1
  4. QTR2
  5. Kole Kole Ranges 3, 4, 5 and 6
  6. Kahuku Training Area.
- B. Access Protocol.

1. Initial Proposed Survey Schedule. On or before thirty-five (35) days from the Effective Date, OHA shall provide written notice to the ARMY, through the Commander, USAG-HI of OHA's proposed comprehensive schedule for all survey days which (1) identifies the specific Survey Areas to be surveyed and/or examined; (2) identifies the OHA representatives who will be performing the survey of each specified Survey Area; and (3) specifies the dates on which OHA wishes to conduct its survey of the specified Survey Areas, the first of which, except for surveys which may occur prior to November 8, 2008 in the BAX, shall not be before forty-five (45) days after the Effective Date ("OHA's Schedule"). The dates of all of OHA's proposed survey days shall be within the period of 210 days from the Effective Date. For each proposed date, three alternative Survey Areas will be identified in order of

OHA's preference to facilitate agreement on a schedule with the ARMY.

2. Accepted Survey Schedule. Within twenty-one (21) days of the ARMY's receipt of OHA's initial proposed survey schedule, the ARMY shall provide its response to OHA's Schedule in writing, seeking, in good faith, to accommodate the specific dates scheduled for specified Survey Areas to the extent practicable without undue interference with the ARMY'S operations and, in any event, not altering the number of days OHA has designated for surveys in a specified Survey Area. If OHA disagrees with the ARMY's response, OHA shall notify the ARMY's primary contact within five (5) days of its receipt of the ARMY's response, and the Settling Parties agree that they shall meet-and-confer in person or if necessary by telephone to resolve their differences within three (3) business days thereafter. If no notification of disagreement is delivered by OHA within said period, the schedule contained in the ARMY's response shall be the mutually accepted survey schedule ("Accepted Schedule"), it being expressly understood by the Settling Parties that the Accepted Schedule may be subject to change based on previously unknown safety issues, operational requirements, necessary changes to the ARMY's schedule of training or maintenance, and/or other legitimate causes of unavoidable delay on either Settling Party's part not known to the Settling Party requesting the change at the time of the Accepted Schedule. If necessary, the Accepted Schedule may extend beyond 210 days from the Effective Date, but in no event shall the ARMY's accepted schedule contain survey dates more than 240 days from the Effective Date. In other words, it is the Settling Parties' intention and agreement that OHA's surveys shall take place within 240 days, at the very latest, from the Effective Date.

3. Contact For Coordination Of Survey Activity. The ARMY shall designate one individual as its primary survey contact with whom OHA shall conduct all of its scheduling

(including scheduling changes), coordination and communications relating to the survey activity to be undertaken pursuant to this Agreement, as well as a separate individual as a secondary contact for such coordination when the primary contact is unavailable. OHA shall likewise designate a primary survey contact with whom the ARMY shall conduct all of its scheduling, coordination and communications relating to the survey activity, and a secondary contact with whom the ARMY shall coordinate in the event the primary contact is not available. Such designations shall be provided by each party to the other in writing, together with the address, email, facsimile and telephone numbers for each said contact, upon execution of this Agreement. The contacts designated under this Agreement shall be required to coordinate with all related branches, departments, divisions, units, authorities and entities of the party for whom it is the contact for in responding to the other party, it being the intention and agreement of the Settling Parties that a party need only deal with the other party's primary (or secondary, as the case may be) contact in order to coordinate all survey-related activity under this Agreement. Nothing in this Agreement shall be construed to affect any obligation OHA may have under federal law to notify, provide information to, and/or seek authorization from, a federal agency or official in matters unrelated to coordinating survey activities as provided in Section III of this Agreement.

4. Changes By ARMY To The Survey Schedule. If, for the reasons noted in Section III.B.2 above, the ARMY must change the Accepted Schedule, the ARMY shall notify OHA's primary and secondary survey contacts in writing via email and facsimile of the change at least five (5) days before the scheduled survey date, unless a shorter notice period is required by urgent circumstances. In its schedule change notice, the ARMY shall disclose which alternative Survey Areas are available to be surveyed in place of the scheduled Survey Area and/or if no alternative Survey Areas are available on the scheduled survey date, the ARMY shall propose

the earliest available alternate survey date that is within 240 days of the Effective Date, if practicable. If the earliest alternative survey date falls outside the 240 day survey period, the survey period will be extended to accommodate all surveys contained within the Accepted Schedule.

5. Changes By OHA To Survey Schedule. If, for the reasons noted in Section III.B.2 above, OHA must change the Accepted Schedule, OHA shall notify the ARMY's primary and secondary survey contacts in writing via email and facsimile of the change at least five (5) days before the scheduled survey date, unless a shorter notice period is required by urgent circumstances, and the Parties shall promptly confer with each other in a good faith effort to reach agreement on alternate dates on which the previously scheduled survey(s) can be accomplished, subject to the limitations of Section III.B.2 above.

6. Prohibited Areas. No surveys will take place in areas that pose a danger, including dangers posed by UXO, to ARMY personnel and/or OHA representatives as determined by the Commander, USAG-HI, or his designated representative. The ARMY shall notify OHA in writing of the locations of any such prohibited areas within the Survey Areas and the basis for prohibiting access to said prohibited areas at the same time that the ARMY's response to OHA's Schedule is delivered to OHA.

7. ARMY Participation; OHA Conduct. ARMY representatives shall accompany OHA representatives for purposes of ensuring compliance with applicable law and protecting the participants and users of the areas being surveyed, as well as the cultural sites and items being surveyed, from physical harm but shall not otherwise interfere with the surveys conducted by the OHA representatives. OHA representatives shall not engage in conduct that is contrary to good order and discipline in conducting the surveys, including but not limited to, the

removal of, or alteration to, cultural items or sites without advance permission in writing by the ARMY. Violations will be subject to administrative and/or criminal proceedings as provided by law.

8. The ARMY acknowledges its commitment regarding access to Stryker-related ARMY facilities in Stipulation III.C. of the Programmatic Agreement, which provision shall remain in effect, subject to the alternative dispute resolution provision in Stipulation VI.C. of the Programmatic Agreement, until Stryker transformation projects identified in Appendix A to the Programmatic Agreement are completed or cancelled. The Army also acknowledges its commitment to provide Native Hawaiians access to traditional religious and cultural properties as reflected in mitigation measure 44, Table ES-22 of the May 2004 SBCT EIS.

9. Requests For Ground Clearance Or Aerial Reconnaissance. Before or during the survey process, OHA may request the ARMY's assistance with limited ground cover clearance (e.g. controlled burns), aerial reconnaissance and/or other activities intended to make the Survey Areas more readily visible and/or accessible to OHA's representatives. All costs associated with implementing such requests will be borne by OHA, who will obtain services from commercial providers when available including but not limited to aerial reconnaissance. OHA acknowledges, however, that activities such as prescribed burns often take months to plan and implement and would not constitute grounds for extension of the survey period. Consistent with the foregoing language of this section and to the extent OHA's requests can be implemented in compliance with applicable law and with appropriate controls to minimize harm or injury to persons, flora or fauna protected by the Federal Endangered Species Act, and/or Historic Properties or Cultural Items, the Army will work in good faith to accommodate OHA's request(s).

C. Training of OHA Representatives. OHA acknowledges that its representatives must receive UXO Identification training in order to access any of the identified Survey Areas. Additionally, OHA must receive HAZWOPPER and First Aid/CPR training for access to the BAX, QTR1, Kole Kole Ranges 3-6, and PTA Ranges 1, 8, 10 and 11T. Within ten (10) days of the Effective Date, the ARMY will inform OHA of any additional safety or other training that is reasonably required for OHA representatives in connection with the surveys to be undertaken in the Survey Areas, and shall work cooperatively with OHA to schedule and facilitate the completion of any Army-sponsored training, e.g., specific range safety briefings, for OHA representatives as soon thereafter as appropriate and in any event in sufficient time to meet the Accepted Schedule. OHA shall be responsible for scheduling and funding any non-Army sponsored training that may be reasonably required, such as HAZWOPPER, First Aid/CPR and/or UXO identification training. OHA shall also be responsible for scheduling and funding explosive ordnance disposal (EOD) escorts, which are required for access to the BAX, QTR1, Kolekole Ranges 3-6, and PTA Ranges 1, 8, 10 and 11T. EOD escorts are recommended for KTA.

D. Survey Results Relating To Potential Historic Properties.

1. Within thirty (30) days of OHA's completion of the last of its surveys, OHA shall deliver its analyses, surveys, and all related information and documents relied upon and considered by OHA to the Lead Archeologist and ARMY. The Army may also submit analysis and supporting documentation within this timeframe for consideration by the Lead Archeologist. Primary findings and analysis will then be determined by the Lead Archeologist, who will prepare a report that will be submitted to the Army and OHA within ninety (90) days of completion of the last survey. Within fifteen (15) days of receipt of the Lead Archeologist's

report, OHA may submit supplemental findings and analysis if it disagrees with the Lead Archeologist's findings and conclusions. After receipt of the Lead Archeologist's report and any supplemental documentation submitted by OHA regarding potential Historic Properties, the ARMY shall, if requested by the Lead Archeologist and/or OHA, promptly evaluate the historic significance of the potential Historic Properties identified by OHA in accordance with 36 C.F.R. 800.4(c). Based on the results of this evaluation, the ARMY will then follow applicable provisions of 36 C.F.R. Part 800 to complete the evaluation, assessment and treatment process.

2. If, in the course of OHA's reviews of the survey areas, OHA discovers facts that were not previously disclosed to it, which reasonably lead OHA to conclude that Historic Properties or Cultural Items located on one or more other Stryker-related training facilities have been improperly identified or may be endangered, then the ARMY will accept and consider written comments from OHA regarding the identification and treatment of Historic Properties or Cultural Items on the other Stryker-related training facility or facilities. With respect to initial surveys at the Schofield BAX occurring on or before November 8, 2008, OHA may provide written comments to the Army regarding the identification and treatment of Historic Properties or Cultural Items at this location. Within 30 days of the ARMY'S receipt of OHA's written comments as provided pursuant to this paragraph, the ARMY will provide a written response to OHA, which will, at minimum, acknowledge receipt of OHA's concern(s) and a substantive response will be provided as soon as circumstances permit.

E. Survey Results Relating To Cultural Items. If in the course of its surveys, OHA identifies Cultural Items, as confirmed by the Lead Archeologist, which were not previously disclosed to OHA by the ARMY, OHA will comply with the procedures in 43 C.F.R. § 10.4 for inadvertent discoveries and give immediate telephone notice of any discovery to the Army's

Cultural Resource Manager, Dr. Laurie Lucking, at telephone number 808-656-6790. OHA will also mail written confirmation of its discovery to the Army's Cultural Resource Manager, Dr. Laurie Lucking at the earliest possible time. The ARMY shall respond to OHA's written notification within the time frame and in the manner required by NAGPRA's implementing regulations, 43 C.F.R. §§ 10.4, 10.5 and 10.6. In the course of the execution of this Agreement, the Army may reach conclusions, regarding whether items are "Cultural Items," that differ from the conclusions that are reached by OHA and confirmed by the Lead Archeologist. Any such differing conclusions regarding whether an item is a "Cultural Item" will be referred to the NAGPRA Review Committee of the National Park Service in accordance with its standard dispute procedures. While the dispute process is pending, the ARMY agrees that it will take reasonable efforts to protect the potential Cultural Items from harm.

#### IV. PROGRAMMATIC AGREEMENT

The Settling Parties agree that they shall negotiate in good faith with each other and with other necessary parties regarding revisions to the PA, including but not limited to reformation of the PA's provisions concerning Cultural Monitors, and to seek agreement among the Settling Parties and other necessary parties relating to the scope and nature of the Cultural Monitors' duties.

#### V. DISMISSAL OF LITIGATION WITH PREJUDICE

A. OHA agrees to dismiss with prejudice the lawsuit currently pending in the United States District Court for the District of Hawai'i entitled The Office of Hawaiian Affairs v. Robert Gates, et al., civil no. 06-00610 (the "Litigation").

B. OHA waives the right to bring future lawsuits under the NHPA and/or NAGPRA based upon facts that are known or reasonably should be known to OHA on or before the

Effective Date concerning the identification, evaluation, treatment and/or assessment of, and consultation relating to, indigenous Native Hawaiian historic or cultural resources and/or Cultural Items located in any of the Survey Areas identified in Part III, above, or other areas where Stryker Brigade Combat Team training or construction will take place in the State of Hawai'i.

C. OHA waives the right to bring future lawsuits under NEPA based upon facts that are known or reasonably should be known on or before the Effective Date concerning the transformation, training and stationing of 2/25 SBCT in Hawai'i.

D. OHA retains the right to pursue future litigation against the ARMY under the NHPA, NEPA or NAGPRA based upon newly discovered information resulting from the surveys after the survey findings are presented to the ARMY, the ARMY has an opportunity to process the survey findings in accordance with the Agreement and, if necessary, the dispute resolution process as set forth in Section VI.K of this Agreement is complete. In any future litigation under NHPA, NEPA and NAGPRA based upon newly discovered information resulting from the surveys, OHA may seek relief only with respect to the specific training range or facility upon which the subsequent discovery from the survey findings is made. The foregoing is not intended to limit any other remedies to which OHA may be entitled except as otherwise provided herein.

E. Both parties agree to pay their own costs and attorneys' fees related to the current lawsuit and settlement of the claims asserted in the current lawsuit.

## VI. MISCELLANEOUS

A. Notices. Except as otherwise expressly provided for above, all notices, approvals, consents, demands, requests or other communications which may or are required by

this Agreement to be given by one party to the other party shall be in writing and shall be deemed to have been duly given or made when delivered by e-mail. In addition to e-mail, a hard copy of the writing shall be delivered by hand, facsimile or U.S. mail, addressed as follows (or at such other place, and to such other persons, as either party may from time to time designate by notice to the other party; no other method of notification shall be effective):

To OHA: Clyde Nāmu‘o, Administrator  
Office of Hawaiian Affairs  
711 Kapi‘olani Boulevard, Suite 500  
Honolulu, Hawai‘i 96813  
Facsimile: (808) 594-1865  
E-mail: [clyden@oha.org](mailto:clyden@oha.org)

Kai Markell, Director of the Native Rights, Land and Culture Division  
Office of Hawaiian Affairs  
711 Kapi‘olani Boulevard, Suite 500  
Honolulu, Hawai‘i 96813  
Facsimile: (808) 594-1865  
E-mail: [kaim@oha.org](mailto:kaim@oha.org)

With copies to:

Ernest Kimoto, Esq., Senior Staff Attorney  
Office of Hawaiian Affairs  
711 Kapi‘olani Boulevard, Suite 500  
Honolulu, Hawai‘i 96813  
Facsimile: (808) 594-1965  
E-mail: [erniek@oha.org](mailto:erniek@oha.org)

Sheryl L. Nicholson, Esq.  
Paul, Johnson, Park & Niles  
1001 Bishop Street  
ASB Tower, Suite 1300  
Honolulu, Hawai‘i 96813  
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and

Colin A. Yost, Esq.  
Cruise & Yost

Dillingham Transportation Building  
735 Bishop Street, Suite 433  
Honolulu, Hawai'i 96813  
Facsimile: (808) 356-3299  
E-mail: [colin@cruisevost.com](mailto:colin@cruisevost.com)

To ARMY:

Commander  
U.S. Army Garrison, Hawai'i  
851 Wright Avenue, WAAF  
Schofield Barracks, Hawai'i 96857  
Facsimile: (808)656-3740  
E-mail: [matthew.margotta@us.army.mil](mailto:matthew.margotta@us.army.mil)

Directorate of Public Works  
Environmental Division  
ATTN: Cultural Resource Manager (Dr. Lucking)  
947 Santos Dumont Avenue  
Wheeler Army Airfield, Hawai'i 96857-5013  
Facsimile: (808)656-1039  
E-mail: [laurie.lucking@us.army.mil](mailto:laurie.lucking@us.army.mil)

With copies to:

Office of the Staff Judge Advocate  
ATTN: Mark Katkow  
718 Carter Drive  
Building 718  
Ft. Shafter, Hawai'i 96818  
Facsimile: (808) 438-2750  
E-mail: [katkownm@shafter.army.mil](mailto:katkownm@shafter.army.mil)

and

Headquarters, Dept. of the Army  
Environmental Law Division  
ATTN: Robert M. Lewis  
Suite 400, 901 N. Stuart Street  
Arlington, VA 22203  
Facsimile: (702) 696-2940  
Email: [Robert.lewis@hqda.army.mil](mailto:Robert.lewis@hqda.army.mil)

B. This Agreement contains the entire agreement among the Settling Parties and supersedes all prior oral and written agreements, representations, negotiations, and correspondence with

respect to the Litigation.

C. The Settling Parties hereto agree to cooperate in good faith with one another in executing any further documents and taking any additional actions that may be reasonably necessary and appropriate to carry out the terms, covenants, conditions and intent of this Agreement.

D. Each of the Settling Parties has been independently advised by counsel, and each has cooperated and participated in the drafting and preparation of this Agreement. Accordingly, the rule that any ambiguity in a document shall be construed against the party drafting the document shall not apply to this Agreement. The Settling Parties shall jointly be deemed to be the drafters of the Agreement and agree that this Agreement shall not be construed or interpreted in favor of or against any party by virtue of the identity of any alleged preparer.

E. This Agreement is executed by the Settling Parties freely and each of the Settling Parties has had a full opportunity to review the agreement and to seek assistance of counsel. The Settling Parties acknowledge that the terms of this Agreement have been negotiated at arm's length among themselves.

F. In this Agreement, the captions and headings of paragraphs and subparagraphs are inserted for convenience, reference, and identification purposes only, and shall neither control, define, limit, nor affect any provision of this Agreement.

G. Nothing in this Agreement shall be construed as an admission of any liability, fault, negligence, breach of duty, breach of any agreement or contract, or violation of any statute, ordinance, rule, or regulation (all of which are expressly denied). This Agreement and its contents are to be construed strictly as a compromise and settlement among the Settling Parties for the purposes of avoiding further controversy, litigation and expense.

H. This Agreement shall not be altered, amended, modified, or otherwise changed, in any respect or particular whatsoever, except by a writing duly executed by the Settling Parties to this Agreement. The Settling Parties hereby acknowledge and agree that they will make no claim at any time that this Agreement has been orally altered or modified in any respect whatsoever.

I. The Settling Parties hereby expressly warrant and represent that they are the owners of all claims, demands, and causes of action described herein, that they have not assigned or otherwise transferred any such claims, demands, and causes of action released herein, and that they have the authority to bind and do so bind themselves to the terms of this Agreement by signing below.

J. This Agreement may be executed in counterparts and by facsimile, each of which shall be deemed an original, and shall constitute one and the same instrument, and, in making proof of this Agreement, it shall not be necessary to produce or account for more than one such counterpart.

K. Except as provided in Section III.E, above, if a dispute should arise between the Settling Parties arising out of or relating in any manner to the terms of this Agreement, the party initiating the dispute shall provide written notice in accordance with Section VI.A of this Agreement and a request for informal negotiation to the other party within thirty (30) days of the disputed event. The Settling Parties agree to meet and confer within thirty (30) days of the delivery of any such notice (Notice Date), in order to make a good faith effort to resolve the dispute. If the Settling Parties fail to resolve such a dispute within sixty (60) days of the Notice Date, the Settling Parties agree to submit the unresolved dispute to non-binding mediation and to each pay fifty (50) percent of the costs, expenses, and/or fees of the mediator, provided OHA

acknowledges that the ARMY's commitment to pay a mediator's costs, expenses or fees for the mediation is subject to the appropriation of funds by Congress that are available for this purpose, the apportionment of such funds by the Office of Management and Budget, the approval of expenditure of such funds for this purpose by the federal agency providing the funds, and any other limitations or requirements under federal law. The Settling Parties will make good faith efforts to obtain approval for the payment of the costs, expenses and fees of the mediator. The Settling Parties further agree to exchange names of unbiased mediators and in good faith attempt to reach an agreement on the potential mediator to be used for the non-binding mediation within sixty (60) days of the Notice Date.

If the Settling Parties cannot resolve the dispute through good faith negotiation or non-binding mediation within one hundred twenty (120) days from the Notice Date, or upon notice delivered to OHA by the ARMY that the ARMY cannot participate in mediation due to lack of approval for the payment of the mediator's costs, expenses and fees a party may seek a provisional court remedy, including temporary or preliminary injunctive relief, subject to the limitations provided in this Agreement, including Section V.D. No party may seek such a remedy unless and until the procedures required by Section IV.K. have been exhausted. In addition, each party in any proceeding to enforce this Agreement shall pay their respective attorneys' fees and costs incurred therein.

Notwithstanding the foregoing, if OHA believes, in good faith, based on information discovered after the Effective Date, that irreparable harm to Historic Properties or Cultural Items is imminent due to the ARMY's alleged non-compliance with this Agreement, the Settling Parties agree, upon OHA's request, to participate in an expedited, non-binding mediation process whereby the Settling Parties would meet with an agreed upon mediator at the earliest mutual

availability of the Settling Parties and the mediator. However, before any expedited non-binding mediation process occurs, the Settling Parties agree that OHA will provide written notice of any alleged non-compliance with this Agreement to the ARMY and the ARMY will have seven (7) days within which to meet and confer with OHA or respond in writing in order to make a good faith effort to amicably resolve the dispute.

L. The Settling Parties agree that the settlement, covenants, promises, and dismissal without prejudice provided for in this Agreement were agreed to in good faith.

M. Nothing in this agreement shall be construed to commit federal funds in violation of the Anti-Deficiency Act, 31 U.S.C. §1341, or any applicable appropriations law.

APPROVED AS TO FORM:



\_\_\_\_\_  
SHERYL L. NICHOLSON  
COLIN A. YOST  
Attorneys for  
The Office of Hawaiian Affairs

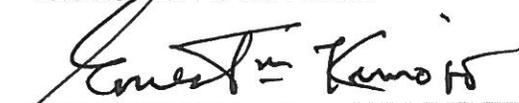
AGREED TO AND APPROVED:

OFFICE OF HAWAIIAN AFFAIRS

By: 

\_\_\_\_\_  
CLYDE W. NAMU'O  
Its Administrator

APPROVED AS TO FORM:



\_\_\_\_\_  
ERNEST M. KIMOTO 10-31-08  
Senior Staff Attorney  
The Office of Hawaiian Affairs

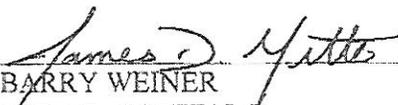
APPROVED AS TO CONTENT:

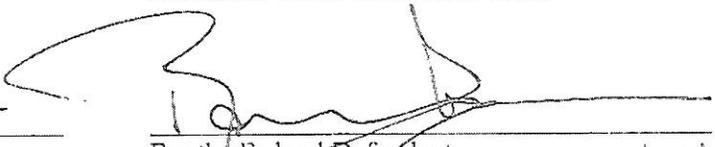


\_\_\_\_\_  
KAI MARKELI  
Director of the Native Rights, Land and Culture  
Division  
Office of Hawaiian Affairs

APPROVED AS TO FORM:

AGREED TO AND APPROVED:

  
BARRY WEINER  
SARA E. COSTELLO  
JAMES D. GETTE  
Attorneys for The Federal Defendants,  
ROBERT GATES, Secretary of the United  
States Department of Defense and PETE  
GEREN, Acting Secretary for the United  
States Army

  
For the Federal Defendants,  
RAYMOND V. MASON  
Major General  
Commander, U.S. Army Hawai'i

10/31/08

RECORDATION REQUESTED BY:  
U. S. Army Engineer Division,  
Pacific Ocean

STATE OF HAWAII  
BUREAU OF CONVEYANCES  
RECEIVED FOR RECORD

LIBER 4821 PAGES 425 TO 444

'64 AUG 20 PM 1:37

AFTER RECORDATION, RETURN TO:

U. S. Army Engineer Division,  
Pacific Ocean  
Phone: 542986

/s/ M. Adachi

INDEXED /i/ EK REGISTRAR

RETURN BY: MAIL ( ) PICKUP (X)

SPACE ABOVE THIS LINE FOR REGISTRAR'S USE

STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE GENERAL LEASE NO. S-3849

U. S. LEASE, CONTRACT NO. DA-94-626-ENG-80

1. THIS LEASE, made and entered into this 17<sup>th</sup>  
day of August, in the year one thousand nine hundred  
and sixty-four by and between the STATE OF HAWAII, represented  
by its Board of Land and Natural Resources, whose address is  
P. O. Box 621, Honolulu, Hawaii, 96809, and whose interest in  
the property hereinafter described is that of fee simple  
owner, for itself, its administrators, successors and assigns,  
hereinafter called the "Lessor", and THE UNITED STATES OF  
AMERICA, hereinafter called the "Government":

WITNESSETH: The parties hereto for the considera-  
tion hereinafter mentioned covenant and agree as follows:

2. The Lessor hereby leases to the Government  
three (3) parcels of land described on Exhibit "A" attached  
hereto and hereby made a part hereof, all to be used for the  
following purpose: Military purposes.

3. TO HAVE AND TO HOLD the said premises for a term of sixty-five (65) years beginning August 17, 1964 and ending August 16, 2029; subject, however, to the rights of the Lessor and the Government respectively to terminate this lease in accordance with provisions 6 and 21 hereof.

4. The Government shall pay the Lessor rent at the following rate: ONE DOLLAR (\$1.00) for the term of the lease, the receipt and sufficiency whereof is hereby acknowledged.

5. The Government shall have the right, during the existence of this lease, to attach fixtures, and erect structures or signs, in or upon the premises hereby leased, which fixtures and structures or signs, so placed in, upon or attached to the said premises shall be and remain the property of the Government and may be removed or otherwise disposed of by the Government. In addition, the Government shall post and maintain signs on roads and trails entering dangerous areas to provide a warning of any dangerous or hazardous activities; provided, that the information placed on the posted signs anywhere within the demised premises shall not be incompatible with the terms of this lease and, in those instances where joint use of an area is permitted, the information placed on the signs may include the permitted activities.

6. The Government may terminate this lease at any time by giving thirty (30) days notice in writing to the Lessor.

7. Except as otherwise provided herein, the Government shall have unrestricted control and use of the demised premises including the right to fire all combat weapons

therefrom into the designated Pohakuloa Impact Area.

8. The Lessor will not be responsible for any loss, liability, claim, or demand for property damage, property loss, or personal injury, including but not limited to death, arising out of any injury or damage caused by or resulting from any act or omission of the Federal Government in connection with the Federal Government's use of the premises described herein.

9. In recognition of public use of the demised premises, the Government shall make every reasonable effort to stockpile supplies and equipment in an orderly fashion and away from established roads and trails and to remove or deactivate all live or blank ammunition upon completion of a training exercise or prior to entry by the said public, whichever is sooner.

10. The Government shall obtain the written consent of the Lessor prior to constructing any road or building of the type for which design and construction plans are normally required; provided, however, that such consent shall not be arbitrarily withheld. The Government agrees that its training roads which provide primary access within or across the demised premises will be maintained to normal standards for training area roads with due regard for preventing unnecessary erosion; provided, however, that the Government shall be under no obligation to maintain roads during periods when the necessary engineer troops are absent from the island of Hawaii.

10(a). The Government hereby agrees that all Government vehicles of any type will at all times be prohibited from using that portion of the demised premises indicated by a red

cross hatch on the map attached to and made a part of this lease. In addition, the Government hereby agrees that it will maintain at all times at least a two-strand wire fence along that part of the boundary bordering Parcel "C" colored in green on the said map.

11. In the interest of safety the Government shall have the right to interrupt traffic on the Saddle Road during training activities involving firing of and/or the passage of troops across the Saddle Road; provided, however, that the Government shall minimize interference with traffic by limiting stoppages thereof to 15 minute periods.

12. With the exception of artillery simulators, atomic bomb simulators and any similar devices, and explosives used in construction work, the Government shall not fire any live ammunition into any portion of the demised premises. This restriction does not apply to any portion of Parcel "A" deemed by the Government to be safe for smallarms firing. In addition, the Government shall not fire any weapons within three-fourths (3/4) of a mile of the Pohakuloa Ranger Station.

13. The Government shall take every reasonable precaution to prevent the start of any fire in the areas herein demised and shall take immediate and continuing action to extinguish any and all fires started by or resulting from Government training activities. Further, the Government shall establish and at all times maintain a standard operating procedure for fighting fires within or adjacent to the subject leased property resulting from Government training activities during its use and occupancy of the premises; provided, further, that Government personnel actually using

the premises shall be familiar with said standard procedure including the means of implementation.

14. In recognition of the limited amount of land available for public use, of the importance of forest reserves and watersheds in Hawaii, and of the necessity for preventing or controlling erosion, the Government hereby agrees that, commensurate with training activities, it will take reasonable action during its use of the premises herein demised to prevent unnecessary damage to or destruction of vegetation, wildlife and forest cover, geological features and related natural resources and improvements constructed by the Lessor, help preserve the natural beauty of the premises, avoid pollution or contamination of all ground and surface waters and remove or bury all trash, garbage and other waste materials resulting from Government use of the said premises.

15. Except as required for defense purposes in times of national emergency, the Government shall not deliberately appropriate, damage, remove, excavate, disfigure, deface or destroy any object of antiquity, prehistoric ruin or monument.

16. The Lessor shall have the right to erect signs and construct capital improvements within the leased property at locations mutually agreed upon by the parties hereto, in connection with water conservation, public water consumption, forestry, recreational and related purposes, said capital improvements including but not limited in any way to the construction, maintenance and/or improvements of roads and trails; provided, however, that notwithstanding any other provisions of this lease to the contrary, the Government

hereby accepts the responsibility and liability for repairs of any damage which can be demonstrated to have been the direct result of military activities, to improvements constructed by the Lessor subsequent to the date of this lease.

17. To the extent permitted by training requirements the Government will cooperate with the Lessor in the game development and hunting programs of the Lessor and, in connection therewith, the Government agrees that Parcels "A", "B" and "C" hereof shall remain available for the aforesaid programs of the Lessor and, further, that Parcels "B" and "C" and all that part of Parcel "A" which lies to the north of the Saddle Road shall be made exclusively available to the Lessor for hunting during the periods 1 July through 15 July and 1 December through 15 January and on national holidays from dawn to midnight and on weekends from midnight Friday through midnight Sunday during the periods 1 November through 30 November and 16 January through 31 January. The Lessor shall also have the right to construct a road along a mutually agreeable route through the northerly portion of Parcel "C" hereof.

18. The Lessor hereby agrees that, commensurate with the public use of the premises herein demised, it will take reasonable action during the use of the said premises by the general public, to remove or bury trash, garbage and other waste materials resulting from use of the said premises by the general public.

19. Subject to obtaining advance clearance from the plans and training office of the Government's controlling agency, or any other designated Government agency, officials and employees of the Lessor shall have the right to enter

upon the demised premises at all reasonable times to conduct any operations that will not unduly interfere with activities of the Government under the terms of this lease; provided, however, that such advance clearance shall not be unreasonably withheld.

20. All persons legally entitled under the provisions of this lease to be on the said premises shall have a nonexclusive right to use all Government roads and trails except when such use will interfere with the training activities of the Government or said roads and trails have been restricted, by a duly posted sign, as security or danger areas by the Government.

21. In the event that the leased property is not used by the Government for a period of three (3) consecutive years, this lease may be terminated upon ninety (90) days written notice from the Lessor to the Government, provided, however, that if prior to the expiration of the aforesaid 90-day period the Secretary of the Army shall find and determine that the leased property is required for military purposes and shall notify the Lessor in writing of this finding and determination, this lease will continue in effect; provided, further, that periods during which a national emergency has been declared by the President or the Congress of the United States and periods during which major combat elements are temporarily deployed away from the State of Hawaii shall not be included in the said three-year period. During such period of temporary deployment the parties hereto shall discuss and give consideration to and provide for the additional public use of the demised premises compatible with then

existing military training requirements. The Government will assure that current military standards concerning adequate utilization are applied to these premises and will assure that such use is known and is a matter of record and available to the Lessor upon request.

22. The Lessor reserves unto itself all ground and surface water, ores, minerals and mineral rights of every description on, in or under the demised premises but shall exploit or permit others to exploit the said ores, minerals and mineral rights only with the consent of the Government. Notwithstanding the foregoing reservation, the Government shall have the right to develop and use for road construction projects on the demised premises sources of coral, rock and similar materials occurring naturally on the said premises and to use said ground and surface waters for purposes incident to the rights granted by this lease.

23. The Government will not be responsible for any loss, liability, claim or demand for any property damage, property loss, or personal injury, including but not limited to death, arising out of injury or damage caused by or resulting from any act or omission of the Lessor or the general public in connection with their use of the premises described herein.

24. Any notice under the terms of this lease shall be in writing signed by a duly authorized representative of the party giving such notice, and if given by the Government shall be addressed to the Lessor at P. O. Box 621, Honolulu, Hawaii, 96809, and if given by the Lessor shall be addressed to the Division Engineer, U. S. Army Engineer Division, Pacific Ocean, Building 96, Fort Armstrong, Honolulu, Hawaii,

Attention: Real Estate Division or at such location and to such other agency as may be mutually agreed upon by the parties hereto.

25. The Government hereby agrees that the use and enjoyment of the land herein demised shall not be in support of any policy which discriminates against anyone based upon race, creed or color.

26. The Government shall not grant any interest in the demised premises; provided, however, that the Government shall have the right to grant the use of portions of the premises for temporary activities of Governmental agencies or their contractors in which case any land rental derived from such use of the premises shall be covered into the Treasury of the State of Hawaii.

27. Subject to obtaining the prior approval of the Government, the Lessor reserves the right to grant rights or privileges to others not inconsistent with the terms of this lease affecting the whole or any portion of the demised premises.

28. The Government agrees to reforest areas, as expeditiously as practicable and within a period mutually agreed upon, where it can be demonstrated that substantial forest cover, including trees, has been destroyed as a direct result of Government activities; provided, however, that the Lessor shall obtain advance Government approval of all future plantings proposed by the Lessor.

29. The Government shall surrender possession of the premises upon the expiration or sooner termination of this lease and, if required by the Lessor, shall within

sixty (60) days thereafter, or within such additional time as may be mutually agreed upon, remove its signs and other structures; provided that in lieu of removal of structures the Government abandon them in place. The Government shall also remove weapons and shells used in connection with its training activities to the extent that a technical and economic capability exists and provided that expenditures for removal of shells will not exceed the fair market value of the land.

30. (a) That, except as otherwise provided in this lease, any dispute concerning a question of fact arising under this lease which is not disposed of by agreement shall be decided by the Division Engineer, U. S. Army Engineer Division, Pacific Ocean, Honolulu, Hawaii, hereinafter referred to as said officer, who shall within a reasonable time reduce his decision and the reasons therefor to writing and mail or otherwise furnish a copy thereof to the Lessor. The decision of the said officer shall be final and conclusive unless, within thirty (30) days from the date of receipt of such copy, the Lessor mails or otherwise furnishes to the said officer a written appeal addressed to the Secretary of the Army. The decision of the Secretary or his duly authorized representative for the determination of such appeals shall be final and conclusive unless determined by a court of competent jurisdiction to have been fraudulent, or capricious, or arbitrary, or so grossly erroneous as necessarily to imply bad faith, or not supported by substantial evidence. In connection with any appeal proceeding under this condition, the Lessor shall be afforded an opportunity to be heard and to offer evidence in support of its appeal.

(b) This Condition does not preclude consideration of law questions in connection with decisions provided for in paragraph (a) above: Provided, that nothing in this Condition shall be construed as making final the decision of any administrative official, representative, or board on a question of law.

(c) That all appeals under this provision shall be processed expeditiously.

31. The Government's compliance with all obligations placed on it by this lease shall be subject to the availability of funds.

32. The Lessor's compliance with any obligations which may be placed on it by this lease shall be subject to the availability of funds and/or personnel.

33. The Lessor warrants that no person or selling agency has been employed or retained to solicit or secure this lease upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the Lessor for the purposes of securing business. For breach or violation of this warranty the Government shall have the right to annul this lease without liability or in its discretion to deduct from the lease price or consideration the full amount of such commission, percentage, brokerage, or contingent fee.

34. No member of or delegate to Congress or resident commissioner shall be admitted to any share or part of this lease or to any benefit that may arise therefrom, but this provision shall not be construed to extend to this lease if

made with a corporation for its general benefit.

35. (a) The Government may, by written notice to the Lessor, terminate the right of the Lessor to proceed under this lease if it is found, after notice and hearing, by the Secretary of the Army or his duly authorized representative, that gratuities (in the form of entertainment, gifts, or otherwise) were offered or given by the Lessor, or any agent or representative of the Lessor, to any officer or employee of the Government with a view toward securing a lease or securing favorable treatment with respect to the awarding or amending, or the making of any determinations with respect to the performing of such lease; provided that the existence of facts upon which the Secretary of the Army or his duly authorized representatives makes such findings shall be in issue and may be reviewed in any competent court.

(b) In the event his lease is terminated as provided in paragraph (a) hereof, the Government shall be entitled (1) to pursue the same remedies against the Lessor as it could pursue in the event of a breach of the lease by the Lessor, and (2) as a penalty in addition to any other damages to which it may be entitled by law, to exemplary damages in an amount (as determined by the Secretary of the Army or his duly authorized representative) which shall be not less than three or more than ten times the costs incurred by the Lessor in providing any such gratuities to any such officer or employee.

(c) The rights and remedies of the Government provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or

under this lease.

36. This lease is not subject to Title 10, United States Code, Section 2662.

IN WITNESS WHEREOF, the parties hereto have hereunto subscribed their names as of the date first above written.

STATE OF HAWAII

By *Jim P. Loo*  
Chairman and Member  
Board of Land and Natural  
Resources

And By *L. L. Summers*  
Member  
Board of Land and Natural  
Resources

THE UNITED STATES OF AMERICA

By *Eugene H. Merrill*

Eugene H. Merrill  
Deputy Assistant Secretary of the Army (I&L)  
(Installations)

APPROVED AS TO FORM:

*Bert T. Kobayashi*  
Bert T. Kobayashi  
Attorney General  
State of Hawaii

*Peter C. Lewis*  
Peter C. Lewis  
Deputy Attorney General  
State of Hawaii

EXHIBIT "A"

TRACT A-105, POHAKULOA TRAINING AREA

PARCEL "A"

Land situated at Kaohe, Hamakua and Puuanahulu, North Kona, Hawaii.

Being portions of the Government lands of Kaohe and Puuanahulu.

Beginning at the southeast corner of this piece of land, the coordinates of the said point of beginning from Government Survey Triangulation Station "Omaokoili," being 5462.74 feet North and 14,081.19 feet West, thence running by azimuths measured clockwise from True South:

1. 111° 10' 6,000.00 feet along the Pohakuloa Impact Area;
2. 28° 30' 800.00 feet along the Pohakuloa Impact Area;
3. 118° 30' 1,400.00 feet along the Pohakuloa Impact Area;
4. 208° 30' 1,100.00 feet along the Pohakuloa Impact Area;
5. 113° 50' 9,600.00 feet along the Pohakuloa Impact Area;
6. 74° 20' 3,300.00 feet along the Pohakuloa Impact Area;
7. 116° 30' 2,900.00 feet along the Pohakuloa Impact Area;
8. 90° 48' 1,670.00 feet along the Pohakuloa Impact Area;
9. 110° 00' 4,700.00 feet along the Pohakuloa Impact Area;
10. 58° 00' 3,600.00 feet along the Pohakuloa Impact Area;
11. 22° 30' 1,300.00 feet along the Pohakuloa Impact Area;
12. 79° 40' 3,700.00 feet along the Pohakuloa Impact Area;
13. 85° 10' 3,000.00 feet along the Pohakuloa Impact Area;

14. 359° 29' 1,132.00 feet along the Pohakuloa Impact Area;
15. 89° 10' 21,730.00 feet along the Pohakuloa Impact Area;
16. 221° 36' 51" 5,539.10 feet along the remainder of the Government Land of Puuanahulu;
17. 183° 36' 51" 9,400.00 feet along the remainder of the Government Land of Puuanahulu;
18. 249° 06' 51" 11,000.00 feet along the remainder of the Government Land of Puuanahulu;
19. 306° 06' 51" 2,500.00 feet along the land of Waikoloa;
20. 300° 23' 51" 12,201.50 feet along the land of Waikoloa;
21. 175° 29' 01" 8,646.00 feet along the land of Waikoloa;
22. 181° 29' 01" 1,617.00 feet along the land of Waikoloa;
23. 191° 29' 01" 2,046.00 feet along the land of Waikoloa;
24. 174° 29' 01" 700.00 feet along the land of Waikoloa;
25. 237° 02' 31" 800.61 feet along portion of Kaohe;
26. 319° 59' 01" 9,000.00 feet along portion of Kaohe;
27. 287° 29' 01" 11,000.00 feet along portion of Kaohe;
28. 288° 40' 7,832.30 feet along "Parcel B" hereof;
29. 10° 53' 30" 2,713.32 feet along Parcel A of Governor's Executive Order 1719, and across the Saddle Road;
30. 288° 13' 2,247.05 feet along the southerly boundary of the Saddle Road;
31. 276° 47' 30" 207.36 feet along the southerly boundary of the Saddle Road;
32. 271° 54' 30" 4.00 feet along the southerly boundary of the Saddle Road;
33. 1° 54' 30" 2,600.00 feet along Parcel B of Governor's Executive Order 1719;
34. 271° 54' 30" 3,215.00 feet along Parcel B of Governor's Executive Order 1719;

- |     |              |               |                                                                                                                                                                                                                    |
|-----|--------------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 35. | 181° 54' 30" | 2,598.25 feet | along Parcel B of Governor's Executive Order 1719;                                                                                                                                                                 |
| 36. | 271° 59'     | 937.10 feet   | along the southerly boundary of the Saddle Road;                                                                                                                                                                   |
| 37. | 269° 44' 30" | 2,115.14 feet | along the southerly boundary of the Saddle Road;                                                                                                                                                                   |
| 38. | 280° 44'     | 110.88 feet   | along the southerly boundary of the Saddle Road;                                                                                                                                                                   |
| 39. | 290° 20'     | 1,036.00 feet | along the southerly boundary of the Saddle Road;                                                                                                                                                                   |
| 40. | 288° 44'     | 275.15 feet   | along the southerly boundary of the Saddle Road;                                                                                                                                                                   |
| 41. | 22° 28' 45"  | 5,075.66 feet | along Mauna Kea Forest Reserve and Parcel "C" hereof;                                                                                                                                                              |
| 42. | 354° 00'     | 5,350.00 feet | along Parcel "C" to the point of beginning and containing a GROSS AREA OF 15,480 ACRES, more or less, excluding therefrom approximately 60 acres of Saddle Road, leaving a NET AREA OF 15,420 ACRES, more or less. |

PARCEL "B"

Land situated at Kaohe, Hamakua, Hawaii, Hawaii.

Being a portion of the Government Land of Kaohe and also being a portion of Mauna Kea Forest Reserve.

Beginning at a point on the southwesterly boundary of this piece of land, also being the northwest corner of Parcel A of Governor's Executive Order 1719 dated 26 January 1956, the coordinates of said point of beginning from Government Survey Triangulation Station "Omaokoili" being 19,465.73 feet North and 22,857.15 feet West, thence running by azimuths measured clockwise from True South:-

- |    |              |                |                                                             |
|----|--------------|----------------|-------------------------------------------------------------|
| 1. | 108° 40'     | 7,832.30 feet  | along Parcel A to the boundary of Mauna Kea Forest Reserve; |
| 2. | 224° 59' 01" | 4,000.00 feet  | along a portion of the Government Land of Kaohe;            |
| 3. | 279° 30'     | 16,000.00 feet | along the remainder of Mauna Kea Forest Reserve;            |

4. 315° 30' 3,000.00 feet along the remainder of Mauna Kea Forest Reserve;
5. 32° 30' 1,700.00 feet along the remainder of Mauna Kea Forest Reserve;
6. 5° 25' 30" 354.25 feet along the remainder of Mauna Kea Forest Reserve;
7. 37° 00' 2,750.00 feet along the remainder of Mauna Kea Forest Reserve;
8. 85° 30' 950.00 feet along the remainder of Mauna Kea Forest Reserve to the boundary of Parcel A of Governor's Executive Order 1719;
9. 213° 45' 1,650.00 feet along Parcel A of Governor's Executive Order 1719;
10. 101° 18' 10,869.06 feet along Parcel A of Governor's Executive Order 1719 to the point of beginning and containing an AREA OF 1,944 ACRES, more or less.

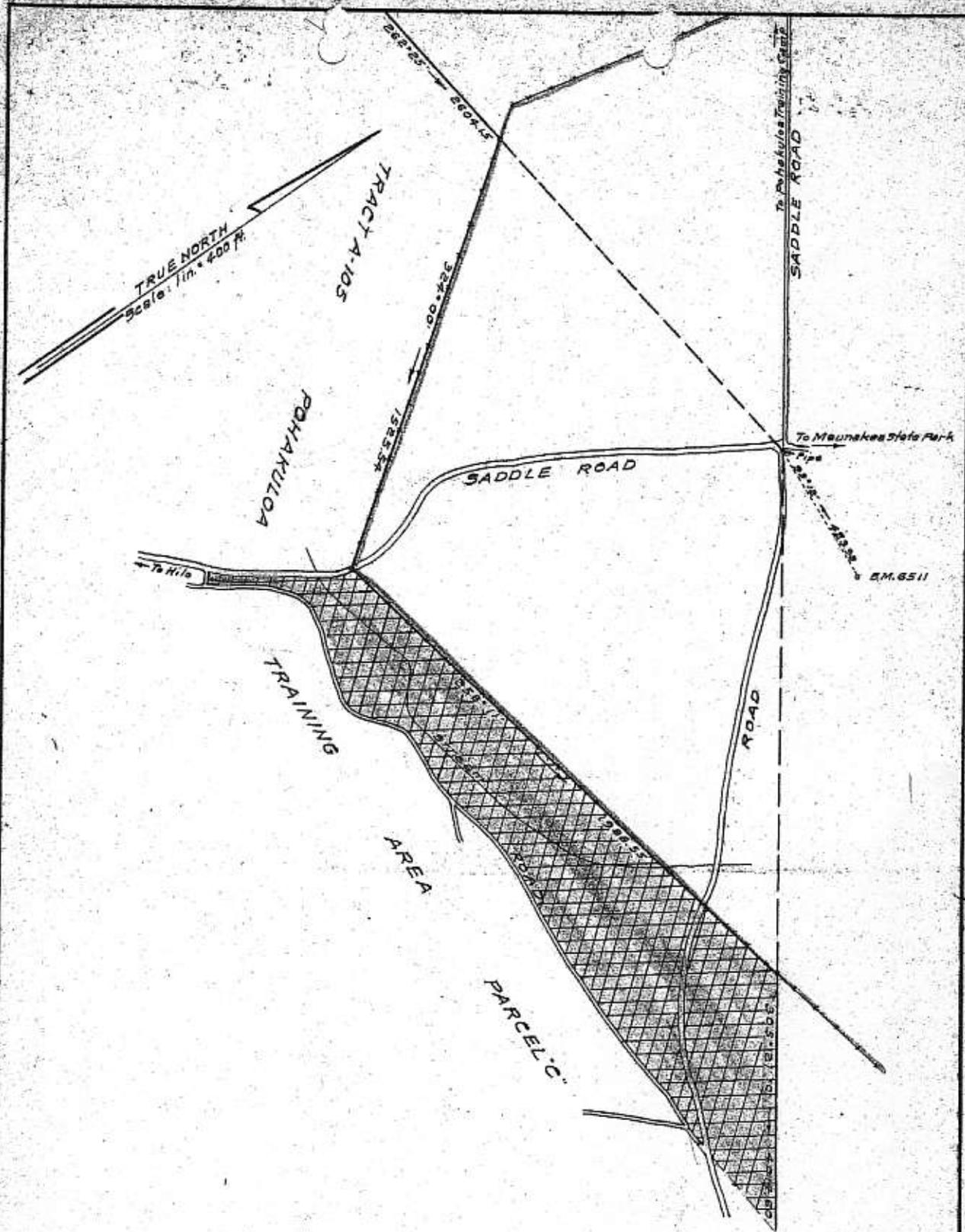
PARCEL "C"

Land situated at Kaohe, Hamakua and Humuula,  
North Hilo, Hawaii, Hawaii.

Beginning at the most southerly corner of this piece of land, also being on the easterly boundary of the proposed Impact Area of Pohakuloa Military Reservation, the coordinates of the said point of beginning from Government Survey Triangulation Station "Omaokoili" being 9685.30 feet South and 2632.28 feet West, thence running by azimuths measured clockwise from True South:-

1. 156° 22' 3,297.35 feet along the proposed Impact Area of Pohakuloa Military Reservation;
2. 136° 30' 14,800.00 feet along the proposed Impact Area of Pohakuloa Military Reservation;
3. 154° 39' 1,540.00 feet along the proposed Impact Area of Pohakuloa Military Reservation;
4. 174° 00' 5,350.00 feet along Tract B of Pohakuloa Military Reservation;

5. 202° 28' 45" 2,100.00 feet along Tract B of Pohakuloa Military Reservation;
6. 262° 25' 2,604.15 feet along the remainder of Mauna Kea Forest Reserve (Governor's Proclamation dated May 2, 1938);
7. 324° 00' 1,525.54 feet along fence, along the remainder of Mauna Kea Forest Reserve (Governor's Proclamation dated May 2, 1938);
8. 258° 11' 1,988.55 feet along fence, along the remainder of Mauna Kea Forest Reserve (Governor's Proclamation dated May 2, 1938);
9. 305° 21' 10" 4,014.60 feet along the remainder of Mauna Kea Forest Reserve (Governor's Proclamation dated May 2, 1938);
10. 231° 30' 4,500.00 feet along the remainder of Mauna Kea Forest Reserve (Governor's Proclamation dated May 2, 1938);
11. 315° 00' 10,000.00 feet along the remainder of Mauna Kea Forest Reserve (Governor's Proclamation dated May 2, 1938) to the boundary between Humuula and Kahohe;
12. 39° 58' 12" 1,600.00 feet along Humuula;
13. 16° 57' 40" 5,307.56 feet along the remainder of Humuula;
14. 36° 58' 30" 5,718.57 feet along the remainder of Humuula;
15. 144° 20' 30" 171.84 feet along the northeasterly boundary of the Saddle Road to the boundary between Humuula and Kahohe;
16. 15° 12' 18" 4,768.28 feet along Humuula to the point of beginning, and containing a GROSS AREA OF 5,659 ACRES, more or less, excluding therefrom the Saddle Road, 100-foot wide right-of-way (52 acres, more or less) leaving a NET AREA OF 5,607 ACRES, more or less.



**EXHIBIT "B"**

Map showing fence and roads near  
Maunakea State Park

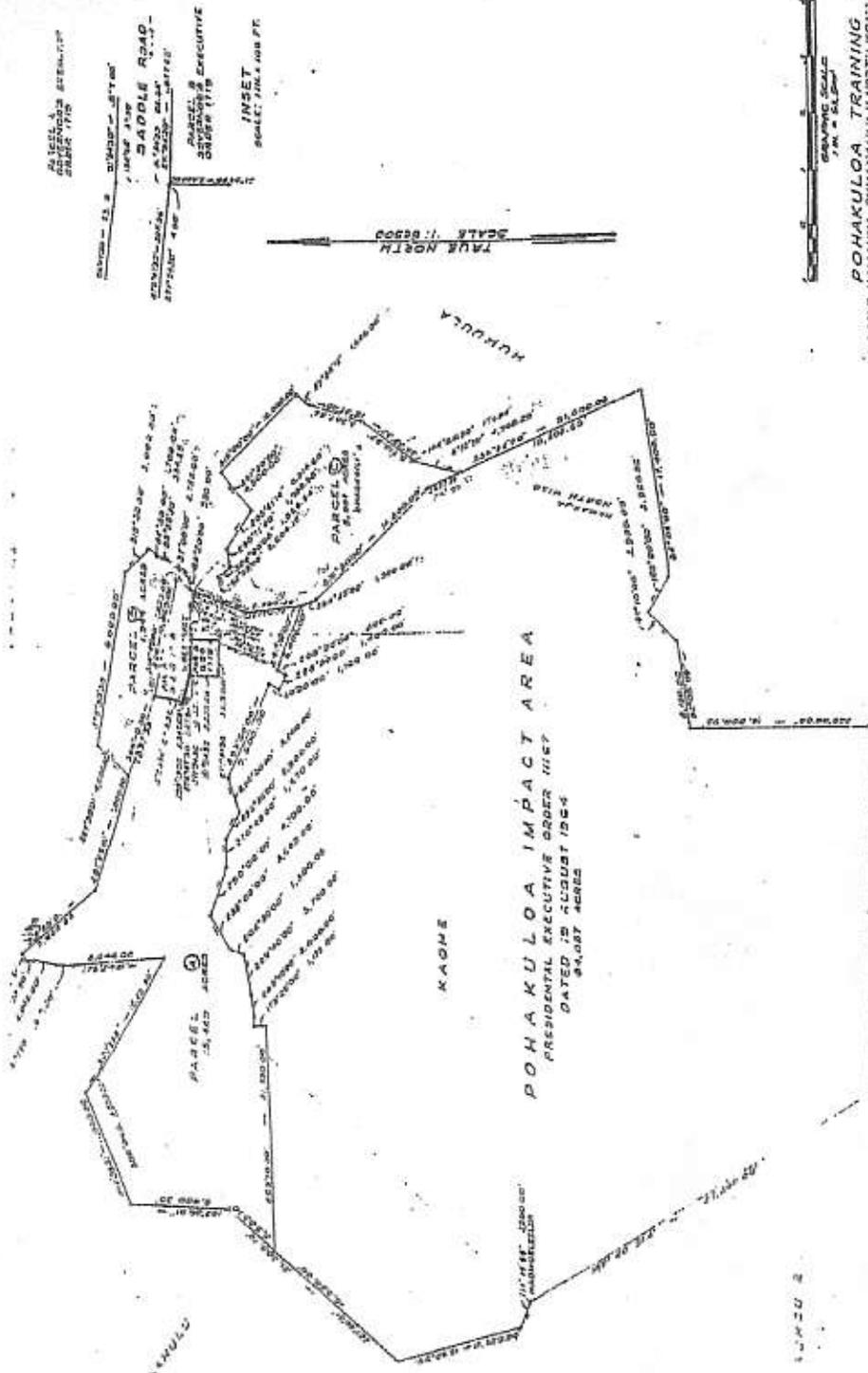
JOB  
C. BK

TAX MAP

SURVEY DIVISION  
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES  
STATE OF HAWAII

C. S. F. No.

A. T. Aug. 7, 1954

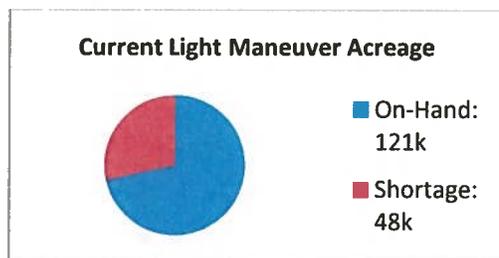


## INFORMATION PAPER

IMPC-HI-PWM  
17 AUG 2015

SUBJECT: Land Leased to the U.S. Army by the State of Hawaii for Training

- 1) Purpose: To explain the current situation regarding land that the Army leases from the State of Hawaii regarding training.
- 2) Findings:
  - a) The U.S. Army has and will continue to have a requirement for training land on both the island of Oahu and Hawaii. The Army is significantly short in the total amount of training land that is available
  - b) The Army leases State lands which are critical to the Army's ability to provide effective training in support of their mission.
  - c) The lease the Army has with the State of Hawaii was initiated in August of 1964 and expires in August of 2029. The Army is beginning to take the necessary steps to put a new lease in place. The overall time expected to place a new lease into operation is between 5-8 years.
- 3) Facts:
  - a) The Army leases approximately 7,371 acres of Land from the State of Hawaii on the island of Oahu and approximately 22,971 acres of Land from the State of Hawaii on the island of Hawaii.
  - b) According to the U.S. Army Hawaii Range Complex Master Plan, the Army is authorized or requires 169K acres of light maneuver training land but only has 120K acres of maneuver training land available at this time, resulting in a shortfall of 48K acres of light maneuver training land. There is insufficient capacity at Schofield Barracks and Pohakuloa Training Area for the Army to meet training and readiness standards.



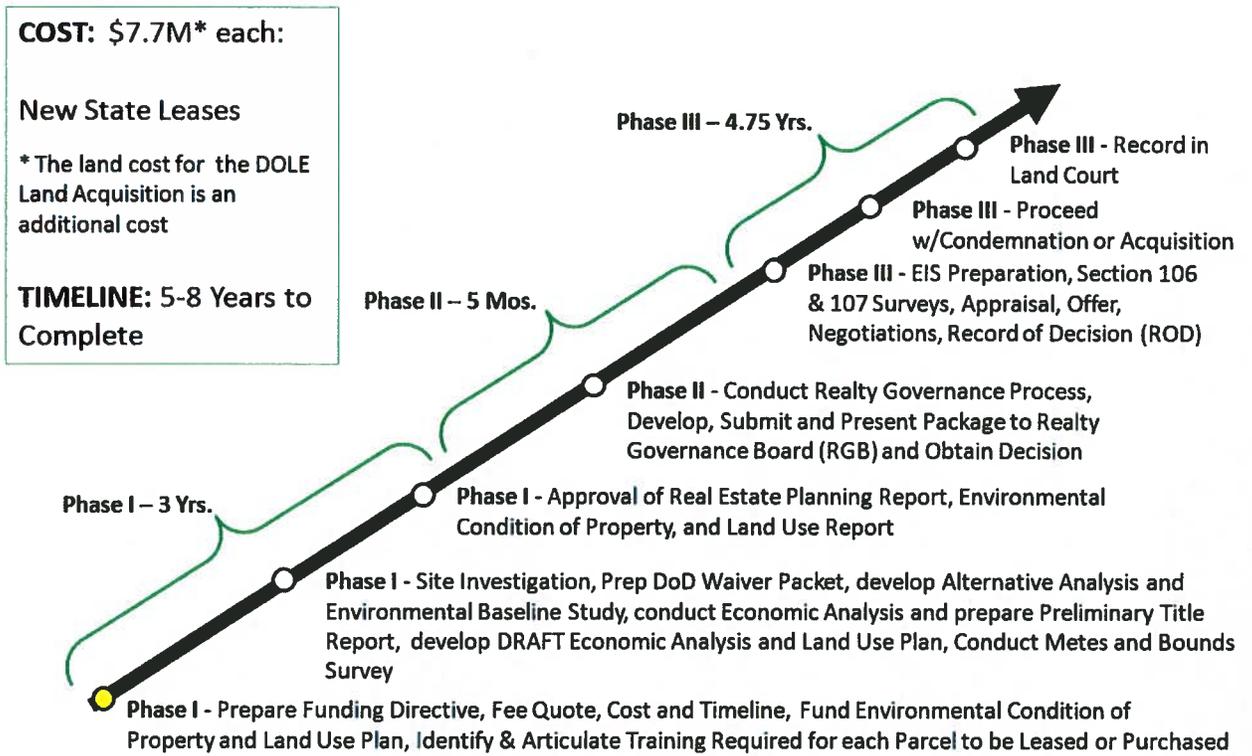
- c) For any MILCON project that the Army plans to build, facilities are designed and constructed with a facility life expectancy of 25 years and a recapitalization allowing it to last a total of 50 years. Regarding leased land, any land the Army leases for MILCON purposes, must have a lease of at least 25 years in order for the asset to be properly capitalized. DA Pamphlet 420-1-2. The Army is seeking a 65 year lease from the state.
- d) The Army recently built a Battle Area Complex (BAX) facility at Pohakuloa Training Area (PTA) on State Leased land. During the design and development phase of this project, the lease with the State of Hawaii extended beyond 25 years. However, by the time construction began, the lease was less than 25 years.

- e) The length of time and the cost associated with processing a new lease with the State of Hawaii could be significant. The estimated time to complete is between 5-8 years at a cost of approximately \$7.7M. This does not include the cost of any of the land itself.
- f) The table below shows current leases with the State of Hawaii

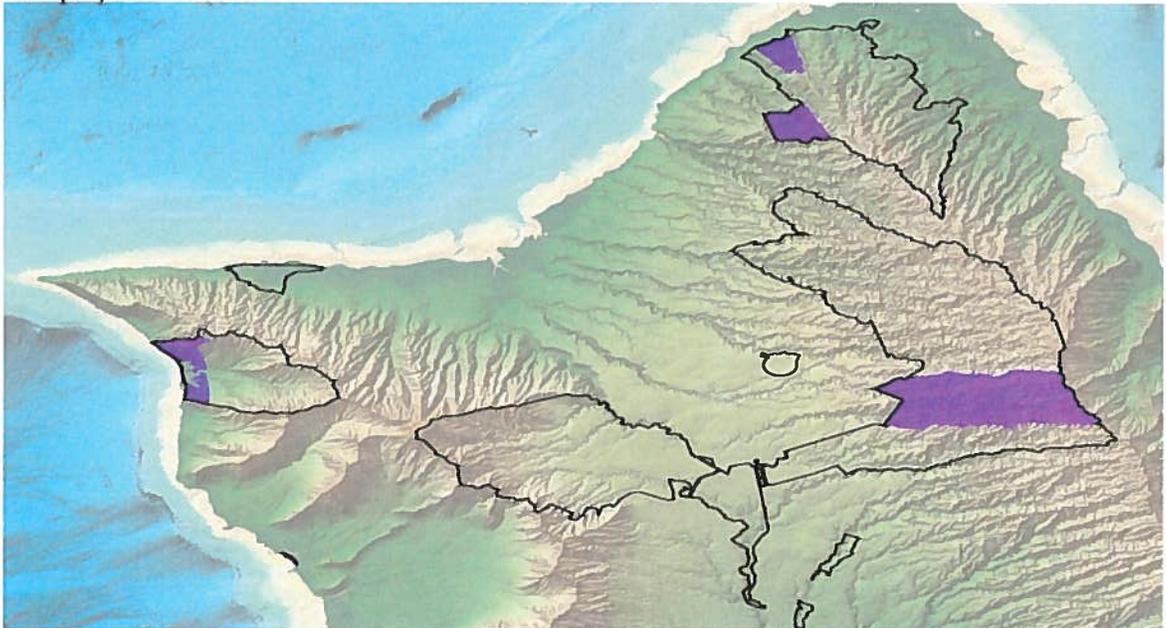
| OAHU - STATE Training Lands Leased to the U.S. Army by the State of Hawaii   |                                                       |                                                  |        |          |          |             |             |
|------------------------------------------------------------------------------|-------------------------------------------------------|--------------------------------------------------|--------|----------|----------|-------------|-------------|
| Ownership                                                                    | Tax Map Key (TMK)                                     | Location                                         | Cost   | Acres    | Term     | Initiated   | Expiration  |
| State of Hawaii                                                              | 1-7-2-001-006                                         | Kawailoa (Poamoho)                               | \$1.00 | 4,390    | 65 Years | 17 Aug 1964 | 16 Aug 2029 |
|                                                                              | 1-5-8-002-002                                         | Kahuku (North)                                   | \$1.00 | 450      |          |             |             |
|                                                                              | 1-5-9-006-026                                         | Kahuku (South)                                   | \$1.00 | 700      |          |             |             |
|                                                                              | 1-8-2-001-024                                         | Makua                                            | \$1.00 | 260.47   |          |             |             |
|                                                                              | 1-8-1-001-007                                         |                                                  | \$1.00 | 1,211.66 |          |             |             |
|                                                                              | 1-8-2-001-001                                         |                                                  | \$1.00 | 24.14    |          |             |             |
|                                                                              | 1-8-2-001-022                                         |                                                  | \$1.00 | 7.5      |          |             |             |
|                                                                              | 1-8-2-001-025                                         |                                                  | \$1.00 | 5.95     |          |             |             |
|                                                                              | 1-6-9-003-001                                         |                                                  | \$1.00 | 321      |          |             |             |
| HAWAII - STATE Training Lands Leased to the U.S. Army by the State of Hawaii |                                                       |                                                  |        |          |          |             |             |
| Ownership                                                                    | Tax Map Key (TMK)                                     | Location                                         | Cost   | Acres    | Term     | Initiated   | Expiration  |
| State of Hawaii                                                              | 3-4-4-015-008 3-4-4-016-005 (por) 3-7-1-004-007 et al | S-3849, DA94-626-ENG-80 Tract A-105-1-Parcel "A" | \$1.00 | 15,420   | 65 Years | 17 Aug 1964 | 16 Aug 2029 |
|                                                                              | 3-4-4-016-005 (por) et al                             | S-3849, DA94-626-ENG-80 Tract A-105-2-Parcel "B" | \$1.00 | 1,944    |          |             |             |
| State of Hawaii<br>Hawaiian Home Lands                                       | 3-4-4-016-005 (por) 3-3-8-001-013 3-3-8-001-022 et al | S-3849, DA94-626-ENG-80 Tract A-105-3-Parcel "C" | \$1.00 | 5,607    |          |             |             |

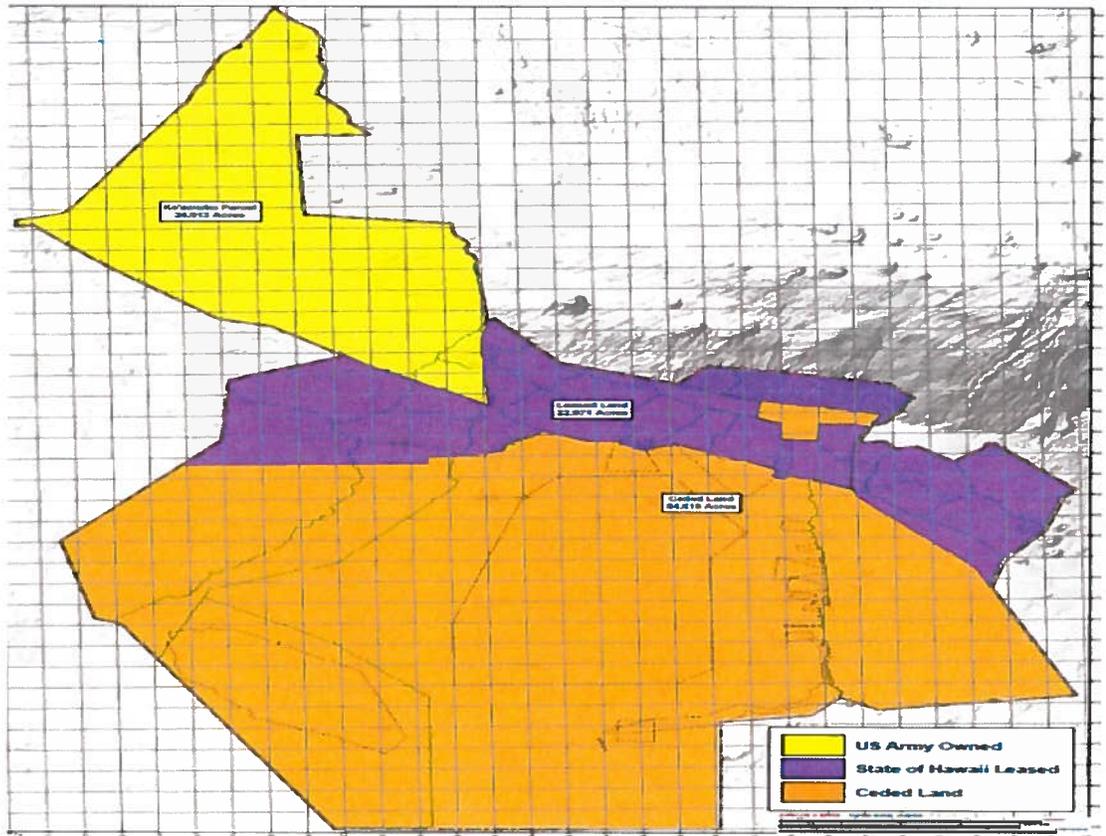
- i) Major actions associated with entering into a new lease are broken down into (3) Phases:
- (1) Phase I
    - (a) Prepare Funding Directive
    - (b) Obtain Fee Quote
    - (c) Receive Cost and Timeline
    - (d) Fund Environmental Condition of Property (ECOP) and Land Use Plan
    - (e) Identify & Articulate Training Requirements for each parcel to be leased
    - (f) Conduct Site Investigation
    - (g) Prepare DoD waiver packet
    - (h) Develop Alternative Analysis and Environmental Baseline Study
    - (i) Conduct Economic Analysis and Land Use Plan
    - (j) Conduct Metes and Bounds Survey
    - (k) Approve Real Estate Planning Report, ECOP and Land Use Report
  - (2) Phase II
    - (a) Conduct Realty Governance Process
    - (b) Develop, Submit and present package to Realty Governance Board
    - (c) Obtain Decision
  - (3) Phase III
    - (a) EIS Preparation
    - (b) Section 106 and 107 Consultation
    - (c) Complete Appraisal and Offer
    - (d) Negotiations
    - (e) Record of Decision (ROD)
    - (f) Proceed with Acquisition or Condemnation
    - (g) Record in Land Court

(4) The table below depicts the phasing of the acquisition plan:



g) The State Lands being considered for leasing on the Islands of Oahu and Hawaii are highlighted below in purple:





David Pawlak/808-656-2448  
Approved by: Sally Pfenning, DPW

**Appendix F:  
Survey Questions**

## Introduction and Background

The Department of the Army is in the beginning stages of the preparation of an Environmental Impact Statement (EIS) that analyzes the environmental and cultural effects of the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. The EIS is being prepared in accordance with Hawai'i Revised Statutes Chapter 343 and Hawai'i Administrative Rules Chapter 11-200.1. The project area is comprised of Tax Map Keys 4-4-015:008; 4-4-016:005; 3-8-001:013 & 022; and 7-1-004:007 in the ahupua'a of Ka'ohe Mauka on the Island of Hawai'i. At a minimum, the EIS shall consider three (3) action alternatives and a no action alternative. A Cultural Impact Assessment (CIA) will be prepared as part of the EIS. The CIA team is seeking consultation with practitioners, Native Hawaiian Organizations, stakeholders, and other individuals. Specifically, consultation is sought on a) identification of an appropriate geographic extent of study, b) historic or existing cultural resources that may be impacted by the proposed project, c) historic or existing traditional practices and/or beliefs that may be impacted by the proposed project, and d) identification of individuals or organizations that should be sought out for consultation on the CIA.

Due to the high volumes of anticipated responses, this survey has been made available for all interested parties to provide input into the CIA at their convenience. Responses to this survey can be provided in Hawaiian, English, or a combination of both Hawaiian and English. Responses provided in Hawaiian will be considered in the CIA analyses, but these responses will not be translated in the CIA.

**All responses will be included in the CIA verbatim, with the exception of profanity or other inappropriate language (i.e., hate speech, threats), which will be redacted as appropriate. Personal contact information will also be redacted from the CIA.**

\* 1. I hereby agree to be a participant in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. I understand that part of the purpose of the CIA is to conduct oral history interviews with individuals with information about the subject property and surrounding area. I understand that Honua Consulting, LLC will retain the products of my participation (responses to this survey, etc.) for use on the project, but that I will remain owner of any of these products. I have the right to request them at any time. I understand that the material(s) will remain in the possession of Honua Consulting, LLC and that the material(s) may be used for scholarly, educational, land management, and other purposes.

- Yes, I agree to be a participant - A "yes" response will allow you to continue the survey and your answers will be included in the CIA.
- No, I do not agree to be a participant - A "no" response will disqualify you from the survey and your answers will **not** be included in the CIA.

## Survey Questions

The following questions relate to cultural resources and potential impacts the project may have on these resources. All of these questions are optional, if there are questions you would like to leave blank, feel free to do so. Any answers provided will be considered in the CIA analyses.

2. Please provide your name.

3. What is your current profession?

4. Where do you live now?

5. Where were you born and raised?

6. Are you associated or representing a specific Native Hawaiian Organization (NHO), 'ohana, or organization in the completion of this survey? If so, please list the entity you are representing.

7. What is your association, if any, with the Project Area?

8. Are you aware of any traditions or customs that may take place near the Project Area or are otherwise associated with the Project Area?

9. What place names do you know for the project area or areas near or adjacent to the project area?

10. Are you aware of any cultural resources in the Project Area or near the Project Area? If so, please list them below.

11. Is there anything about the project area that's particularly significant you would like to share? If so, please share the information below.

12. Are there any stories associated with the project area we should be aware of? If so, please share that information below.

13. The Department of the Army is proposing retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. The project area is comprised of Tax Map Keys 4-4-015:008; 4-4-016:005; 3-8-001:013 & 022; and 7-1-004:007 in the ahupua'a of Ka'ohē Mauka on the Island of Hawai'i.

Are you aware of any resources that may be impacted by such a project? What might those impacts be?

14. Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

15. Are you aware of any traditions or customs that may be impacted by such a project? What might that impacts be?

16. Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

17. Do you have any recommendations for conditions or best management practices for the project, should it proceed?

18. Is there anything else you would like to share?

19. If there are any documents you would like to share, feel free to upload them here.

If you have any trouble uploading documents, please email them to [community@honuaconsulting.com](mailto:community@honuaconsulting.com)

Choose File

Choose File

No file chosen

## Confirmation of Participation

\* 20. CONFIRMATION OF PARTICIPATION - I hereby understand and agree that the answers I have provided in this survey are to be included in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area.

- Yes - I understand and agree that the answers I have provided in this survey will be included in the Cultural Impact Assessment.
- No - I **do not** want my responses included in or considered in the Cultural Impact Assessment.

21. OPTIONAL: If you would like to share your contact information, please do so below. This information will be redacted from your response in the CIA to protect your privacy.

**Mahalo!**

**Mahalo for your time and participation in this survey. Should you have any questions, please contact us at [community@honuaconsulting.com](mailto:community@honuaconsulting.com).**

**Appendix G:  
Survey Responses**

Respondent # skipped all questions.

The survey has been excluded from this appendix  
to reduce the volume of the appendices.  
It is on file with the author and available for review upon request.

Respondent #   skipped all questions.

The survey has been excluded from this appendix  
to reduce the volume of the appendices.  
It is on file with the author and available for review upon request.

Respondent #   skipped all questions.

The survey has been excluded from this appendix  
to reduce the volume of the appendices.  
It is on file with the author and available for review upon request.

## #4

COMPLETE

**Collector:** Pohakuloa CIA (Web Link)  
**Started:** Friday, October 16, 2020 8:05:45 AM  
**Last Modified:** Friday, October 16, 2020 8:21:23 AM  
**Time Spent:** 00:15:37  
**IP Address:** 165.248.1.174

---

### Page 1: Introduction and Background

#### Q1

I hereby agree to be a participant in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. I understand that part of the purpose of the CIA is to conduct oral history interviews with individuals with information about the subject property and surrounding area. I understand that Honua Consulting, LLC will retain the products of my participation (responses to this survey, etc.) for use on the project, but that I will remain owner of any of these products. I have the right to request them at any time. I understand that the material(s) will remain in the possession of Honua Consulting, LLC and that the material(s) may be used for scholarly, educational, land management, and other purposes.

**Yes, I agree to be a participant - A "yes" response will allow you to continue the survey and your answers will be included in the CIA.**

---

### Page 2: Survey Questions

#### Q2

Please provide your name.

Alex Kagawa

#### Q3

What is your current profession?

Budget Director

#### Q4

Where do you live now?

Honolulu

**Q5**

Where were you born and raised?

Born: New Jersey, but raised in Hawaii where family is from

---

**Q6**

Are you associated or representing a specific Native Hawaiian Organization (NHO), 'ohana, or organization in the completion of this survey? If so, please list the entity you are representing.

No

---

**Q7**

What is your association, if any, with the Project Area?

No association

---

**Q8**

Are you aware of any traditions or customs that may take place near the Project Area or are otherwise associated with the Project Area?

Not aware

---

**Q9**

What place names do you know for the project area or areas near or adjacent to the project area?

None

---

**Q10**

Are you aware of any cultural resources in the Project Area or near the Project Area? If so, please list them below.

Not aware

---

**Q11**

Is there anything about the project area that's particularly significant you would like to share? If so, please share the information below.

Depleted uranium is a health hazard for the entire community. The lands are sacred and should not be used for military training. Protection of native species must be a priority.

---

**Q12**

Are there any stories associated with the project area we should be aware of? If so, please share that information below.

None

---

**Q13**

The Department of the Army is proposing retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. The project area is comprised of Tax Map Keys 4-4-015:008; 4-4-016:005; 3-8-001:013 & 022; and 7-1-004:007 in the ahupua'a of Ka'ohe Mauka on the Island of Hawai'i. Are you aware of any resources that may be impacted by such a project? What might those impacts be?

Depleted uranium is a health hazard for the entire community. The lands are sacred and should not be used for military training. Protection of native species must be a priority. Heiau and other cultural artifacts must also be respected and preserved.

---

**Q14**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

Identify and get appropriate cultural approvals for other larger land areas instead of selecting an island state with very limited land mass. Use simulation training.

---

**Q15**

Are you aware of any traditions or customs that may be impacted by such a project? What might that impacts be?

Hawaiian values, traditions, culture and history.

---

**Q16**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

Terminate lease and find another alternative site not in Hawaii.

---

**Q17**

Do you have any recommendations for conditions or best management practices for the project, should it proceed?

None other than to find another training area outside of Hawaii

---

**Q18**

Is there anything else you would like to share?

Thank you for the opportunity for input.

---

**Q19**

Respondent skipped this question

If there are any documents you would like to share, feel free to upload them here.

---

---

**Q20**

CONFIRMATION OF PARTICIPATION - I hereby understand and agree that the answers I have provided in this survey are to be included in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area.

**Yes - I understand and agree that the answers I have provided in this survey will be included in the Cultural Impact Assessment.**

**Q21**

OPTIONAL: If you would like to share your contact information, please do so below. This information will be redacted from your response in the CIA to protect your privacy.

**Respondent skipped this question**

Respondent #   skipped all questions.

The survey has been excluded from this appendix  
to reduce the volume of the appendices.  
It is on file with the author and available for review upon request.

Respondent #   skipped all questions.

The survey has been excluded from this appendix  
to reduce the volume of the appendices.  
It is on file with the author and available for review upon request.

#7

COMPLETE

**Collector:** Pohakuloa CIA (Web Link)  
**Started:** Monday, December 07, 2020 7:56:16 AM  
**Last Modified:** Monday, December 07, 2020 8:23:41 AM  
**Time Spent:** 00:27:24  
**IP Address:** 66.8.154.190

---

## Page 1: Introduction and Background

### Q1

I hereby agree to be a participant in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. I understand that part of the purpose of the CIA is to conduct oral history interviews with individuals with information about the subject property and surrounding area. I understand that Honua Consulting, LLC will retain the products of my participation (responses to this survey, etc.) for use on the project, but that I will remain owner of any of these products. I have the right to request them at any time. I understand that the material(s) will remain in the possession of Honua Consulting, LLC and that the material(s) may be used for scholarly, educational, land management, and other purposes.

**Yes, I agree to be a participant - A "yes" response will allow you to continue the survey and your answers will be included in the CIA.**

---

## Page 2: Survey Questions

### Q2

Please provide your name.

Mike murray

### Q3

What is your current profession?

Retired

### Q4

Where do you live now?

Keaau

**Q5**

Where were you born and raised?

Oahu

---

**Q6**

Are you associated or representing a specific Native Hawaiian Organization (NHO), 'ohana, or organization in the completion of this survey? If so, please list the entity you are representing.

No

---

**Q7**

What is your association, if any, with the Project Area?

I am a hunter gatherer, and religious user

---

**Q8**

Are you aware of any traditions or customs that may take place near the Project Area or are otherwise associated with the Project Area?

No

---

**Q9**

What place names do you know for the project area or areas near or adjacent to the project area?

Kaohe

---

**Q10**

Are you aware of any cultural resources in the Project Area or near the Project Area? If so, please list them below.

Yes, I have found sacred area's while hunting

---

**Q11**

Is there anything about the project area that's particularly significant you would like to share? If so, please share the information below.

The military already has too much land, and once in their control most of it is never used, then the usage rule change to the point most people cannot access, and area becomes overgrown. Keamoku is good example, or they restrict access to area's that were open to hunting/ close area, or they put a road through state land so they can more easily access pta while trying to control state land which they have no jurisdiction, they have already taken portions of unit A that were open to public since I was a kid. Too much land has already been taken and military imposes absurd rules for access then want you to pay for the process in the form of a permit. Enough already.

---

**Q12**

Are there any stories associated with the project area we should be aware of? If so, please share that information below.

If you look close, they are expanding, but not creating jobs for locals, it has always been a select few, or mainland contractors, training is good but they don't use over half of what they have control of, land not being used should be returned.

---

**Q13**

The Department of the Army is proposing retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. The project area is comprised of Tax Map Keys 4-4-015:008; 4-4-016:005; 3-8-001:013 & 022; and 7-1-004:007 in the ahupua'a of Ka'ohe Mauka on the Island of Hawai'i. Are you aware of any resources that may be impacted by such a project? What might those impacts be?

What for, they don't need it or use it, it should be returned to the people

---

**Q14**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

Yeah, get out, you don't need the land or use it.

---

**Q15**

Are you aware of any traditions or customs that may be impacted by such a project? What might that impacts be?

I have already been denied access to places I go to talk to GOD, this will just make it worse.

---

**Q16**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

Yeah give it up, you don't need it

---

**Q17**

Do you have any recommendations for conditions or best management practices for the project, should it proceed?

No restrictions on public access none of the nonsense happening now, why do I need a background check, or register my weapons with military, then they want me to pay for process in the form of a permit, no thank you, I worked for federal govt for 20 plus years and probably held a higher clearance than most people there so , this is a hard no for me you can't have it.

---

**Q18**

Is there anything else you would like to share?

No

---

**Q19**

Respondent skipped this question

If there are any documents you would like to share, feel free to upload them here.

---

Page 3: Confirmation of Participation

**Q20**

**Yes - I understand and agree that the answers I have provided in this survey will be included in the Cultural Impact Assessment.**

CONFIRMATION OF PARTICIPATION - I hereby understand and agree that the answers I have provided in this survey are to be included in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area.

---

**Q21**

Respondent skipped this question

OPTIONAL: If you would like to share your contact information, please do so below. This information will be redacted from your response in the CIA to protect your privacy.

---

#8

COMPLETE

**Collector:** Pohakuloa CIA (Web Link)  
**Started:** Monday, December 07, 2020 9:18:07 AM  
**Last Modified:** Monday, December 07, 2020 9:38:02 AM  
**Time Spent:** 00:19:55  
**IP Address:** 72.234.115.80

---

## Page 1: Introduction and Background

### Q1

I hereby agree to be a participant in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. I understand that part of the purpose of the CIA is to conduct oral history interviews with individuals with information about the subject property and surrounding area. I understand that Honua Consulting, LLC will retain the products of my participation (responses to this survey, etc.) for use on the project, but that I will remain owner of any of these products. I have the right to request them at any time. I understand that the material(s) will remain in the possession of Honua Consulting, LLC and that the material(s) may be used for scholarly, educational, land management, and other purposes.

**Yes, I agree to be a participant - A "yes" response will allow you to continue the survey and your answers will be included in the CIA.**

---

## Page 2: Survey Questions

### Q2

Please provide your name.

KEAWE ALAPAI

### Q3

What is your current profession?

DISABLED

### Q4

Where do you live now?

Kailua-kona, Hi

---

**Q5**

Where were you born and raised?

Kailua-kona, Hi

---

**Q6**

Are you associated or representing a specific Native Hawaiian Organization (NHO), 'ohana, or organization in the completion of this survey? If so, please list the entity you are representing.

I am a Lineal Descendant

---

**Q7**

What is your association, if any, with the Project Area?

Lineal Descendant of those who inhabited the Hawaiian Islands prior to 1778

---

**Q8**

Are you aware of any traditions or customs that may take place near the Project Area or are otherwise associated with the Project Area?

Yes

---

**Q9**

What place names do you know for the project area or areas near or adjacent to the project area?

Kaohe Mauka

---

**Q10**

Are you aware of any cultural resources in the Project Area or near the Project Area? If so, please list them below.

substance informs of native plants, animals, and springs as well as places of worship

---

**Q11**

Is there anything about the project area that's particularly significant you would like to share? If so, please share the information below.

My great grandparents used to go up their for substance and prayer

---

**Q12**

Are there any stories associated with the project area we should be aware of? If so, please share that information below.

for substance and worship/prayers/halawai/church

---

**Q13**

The Department of the Army is proposing retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. The project area is comprised of Tax Map Keys 4-4-015:008; 4-4-016:005; 3-8-001:013 & 022; and 7-1-004:007 in the ahupua'a of Ka'ohe Mauka on the Island of Hawai'i. Are you aware of any resources that may be impacted by such a project? What might those impacts be?

the water springs below the areas, substance in forms of herbs, plants, animals/livestock, insects

---

**Q14**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

not till i have a better understanding of the project from start to finish

---

**Q15**

Are you aware of any traditions or customs that may be impacted by such a project? What might that impacts be?

substance and worship

---

**Q16**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

not till I have a better understanding of the project from start to finish

---

**Q17**

Do you have any recommendations for conditions or best management practices for the project, should it proceed?

a meeting of the minds amongst the lineal descendants, cultural descendants, and any other parties that can come together with reason

---

**Q18**

Is there anything else you would like to share?

not at the current moment or told othwise

---

**Q19**

Respondent skipped this question

If there are any documents you would like to share, feel free to upload them here.

---

**Q20**

CONFIRMATION OF PARTICIPATION - I hereby understand and agree that the answers I have provided in this survey are to be included in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area.

**Yes - I understand and agree that the answers I have provided in this survey will be included in the Cultural Impact Assessment.**

**Q21**

OPTIONAL: If you would like to share your contact information, please do so below. This information will be redacted from your response in the CIA to protect your privacy.

**Respondent skipped this question**

Respondent #   skipped all questions.

The survey has been excluded from this appendix  
to reduce the volume of the appendices.  
It is on file with the author and available for review upon request.

Respondent #      skipped all questions.

The survey has been excluded from this appendix  
to reduce the volume of the appendices.  
It is on file with the author and available for review upon request.

#11

COMPLETE

**Collector:** Pohakuloa CIA (Web Link)  
**Started:** Monday, December 07, 2020 8:41:48 PM  
**Last Modified:** Monday, December 07, 2020 10:36:05 PM  
**Time Spent:** 01:54:17  
**IP Address:** 98.151.198.52

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## Page 1: Introduction and Background

### Q1

I hereby agree to be a participant in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. I understand that part of the purpose of the CIA is to conduct oral history interviews with individuals with information about the subject property and surrounding area. I understand that Honua Consulting, LLC will retain the products of my participation (responses to this survey, etc.) for use on the project, but that I will remain owner of any of these products. I have the right to request them at any time. I understand that the material(s) will remain in the possession of Honua Consulting, LLC and that the material(s) may be used for scholarly, educational, land management, and other purposes.

**Yes, I agree to be a participant - A "yes" response will allow you to continue the survey and your answers will be included in the CIA.**

---

## Page 2: Survey Questions

### Q2

Please provide your name.

Roy McGrath

### Q3

What is your current profession?

Kumu a'ō kamali'i - Hawaiian immersion pre-school teacher

### Q4

Where do you live now?

Kona, Hawai'i.

**Q5**

Where were you born and raised?

Kona, Hawai'i

---

**Q6**

Are you associated or representing a specific Native Hawaiian Organization (NHO), 'ohana, or organization in the completion of this survey? If so, please list the entity you are representing.

'A'ole - No

---

**Q7**

What is your association, if any, with the Project Area?

'A'ohe pilina pilikino, koe wale ka Hawai'i 'ana - No personal connection, save for being a citizen of Hawai'i.

---

**Q8**

Are you aware of any traditions or customs that may take place near the Project Area or are otherwise associated with the Project Area?

'O ke alualu pua'a kekahi hana o ia 'aina, pēlā nō ka māka'ika'i ka'apuni, ka ho'omana, a keu nō i ka po'e hula - Pig hunting is a tradition of that land, as is its status as an important place in the tradition of spiritual island circling excursions, known as "huaka'i ka'apuni," special spiritual meaning and customs may be held by certain individuals especially those involved in hula. Every piece of land is steeped in history, and the land in question was originally held under the tenure of high ali'i Victoria Kamāmalu and Laura Kōnia. Those decedents of these ali'i, and others seeking to honor or connect with them for other cultural and spiritual reasons may find great importance in these lands.

---

**Q9**

What place names do you know for the project area or areas near or adjacent to the project area?

'O Pu'uahi, ka punawai 'o Lilinoe, ka punawai 'o Hopukani, 'o Ahumoa, 'o Kilohana, 'o Pu'uukea, 'o Pu'ukoko, 'o Pu'umana'o, 'o Pu'umau'u, 'o Pu'uokau, 'o Pu'uokahua, 'o Pu'upōhakuloa, 'o Pu'u'ula'ula. Aia paha 'o Kawaihūokāne i kēia 'aina, 'a'ole paha. - " ", Kawaihūokāne may be located at or near this piece of land.

---

**Q10**

Are you aware of any cultural resources in the Project Area or near the Project Area? If so, please list them below.

English below. He pilina ko Hawai'i nei 'āina i ka Hawai'i ma kona kanaka 'ana. He pilina ikaika, anoano, a me ke aloha wale ho'i. Ke lawe 'ia ka 'āina, lawe 'ia kekahi mea o ke kanaka 'ana. Ma 'ō loa aku ka 'āina o kekahi mea e ho'onanea ai ka maka, he mea ia e pā 'e'ehia ai ka na'au o ka Hawai'i. Loa'a nō ka po'e nona he pilina ikaika, a he pilina 'ohana paha i kēia 'āina i hāpai 'ia a'e nei, a he waiwai ka mālama 'ia o ia 'āina me ke hāpai a ho'omana'o 'ia o ko lākou kuleana ma laila. Hawaiian lands have a special relationship existential with the identity of the people from Hawai'i. The land is a part of not just a collective cultural and societal identity, but a strong, spiritual, and personal one as well. When a piece land is taken, it piece of identity is also taken as well. In a very actual Hawaiian perspective, land is more than just something appealing to the eye of man, but is something that strikes a deep and spiritual chord in the identity of anyone of Hawai'i. There are those who have a deep and possibly even familial connection with the lands mentioned above, and the very existence of this land is a very important cultural resource for them. Disregarding this as a intangible and therefore un-important cultural resource would be objectively ethnocentric and cultural biased and intolerant.

---

**Q11**

Is there anything about the project area that's particularly significant you would like to share? If so, please share the information below.

He 'āina ia o ka wao akua, 'a'ohe noho 'ia e kōnaka koe nā mea pili 'uhane a me nā māka'ika'i kuleana. - This land is of the "wao akua" or holy/godlike region. This essentially means that it was not lived on by people, and was only traveled to for the sake of spiritual journeys and other travels of special responsibility. This perspective still lives on in Hawaiian culture today, and isolated untouched lands are held in great esteem and revered. These lands are not considered lands opportune lands for use, as that would be a kind of defilement of sacred land. This is a very real and important aspect of the current cultural worldview and to view it as intangible and therefore unimportant would again be ethnocentric.

---

**Q12**

Are there any stories associated with the project area we should be aware of? If so, please share that information below.

He 'āina ia i kaua ai 'o Kamalalawalu lāua 'o Lanikaula. He wahi kēia i hele mua ai 'o Hi'iakaikapoliopole, a he ko'iko'i ko laila no ka po'e hula. Nui nā mo'olelo o ka nūpepa i laha 'ole, a he mea pono ka maka'ala loa a me ka noi'i nui loa i ka hana pono. - Kamalalawalu and Lanukaula battled here in the story of Lonoikamakahiki. This is also a specifically mentioned spot that Hi'iakaikapoliopole first traveled to after she left Pele. Due to the great importance of the latter story, and especially its importance to those associated with Hula, this land is of importance. There are great numbers of relatively uncommon stories held in Hawaiian news paper, so great care must be taken to ensure that important landmarks in these stories are not adversely affected by the project.

---

**Q13**

The Department of the Army is proposing retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. The project area is comprised of Tax Map Keys 4-4-015:008; 4-4-016:005; 3-8-001:013 & 022; and 7-1-004:007 in the ahupua'a of Ka'ohe Mauka on the Island of Hawai'i. Are you aware of any resources that may be impacted by such a project? What might those impacts be?

Nā waiwai mo'omeheu a'u i hāpai aku nei i luna a'e ma ka hā'ina nīnau 10 me 11. - The cultural resources I previously brought up as answers to questions 10 and eleven. These are real, true cultural resources that can and will be affected.

---

**Q14**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

Pono ka ho'opane'e, a me ke kūkulu i wahi e hāpai ai ka po'e nona he kuleana maoli ma laila i ko lākou mau mana'o, me ke hiki aku i hana e mālama 'ia ai nā pono mo'omeheu a siwila maoli o ia po'e. - There must be dialogue held with people with a firm grasp on Hawaiian culture, and specifically how actions taken at Pōhakuloa will end up affecting the larger public, and also those with legitimate relationships with the land, and a solution must be reached that honors and respects the legitimate cultural and thereby civil and human rights of those people in question.

---

**Q15**

Are you aware of any traditions or customs that may be impacted by such a project? What might that impacts be?

Ua hiki ke pā nō nā mea a'u i hapai a'e ai ma ka helu 8, 10 me 11. The traditions and customs i previously brought up on number 8, 10, and 11 could all surely be affected.

---

**Q16**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

E like nō me ka'u i hāpai ai ma ka helu 14 - Similarly to what I brought up on number 14.

---

**Q17**

Do you have any recommendations for conditions or best management practices for the project, should it proceed?

Ka ho'omana'o me ka ho'omaopopo mau i ka 'oia'i'o maoli nō ho'i o ka 'oko'a lua 'ole o ke kuana'ike me ka mo'omeheu Hawai'i. He mea ia e maka'ala mau ai ka haole. - The remembrance and recognition of the true and unique differences of Hawaiian perspective and culture. It is something that non-Hawaiian people working in Hawaii must be constantly be aware of, lest they end up working to break down an already marginalized culture.

---

**Q18**

Is there anything else you would like to share?

Ma ka mo'omeheu 'oia'i'o o ka Hawai'i, 'elua wale nō mea e hehi ai ke kanaka ma kahi malihini, 'o ke kuleana, a me ke kama'āina. He maha'oi, a he hō'eha ka hele wale o ke kanaka. Ma 'ane'i ho'i e 'ike ai, 'o kēia hanana a ka pū'ali koa i Pōhakuloa, he kuleana 'ole, a kama'āina 'ole. He hakina kolonaio nō ia.- In an again real and actual Hawaiian perspective, there are only two reasons one would go to a place one is not framiliar with. They are "kuleana" or responsibility, and "kama'āina," or interpersonal connections. If one does not a specific responsibility to a place or have people to welcome one to an unfamiliar spot, it is considered rude to go there. This is the fundemental reason why the U.S. training camp at Pōhakuloa is so painful and displeasing to people of Hawai'i. It is a vestige of Hawai'i's colonial history.

---

**Q19**

Respondent skipped this question

If there are any documents you would like to share, feel free to upload them here.

---



Respondent #      skipped all questions.

The survey has been excluded from this appendix  
to reduce the volume of the appendices.  
It is on file with the author and available for review upon request.

Respondent #    skipped all questions.

The survey has been excluded from this appendix  
to reduce the volume of the appendices.  
It is on file with the author and available for review upon request.

Respondent #      skipped all questions.

The survey has been excluded from this appendix  
to reduce the volume of the appendices.  
It is on file with the author and available for review upon request.

#15

COMPLETE

**Collector:** Pohakuloa CIA (Web Link)  
**Started:** Tuesday, December 08, 2020 7:11:05 PM  
**Last Modified:** Tuesday, December 08, 2020 10:32:38 PM  
**Time Spent:** 03:21:33  
**IP Address:** 66.8.151.213

---

Page 1: Introduction and Background

**Q1**

I hereby agree to be a participant in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. I understand that part of the purpose of the CIA is to conduct oral history interviews with individuals with information about the subject property and surrounding area. I understand that Honua Consulting, LLC will retain the products of my participation (responses to this survey, etc.) for use on the project, but that I will remain owner of any of these products. I have the right to request them at any time. I understand that the material(s) will remain in the possession of Honua Consulting, LLC and that the material(s) may be used for scholarly, educational, land management, and other purposes.

**Yes, I agree to be a participant - A "yes" response will allow you to continue the survey and your answers will be included in the CIA.**

---

Page 2: Survey Questions

**Q2**

Please provide your name.

Lauren Kēpa'a

---

**Q3**

What is your current profession?

Archaeologist

---

**Q4**

Where do you live now?

Waikahekahe Iki, Puna, Hawai'i

---

**Q5**

Where were you born and raised?

Nu‘uanu, O‘ahu

---

**Q6**

Are you associated or representing a specific Native Hawaiian Organization (NHO), ‘ohana, or organization in the completion of this survey? If so, please list the entity you are representing.

No

---

**Q7**

What is your association, if any, with the Project Area?

While I do not have an explicit affiliation with the ‘āina contained within the boundaries of by USARHAW, I conduct pig hunting for subsistence purposes on the slopes of Mauna a Wākea within Ka‘ohe Mauka Ahupua‘a and have ancestral lineage to the moku of Hāmākua.

---

**Q8**

Are you aware of any traditions or customs that may take place near the Project Area or are otherwise associated with the Project Area?

I am aware of subsistence pig hunting occurring within Pōhakuloa Training Area during certain hunting seasons, a traditional practice. I am not aware of any other traditional Hawaiian practices (e.g. feather collection, ‘uwa‘u hunting) currently being practiced within the project area as the general public, and particularly kanaka ‘ōiwi, are not typically permitted within PTA despite the presence of iwi kūpuna and upwards of a thousand cultural sites, several of which are ceremonial in nature.

---

**Q9**

What place names do you know for the project area or areas near or adjacent to the project area?

The name Pōhakuloa may refer to an akua, a

---

### Q10

Are you aware of any cultural resources in the Project Area or near the Project Area? If so, please list them below.

Yes. I am aware of a network of lava tubes that extend for miles below the surface of the project area that preserve within them significant and intact cultural resources that have (so far) been protected from the abhorrent destruction that has occurred already within PTA. I am also aware of intact nesting grounds for the 'uwa'u ('ua'u) bird, a bird that was traditionally caught in the lands of Pōhakuloa according to boundary commission testimonies from the late nineteenth century. There has also been evidence that other birds traditionally significant to Hawaiians were hunted in these lands, including the nēnē. Precontact site types documented within the project area have included but are not limited to human burials as well as those pertaining to temporary habitation, lava tube shelters, transportation, markers (e.g. cairns), terraces, and lithic and volcanic glass flakes. Furthermore, there is great potential to unearth subsurface cultural features within or in the proximity of existing sites. There are also numerous surface features (e.g. hearths, cupboards) associated with these sites that are indicative of a rich plethora of traditional activities which have occurred within the bounds of PTA. Some of the sites that have been lucky enough to have been preserved have yielded rare finds of organic materials including a ti leaf sandal, cordage, ipu, and charcoal, indicating an area rich in pronounced human activity most likely utilized during activities associated temporary and more long-term habitation to facilitate upland resource procurement. I am also aware of several trails that lead to the lands contained within the project area (which include kīpuka) although I am unsure as to their current integrity given the activities that have been undertaken on the lands of Pōhakuloa over the course of the last 77 years.

Since the first archaeological survey of the lands of Pōhakuloa wasn't conducted until approximately 30 years subsequent to the initial military use of the lands and 13 years after the lease of the lands to the Army, it is unfathomable to imagine how many significant cultural sites and resources were subject to obliteration during these spans of time.

---

### Q11

Is there anything about the project area that's particularly significant you would like to share? If so, please share the information below.

The name Ka'ōhe, which literally translates to "the bamboo," may be affiliated with water transportation throughout the ahupua'a and speak to the significance of the richness of water as a natural resource within Ka'ōhe, and thus within the project area.

---

### Q12

Are there any stories associated with the project area we should be aware of? If so, please share that information below.

The name Pōhakuloa may refer to an akua, and a lover of Poli'ahu, and is discussed in the Kaa Hooniua Puuwai no Ka-Miki tale. He is affiliated with the akua Kāne and also with Waihu Spring and Lake Waiiau. There are many more.

---

### Q13

The Department of the Army is proposing retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. The project area is comprised of Tax Map Keys 4-4-015:008; 4-4-016:005; 3-8-001:013 & 022; and 7-1-004:007 in the ahupua'a of Ka'ōhe Mauka on the Island of Hawai'i. Are you aware of any resources that may be impacted by such a project? What might those impacts be?

The proposed retention by the Army of the state-leased lands of Pōhakuloa means certain death for the remaining cultural sites within the project area. We can only surmise the amount of such sites destroyed between 1943 and 1964, and then between 1964 up until the initial archaeological survey was conducted in 1977. From now until the end of the current lease in 2029, unimaginable and irreversible damage will be caused to the cultural landscape comprising Pōhakula.

---

**Q14**

Respondent skipped this question

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

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**Q15**

Respondent skipped this question

Are you aware of any traditions or customs that may be impacted by such a project? What might that impacts be?

---

**Q16**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

Please see below.

---

**Q17**

Do you have any recommendations for conditions or best management practices for the project, should it proceed?

Clearly my viewpoint is against the lease renewal, and I am staunch in my belief that this project should absolutely, under no conditions, proceed.

However if, for some reason the PTA lease is renewed, there needs to be not only extensive consultation conducted with the aboriginal kānaka 'ōiwi community, but also a serious commitment to ongoing collaboration with members of said community who wish to be involved. To exclude kānaka 'ōiwi from the process dictating what happens on their 'āina hānau is inexcusable and intolerable. There should be full disclosure to all participants in this process, and full transparency should the United States military wish to proceed on an ethical journey, of which this request for renewal is not. Those kānaka 'ōiwi who wish to conduct traditional cultural practices at sites within PTA (where safe) should be allowed unrestricted access (with reasonable notice) accompanied by a team of EODs for their safety. And cultural resource management staff should work in full cooperation with members of the community. An outreach program to kānaka 'ōiwi and to keiki should also be ongoing, to facilitate learning about the cultural resources present within Pōhakuloa from a firsthand perspective and also to allow for the learning of the traditions and practices that commonly occurred there.

It is absolutely imperative that the lands contained within the bounds of the project area be considered as a cultural landscape. Our kūpuna viewed the world holistically, as a multitude of elements, each forming an intricate network that influenced their world view, their lives, their beliefs and practices. The lava flows and geologic features contained within PTA are just as significant as the physical material culture left behind by our kūpuna, as are the waters that flow towards the project area from freshwater springs and the ua that falls from the sky blown by the winds. A pōhaku is not just a pōhaku. A pu'u is not just a pu'u, and it is unethical and unwise to consider these as suitable objects for target practice. Each individual element contained within the cultural landscape at Pōhakuloa must be taken into consideration, as it was by our kūpuna, and thoughtfully be considered cohesively with other material elements of culture in conjunction with living kānaka 'ōiwi to truly comprehend the significance of the Pōhakuloa lands and to preserve what is left for the future generations to come. Our 'āina has been ravaged at the hands of the oppressor, and the aboriginal descendants of these lands have been victimized through this continued exploitation not only of our lands, but of our cultural resources and the prohibition of our traditional cultural practices that are our birthright. I urge the United States military and PTA personnel to reflect deeply upon these reflections and lead from a place of genuine understanding. An understanding of our precious 'āina. An understanding of kānaka and the culture of the people whose lands are continually exploited. An understanding of the relationship between the 'āina and its people. The 'āina doesn't simply exist to serve for profit (especially to an illegally occupying country), it is that which feeds, but you must mālama 'āina first and foremost. The continued lease of these 23,000 acres termed the "project area" is a promise of extensive desecration and serves as an insult to kānaka, the 'āina, and the legacy of our ancestors. So much has been stripped already, will you not stop until the 'āina is wiped clean of any trace of our history?

These suggestions and musings are merely a basis upon which to form the best management practices should, in the worst case, the project proceed and the lands lawfully belonging to the Hawaiian Kingdom be illegally re-leased to the United States military as they continue their belligerent, prolonged occupation of the kingdom and perpetuate their continued failure to comply with international humanitarian law.

---

**Q18**

Is there anything else you would like to share?

No. Mahalo.

---

**Q19**

Respondent skipped this question

If there are any documents you would like to share, feel free to upload them here.

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Page 3: Confirmation of Participation

**Q20**

CONFIRMATION OF PARTICIPATION - I hereby understand and agree that the answers I have provided in this survey are to be included in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area.

**Yes - I understand and agree that the answers I have provided in this survey will be included in the Cultural Impact Assessment.**

---

**Q21**

OPTIONAL: If you would like to share your contact information, please do so below. This information will be redacted from your response in the CIA to protect your privacy.

████████████████████

# #16

COMPLETE

**Collector:** Pohakuloa CIA (Web Link)  
**Started:** Tuesday, December 08, 2020 10:48:37 PM  
**Last Modified:** Tuesday, December 08, 2020 11:36:37 PM  
**Time Spent:** 00:47:59  
**IP Address:** 24.165.8.243

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## Page 1: Introduction and Background

### Q1

I hereby agree to be a participant in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. I understand that part of the purpose of the CIA is to conduct oral history interviews with individuals with information about the subject property and surrounding area. I understand that Honua Consulting, LLC will retain the products of my participation (responses to this survey, etc.) for use on the project, but that I will remain owner of any of these products. I have the right to request them at any time. I understand that the material(s) will remain in the possession of Honua Consulting, LLC and that the material(s) may be used for scholarly, educational, land management, and other purposes.

**Yes, I agree to be a participant - A "yes" response will allow you to continue the survey and your answers will be included in the CIA.**

---

## Page 2: Survey Questions

### Q2

Please provide your name.

Dr. Michael Alapa'i Linnolt

### Q3

What is your current profession?

Research

### Q4

Where do you live now?

Volcano, Hawaii

**Q5**

Where were you born and raised?

New York State

---

**Q6**

Are you associated or representing a specific Native Hawaiian Organization (NHO), 'ohana, or organization in the completion of this survey? If so, please list the entity you are representing.

No.

---

**Q7**

What is your association, if any, with the Project Area?

Research, study, access restricted by US Army, interference with native Hawaiian traditional practices.

---

**Q8**

Are you aware of any traditions or customs that may take place near the Project Area or are otherwise associated with the Project Area?

Yes, native Hawaiian cultural practices.

---

**Q9**

What place names do you know for the project area or areas near or adjacent to the project area?

Ka'ohe Mauka ahupua'a, Humu'ula ahupua'a, Waimea Crown lands (1848), Keauhou Ii Nene Sanctuary, Kaohe Game Management area, Land Commission Award (LCA Helu 8521 B:1, G.D. Hueu).

---

**Q10**

Are you aware of any cultural resources in the Project Area or near the Project Area? If so, please list them below.

Unknown specifically.

---

**Q11**

Is there anything about the project area that's particularly significant you would like to share? If so, please share the information below.

TMK's 3-3-8-001-013 & 022 belong to the beneficiaries of the Hawaiian Homes Commission Act of 1921, administered by the Dept. of Hawaiian Homelands (DHHL). Removal of these lands from this inventory is prohibited by the ACT, without consultation and approval of the beneficiaries! [HHCA §228 (b)].

---

**Q12**

Are there any stories associated with the project area we should be aware of? If so, please share that information below.

Unknown.

---

**Q13**

The Department of the Army is proposing retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. The project area is comprised of Tax Map Keys 4-4-015:008; 4-4-016:005; 3-8-001:013 & 022; and 7-1-004:007 in the ahupua'a of Ka'ohe Mauka on the Island of Hawai'i. Are you aware of any resources that may be impacted by such a project? What might those impacts be?

TMK's 3-8-001-013 & 022 belong to beneficiaries of the Hawaiian Homelands. Any leasing of these lands require beneficiary approval. All these lands are close to the Keauhou Ii Nene Sanctuary, and Kaohe Game Management area, which would be negatively impacted by military bombing and other destructive activities.

---

**Q14**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

By not renewing the lease of all of these lands to the US Military! There is no great need to conduct such culturally and environmentally disruptive activities on Hawaiian lands. The military has far more space available on the US mainland to conduct destructive exercises, rather than on the limited lands of Hawaii.

---

**Q15**

Are you aware of any traditions or customs that may be impacted by such a project? What might that impacts be?

Native Hawaiian practices.

---

**Q16**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

Not renewing the leases to US military.

---

**Q17**

Do you have any recommendations for conditions or best management practices for the project, should it proceed?

It should NOT proceed.

---

**Q18**

Is there anything else you would like to share?

US military needs to release the lands on Oahu as well. The impact to Honolulu is even greater, due to the limited space and large population there!

---

**Q19**

Respondent skipped this question

If there are any documents you would like to share, feel free to upload them here.

---

Page 3: Confirmation of Participation

**Q20**

CONFIRMATION OF PARTICIPATION - I hereby understand and agree that the answers I have provided in this survey are to be included in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area.

**Yes - I understand and agree that the answers I have provided in this survey will be included in the Cultural Impact Assessment.**

**Q21**

OPTIONAL: If you would like to share your contact information, please do so below. This information will be redacted from your response in the CIA to protect your privacy.

████████████████████

#17

INCOMPLETE

**Collector:** Pohakuloa CIA (Web Link)  
**Started:** Wednesday, December 09, 2020 2:05:18 PM  
**Last Modified:** Wednesday, December 09, 2020 2:12:50 PM  
**Time Spent:** 00:07:32  
**IP Address:** 72.234.126.213

---

## Page 1: Introduction and Background

### Q1

I hereby agree to be a participant in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. I understand that part of the purpose of the CIA is to conduct oral history interviews with individuals with information about the subject property and surrounding area. I understand that Honua Consulting, LLC will retain the products of my participation (responses to this survey, etc.) for use on the project, but that I will remain owner of any of these products. I have the right to request them at any time. I understand that the material(s) will remain in the possession of Honua Consulting, LLC and that the material(s) may be used for scholarly, educational, land management, and other purposes.

**Yes, I agree to be a participant - A "yes" response will allow you to continue the survey and your answers will be included in the CIA.**

---

## Page 2: Survey Questions

### Q2

Please provide your name.

M

---

### Q3

What is your current profession?

homemaker

---

### Q4

Where do you live now?

Kamuela

---

**Q5**

Where were you born and raised?

Big Island

---

**Q6**

Are you associated or representing a specific Native Hawaiian Organization (NHO), 'ohana, or organization in the completion of this survey? If so, please list the entity you are representing.

no

---

**Q7**

What is your association, if any, with the Project Area?

none, just a resident with concerns about what PTA does to our land

---

**Q8**

Are you aware of any traditions or customs that may take place near the Project Area or are otherwise associated with the Project Area?

no

---

**Q9**

What place names do you know for the project area or areas near or adjacent to the project area?

-

---

**Q10**

Are you aware of any cultural resources in the Project Area or near the Project Area? If so, please list them below.

-

---

**Q11**

Is there anything about the project area that's particularly significant you would like to share? If so, please share the information below.

-

---

**Q12**

Are there any stories associated with the project area we should be aware of? If so, please share that information below.

-

---

**Q13**

The Department of the Army is proposing retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. The project area is comprised of Tax Map Keys 4-4-015:008; 4-4-016:005; 3-8-001:013 & 022; and 7-1-004:007 in the ahupua'a of Ka'ohe Mauka on the Island of Hawai'i. Are you aware of any resources that may be impacted by such a project? What might those impacts be?

-

---

**Q14**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

-

---

**Q15**

Are you aware of any traditions or customs that may be impacted by such a project? What might that impacts be?

-

---

**Q16**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

-

---

**Q17**

Do you have any recommendations for conditions or best management practices for the project, should it proceed?

-

---

**Q18**

Is there anything else you would like to share?

I don't support the military practices that PTA does to our land. The noise pollution, the air pollution that goes to Kona, the damage it does to our land...many many many residence feel the same way. We don't support PTA - period.

---

**Q19**

Respondent skipped this question

If there are any documents you would like to share, feel free to upload them here.

---

**Q20**

CONFIRMATION OF PARTICIPATION - I hereby understand and agree that the answers I have provided in this survey are to be included in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area.

**Yes - I understand and agree that the answers I have provided in this survey will be included in the Cultural Impact Assessment.**

**Q21**

OPTIONAL: If you would like to share your contact information, please do so below. This information will be redacted from your response in the CIA to protect your privacy.

**Respondent skipped this question**

#18

COMPLETE

**Collector:** Pohakuloa CIA (Web Link)  
**Started:** Wednesday, December 09, 2020 3:38:26 PM  
**Last Modified:** Wednesday, December 09, 2020 7:56:37 PM  
**Time Spent:** 04:18:11  
**IP Address:** 98.151.197.212

---

Page 1: Introduction and Background

**Q1**

I hereby agree to be a participant in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. I understand that part of the purpose of the CIA is to conduct oral history interviews with individuals with information about the subject property and surrounding area. I understand that Honua Consulting, LLC will retain the products of my participation (responses to this survey, etc.) for use on the project, but that I will remain owner of any of these products. I have the right to request them at any time. I understand that the material(s) will remain in the possession of Honua Consulting, LLC and that the material(s) may be used for scholarly, educational, land management, and other purposes.

**Yes, I agree to be a participant - A "yes" response will allow you to continue the survey and your answers will be included in the CIA.**

---

Page 2: Survey Questions

**Q2**

Please provide your name.

Karen Altergott

---

**Q3**

What is your current profession?

Acupuncturist

---

**Q4**

Where do you live now?

Waikoloa

---

**Q5**

Where were you born and raised?

Colorado /New York

---

**Q6**

Respondent skipped this question

Are you associated or representing a specific Native Hawaiian Organization (NHO), 'ohana, or organization in the completion of this survey? If so, please list the entity you are representing.

---

**Q7**

Respondent skipped this question

What is your association, if any, with the Project Area?

---

**Q8**

Respondent skipped this question

Are you aware of any traditions or customs that may take place near the Project Area or are otherwise associated with the Project Area?

---

**Q9**

Respondent skipped this question

What place names do you know for the project area or areas near or adjacent to the project area?

---

**Q10**

Respondent skipped this question

Are you aware of any cultural resources in the Project Area or near the Project Area? If so, please list them below.

---

**Q11**

Respondent skipped this question

Is there anything about the project area that's particularly significant you would like to share? If so, please share the information below.

---

**Q12**

Respondent skipped this question

Are there any stories associated with the project area we should be aware of? If so, please share that information below.

---

**Q13**

Respondent skipped this question

The Department of the Army is proposing retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. The project area is comprised of Tax Map Keys 4-4-015:008; 4-4-016:005; 3-8-001:013 & 022; and 7-1-004:007 in the ahupua'a of Ka'ohe Mauka on the Island of Hawai'i. Are you aware of any resources that may be impacted by such a project? What might those impacts be?

---

**Q14**

Respondent skipped this question

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

---

**Q15**

Respondent skipped this question

Are you aware of any traditions or customs that may be impacted by such a project? What might that impacts be?

---

**Q16**

Respondent skipped this question

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

---

**Q17**

Respondent skipped this question

Do you have any recommendations for conditions or best management practices for the project, should it proceed?

---

**Q18**

Is there anything else you would like to share?

Please stop bombing the land and polluting the air

---

**Q19**

Respondent skipped this question

If there are any documents you would like to share, feel free to upload them here.

---

**Q20**

CONFIRMATION OF PARTICIPATION - I hereby understand and agree that the answers I have provided in this survey are to be included in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area.

**Yes - I understand and agree that the answers I have provided in this survey will be included in the Cultural Impact Assessment.**

**Q21**

OPTIONAL: If you would like to share your contact information, please do so below. This information will be redacted from your response in the CIA to protect your privacy.

**Respondent skipped this question**

Respondent #      skipped all questions.

The survey has been excluded from this appendix  
to reduce the volume of the appendices.  
It is on file with the author and available for review upon request.

#20

COMPLETE

**Collector:** Pohakuloa CIA (Web Link)  
**Started:** Wednesday, December 09, 2020 8:27:33 PM  
**Last Modified:** Wednesday, December 09, 2020 9:10:39 PM  
**Time Spent:** 00:43:05  
**IP Address:** 204.210.100.252

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Page 1: Introduction and Background

**Q1**

I hereby agree to be a participant in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. I understand that part of the purpose of the CIA is to conduct oral history interviews with individuals with information about the subject property and surrounding area. I understand that Honua Consulting, LLC will retain the products of my participation (responses to this survey, etc.) for use on the project, but that I will remain owner of any of these products. I have the right to request them at any time. I understand that the material(s) will remain in the possession of Honua Consulting, LLC and that the material(s) may be used for scholarly, educational, land management, and other purposes.

**Yes, I agree to be a participant - A "yes" response will allow you to continue the survey and your answers will be included in the CIA.**

---

Page 2: Survey Questions

**Q2**

Please provide your name.

Ron Taylor

---

**Q3**

What is your current profession?

Retired

---

**Q4**

Where do you live now?

Pahoa, Hawaii

---

**Q5**

Where were you born and raised?

Tennessee

---

**Q6**

Are you associated or representing a specific Native Hawaiian Organization (NHO), 'ohana, or organization in the completion of this survey? If so, please list the entity you are representing.

N/A

---

**Q7**

What is your association, if any, with the Project Area?

I live on the Big Island and identify with the area in question and want it removed from the toxic pollution and destruction the U.S. Military has wreaked on this sacred area. The Military is harmful and Colonialist and should be removed from their presence and use of this sacred land! U.S. Military OUT!

---

**Q8**

Are you aware of any traditions or customs that may take place near the Project Area or are otherwise associated with the Project Area?

The whole area is considered sacred and holy to Native Hawaiians and many others. The Military is desecrating this sacred land that is part of the Hawaiian reverence for the area.

---

**Q9**

What place names do you know for the project area or areas near or adjacent to the project area?

I know it as a sacred place that is being misused and polluted and this needs to stop!

---

**Q10**

Are you aware of any cultural resources in the Project Area or near the Project Area? If so, please list them below.

The whole area is worshipped as part of the sacred area of Mauna Kea. It should be removed from Military control. Period.

---

**Q11**

Is there anything about the project area that's particularly significant you would like to share? If so, please share the information below.

The whole area is sacred to Native Hawaiians. Get the Colonialist U.S. Military out of there and off the Saddle.

---

**Q12**

Are there any stories associated with the project area we should be aware of? If so, please share that information below.

The area is talked about as sacred in many historical Hawaiian stories. It was stolen from Native Hawaiians by the Colonialist U.S. govt. Return it to it's rightful owners!

---

**Q13**

The Department of the Army is proposing retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. The project area is comprised of Tax Map Keys 4-4-015:008; 4-4-016:005; 3-8-001:013 & 022; and 7-1-004:007 in the ahupua'a of Ka'ohe Mauka on the Island of Hawai'i. Are you aware of any resources that may be impacted by such a project? What might those impacts be?

The ability to access and protect this sacred land by Native Hawaiians would be destroyed by letting the Military retain control of an area they have repeatedly polluted and desecrated. The impact is simple and already seen as the U.S. Military keeps destroying native fauna and leaving toxins every where they touch the land. That's a pretty negative impact and interferes with Native Hawaiian culture and belief and ritual ceremonies and practices.. U.S. Military out!

---

**Q14**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

Easy. Remove the U.S. Military from control and oppressive occupation of this sacred land.

---

**Q15**

Are you aware of any traditions or customs that may be impacted by such a project? What might that impacts be?

Remove the Military, their presence is 100% blocking all sacred rituals of the Hawaiian people.

---

**Q16**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

Remove the U.S. Military presence and control of the land. Return it to Native Hawaiians. That would fix everything.

---

**Q17**

Do you have any recommendations for conditions or best management practices for the project, should it proceed?

The U.S. Military has ruined the land with toxins and toxic evil behaviors. Give the land back to Native Hawaiians to cleanse and return to it's original sacred status.

---

**Q18**

Is there anything else you would like to share?

End the Military occupation and end the desecration of our sacred Mauna Kea/Mauna Loa. Return the land to Native Hawaiians.

---

**Q19**

Respondent skipped this question

If there are any documents you would like to share, feel free to upload them here.

---

Page 3: Confirmation of Participation

**Q20**

CONFIRMATION OF PARTICIPATION - I hereby understand and agree that the answers I have provided in this survey are to be included in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area.

**Yes - I understand and agree that the answers I have provided in this survey will be included in the Cultural Impact Assessment.**

**Q21**

OPTIONAL: If you would like to share your contact information, please do so below. This information will be redacted from your response in the CIA to protect your privacy.

████████████████████

#21

COMPLETE

**Collector:** Pohakuloa CIA (Web Link)  
**Started:** Thursday, December 10, 2020 5:59:48 AM  
**Last Modified:** Thursday, December 10, 2020 6:27:28 AM  
**Time Spent:** 00:27:40  
**IP Address:** 66.91.2.90

---

## Page 1: Introduction and Background

### Q1

I hereby agree to be a participant in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. I understand that part of the purpose of the CIA is to conduct oral history interviews with individuals with information about the subject property and surrounding area. I understand that Honua Consulting, LLC will retain the products of my participation (responses to this survey, etc.) for use on the project, but that I will remain owner of any of these products. I have the right to request them at any time. I understand that the material(s) will remain in the possession of Honua Consulting, LLC and that the material(s) may be used for scholarly, educational, land management, and other purposes.

**Yes, I agree to be a participant - A "yes" response will allow you to continue the survey and your answers will be included in the CIA.**

---

## Page 2: Survey Questions

### Q2

Please provide your name.

Jeff

---

### Q3

What is your current profession?

retired

---

### Q4

Where do you live now?

Hilo

---

**Q5**

Where were you born and raised?

Iowa

---

**Q6**

Are you associated or representing a specific Native Hawaiian Organization (NHO), 'ohana, or organization in the completion of this survey? If so, please list the entity you are representing.

no

---

**Q7**

What is your association, if any, with the Project Area?

resident of Moku o Keawe

---

**Q8**

Are you aware of any traditions or customs that may take place near the Project Area or are otherwise associated with the Project Area?

yes

---

**Q9**

What place names do you know for the project area or areas near or adjacent to the project area?

the entirety of Hawaii Island is sacred in traditional Hawaiian culture and U.S. military presence here is harmful, illegal desecration

---

**Q10**

Are you aware of any cultural resources in the Project Area or near the Project Area? If so, please list them below.

endemic plants, petroglyphs, endemic birds, endemic insects, endemic people who inhabited the region until the illegal U.S. overthrow of the Kingdom of Hawaii

---

**Q11**

Is there anything about the project area that's particularly significant you would like to share? If so, please share the information below.

This is sacred ground that should be restored to its natural condition then left by the U.S. military

---

**Q12**

Are there any stories associated with the project area we should be aware of? If so, please share that information below.

There was no treaty if acquisition, which means it was never legal under U.S. law for Hawaii to become a state. 78% of Hawaiian s signed a petition requesting the Queen be reinstated. Hawaiians weren't who voted for statehood, it was plantation workers and owners who got to vote. An entire, independent country became an ilkegal state without its citizens getting a vote. Even the United Nations has called Hawaii a "strange" colony of the U.S.

---

**Q13**

The Department of the Army is proposing retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. The project area is comprised of Tax Map Keys 4-4-015:008; 4-4-016:005; 3-8-001:013 & 022; and 7-1-004:007 in the ahupua'a of Ka'ohe Mauka on the Island of Hawai'i.Are you aware of any resources that may be impacted by such a project? What might those impacts be?

Endemic trees, birds, plants, insects. Ability of Hawaiian people to inhabite the island placed here for them and to use natural resources safely

---

**Q14**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

Yes. Keep the U.S. Army off the islands entirely, since it was military action by the U.S. that overthrew the Queen illegally.

---

**Q15**

Are you aware of any traditions or customs that may be impacted by such a project? What might that impacts be?

All traditional customs will be impacted. Prove the U.S. military has legal right to be on the islands under U.S. and international law or get out.

---

**Q16**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

Yes. Leave the islands (after restoring to pristine condition).

---

**Q17**

Do you have any recommendations for conditions or best management practices for the project, should it proceed?

Require zero impact on endemic plants, birds, insects, humans or environment.

---

**Q18**

Is there anything else you would like to share?

Please leave the islands altogether. You were never meant to be here.

---

**Q19**

Respondent skipped this question

If there are any documents you would like to share, feel free to upload them here.

---

Page 3: Confirmation of Participation

**Q20**

**Yes - I understand and agree that the answers I have provided in this survey will be included in the Cultural Impact Assessment.**

CONFIRMATION OF PARTICIPATION - I hereby understand and agree that the answers I have provided in this survey are to be included in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area.

---

**Q21**

Respondent skipped this question

OPTIONAL: If you would like to share your contact information, please do so below. This information will be redacted from your response in the CIA to protect your privacy.

---

#22

INCOMPLETE

**Collector:** Pohakuloa CIA (Web Link)  
**Started:** Thursday, December 10, 2020 3:42:04 PM  
**Last Modified:** Thursday, December 10, 2020 3:49:35 PM  
**Time Spent:** 00:07:31  
**IP Address:** 174.248.252.233

---

## Page 1: Introduction and Background

### Q1

I hereby agree to be a participant in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. I understand that part of the purpose of the CIA is to conduct oral history interviews with individuals with information about the subject property and surrounding area. I understand that Honua Consulting, LLC will retain the products of my participation (responses to this survey, etc.) for use on the project, but that I will remain owner of any of these products. I have the right to request them at any time. I understand that the material(s) will remain in the possession of Honua Consulting, LLC and that the material(s) may be used for scholarly, educational, land management, and other purposes.

**Yes, I agree to be a participant - A "yes" response will allow you to continue the survey and your answers will be included in the CIA.**

---

## Page 2: Survey Questions

### Q2

Please provide your name.

Eila

### Q3

What is your current profession?

Private investor and small business owner

### Q4

Where do you live now?

Hawi, Hawaii

---

**Q5**

Where were you born and raised?

New York

---

**Q6**

Are you associated or representing a specific Native Hawaiian Organization (NHO), 'ohana, or organization in the completion of this survey? If so, please list the entity you are representing.

No

---

**Q7**

What is your association, if any, with the Project Area?

I live on the island

---

**Q8**

Are you aware of any traditions or customs that may take place near the Project Area or are otherwise associated with the Project Area?

No

---

**Q9**

What place names do you know for the project area or areas near or adjacent to the project area?

Mauna Kea park

---

**Q10**

Are you aware of any cultural resources in the Project Area or near the Project Area? If so, please list them below.

No

---

**Q11**

Is there anything about the project area that's particularly significant you would like to share? If so, please share the information below.

I would like the bombing to stop. It is time to focus on peaceful solutions to problems in our world.

---

**Q12**

Are there any stories associated with the project area we should be aware of? If so, please share that information below.

Some years ago a friend of mine told me that she lived here in the 1960s and that there were some poisonous effects from the military happenings up by Mauna Kea

---

**Q13**

The Department of the Army is proposing retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. The project area is comprised of Tax Map Keys 4-4-015:008; 4-4-016:005; 3-8-001:013 & 022; and 7-1-004:007 in the ahupua'a of Ka'ohe Mauka on the Island of Hawai'i. Are you aware of any resources that may be impacted by such a project? What might those impacts be?

Bombing the land has no positive impact on the earth. It kills whatever is in its way. It is only destructive. It is most likely going to have a negative impact on the ground water

---

**Q14**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

Cease all bombing practices

---

**Q15**

Are you aware of any traditions or customs that may be impacted by such a project? What might that impacts be?

No one except the military is allowed on the land so it impacts all of us. We're not allowed to hike or walk anywhere near there

---

**Q16**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

Stop bombing

---

**Q17**

Do you have any recommendations for conditions or best management practices for the project, should it proceed?

Offer up many community meetings to get feedback from the people who live on Hawaii Island. If we cannot meet in person have meetings on zoom. But you also need to reach out to people who do not have access to computer technology

---

**Q18**

Is there anything else you would like to share?

No

---

**Q19**

**Respondent skipped this question**

If there are any documents you would like to share, feel free to upload them here.

---

---

**Q20**

CONFIRMATION OF PARTICIPATION - I hereby understand and agree that the answers I have provided in this survey are to be included in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area.

**Yes - I understand and agree that the answers I have provided in this survey will be included in the Cultural Impact Assessment.**

**Q21**

OPTIONAL: If you would like to share your contact information, please do so below. This information will be redacted from your response in the CIA to protect your privacy.

**Respondent skipped this question**

#23

COMPLETE

**Collector:** Pohakuloa CIA (Web Link)  
**Started:** Thursday, December 10, 2020 9:22:47 AM  
**Last Modified:** Thursday, December 10, 2020 4:19:05 PM  
**Time Spent:** 06:56:18  
**IP Address:** 98.155.51.14

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## Page 1: Introduction and Background

### Q1

I hereby agree to be a participant in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. I understand that part of the purpose of the CIA is to conduct oral history interviews with individuals with information about the subject property and surrounding area. I understand that Honua Consulting, LLC will retain the products of my participation (responses to this survey, etc.) for use on the project, but that I will remain owner of any of these products. I have the right to request them at any time. I understand that the material(s) will remain in the possession of Honua Consulting, LLC and that the material(s) may be used for scholarly, educational, land management, and other purposes.

**Yes, I agree to be a participant - A "yes" response will allow you to continue the survey and your answers will be included in the CIA.**

---

## Page 2: Survey Questions

### Q2

Please provide your name.

Jane Taylor

---

### Q3

What is your current profession?

Retired teacher and current caregiver

---

### Q4

Where do you live now?

Waimea

**Q5**

Where were you born and raised?

Been here since 1954. Born mainland 1950 so raised here.

---

**Q6**

Are you associated or representing a specific Native Hawaiian Organization (NHO), 'ohana, or organization in the completion of this survey? If so, please list the entity you are representing.

No

---

**Q7**

What is your association, if any, with the Project Area?

I live on the island, hear the noise, breath the air, and love the mountains. I see the water at Kiholo and have learned much of it comes from the mountain areas.

---

**Q8**

Are you aware of any traditions or customs that may take place near the Project Area or are otherwise associated with the Project Area?

I have friends who go for traditional reasons but I don't. My relationship with the area is more about keeping the environment pristine

---

**Q9**

**Respondent skipped this question**

What place names do you know for the project area or areas near or adjacent to the project area?

---

**Q10**

**Respondent skipped this question**

Are you aware of any cultural resources in the Project Area or near the Project Area? If so, please list them below.

---

**Q11**

Is there anything about the project area that's particularly significant you would like to share? If so, please share the information below.

This place is unique in the entire world. Why on earth would we bomb such a place? It is an inappropriate place for such training.

---

**Q12**

**Respondent skipped this question**

Are there any stories associated with the project area we should be aware of? If so, please share that information below.

---

**Q13**

The Department of the Army is proposing retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. The project area is comprised of Tax Map Keys 4-4-015:008; 4-4-016:005; 3-8-001:013 & 022; and 7-1-004:007 in the ahupua'a of Ka'ohe Mauka on the Island of Hawai'i. Are you aware of any resources that may be impacted by such a project? What might those impacts be?

It is not a matter of resources. It is a matter of protecting an absolutely unique ecosystem.

---

**Q14**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

Make it a national park and stop bombing in it.

---

**Q15**

Respondent skipped this question

Are you aware of any traditions or customs that may be impacted by such a project? What might that impacts be?

---

**Q16**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

Make it a national Park and stop bombing in it.

---

**Q17**

Do you have any recommendations for conditions or best management practices for the project, should it proceed?

Finish cleaning up the mess you left before such as the depleted uranium etc. and then don't make anymore.

---

**Q18**

Is there anything else you would like to share?

Once again, I would like to say that uniquely uniquely situated spot such as this in a tiny island chain with situations that don't exist anywhere else in the world is an inappropriate place for any military activity.

---

**Q19**

Respondent skipped this question

If there are any documents you would like to share, feel free to upload them here.

---

**Q20**

CONFIRMATION OF PARTICIPATION - I hereby understand and agree that the answers I have provided in this survey are to be included in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area.

**Yes - I understand and agree that the answers I have provided in this survey will be included in the Cultural Impact Assessment.**

**Q21**

OPTIONAL: If you would like to share your contact information, please do so below. This information will be redacted from your response in the CIA to protect your privacy.

**Respondent skipped this question**

Respondent #   skipped all questions.

The survey has been excluded from this appendix  
to reduce the volume of the appendices.  
It is on file with the author and available for review upon request.

#25

COMPLETE

**Collector:** Pohakuloa CIA (Web Link)  
**Started:** Thursday, December 10, 2020 11:51:37 AM  
**Last Modified:** Thursday, December 10, 2020 4:44:21 PM  
**Time Spent:** 04:52:43  
**IP Address:** 107.77.229.127

---

## Page 1: Introduction and Background

### Q1

I hereby agree to be a participant in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. I understand that part of the purpose of the CIA is to conduct oral history interviews with individuals with information about the subject property and surrounding area. I understand that Honua Consulting, LLC will retain the products of my participation (responses to this survey, etc.) for use on the project, but that I will remain owner of any of these products. I have the right to request them at any time. I understand that the material(s) will remain in the possession of Honua Consulting, LLC and that the material(s) may be used for scholarly, educational, land management, and other purposes.

**Yes, I agree to be a participant - A "yes" response will allow you to continue the survey and your answers will be included in the CIA.**

---

## Page 2: Survey Questions

### Q2

Please provide your name.

Paul Kuykendall

### Q3

What is your current profession?

farmer

### Q4

Where do you live now?

Puna makai hawaii

**Q5**

Where were you born and raised?

California, hi

---

**Q6**

Are you associated or representing a specific Native Hawaiian Organization (NHO), 'ohana, or organization in the completion of this survey? If so, please list the entity you are representing.

Waihu O Puna Watershed Coalition

---

**Q7**

What is your association, if any, with the Project Area?

My home and farm is in Puna. What happens there affects the dust and water that flows throughout the island. I also drive past there regularly.

---

**Q8**

Are you aware of any traditions or customs that may take place near the Project Area or are otherwise associated with the Project Area?

Yes, Hawaiians conduct cultural activities near the project area.

---

**Q9**

What place names do you know for the project area or areas near or adjacent to the project area?

Mauna Loa, Mauna Kea, Hualālai, Pu'ukea, Pu'ukapele, pu'uma'au, Napu'ukūlua, Omakoili

---

**Q10**

Are you aware of any cultural resources in the Project Area or near the Project Area? If so, please list them below.

Yes, burial grounds, heiau

---

**Q11**

**Respondent skipped this question**

Is there anything about the project area that's particularly significant you would like to share? If so, please share the information below.

---

**Q12**

**Respondent skipped this question**

Are there any stories associated with the project area we should be aware of? If so, please share that information below.

---

**Q13**

Respondent skipped this question

The Department of the Army is proposing retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. The project area is comprised of Tax Map Keys 4-4-015:008; 4-4-016:005; 3-8-001:013 & 022; and 7-1-004:007 in the ahupua'a of Ka'ohē Mauka on the Island of Hawai'i. Are you aware of any resources that may be impacted by such a project? What might those impacts be?

---

**Q14**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

Do not renew the lease and return the area to Hawaiian control

---

**Q15**

Are you aware of any traditions or customs that may be impacted by such a project? What might that impacts be?

Fencing off an area with Hawaiian cultural areas and bombing it has a huge impact on the people and the 'aina.

---

**Q16**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

The only way to avoid the potential impacts is not to renew the lease.

---

**Q17**

Do you have any recommendations for conditions or best management practices for the project, should it proceed?

The best management practice would be to not renew the lease and return the area to the Hawaiians who will malama the area rather than bombing it.

---

**Q18**

Respondent skipped this question

Is there anything else you would like to share?

---

**Q19**

Respondent skipped this question

If there are any documents you would like to share, feel free to upload them here.

---

---

**Q20**

CONFIRMATION OF PARTICIPATION - I hereby understand and agree that the answers I have provided in this survey are to be included in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area.

**Yes - I understand and agree that the answers I have provided in this survey will be included in the Cultural Impact Assessment.**

**Q21**

OPTIONAL: If you would like to share your contact information, please do so below. This information will be redacted from your response in the CIA to protect your privacy.

**Respondent skipped this question**

#26

INCOMPLETE

**Collector:** Pohakuloa CIA (Web Link)  
**Started:** Thursday, December 10, 2020 7:34:24 PM  
**Last Modified:** Thursday, December 10, 2020 7:46:48 PM  
**Time Spent:** 00:12:24  
**IP Address:** 76.173.3.8

---

## Page 1: Introduction and Background

### Q1

I hereby agree to be a participant in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. I understand that part of the purpose of the CIA is to conduct oral history interviews with individuals with information about the subject property and surrounding area. I understand that Honua Consulting, LLC will retain the products of my participation (responses to this survey, etc.) for use on the project, but that I will remain owner of any of these products. I have the right to request them at any time. I understand that the material(s) will remain in the possession of Honua Consulting, LLC and that the material(s) may be used for scholarly, educational, land management, and other purposes.

**Yes, I agree to be a participant - A "yes" response will allow you to continue the survey and your answers will be included in the CIA.**

---

## Page 2: Survey Questions

### Q2

Please provide your name.

Sarah

### Q3

What is your current profession?

Chef & Farmer

### Q4

Where do you live now?

Kamuela

**Q5**

Where were you born and raised?

Planet Earth

---

**Q6**

Respondent skipped this question

Are you associated or representing a specific Native Hawaiian Organization (NHO), 'ohana, or organization in the completion of this survey? If so, please list the entity you are representing.

---

**Q7**

What is your association, if any, with the Project Area?

This is my home.

---

**Q8**

Are you aware of any traditions or customs that may take place near the Project Area or are otherwise associated with the Project Area?

The water in this area brings life to plants and animals. We must honor the land and take care of the earth.

---

**Q9**

Respondent skipped this question

What place names do you know for the project area or areas near or adjacent to the project area?

---

**Q10**

Are you aware of any cultural resources in the Project Area or near the Project Area? If so, please list them below.

Yes, water and natural resources.

---

**Q11**

Is there anything about the project area that's particularly significant you would like to share? If so, please share the information below.

The water and natural environment must be protected.

---

**Q12**

Respondent skipped this question

Are there any stories associated with the project area we should be aware of? If so, please share that information below.

---

**Q13**

The Department of the Army is proposing retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. The project area is comprised of Tax Map Keys 4-4-015:008; 4-4-016:005; 3-8-001:013 & 022; and 7-1-004:007 in the ahupua'a of Ka'ohe Mauka on the Island of Hawai'i. Are you aware of any resources that may be impacted by such a project? What might those impacts be?

Yes, ahupua'a of Ka'ohe feeds many people. If you contaminate this area, you are responsible for poisoning those people and any future visitors to the area. Further, the Department of the Army would be responsible for any contaminants that are carried away in rainwater and runoff downstream.

---

**Q14**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

Cancel your plans. Leave the area in its natural state.

---

**Q15**

Respondent skipped this question

Are you aware of any traditions or customs that may be impacted by such a project? What might that impacts be?

---

**Q16**

Respondent skipped this question

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

---

**Q17**

Respondent skipped this question

Do you have any recommendations for conditions or best management practices for the project, should it proceed?

---

**Q18**

Is there anything else you would like to share?

We are living in a time of great destruction. The pandemic is a direct result of man's ignorance. If we are to have a home on earth- We must create spaces of sanctuary and care for the environment. If you want to do the best with this land, then work on creating a place of sanctuary. Protect the land.

---

**Q19**

Respondent skipped this question

If there are any documents you would like to share, feel free to upload them here.

---

**Q20**

CONFIRMATION OF PARTICIPATION - I hereby understand and agree that the answers I have provided in this survey are to be included in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area.

**Yes - I understand and agree that the answers I have provided in this survey will be included in the Cultural Impact Assessment.**

**Q21**

OPTIONAL: If you would like to share your contact information, please do so below. This information will be redacted from your response in the CIA to protect your privacy.

**Respondent skipped this question**

Respondent #      skipped all questions.

The survey has been excluded from this appendix  
to reduce the volume of the appendices.  
It is on file with the author and available for review upon request.

#28

COMPLETE

**Collector:** Pohakuloa CIA (Web Link)  
**Started:** Friday, December 11, 2020 10:26:02 AM  
**Last Modified:** Friday, December 11, 2020 10:47:57 AM  
**Time Spent:** 00:21:55  
**IP Address:** 174.233.0.180

---

## Page 1: Introduction and Background

### Q1

I hereby agree to be a participant in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. I understand that part of the purpose of the CIA is to conduct oral history interviews with individuals with information about the subject property and surrounding area. I understand that Honua Consulting, LLC will retain the products of my participation (responses to this survey, etc.) for use on the project, but that I will remain owner of any of these products. I have the right to request them at any time. I understand that the material(s) will remain in the possession of Honua Consulting, LLC and that the material(s) may be used for scholarly, educational, land management, and other purposes.

**Yes, I agree to be a participant - A "yes" response will allow you to continue the survey and your answers will be included in the CIA.**

---

## Page 2: Survey Questions

### Q2

Please provide your name.

Patricia Tompkins

### Q3

What is your current profession?

Retired State of Hawai'i employee

### Q4

Where do you live now?

Fayetteville Ohio

---

**Q5**

Where were you born and raised?

Lis Angeles CA

---

**Q6**

Are you associated or representing a specific Native Hawaiian Organization (NHO), 'ohana, or organization in the completion of this survey? If so, please list the entity you are representing.

No

---

**Q7**

What is your association, if any, with the Project Area?

I have been to the "Project Area" many times over the period of 27 years I lived and worked in Hawai'i from 1992-2020

---

**Q8**

Are you aware of any traditions or customs that may take place near the Project Area or are otherwise associated with the Project Area?

Yes

---

**Q9**

What place names do you know for the project area or areas near or adjacent to the project area?

Pohakuloa. Kohala.

---

**Q10**

Are you aware of any cultural resources in the Project Area or near the Project Area? If so, please list them below.

Hunting. Fishing. Early settlements including farming, living, religious practices. There are many caves where people lived. Many ancient walls and agricultural sites. Also trails and pathways.

---

**Q11**

Is there anything about the project area that's particularly significant you would like to share? If so, please share the information below.

Ancient and historical sites for hunting, fishing, living, worship, observing stars and planetary movement.

---

**Q12**

Are there any stories associated with the project area we should be aware of? If so, please share that information below.

Yes. See booklists available thru the University of Hawai'i at Manoa and Hilo.

---

**Q13**

The Department of the Army is proposing retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. The project area is comprised of Tax Map Keys 4-4-015:008; 4-4-016:005; 3-8-001:013 & 022; and 7-1-004:007 in the ahupua'a of Ka'ohe Mauka on the Island of Hawai'i. Are you aware of any resources that may be impacted by such a project? What might those impacts be?

Numerous cultural sites. I was part of a University of Hawai'i workgroup which did mapping & excavation of sites in the late 1990's. We were allowed on the site but were usually accompanied by a representative employed by the Army. Damage to the area from shelling and other military activity was evident almost everywhere we worked

---

**Q14**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

1. Have the military vacate the property.
  2. If allowed to remain require the on site presence of an archeologist to survey and inspect sites and botanist to do the same for endangered species. And to then require mitigation measures to be developed and put in place and maintained.
  3. Require the notary to pay a fair market rates with appropriate increases.
  4. Make those leases for short terms with right of renewal/extension at the sole discretion of the DLNR or whoever is the signatory to the lease.
- 

**Q15**

Are you aware of any traditions or customs that may be impacted by such a project? What might that impacts be?

Only bad impacts such as not allowing free access, decimation of cultural sites loss of historical physical documentation.m which may be u known at the present time.

---

**Q16**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

No. As long as the military is allowed free reign, shelling etc. known and unknown sites will be lost

---

**Q17**

Do you have any recommendations for conditions or best management practices for the project, should it proceed?

Monitoring, monitoring, monitoring. And adequate funding of all mitigation measures.

---

**Q18**

Is there anything else you would like to share?

The military is getting/taking a free ride in many areas in the islands such as Pohakuloa and Makua. It needs to stop.

---

**Q19**

Respondent skipped this question

If there are any documents you would like to share, feel free to upload them here.

---



#29

COMPLETE

**Collector:** Pohakuloa CIA (Web Link)  
**Started:** Friday, December 11, 2020 9:09:56 AM  
**Last Modified:** Saturday, December 12, 2020 8:30:41 AM  
**Time Spent:** 23:20:45  
**IP Address:** 172.56.44.114

---

Page 1: Introduction and Background

**Q1**

I hereby agree to be a participant in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. I understand that part of the purpose of the CIA is to conduct oral history interviews with individuals with information about the subject property and surrounding area. I understand that Honua Consulting, LLC will retain the products of my participation (responses to this survey, etc.) for use on the project, but that I will remain owner of any of these products. I have the right to request them at any time. I understand that the material(s) will remain in the possession of Honua Consulting, LLC and that the material(s) may be used for scholarly, educational, land management, and other purposes.

**Yes, I agree to be a participant - A "yes" response will allow you to continue the survey and your answers will be included in the CIA.**

---

Page 2: Survey Questions

**Q2**

Please provide your name.

Abraham Keola Cortes kaleopaa

**Q3**

What is your current profession?

Postage

**Q4**

Where do you live now?

Kurtistown hawaii

---

**Q5**

Where were you born and raised?

Born in Honolulu/ raised in MT. View hawaii

---

**Q6**

Are you associated or representing a specific Native Hawaiian Organization (NHO), 'ohana, or organization in the completion of this survey? If so, please list the entity you are representing.

Hawaiian kingdom task Force (HKTF) is a native Hawaiian organization with the Department of Interior Independent District Of Puna (IDP) also a native Hawaiian organization with the Department of Interior

---

**Q7**

What is your association, if any, with the Project Area?

43 CFR section 50 reestablishing the government to government relations withering the United states

---

**Q8**

Are you aware of any traditions or customs that may take place near the Project Area or are otherwise associated with the Project Area?

We are currently working with other native Hawaiian organizations in regard to traditions and customs

---

**Q9**

What place names do you know for the project area or areas near or adjacent to the project area?

Also working with other native Hawaiian organizations familiar with the aspect of names in the project area

---

**Q10**

Are you aware of any cultural resources in the Project Area or near the Project Area? If so, please list them below.

We are familiar with the watershed and conservation of aquifers under the slopes of Maunakea and Mauna Loa

---

**Q11**

Is there anything about the project area that's particularly significant you would like to share? If so, please share the information below.

Currently in consultation with other native Hawaiian organizations pertaining to that matter

---

**Q12**

Are there any stories associated with the project area we should be aware of? If so, please share that information below.

Native Hawaiian organization related to this will be assistance for us as we proceed

---

**Q13**

The Department of the Army is proposing retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. The project area is comprised of Tax Map Keys 4-4-015:008; 4-4-016:005; 3-8-001:013 & 022; and 7-1-004:007 in the ahupua'a of Ka'ōhe Mauka on the Island of Hawai'i. Are you aware of any resources that may be impacted by such a project? What might those impacts be?

Water resources and contamination of those waters

---

**Q14**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

With diplomacy

---

**Q15**

Are you aware of any traditions or customs that may be impacted by such a project? What might that impacts be?

Mamalahoakanawai

---

**Q16**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

Diplomacy

---

**Q17**

Do you have any recommendations for conditions or best management practices for the project, should it proceed?

We propose that native Hawaiian organization Hawaiian Kingdom Task Force facilities be created within the project area as an oversight committee and to partake with the United States military in regards to the project.

---

**Q18**

Is there anything else you would like to share?

Under DoD instructions 4710.03 We here at IDP/HKTF would like to continue a mutual agreement for reestablishing a formal government to government relationships

---

**Q19**

Respondent skipped this question

If there are any documents you would like to share, feel free to upload them here.

---

Page 3: Confirmation of Participation

**Q20**

CONFIRMATION OF PARTICIPATION - I hereby understand and agree that the answers I have provided in this survey are to be included in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area.

**Yes - I understand and agree that the answers I have provided in this survey will be included in the Cultural Impact Assessment.**

**Q21**

OPTIONAL: If you would like to share your contact information, please do so below. This information will be redacted from your response in the CIA to protect your privacy.

Respondent skipped this question

Respondent #      skipped all questions.

The survey has been excluded from this appendix  
to reduce the volume of the appendices.  
It is on file with the author and available for review upon request.

#31

COMPLETE

**Collector:** Pohakuloa CIA (Web Link)  
**Started:** Sunday, December 13, 2020 1:25:50 PM  
**Last Modified:** Sunday, December 13, 2020 1:35:18 PM  
**Time Spent:** 00:09:28  
**IP Address:** 66.91.124.247

---

## Page 1: Introduction and Background

### Q1

I hereby agree to be a participant in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. I understand that part of the purpose of the CIA is to conduct oral history interviews with individuals with information about the subject property and surrounding area. I understand that Honua Consulting, LLC will retain the products of my participation (responses to this survey, etc.) for use on the project, but that I will remain owner of any of these products. I have the right to request them at any time. I understand that the material(s) will remain in the possession of Honua Consulting, LLC and that the material(s) may be used for scholarly, educational, land management, and other purposes.

**Yes, I agree to be a participant - A "yes" response will allow you to continue the survey and your answers will be included in the CIA.**

---

## Page 2: Survey Questions

### Q2

Please provide your name.

Maryann Broyles

### Q3

What is your current profession?

Massage therapist

### Q4

Where do you live now?

Honokaa

**Q5**

Where were you born and raised?

Illinois

---

**Q6**

Are you associated or representing a specific Native Hawaiian Organization (NHO), 'ohana, or organization in the completion of this survey? If so, please list the entity you are representing.

No

---

**Q7**

What is your association, if any, with the Project Area?

I love it it is sacred ground it is my neighborhood

---

**Q8**

Are you aware of any traditions or customs that may take place near the Project Area or are otherwise associated with the Project Area?

Not formal  
Just that they are ceremonial

---

**Q9**

What place names do you know for the project area or areas near or adjacent to the project area?

Waikoloa and Waimea

---

**Q10**

Are you aware of any cultural resources in the Project Area or near the Project Area? If so, please list them below.

Ohio trees and temples

---

**Q11**

Is there anything about the project area that's particularly significant you would like to share? If so, please share the information below.

It is very close to to 2 towns and the military activities are very disturbing

---

**Q12**

Are there any stories associated with the project area we should be aware of? If so, please share that information below.

Loud bombs and fires. Shaking the ground and very upsetting to people

---

**Q13**

The Department of the Army is proposing retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. The project area is comprised of Tax Map Keys 4-4-015:008; 4-4-016:005; 3-8-001:013 & 022; and 7-1-004:007 in the ahupua'a of Ka'ohe Mauka on the Island of Hawai'i. Are you aware of any resources that may be impacted by such a project? What might those impacts be?

The bombing is toxic as well as the noise and nature

---

**Q14**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

Stop bombing and playing war games there and not lease any more of this land to them

---

**Q15**

Are you aware of any traditions or customs that may be impacted by such a project? What might that impacts be?

Ceremony by the hawaiiians

---

**Q16**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

Stop the military activity here

---

**Q17**

Do you have any recommendations for conditions or best management practices for the project, should it proceed?

Managed by a environmental group

---

**Q18**

Is there anything else you would like to share?

Delay the lease approval till, more people know and have a chance to voice their concerns

---

**Q19**

Respondent skipped this question

If there are any documents you would like to share, feel free to upload them here.

---

**Q20**

CONFIRMATION OF PARTICIPATION - I hereby understand and agree that the answers I have provided in this survey are to be included in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area.

**Yes - I understand and agree that the answers I have provided in this survey will be included in the Cultural Impact Assessment.**

**Q21**

OPTIONAL: If you would like to share your contact information, please do so below. This information will be redacted from your response in the CIA to protect your privacy.

**Respondent skipped this question**

Respondent #      skipped all questions.

The survey has been excluded from this appendix  
to reduce the volume of the appendices.  
It is on file with the author and available for review upon request.

Respondent #   skipped all questions.

The survey has been excluded from this appendix  
to reduce the volume of the appendices.  
It is on file with the author and available for review upon request.

#34

COMPLETE

**Collector:** Pohakuloa CIA (Web Link)  
**Started:** Monday, December 14, 2020 11:43:43 AM  
**Last Modified:** Monday, December 14, 2020 12:01:24 PM  
**Time Spent:** 00:17:40  
**IP Address:** 24.94.67.11

---

## Page 1: Introduction and Background

### Q1

I hereby agree to be a participant in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. I understand that part of the purpose of the CIA is to conduct oral history interviews with individuals with information about the subject property and surrounding area. I understand that Honua Consulting, LLC will retain the products of my participation (responses to this survey, etc.) for use on the project, but that I will remain owner of any of these products. I have the right to request them at any time. I understand that the material(s) will remain in the possession of Honua Consulting, LLC and that the material(s) may be used for scholarly, educational, land management, and other purposes.

**Yes, I agree to be a participant - A "yes" response will allow you to continue the survey and your answers will be included in the CIA.**

---

## Page 2: Survey Questions

### Q2

Please provide your name.

Ross Perrins

### Q3

What is your current profession?

Retired

### Q4

Where do you live now?

Honokaa

**Q5**

Where were you born and raised?

In Connecticut

---

**Q6**

Are you associated or representing a specific Native Hawaiian Organization (NHO), 'ohana, or organization in the completion of this survey? If so, please list the entity you are representing.

No

---

**Q7**

What is your association, if any, with the Project Area?

a resident and landowner on the Big Island

---

**Q8**

Are you aware of any traditions or customs that may take place near the Project Area or are otherwise associated with the Project Area?

no

---

**Q9**

What place names do you know for the project area or areas near or adjacent to the project area?

none

---

**Q10**

Respondent skipped this question

Are you aware of any cultural resources in the Project Area or near the Project Area? If so, please list them below.

---

**Q11**

Respondent skipped this question

Is there anything about the project area that's particularly significant you would like to share? If so, please share the information below.

---

**Q12**

Respondent skipped this question

Are there any stories associated with the project area we should be aware of? If so, please share that information below.

---

**Q13**

The Department of the Army is proposing retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. The project area is comprised of Tax Map Keys 4-4-015:008; 4-4-016:005; 3-8-001:013 & 022; and 7-1-004:007 in the ahupua'a of Ka'ohe Mauka on the Island of Hawai'i. Are you aware of any resources that may be impacted by such a project? What might those impacts be?

Water, Land abuse, Toxic waste, erosion, and potential historic artifacts

---

**Q14**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

No. And based on past practices, the military cannot be relied on to prevent or remedy such occurrences

---

**Q15**

Are you aware of any traditions or customs that may be impacted by such a project? What might that impacts be?

The proper handling of significant artifacts and burial remains, have been and continue to be mishandled by authorities. I see neither any acknowledgment nor any behavior changes unless monitored and enforced by an agency outside of the government.

---

**Q16**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

Only the constant monitoring of ALL military activities by outside agencies such as OHA could possibly prevent damaging impacts.

---

**Q17**

Do you have any recommendations for conditions or best management practices for the project, should it proceed?

Constant Monitoring with halting power in all operations.  
But realistically? No! Not at all.

---

**Q18**

Is there anything else you would like to share?

Our military has still not cleaned up their previous destruction. They continue to damage our environment to this day. Increasing their domain is moving in the wrong direction.  
They have not adequately justified their need for this land abuse.

---

**Q19**

Respondent skipped this question

If there are any documents you would like to share, feel free to upload them here.

---

**Q20**

CONFIRMATION OF PARTICIPATION - I hereby understand and agree that the answers I have provided in this survey are to be included in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area.

**Yes - I understand and agree that the answers I have provided in this survey will be included in the Cultural Impact Assessment.**

**Q21**

OPTIONAL: If you would like to share your contact information, please do so below. This information will be redacted from your response in the CIA to protect your privacy.

**Respondent skipped this question**

Respondent #      skipped all questions.

The survey has been excluded from this appendix  
to reduce the volume of the appendices.  
It is on file with the author and available for review upon request.

Respondent #      skipped all questions.

The survey has been excluded from this appendix  
to reduce the volume of the appendices.  
It is on file with the author and available for review upon request.

Respondent #      skipped all questions.

The survey has been excluded from this appendix  
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Respondent #      skipped all questions.

The survey has been excluded from this appendix  
to reduce the volume of the appendices.  
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#39

COMPLETE

**Collector:** Pohakuloa CIA (Web Link)  
**Started:** Wednesday, December 16, 2020 4:11:33 PM  
**Last Modified:** Wednesday, December 16, 2020 4:24:59 PM  
**Time Spent:** 00:13:26  
**IP Address:** 172.56.44.5

---

## Page 1: Introduction and Background

### Q1

I hereby agree to be a participant in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. I understand that part of the purpose of the CIA is to conduct oral history interviews with individuals with information about the subject property and surrounding area. I understand that Honua Consulting, LLC will retain the products of my participation (responses to this survey, etc.) for use on the project, but that I will remain owner of any of these products. I have the right to request them at any time. I understand that the material(s) will remain in the possession of Honua Consulting, LLC and that the material(s) may be used for scholarly, educational, land management, and other purposes.

**Yes, I agree to be a participant - A "yes" response will allow you to continue the survey and your answers will be included in the CIA.**

---

## Page 2: Survey Questions

### Q2

Please provide your name.

Maile

---

### Q3

What is your current profession?

Lending

---

### Q4

Where do you live now?

Hilo HI

---

**Q5**

Where were you born and raised?

Anchorage AK

---

**Q6**

Are you associated or representing a specific Native Hawaiian Organization (NHO), 'ohana, or organization in the completion of this survey? If so, please list the entity you are representing.

Lavea-Malloe Ohana

---

**Q7**

What is your association, if any, with the Project Area?

Familial ties to Kaohe (Pohakuloa)

---

**Q8**

Are you aware of any traditions or customs that may take place near the Project Area or are otherwise associated with the Project Area?

Yes

---

**Q9**

What place names do you know for the project area or areas near or adjacent to the project area?

Not willing to offer names for the project but I do know names of these places

---

**Q10**

Are you aware of any cultural resources in the Project Area or near the Project Area? If so, please list them below.

There are family heiau, ahu and burials on these lands. We need access to carry out our traditions and practices.

---

**Q11**

Is there anything about the project area that's particularly significant you would like to share? If so, please share the information below.

So shared above

---

**Q12**

Are there any stories associated with the project area we should be aware of? If so, please share that information below.

Plenty

---

**Q13**

The Department of the Army is proposing retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. The project area is comprised of Tax Map Keys 4-4-015:008; 4-4-016:005; 3-8-001:013 & 022; and 7-1-004:007 in the ahupua'a of Ka'ohe Mauka on the Island of Hawai'i. Are you aware of any resources that may be impacted by such a project? What might those impacts be?

Water, land, burials, heiau, ahu, wildlife, humans, etc. PTA and its use of depleted uranium!

---

**Q14**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

STOP BOMBING HAWAII!

---

**Q15**

Are you aware of any traditions or customs that may be impacted by such a project? What might that impacts be?

The negative impacts have BEEN affecting Hawai'i and its people. Cancer is on the rise while bombs continue to fall. The lawsuit is still intact and needs to be fulfilled with a hefty cleanup by PTA

---

**Q16**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

Yes.. STOP BOMBING HAWAII!

---

**Q17**

Do you have any recommendations for conditions or best management practices for the project, should it proceed?

STOP BOMBING HAWAII! No it should not proceed

---

**Q18**

Respondent skipped this question

Is there anything else you would like to share?

---

**Q19**

Respondent skipped this question

If there are any documents you would like to share, feel free to upload them here.

---

**Q20**

CONFIRMATION OF PARTICIPATION - I hereby understand and agree that the answers I have provided in this survey are to be included in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area.

**Yes - I understand and agree that the answers I have provided in this survey will be included in the Cultural Impact Assessment.**

---

**Q21**

OPTIONAL: If you would like to share your contact information, please do so below. This information will be redacted from your response in the CIA to protect your privacy.

██████████

Respondent #   skipped all questions.

The survey has been excluded from this appendix  
to reduce the volume of the appendices.  
It is on file with the author and available for review upon request.

#41

COMPLETE

**Collector:** Pohakuloa CIA (Web Link)  
**Started:** Friday, December 18, 2020 6:06:49 AM  
**Last Modified:** Friday, December 18, 2020 7:04:21 AM  
**Time Spent:** 00:57:31  
**IP Address:** 75.80.217.32

---

## Page 1: Introduction and Background

### Q1

I hereby agree to be a participant in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. I understand that part of the purpose of the CIA is to conduct oral history interviews with individuals with information about the subject property and surrounding area. I understand that Honua Consulting, LLC will retain the products of my participation (responses to this survey, etc.) for use on the project, but that I will remain owner of any of these products. I have the right to request them at any time. I understand that the material(s) will remain in the possession of Honua Consulting, LLC and that the material(s) may be used for scholarly, educational, land management, and other purposes.

**Yes, I agree to be a participant - A "yes" response will allow you to continue the survey and your answers will be included in the CIA.**

---

## Page 2: Survey Questions

### Q2

Please provide your name.

JR Keoneakapu Williams

### Q3

What is your current profession?

small business owner

### Q4

Where do you live now?

Waianae, Oahu

**Q5**

Where were you born and raised?

Waikiki

---

**Q6**

Are you associated or representing a specific Native Hawaiian Organization (NHO), 'ohana, or organization in the completion of this survey? If so, please list the entity you are representing.

'Ohana Kapu

---

**Q7**

What is your association, if any, with the Project Area?

I will not be answering that right now until 1. I have a better understanding what the army is proposing to do there. 2. Every Kanaka Maoli today is associated to that area so to ask this question hits a nerve with me.

---

**Q8**

Are you aware of any traditions or customs that may take place near the Project Area or are otherwise associated with the Project Area?

Well let me just say the map you sent and description of the proposed sight is generic. With the resources of knowledge with today's technology I would have expected a lot better from you folks. This is the norm for the US military to give us bare minimum but Dr Kehau wow here's a hint of advice, give us better maps of the area preferably old maps, the older the better, even if you have to write over the names of places on the map do it those names deserve to be said out loud over and over. If there are family names associated with the LCA's or Royal Patents we should know about it. Seeing and reading it is will help us channel our ancestors so we can get that knowledge you seek. Many of us here represent our entire ohana and you know how far that could extend. Take this proposed sight and give it the mana it deserves. We all want to repeatedly say the names of those places to give it mana. For far to long our history has been kept silent. So can we not be silent and can you teach geography that way by the time we pau with this the army will have no choice but to leave it as is.

---

**Q9**

What place names do you know for the project area or areas near or adjacent to the project area?

I am still looking at the map you sent and I still don't know where it is. Now you know I am being sarcastic but if this is a Cultural Impact Assessment this survey is ridiculous it only shows how generic your consulting firm is.

---

**Q10**

Are you aware of any cultural resources in the Project Area or near the Project Area? If so, please list them below.

Many

---

**Q11**

Is there anything about the project area that's particularly significant you would like to share? If so, please share the information below.

every piece of aina is significant to me

---

**Q12**

Are there any stories associated with the project area we should be aware of? If so, please share that information below.

how inconvenient, do you need a history lesson? stories like this are so scarce why would anyone say it for the army?

---

**Q13**

The Department of the Army is proposing retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. The project area is comprised of Tax Map Keys 4-4-015:008; 4-4-016:005; 3-8-001:013 & 022; and 7-1-004:007 in the ahupua'a of Ka'ohe Mauka on the Island of Hawai'i. Are you aware of any resources that may be impacted by such a project? What might those impacts be?

Ask me again on a later date

---

**Q14**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

Before we answer that could we at least know the specific names of these areas.

---

**Q15**

Are you aware of any traditions or customs that may be impacted by such a project? What might that impacts be?

Aina that has lost its history can always be rejuvenated all it takes is for us to know

---

**Q16**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

any impact on any aina when we are dealing with the United States Army should be avoided in fact state owned lands (de facto) should never be leased to the military.

---

**Q17**

Do you have any recommendations for conditions or best management practices for the project, should it proceed?

It will not proceed if we know the specific names of the areas.

---

**Q18**

Is there anything else you would like to share?

Lots, but I will reserve for now, mahalo

---

**Q19**

Respondent skipped this question

If there are any documents you would like to share, feel free to upload them here.

---

Page 3: Confirmation of Participation

**Q20**

**Yes - I understand and agree that the answers I have provided in this survey will be included in the Cultural Impact Assessment.**

CONFIRMATION OF PARTICIPATION - I hereby understand and agree that the answers I have provided in this survey are to be included in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area.

---

**Q21**

Respondent skipped this question

OPTIONAL: If you would like to share your contact information, please do so below. This information will be redacted from your response in the CIA to protect your privacy.

---

Respondent #   skipped all questions.

The survey has been excluded from this appendix  
to reduce the volume of the appendices.  
It is on file with the author and available for review upon request.

#43

INCOMPLETE

**Collector:** Pohakuloa CIA (Web Link)  
**Started:** Tuesday, December 22, 2020 9:56:43 AM  
**Last Modified:** Tuesday, December 22, 2020 10:48:30 AM  
**Time Spent:** 00:51:46  
**IP Address:** 66.91.2.118

---

## Page 1: Introduction and Background

### Q1

I hereby agree to be a participant in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. I understand that part of the purpose of the CIA is to conduct oral history interviews with individuals with information about the subject property and surrounding area. I understand that Honua Consulting, LLC will retain the products of my participation (responses to this survey, etc.) for use on the project, but that I will remain owner of any of these products. I have the right to request them at any time. I understand that the material(s) will remain in the possession of Honua Consulting, LLC and that the material(s) may be used for scholarly, educational, land management, and other purposes.

**Yes, I agree to be a participant - A "yes" response will allow you to continue the survey and your answers will be included in the CIA.**

---

## Page 2: Survey Questions

### Q2

Please provide your name.

Ed Shaffer

---

### Q3

What is your current profession?

Nurse

---

### Q4

Where do you live now?

Hilo

---

**Q5**

Where were you born and raised?

Florida

---

**Q6**

Are you associated or representing a specific Native Hawaiian Organization (NHO), 'ohana, or organization in the completion of this survey? If so, please list the entity you are representing.

No

---

**Q7**

What is your association, if any, with the Project Area?

None

---

**Q8**

Are you aware of any traditions or customs that may take place near the Project Area or are otherwise associated with the Project Area?

None

---

**Q9**

What place names do you know for the project area or areas near or adjacent to the project area?

None

---

**Q10**

Are you aware of any cultural resources in the Project Area or near the Project Area? If so, please list them below.

None

---

**Q11**

Is there anything about the project area that's particularly significant you would like to share? If so, please share the information below.

None

---

**Q12**

Are there any stories associated with the project area we should be aware of? If so, please share that information below.

No

---

**Q13**

The Department of the Army is proposing retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. The project area is comprised of Tax Map Keys 4-4-015:008; 4-4-016:005; 3-8-001:013 & 022; and 7-1-004:007 in the ahupua'a of Ka'ohe Mauka on the Island of Hawai'i. Are you aware of any resources that may be impacted by such a project? What might those impacts be?

Ohana

---

**Q14**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

Give more money

---

**Q15**

Are you aware of any traditions or customs that may be impacted by such a project? What might that impacts be?

The plant dying custom

---

**Q16**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

Give Hawaiians with 100% bloodline a class on racism.

---

**Q17**

Do you have any recommendations for conditions or best management practices for the project, should it proceed?

As a good steward.

---

**Q18**

Is there anything else you would like to share?

Stop capitulating to the racist Hawaiians.

---

**Q19**

Respondent skipped this question

If there are any documents you would like to share, feel free to upload them here.

---

---

**Q20**

CONFIRMATION OF PARTICIPATION - I hereby understand and agree that the answers I have provided in this survey are to be included in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area.

**Yes - I understand and agree that the answers I have provided in this survey will be included in the Cultural Impact Assessment.**

**Q21**

OPTIONAL: If you would like to share your contact information, please do so below. This information will be redacted from your response in the CIA to protect your privacy.

**Respondent skipped this question**

#44

COMPLETE

**Collector:** Pohakuloa CIA (Web Link)  
**Started:** Tuesday, December 22, 2020 10:56:50 AM  
**Last Modified:** Tuesday, December 22, 2020 11:08:29 AM  
**Time Spent:** 00:11:38  
**IP Address:** 98.155.37.243

---

## Page 1: Introduction and Background

### Q1

I hereby agree to be a participant in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. I understand that part of the purpose of the CIA is to conduct oral history interviews with individuals with information about the subject property and surrounding area. I understand that Honua Consulting, LLC will retain the products of my participation (responses to this survey, etc.) for use on the project, but that I will remain owner of any of these products. I have the right to request them at any time. I understand that the material(s) will remain in the possession of Honua Consulting, LLC and that the material(s) may be used for scholarly, educational, land management, and other purposes.

**Yes, I agree to be a participant - A "yes" response will allow you to continue the survey and your answers will be included in the CIA.**

---

## Page 2: Survey Questions

### Q2

Please provide your name.

Debbie

### Q3

What is your current profession?

Retired Engineer

### Q4

Where do you live now?

Honaunau, HI

---

**Q5**

Where were you born and raised?

Memphis

---

**Q6**

Are you associated or representing a specific Native Hawaiian Organization (NHO), 'ohana, or organization in the completion of this survey? If so, please list the entity you are representing.

No

---

**Q7**

What is your association, if any, with the Project Area?

None

---

**Q8**

Are you aware of any traditions or customs that may take place near the Project Area or are otherwise associated with the Project Area?

No

---

**Q9**

What place names do you know for the project area or areas near or adjacent to the project area?

None

---

**Q10**

Are you aware of any cultural resources in the Project Area or near the Project Area? If so, please list them below.

No

---

**Q11**

Is there anything about the project area that's particularly significant you would like to share? If so, please share the information below.

No

---

**Q12**

Are there any stories associated with the project area we should be aware of? If so, please share that information below.

No

---

**Q13**

The Department of the Army is proposing retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. The project area is comprised of Tax Map Keys 4-4-015:008; 4-4-016:005; 3-8-001:013 & 022; and 7-1-004:007 in the ahupua'a of Ka'ohe Mauka on the Island of Hawai'i. Are you aware of any resources that may be impacted by such a project? What might those impacts be?

No

---

**Q14**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

Does the Army really need 23,000 acres? The question is what does the Army plan to do with all that land? If practice bombing is to take place then that would have an impact on the land.

---

**Q15**

Are you aware of any traditions or customs that may be impacted by such a project? What might that impacts be?

No

---

**Q16**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

Avoid war games

---

**Q17**

Do you have any recommendations for conditions or best management practices for the project, should it proceed?

Honor the land and preserve wild life and waterways

---

**Q18**

Is there anything else you would like to share?

Can the Army be transparent with how the land would be used?

---

**Q19**

Respondent skipped this question

If there are any documents you would like to share, feel free to upload them here.

---

**Q20**

CONFIRMATION OF PARTICIPATION - I hereby understand and agree that the answers I have provided in this survey are to be included in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area.

**Yes - I understand and agree that the answers I have provided in this survey will be included in the Cultural Impact Assessment.**

**Q21**

OPTIONAL: If you would like to share your contact information, please do so below. This information will be redacted from your response in the CIA to protect your privacy.

**Respondent skipped this question**

Respondent #      skipped all questions.

The survey has been excluded from this appendix  
to reduce the volume of the appendices.  
It is on file with the author and available for review upon request.

Respondent #      skipped all questions.

The survey has been excluded from this appendix  
to reduce the volume of the appendices.  
It is on file with the author and available for review upon request.

Respondent #      skipped all questions.

The survey has been excluded from this appendix  
to reduce the volume of the appendices.  
It is on file with the author and available for review upon request.

#48

COMPLETE

**Collector:** Pohakuloa CIA (Web Link)  
**Started:** Wednesday, December 23, 2020 9:51:13 PM  
**Last Modified:** Wednesday, December 23, 2020 11:06:19 PM  
**Time Spent:** 01:15:06  
**IP Address:** 174.239.3.167

---

## Page 1: Introduction and Background

### Q1

I hereby agree to be a participant in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. I understand that part of the purpose of the CIA is to conduct oral history interviews with individuals with information about the subject property and surrounding area. I understand that Honua Consulting, LLC will retain the products of my participation (responses to this survey, etc.) for use on the project, but that I will remain owner of any of these products. I have the right to request them at any time. I understand that the material(s) will remain in the possession of Honua Consulting, LLC and that the material(s) may be used for scholarly, educational, land management, and other purposes.

**Yes, I agree to be a participant - A "yes" response will allow you to continue the survey and your answers will be included in the CIA.**

---

## Page 2: Survey Questions

### Q2

Please provide your name.

Shelley S. Mahi

---

### Q3

What is your current profession?

Volunteer work and assist in various Consultations

---

### Q4

Where do you live now?

Big Island of Hawai'i-Moku o Keawe

---

**Q5**

Where were you born and raised?

Mainland America

---

**Q6**

Are you associated or representing a specific Native Hawaiian Organization (NHO), 'ohana, or organization in the completion of this survey? If so, please list the entity you are representing.

Native Tenant Protection Council  
Aka Mahi

---

**Q7**

What is your association, if any, with the Project Area?

The Project Area of Pohakuloa Training Area is on Crown Land, not owned by the State of Hawaii;but under a Trust with Congressional Oversight. I have been trained in Section 106. and Federal Undertakings.

---

**Q8**

Are you aware of any traditions or customs that may take place near the Project Area or are otherwise associated with the Project Area?

Yes. PTA has different Cultural Sites and includes an old Village with burials. An elderly Hawaiian Man is attempting to pick up bone fragments and long bones, and says Pohakuloa is being used as a bombing site for foreign countries and wants it to stop.

---

**Q9**

What place names do you know for the project area or areas near or adjacent to the project area?

The Pu'u cinder cones all have names in Hawaiian and the area is know to be a gathering place. Bombing has made an impact to the area and Destroyed vegetation and crucial forests, altering these sites named in mo'olelo.

---

**Q10**

Are you aware of any cultural resources in the Project Area or near the Project Area? If so, please list them below.

The Project area contained medicinal plants, petroglyphs, burials, and was a resource for hunting and gathering, lei making, and Navigational que stones

---

**Q11**

Is there anything about the project area that's particularly significant you would like to share? If so, please share the information below.

PTA was given a Lease by BLNR. The entire site of Pohakuloa looked very different than it does today, due to severe bombing and live fire training. The "Cultural Impact Statement" and EIS should first be about Complying with the Lease that signed. Focus should be on Clean-up and just how the DoD plans to Comply; what native plants will be grown to plant there to Comply with the former lease. No future lease should be considered because DoD needs to Comply now.

---

**Q12**

Are there any stories associated with the project area we should be aware of? If so, please share that information below.

I am aware of the story of the United States of America (of which I am a Patriot) is involved in the illegal Overthrow of the Hawaiian Kingdom; now "...under a strange form of Occupation" according to UN Human Rights investigator Dr. De Zayas. PTA military have a Field Manual that explains "Occupation" and how the "Laws of the Occupied" must be followed. Originally, the United States signed the Treaty of Friendship, Commerce and Navigation with No Hawai'i Pae 'Aina (The Hawaiian Kingdom) Recently a letter was sent to Gov. Ige on Nov. 10th, 2020 from the National Lawyers Guild (NLG) made of 6,000 members who voted to send the Compliance letter. Perhaps the story will end well if the USA does the right thing and set Hawai'i Kingdom free.. .if America stands for FREEDOM we would be hypocrites if we now know we are Belligerently Occupying Hawai'i Nei and we don't set her free.

---

**Q13**

The Department of the Army is proposing retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. The project area is comprised of Tax Map Keys 4-4-015:008; 4-4-016:005; 3-8-001:013 & 022; and 7-1-004:007 in the ahupua'a of Ka'ohe Mauka on the Island of Hawai'i. Are you aware of any resources that may be impacted by such a project? What might those impacts be?

Correction: None of these Parcels are "owned" by the State of Hawaii. Ka'ohe is Crown Land within the Metes and Bounds of occupied Hawai'i. PTA was found to contain at least four sites with Depleted Uranium. There must be NO LIVE-FIRE TRAINING into any of the RCAs. at PTA to prevent further contamination and reducing Depleted Uranium Oxide...which one particle in the human body an cause havoc. Water Aquifers and soil contamination.

---

**Q14**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

Yes. Do not allow further military use of the land other than the beginnings of Clean-up and reforestation. High altitude bombing with cement filled "dummy bombs" and foreign bombing on PTA grounds must cease. The Lease states the DoD's Clean-up Budget would be based on the "Fair Market Value of the Land"--assessed by DLNR Land Division.

---

**Q15**

Are you aware of any traditions or customs that may be impacted by such a project? What might that impacts be?

Yes, but under NHPA Section 106, these practices are alluded to be confidential.

---



Respondent #      skipped all questions.

The survey has been excluded from this appendix  
to reduce the volume of the appendices.  
It is on file with the author and available for review upon request.

Respondent #      skipped all questions.

The survey has been excluded from this appendix  
to reduce the volume of the appendices.  
It is on file with the author and available for review upon request.

Respondent #   skipped all questions.

The survey has been excluded from this appendix  
to reduce the volume of the appendices.  
It is on file with the author and available for review upon request.

Respondent #   skipped all questions.

The survey has been excluded from this appendix  
to reduce the volume of the appendices.  
It is on file with the author and available for review upon request.

#53

COMPLETE

**Collector:** Pohakuloa CIA (Web Link)  
**Started:** Tuesday, December 29, 2020 12:08:07 PM  
**Last Modified:** Tuesday, December 29, 2020 12:20:49 PM  
**Time Spent:** 00:12:41  
**IP Address:** 24.165.8.210

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## Page 1: Introduction and Background

### Q1

I hereby agree to be a participant in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. I understand that part of the purpose of the CIA is to conduct oral history interviews with individuals with information about the subject property and surrounding area. I understand that Honua Consulting, LLC will retain the products of my participation (responses to this survey, etc.) for use on the project, but that I will remain owner of any of these products. I have the right to request them at any time. I understand that the material(s) will remain in the possession of Honua Consulting, LLC and that the material(s) may be used for scholarly, educational, land management, and other purposes.

**Yes, I agree to be a participant - A "yes" response will allow you to continue the survey and your answers will be included in the CIA.**

---

## Page 2: Survey Questions

### Q2

Please provide your name.

DAVID M. HEAUKULANI

### Q3

What is your current profession?

Retired

### Q4

Where do you live now?

Hilo, HI

**Q5**

Where were you born and raised?

Born Kalopa, Hawaii raised Honolulu, Oahu

---

**Q6**

Are you associated or representing a specific Native Hawaiian Organization (NHO), 'ohana, or organization in the completion of this survey? If so, please list the entity you are representing.

No

---

**Q7**

What is your association, if any, with the Project Area?

I was included as a cultural practitioner

---

**Q8**

Are you aware of any traditions or customs that may take place near the Project Area or are otherwise associated with the Project Area?

No

---

**Q9**

What place names do you know for the project area or areas near or adjacent to the project area?

Judd Trail

---

**Q10**

Are you aware of any cultural resources in the Project Area or near the Project Area? If so, please list them below.

No

---

**Q11**

Is there anything about the project area that's particularly significant you would like to share? If so, please share the information below.

I am curious as to how the US Government acquired ownership of the land as indicated in the purple colored area of the map of Kaohe area. Is this real estate that was acquired from Parker Ranch?

---

**Q12**

Are there any stories associated with the project area we should be aware of? If so, please share that information below.

Unknown.

---

**Q13**

The Department of the Army is proposing retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. The project area is comprised of Tax Map Keys 4-4-015:008; 4-4-016:005; 3-8-001:013 & 022; and 7-1-004:007 in the ahupua'a of Ka'ohe Mauka on the Island of Hawai'i. Are you aware of any resources that may be impacted by such a project? What might those impacts be?

No

---

**Q14**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

No

---

**Q15**

Are you aware of any traditions or customs that may be impacted by such a project? What might that impacts be?

No

---

**Q16**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

No

---

**Q17**

Do you have any recommendations for conditions or best management practices for the project, should it proceed?

None

---

**Q18**

Is there anything else you would like to share?

Not at this time

---

**Q19**

Respondent skipped this question

If there are any documents you would like to share, feel free to upload them here.

---

---

**Q20**

CONFIRMATION OF PARTICIPATION - I hereby understand and agree that the answers I have provided in this survey are to be included in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area.

**Yes - I understand and agree that the answers I have provided in this survey will be included in the Cultural Impact Assessment.**

**Q21**

OPTIONAL: If you would like to share your contact information, please do so below. This information will be redacted from your response in the CIA to protect your privacy.

**Respondent skipped this question**

Respondent #      skipped all questions.

The survey has been excluded from this appendix  
to reduce the volume of the appendices.  
It is on file with the author and available for review upon request.

Respondent #      skipped all questions.

The survey has been excluded from this appendix  
to reduce the volume of the appendices.  
It is on file with the author and available for review upon request.

#56

INCOMPLETE

**Collector:** Pohakuloa CIA (Web Link)  
**Started:** Sunday, January 10, 2021 6:58:18 PM  
**Last Modified:** Sunday, January 10, 2021 7:29:18 PM  
**Time Spent:** 00:31:00  
**IP Address:** 98.151.109.118

---

## Page 1: Introduction and Background

### Q1

I hereby agree to be a participant in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. I understand that part of the purpose of the CIA is to conduct oral history interviews with individuals with information about the subject property and surrounding area. I understand that Honua Consulting, LLC will retain the products of my participation (responses to this survey, etc.) for use on the project, but that I will remain owner of any of these products. I have the right to request them at any time. I understand that the material(s) will remain in the possession of Honua Consulting, LLC and that the material(s) may be used for scholarly, educational, land management, and other purposes.

**Yes, I agree to be a participant - A "yes" response will allow you to continue the survey and your answers will be included in the CIA.**

---

## Page 2: Survey Questions

### Q2

Please provide your name.

Clare Loprinzi

### Q3

What is your current profession?

traditional midwife, cultural practitioner, kumu

### Q4

Where do you live now?

moku o keawe

---

**Q5**

Where were you born and raised?

Oregon

---

**Q6**

Are you associated or representing a specific Native Hawaiian Organization (NHO), 'ohana, or organization in the completion of this survey? If so, please list the entity you are representing.

MammaPrimitiva Pathway to Traditional Midwifery (Native Hawaiian Haumana Involved), Pahanapuka kumu, Ke Kula o Ehunuikaimalino

---

**Q7**

What is your association, if any, with the Project Area?

Cultural Advisor for Military at Pohakuloa, Traditional Practitioner, kiai

---

**Q8**

Are you aware of any traditions or customs that may take place near the Project Area or are otherwise associated with the Project Area?

yes

---

**Q9**

What place names do you know for the project area or areas near or adjacent to the project area?

ahupuaa Kaohe , Burial grounds within Pohakuloa

---

**Q10**

Are you aware of any cultural resources in the Project Area or near the Project Area? If so, please list them below.

yes, the list would be too long, it is known as a burial and kapu aloha everywhere,

---

**Q11**

Is there anything about the project area that's particularly significant you would like to share? If so, please share the information below.

needs to be stopped bombing, archeologist are not cultural practitioner and had no accountability of understanding or know place base and destruction within project military base

---

**Q12**

Are there any stories associated with the project area we should be aware of? If so, please share that information below.

I will leave the moolalo to Kupuna whose iwi reside there.

---

**Q13**

The Department of the Army is proposing retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. The project area is comprised of Tax Map Keys 4-4-015:008; 4-4-016:005; 3-8-001:013 & 022; and 7-1-004:007 in the ahupua'a of Ka'ohē Mauka on the Island of Hawai'i. Are you aware of any resources that may be impacted by such a project? What might those impacts be?

many na pohaku have been attacked and are now lying down when they were put upright because of the importance In relation to all else there. but you all should know this, many questions here are mahaoi ....I am not comfortable or do we have even have permission to be answering many of these questions.

---

**Q14**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

stop the bombing and destruction

---

**Q15**

Are you aware of any traditions or customs that may be impacted by such a project? What might that impacts be?

I have been a traditional midwife here for 25 yrs. Am keeping documentation on the history of trauma that native Hawaiian women have with high miscarriage and fetal mortality rates during RIMPAC exercises on aina ame kai. you should be aware already that Native Hawaiians who have a high cultural affiliation with Pohakuloa and their iwi there, experience a greater impact on them on body, mind and spirit. Statistics show that they are impacted disproportionately.

---

**Q16**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

There should be studies done and information gathered on fetal morality rates and miscarriages due to RIMPAC exercises. Where are they? Why has the Department of Health refused to release Hawaii Fetal and Maternal Mortality rates the last 20 years.

---

**Q17**

Do you have any recommendations for conditions or best management practices for the project, should it proceed?

Malama na keiki o hawaii nei. Respect the land, stop bombing, if this is a Hawaiian organization you should already know the best management practices for a area that without a doubt is kapu aloha. abide by these practices.

---

**Q18**

Is there anything else you would like to share?

What impact did the bombing have at Kahoolawe ? why is allowed on the aquifers for all of Moku o Keawe?

---

**Q19**

Respondent skipped this question

If there are any documents you would like to share, feel free to upload them here.

---

Page 3: Confirmation of Participation

**Q20**

**Yes - I understand and agree that the answers I have provided in this survey will be included in the Cultural Impact Assessment.**

CONFIRMATION OF PARTICIPATION - I hereby understand and agree that the answers I have provided in this survey are to be included in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area.

---

**Q21**

Respondent skipped this question

OPTIONAL: If you would like to share your contact information, please do so below. This information will be redacted from your response in the CIA to protect your privacy.

---

#57

COMPLETE

**Collector:** Pohakuloa CIA (Web Link)  
**Started:** Sunday, January 10, 2021 10:20:59 PM  
**Last Modified:** Tuesday, January 12, 2021 4:13:57 AM  
**Time Spent:** Over a day  
**IP Address:** 172.56.44.17

---

## Page 1: Introduction and Background

### Q1

I hereby agree to be a participant in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. I understand that part of the purpose of the CIA is to conduct oral history interviews with individuals with information about the subject property and surrounding area. I understand that Honua Consulting, LLC will retain the products of my participation (responses to this survey, etc.) for use on the project, but that I will remain owner of any of these products. I have the right to request them at any time. I understand that the material(s) will remain in the possession of Honua Consulting, LLC and that the material(s) may be used for scholarly, educational, land management, and other purposes.

**Yes, I agree to be a participant - A "yes" response will allow you to continue the survey and your answers will be included in the CIA.**

---

## Page 2: Survey Questions

### Q2

Please provide your name.

Frederick TorresPestana

### Q3

What is your current profession?

Kai Kane

### Q4

Where do you live now?

Maui

**Q5**

Where were you born and raised?

Honoka'a , Moku o Keawe

---

**Q6**

Are you associated or representing a specific Native Hawaiian Organization (NHO), 'ohana, or organization in the completion of this survey? If so, please list the entity you are representing.

Hale O Lono

---

**Q7**

What is your association, if any, with the Project Area?

Spiritual

---

**Q8**

Are you aware of any traditions or customs that may take place near the Project Area or are otherwise associated with the Project Area?

Ae , ( yes )

---

**Q9**

What place names do you know for the project area or areas near or adjacent to the project area?

Malama Aina

---

**Q10**

Are you aware of any cultural resources in the Project Area or near the Project Area? If so, please list them below.

Malama Aina

---

**Q11**

Is there anything about the project area that's particularly significant you would like to share? If so, please share the information below.

Malama Aina

---

**Q12**

Are there any stories associated with the project area we should be aware of? If so, please share that information below.

Stop War

---

**Q13**

The Department of the Army is proposing retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. The project area is comprised of Tax Map Keys 4-4-015:008; 4-4-016:005; 3-8-001:013 & 022; and 7-1-004:007 in the ahupua'a of Ka'ohe Mauka on the Island of Hawai'i. Are you aware of any resources that may be impacted by such a project? What might those impacts be?

Malama Aina , stop war

---

**Q14**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

Stop all wars

---

**Q15**

Are you aware of any traditions or customs that may be impacted by such a project? What might that impacts be?

Destruction of all life , Kanaka Seek Truth Justice Peace , Hale o Lono

---

**Q16**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

Stop war

---

**Q17**

Do you have any recommendations for conditions or best management practices for the project, should it proceed?

Turn Pohakuloa into world healing center for PTSD

---

**Q18**

Is there anything else you would like to share?

Make Peace NOT war

---

**Q19**

Respondent skipped this question

If there are any documents you would like to share, feel free to upload them here.

---

**Q20**

CONFIRMATION OF PARTICIPATION - I hereby understand and agree that the answers I have provided in this survey are to be included in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area.

**Yes - I understand and agree that the answers I have provided in this survey will be included in the Cultural Impact Assessment.**

---

**Q21**

OPTIONAL: If you would like to share your contact information, please do so below. This information will be redacted from your response in the CIA to protect your privacy.

████████████████████

Respondent #      skipped all questions.

The survey has been excluded from this appendix  
to reduce the volume of the appendices.  
It is on file with the author and available for review upon request.

Respondent #    responded “No” to Question 20,  
expressing that he/she/they did not want those responses included in  
or considered in the assessment.

The survey has been excluded from this appendix  
at the request of the respondent.

#60

COMPLETE

**Collector:** Pohakuloa CIA (Web Link)  
**Started:** Sunday, April 11, 2021 7:31:31 AM  
**Last Modified:** Sunday, April 11, 2021 7:50:53 AM  
**Time Spent:** 00:19:22  
**IP Address:** 73.128.116.65

---

Page 1: Introduction and Background

**Q1**

I hereby agree to be a participant in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. I understand that part of the purpose of the CIA is to conduct oral history interviews with individuals with information about the subject property and surrounding area. I understand that Honua Consulting, LLC will retain the products of my participation (responses to this survey, etc.) for use on the project, but that I will remain owner of any of these products. I have the right to request them at any time. I understand that the material(s) will remain in the possession of Honua Consulting, LLC and that the material(s) may be used for scholarly, educational, land management, and other purposes.

**Yes, I agree to be a participant - A "yes" response will allow you to continue the survey and your answers will be included in the CIA.**

---

Page 2: Survey Questions

**Q2**

Please provide your name.

Wahineali'i

---

**Q3**

What is your current profession?

Respondent skipped this question

---

**Q4**

Where do you live now?

Respondent skipped this question

**Q5**

Where were you born and raised?

O'ahu, Hawaiian Kingdom

---

**Q6**

Respondent skipped this question

Are you associated or representing a specific Native Hawaiian Organization (NHO), 'ohana, or organization in the completion of this survey? If so, please list the entity you are representing.

---

**Q7**

Respondent skipped this question

What is your association, if any, with the Project Area?

---

**Q8**

Are you aware of any traditions or customs that may take place near the Project Area or are otherwise associated with the Project Area?

'Ae, yes. Pōhakuloa is our piko of Hawai'i island. Many sacred sites such as heiau temples, ahu altars built by our Ali'i, and the 'āina and her genealogy itself are sacred to me and to Hawai'i.

---

**Q9**

What place names do you know for the project area or areas near or adjacent to the project area?

Ahu a 'Umi

---

**Q10**

Are you aware of any cultural resources in the Project Area or near the Project Area? If so, please list them below.

Ahu A 'Umi- altar built by Ali'i 'Umi a Lilio who is my ancestor and chief of Hawai'i. He trained his warriors here in Pōhakuloa and the entire region is the piko umbilical cord of Hawai'i island.

---

**Q11**

Is there anything about the project area that's particularly significant you would like to share? If so, please share the information below.

Ahu A 'Umi is sacred to me because Ke Ali'i o 'Umi A Liloa is my kupuna ali'i. This is a sacred site from a pono and important Chief of Hawai'i built thousands of years ago that stands firm today.

Second. Pōhakuloa, the 'āina is thr piko of Hawai'i Island. The mana and spiritual energy as well as natural energy that exists in this realm is sacred. Disturbing this mana and energy disturbs everyone and everything. Respect what is sacred. Our house of worship may not have steeples or look like a cathedral, mosque, or synagogogue but Pōhakuloa and Mauna Kea are our Houses of Worship and we demand mutual respect.

---

**Q12**

Respondent skipped this question

Are there any stories associated with the project area we should be aware of? If so, please share that information below.

---

**Q13**

The Department of the Army is proposing retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area. The project area is comprised of Tax Map Keys 4-4-015:008; 4-4-016:005; 3-8-001:013 & 022; and 7-1-004:007 in the ahupua'a of Ka'ohe Mauka on the Island of Hawai'i. Are you aware of any resources that may be impacted by such a project? What might those impacts be?

Yes the further destructions of our wahi pana and wahi kapu. The cultural sites and religious sites will continue to be desecrated and destroyed if this lease is renewed. The water resevoirs, rivers and streams polluted. The atmosphere intoxicated with the most harmful substane ; depleted uranium. This land is supposed to be used for benefit of Hawaiians. Hawaiians have for long been on the backburner and treated as strangers in our homeland. This is cruel and evil to allow a foreign occupier military to pay only \$1 lease for 65 years why Hawaiians are being gentrified and overcharged and losing our lands, homes, and being forced to leave. Many Chiefs and Hawaiian Monarchs such as Ke Ali'i 'o Lunalilo allowed Hawaiians to live on his land for free. Queen Lili'uokalani allowed Hawaiians to live in their homes for \$1 a year. This is how we Hawaiians should continue to be nurtured. Hawaiians should receive this treatment and benefits Not the occupying military receiving those treatments and benefits.

---

**Q14**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

Absolutely, end the lease immediately, the military should stop desecrated not only our 'āina but everyone elses 'āina. They need to leave Pōhakuloa forever, leave our 'āina, go somewhere else and train period.

---

**Q15**

Are you aware of any traditions or customs that may be impacted by such a project? What might that impacts be?

Absolutely, the heiau and cultural sites that we as Kānaka could enter, have ceremony, cleanse the 'āina and injustices through pule and oli and cleanups, restoring Pōhakuloa are all being restricted from us because thr occupying american military is bombing our sacred Pōhakuloa.

---

**Q16**

Can you think of ways in which any potential impacts can be minimized, mitigated, or avoided?

End the lease. Military needs to leave our 'Āina and leave Hawai'i for good.

---

**Q17**

Do you have any recommendations for conditions or best management practices for the project, should it proceed?

LEAVE HAWAI'I. WHY ARE ILLEGAL OCCUPYING AMERICAN FORCES BEING TREATED ROYALLY ON OUR HAWAIIAN LANDS? WHY ARE HAWAIIANS BEING TREATED AS THE FOREIGNERS? WHY ARE OUR SACRED SITES AND CULTURAL SITES AND ANCESTRAL LANDS BEING PROSTITUTED FOR TARGET PRACTICE AND BEING DESTROYED. HOW WOULD YOU FEEL IF THIS WERE YOUR OWN HOME?

---

**Q18**

Is there anything else you would like to share?

DEFEND PŌHAKULOA! THIS IS THE HAWAIIAN KINGDOM. NOT AMERICA. EVERYTHING OCCURING IS ILLEGAL UNDER INTERNATIONAL LAW, HAWAIIAN KINGDOM LAW, AND U.S. CONSTITUTIONAL LAW.

---

**Q19**

Respondent skipped this question

If there are any documents you would like to share, feel free to upload them here.

---

Page 3: Confirmation of Participation

**Q20**

**Yes - I understand and agree that the answers I have provided in this survey will be included in the Cultural Impact Assessment.**

CONFIRMATION OF PARTICIPATION - I hereby understand and agree that the answers I have provided in this survey are to be included in the Cultural Impact Assessment (herein referred to as "CIA") for the proposed retention of up to approximately 23,000 acres of State-owned land at Pōhakuloa Training Area.

---

**Q21**

Respondent skipped this question

OPTIONAL: If you would like to share your contact information, please do so below. This information will be redacted from your response in the CIA to protect your privacy.

---

Respondent #      skipped all questions.

The survey has been excluded from this appendix  
to reduce the volume of the appendices.  
It is on file with the author and available for review upon request.

Respondent #      skipped all questions.

The survey has been excluded from this appendix  
to reduce the volume of the appendices.  
It is on file with the author and available for review upon request.

Respondent #      skipped all questions.

The survey has been excluded from this appendix  
to reduce the volume of the appendices.  
It is on file with the author and available for review upon request.