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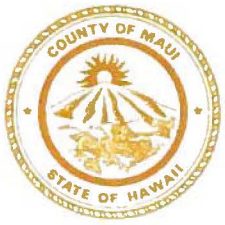
APR 08 2019

MICHAEL P. VICTORINO
Mayor

JEFFREY T. PEARSON, P.E.
Director

HELENE KAU
Deputy Director



DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAI'I 96793
www.mauiwater.org

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QUALITY CONTROL

March 19, 2019

Scott Glenn, Director
State of Hawai'i
Department of Health
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawai'i 96813

SUBJECT: Chapter 343, Hawai'i Revised Statutes, Draft Environmental Assessment for Proposed West Maui Source Development Project (Mahinahina Well (Well No. 6-5638-004) and Kahana Well (Well No. 6-5738-002)), Lāhainā, Maui, Hawai'i

Dear Mr. Scott Glenn:

With this letter, County of Maui, Department of Water Supply hereby transmits the Draft Environmental Assessment and Anticipated Finding of No Significant Impact (DEA-AFONSI) for the proposed West Maui Source Development Project (Mahinahina Well (Well No. 6-5638-004) and Kahana Well (Well No. 6-5738-002)) in Lāhainā on the island of Maui for publication in the next available edition (April 8, 2019) of the Environmental Notice.

Enclosed are a completed OEQC Publication Form, one (1) hard copy of the DEA-AFONSI, HRS 343-5(b) – Agency Action Environmental Assessment Checklist, a CD containing an Adobe Acrobat PDF file of the DEA-AFONSI, and an electronic copy of the publication form in MS Word. Simultaneous with this letter, we have submitted the summary of the action in a text file by electronic mail to your office.

If there are any questions, please contact our planning consultant, Yukino Uchiyama of Munekiyo Hiraga at 983-1233.

Sincerely,

JEFFREY T. PEARSON, P.E.
Director

JTP/TO/smb

Enclosures

cc: Curtis Eaton, County of Maui, Department of Water Supply (w/out enclosure)
Ronald M. Fukumoto, Fukumoto Engineering, Inc. (w/out enclosure)
Alan L. Unemori, Warren S. Unemori Engineering, Inc. (w/out enclosure)
Yukino Uchiyama, Munekiyo Hiraga (w/out enclosure)

19-302

APR 08 2019

AGENCY
PUBLICATION FORM

FILE COPY

Project Name:	Proposed West Maui Source Development Project (Mahinahina Well (Well No. 6-5638-004) and Kahana Well (Well No. 6-5738-002)), Lāhainā, Maui
Project Short Name:	West Maui Source Development Project
HRS §343-5 Trigger(s):	Use of State and County Funds Use of State Lands
Island(s):	Maui
Judicial District(s):	Lāhainā
TMK(s):	(2)4-3-001:017(por.), 084(por.);(2)4-4-002:014(por.), 015(por.), 018(por.); (2)4-4-004:009(por.), 011 (por.), and 019(por.)
Permit(s)/Approval(s):	Section 106, National Historic Preservation Act; Department of Health, NPDES Permit, Engineering Report for New Drinking Water Source, Disability and Communication Access Board's Review, Noise Permit (as applicable); Department of Land and Natural Resources, Commission on Water Resouece Management Pump Installation Permits; Construction Permits, and Grading and Grubbing Permits
Proposing/Determining Agency:	County of Maui, Department of Water Supply
Contact Name, Email, Telephone, Address	Curtis Eaton, P.E. 200 South High Street, 5th Floor Wailuku, Hawai'i 96793 Phone: (808)270-7835
Accepting Authority:	(for EIS submittals only)
Contact Name, Email, Telephone, Address	
Consultant:	Munekiyo Hiraga
Contact Name, Email, Telephone, Address	Yukino Uchiyama, Associate 305 High Street, Suite 104 Wailuku, Hawai'i 96793 Phone: (808)983-1233

Status (select one)	**Submittal Requirements**
__X__ DEA-AFNSI	Submit 1) the proposing agency notice of determination/transmittal letter on agency letterhead, 2) this completed OEQC publication form as a Word file, 3) a hard copy of the DEA, and 4) a searchable PDF of the DEA; a 30-day comment period follows from the date of publication in the Notice.
____ FEA-FONSI	Submit 1) the proposing agency notice of determination/transmittal letter on agency letterhead, 2) this completed OEQC publication form as a Word file, 3) a hard copy of the FEA, and 4) a searchable PDF of the FEA; no comment period follows from publication in the Notice.
____ FEA-EISPN	Submit 1) the proposing agency notice of determination/transmittal letter on agency letterhead, 2) this completed OEQC publication form as a Word file, 3) a hard copy of the FEA, and 4) a searchable PDF of the FEA; a 30-day comment period follows from the date of publication in the Notice.
____ Act 172-12 EISPN ("Direct to EIS")	Submit 1) the proposing agency notice of determination letter on agency letterhead and 2) this completed OEQC publication form as a Word file; no EA is required and a 30-day comment period follows from the date of publication in the Notice.
____ DEIS	Submit 1) a transmittal letter to the OEQC and to the accepting authority, 2) this completed OEQC publication form as a Word file, 3) a hard copy of the DEIS, 4) a searchable PDF of the DEIS, and 5) a searchable PDF of the distribution list; a 45-day comment period follows from the date of publication in the Notice.
____ FEIS	Submit 1) a transmittal letter to the OEQC and to the accepting authority, 2) this completed OEQC publication form as a Word file, 3) a hard copy of the FEIS, 4) a searchable PDF of the FEIS, and 5) a searchable PDF of the distribution list; no comment period follows from publication in the Notice.

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____	FEIS Acceptance Determination	The accepting authority simultaneously transmits to both the OEQC and the proposing agency a letter of its determination of acceptance or nonacceptance (pursuant to Section 11-200-23, HAR) of the FEIS; no comment period ensues upon publication in the Notice.
	FEIS Statutory Acceptance	Timely statutory acceptance of the FEIS under Section 343-5(c), HRS, is not applicable to agency actions.
____	Supplemental EIS Determination	The accepting authority simultaneously transmits its notice to both the proposing agency and the OEQC that it has reviewed (pursuant to Section 11-200-27, HAR) the previously accepted FEIS and determines that a supplemental EIS is or is not required; no EA is required and no comment period ensues upon publication in the Notice.
____	Withdrawal	Identify the specific document(s) to withdraw and explain in the project summary section.
____	Other	Contact the OEQC if your action is not one of the above items.

Project Summary
Provide a description of the proposed action and purpose and need in 200 words or less.

The County of Maui, Department of Water Supply (DWS) is proposing the West Maui Source Development Project, which involves the development of existing exploratory wells, the Mahinahina Well (Well No. 6-5638-004), and the Kahana Well (Well No.6-5738-002), into production wells and related improvements to integrate the wells into the DWS West Maui Water System. Related improvements include the construction of a 500,000-gallon control tank, transmission waterlines, electrical lines, and access roads. The project is located in the Lahaina District approximately three (3) miles eastward of Honokowai Beach Park.

The propsed West Maui Source Development Project will provide additional water source and system reliability to the DWS West Maui Water System. DWS has drilled and tested both exploratory wells at these locations and results indicated that these wells have reliable capacity.

19-302

VOLUME I OF II

Draft Environmental Assessment

PROPOSED WEST MAUI SOURCE DEVELOPMENT PROJECT (MAHINAHINA WELL (WELL NO. 6-5638-004) AND KAHANA WELL (WELL NO. 6-5738-002)) LĀHAINĀ, MAUI

(TMK NOS. (2)4-3-001:017(por.), 084(por.); (2)4-4-002:014(por.), 015(por.), 018(por.); (2)4-4-004:009(por.), 011(por.), and 019(por.))

Prepared for:
County of Maui,
Department of Water Supply

March 2019

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Planning. Project Management. Sustainable Solutions.

VOLUME I OF II

Draft Environmental Assessment

PROPOSED WEST MAUI SOURCE DEVELOPMENT PROJECT (MAHINAHINA WELL (WELL NO. 6-5638-004) AND KAHANA WELL (WELL NO. 6-5738-002))

LĀHAINĀ, MAUI

(TMK NOS. (2)4-3-001:017(por.), 084(por.); (2)4-4-002:014(por.), 015(por.), 018(por.); (2)4-4-004:009(por.), 011(por.), and 019(por.))

Prepared for:
County of Maui,
Department of Water Supply

March 2019

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Executive Summary

Project Name:	Proposed West Maui Source Development Project (Mahinahina Well (Well No. 6-5638-004) and Kahana Well (Well No. 6-5738-002))
Type of Document:	Draft Environmental Assessment
Legal Authority:	Chapter 343, Hawai'i Revised Statutes
Anticipated Determination:	Anticipated Finding of No Significant Impact (AFONSI)
Applicable Environmental Assessment review "Trigger":	Use of State and County Funds Use of State Lands
Location:	Maui Island Lāhainā TMK Nos. (2)4-3-001:017(por.), 084(por.); (2)4-4-002:014(por.), 015(por.), 018(por.); (2)4-4-004:009(por.), 011(por.), and 019(por.)
Landowner:	State of Hawai'i Department of Hawaiian Home Lands 91-5420 Kapolei Parkway Kapolei, Hawai'i 96707 Contact: Land Management Division Phone: (808) 620-9450 State of Hawai'i Department of Land and Natural Resources 1151 Punchbowl Street Honolulu, Hawai'i 96813 Phone: (808) 587-0400 Maui Land and Pineapple Company 200 Village Road Lāhainā, Hawai'i 96761
Proposing and Determining Agency:	County of Maui Department of Water Supply 200 South High Street, 5th Floor Wailuku, Hawai'i 96793 Contact: Curtis Eaton, P.E. Phone: (808) 270-7835

Consultant:

Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawai'i 96793
Contact: Yukino Uchiyama, Associate
Phone: (808) 983-1233

Project Summary:

The County of Maui, Department of Water Supply (DWS) is proposing the West Maui Source Development Project, which involves the development of existing exploratory wells, the Mahinahina Well (Well No. 6-5638-004), and the Kahana Well (Well No.6-5738-002), into production wells and related improvements to integrate the wells into the DWS West Maui Water System. Related improvements include the construction of a 500,000-gallon control tank, transmission waterlines, electrical lines, and access roads. The project is located in the Lāhainā District approximately three (3) miles eastward of Honokōwai Beach Park.

The proposed project consists of the following components:

1. **Mahinahina Well Site and Related Improvements**

    a. A well pump up to 700 gallons per minute (gpm)
    b. An approximate 300,000-gallon control tank
    c. A 52-foot long and 20-foot wide concrete masonry unit control building to house chlorination system, supervisory control and data acquisition (SCADA) system, electrical equipment, and related appurtenances
    d. Site development of approximately two (2) acres (grading, drainage, fencing, and landscaping)
    e. Electric line extension from the existing Maui Electric Company (MECO) electric line to the well site

2. **Kahana Well Site and Related Improvements**

    a. An estimated 1,000 gpm well pump
    b. An approximate 30,000-gallon control tank
    c. A 56-foot long and 20-foot wide concrete masonry unit control building to house

chlorination system, SCADA system, electrical equipment, and related appurtenances

d. Site development of approximately one (1) acre (grading, drainage, fencing, and landscaping)

e. Electrical site improvements, including offsite electric line extension from the existing MECO electric line to the well site, transformer, and emergency generator

3. **500,000-Gallon Control Tank**

a. An estimated 500,000-gallon control tank, which will be located next to the existing Mahinahina Surface Water Treatment Plant (SWTP) on an approximately 1.8-acre site

b. Site development of approximately 1.8 acres (grading, drainage, fencing, and landscaping)

4. **Transmission Waterlines and Access Roads**

a. Approximately 6,500 feet of 12-inch waterline and an access road connecting the Mahinahina Well to the proposed estimated 500,000-gallon control tank near the Mahinahina SWTP

b. Approximately 8,300 feet of 12-inch waterline and an access road connecting the Kahana Well to the transmission waterline connecting the Mahinahina Well and the 500,000-gallon control tank

It is noted that two (2) separate Final Environmental Assessments (EAs) were prepared and Findings of No Significant Impact (FONSI) were published in the July 23, 2011 Office of Environmental Quality Control (OEQC) Bulletin and in the May 23, 2014 OEQC Bulletin for the Mahinahina Exploratory Well (Mahinahina Well) and the West Maui Exploratory Well No. 2 (Kahana Well), respectively. DWS drilled and tested both exploratory wells at these locations and results indicated that these wells have reliable capacity which can support new users or backup redundancy for existing users. The proposed project will develop the

existing exploratory wells into permanent production wells along with related improvements.

Lands underlying the project area are classified as "Agricultural" by the State Land Use District, designated "Agricultural" and "Open Space" by the West Maui Community Plan and zoned "Agricultural" by the County of Maui.

The proposed action involves the use of State and County funds and use of State lands, which are triggers for the preparation of an EA pursuant to Chapter 343, Hawai'i Revised Statutes (HRS) and Section 11-200-6, Hawai'i Administrative Rules (HAR). As such, this EA is being prepared to evaluate the technical characteristics, environmental impacts and alternatives, as well as to advance findings relative to the proposed project. DWS is serving as the Approving Agency for the EA.

Furthermore, funds from the State of Hawai'i's Drinking Water State Revolving Fund will also be utilized for the project. As such, compliance with applicable Federal cross-cutter requirements will also be addressed during the Chapter 343, HRS environmental review process.

List of Acronyms

AeC	Alaeloa Silty Clay, 7 to 15 percent slopes
AeE	Alaeloa Silty Clay, 15 to 35 percent slopes
ALISH	Agricultural Lands of Importance to the State of Hawai'i
BMP	Best Management Practices
cfs	cubic feet per second
CIA	Cultural Impact Assessment
COE	U.S. Army Corp of Engineering
CWRM	Commission on Water Resource Management
DBCP	1,2-Dibromo-3-chloropropane
DHHL	Department of Hawaiian Home Lands
Ditch	Honokōhau Ditch
DLNR	Department of Land and Natural Resources
DOE	Department of Education
DOH	Department of Health
DOH-CWB	Department of Health, Clean Water Branch
DOH-SDWB	Department of Health, Safe Drinking Water Branch
DOH-SLD	Department of Health, State Laboratories Division
DSM	Demand Side Management
DWS	Department of Water Supply
DWSRF	Drinking Water State Revolving Fund
EA	Environmental Assessment
ECL	Early Consultation Letter
EPA	Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
FPPA	Farmland Protection Policy Act
gpm	gallons per minute
HAR	Hawai'i Administrative Rules
HCZMP	Hawai'i Coastal Zone Management Plan
HDD	Horizontal Directional Drilling
HRS	Hawai'i Revised Statutes
KbB	Kahana Silty Clay, 3 to 7 percent slopes
KbC	Kahana Silty Clay, 7 to 15 percent slopes
LSB	Land Study Bureau
LWRF	Lahaina Wastewater Reclamation Facility
MCL	Maximum Contaminant Level
MECO	Maui Electric Company
MG	million gallon
mgd	million gallons per day
mg/l	milligrams per liter
mgd	million gallons per day
MIP	Maui Island Plan
MLP	Maui Land and Pineapple Company
msl	Mean Sea Level
ND	not detected

NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NTU	nephelometric turbidity units
NWP	Nationwide Permit
OEQC	Office of Environmental Quality Control
RGB	Rural Growth Boundary
rRS	Rough Broken and Stony Land
rTT	Rough Mountainous Land
SCADA	Supervisory Control and Data Acquisition
SCS	Scientific Consultant Services, Inc.
SHPD	State Historic Preservation Division
SRF	State Revolving Fund
SWTP	Surface Water Treatment Plant
TCP	1,2,3-Trichloropropane
UGB	Urban Growth Boundary
UH-Maui	University of Hawai'i Maui College
µmho/cm	micromhos per centimeter
USACE	U.S. Army Corp of Engineering
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
WQC	Water Quality Certification
WUDP	Water Use and Development Plan

PROJECT OVERVIEW

I. PROJECT OVERVIEW

A. PROPERTY LOCATION, EXISTING USE, AND LAND OWNERSHIP

The County of Maui, Department of Water Supply (DWS) proposes the West Maui Water Source Development Project (Project), which involves the development of existing exploratory wells, the Mahinahina Well (Well No. 6-5638-004) and the Kahana Well (Well No.6-5738-002), into production wells and development of related improvements to integrate the wells into the DWS West Maui Water System. Related improvements include the construction of a 500,000-gallon control tank, transmission waterlines and access roads. The Mahinahina Well is also known as the West Maui Well No. 1 and the Kahana Well is also known as the West Maui Well No. 2. The project is located in Lāhainā District approximately three (3) miles east of Honokōwai Beach Park. The areas affected by the project are summarized in **Table 1**, below. See **Figure 1**, **Figure 2,** and **Figure 3**.

Table 1. List of Parcels Affected by the Proposed Project

Project Component	TMK	Landowner
Mahinahina Well	(2)4-4-004:011(por.) (2)4-4-004:009(por.)	State of Hawai'i State of Hawai'i
Kahana Well	(2)4-3-001:017(por.)	Maui Land and Pineapple Company (MLP)
500,000-Gallon Control Tank	(2)4-4-002:018(por.)	Department of Hawaiian Home Lands (DHHL)
Transmission Waterlines, Access Roads, and Maui Electric Line Extensions	(2)4-3-001:017(por.) (2)4-3-001:084(por.) (2)4-4-002:014(por.) (2)4-4-002:015(por.) (2)4-4-002:018(por.) (2)4-4-004:009(por.) (2)4-4-004:011(por.) (2)4-4-004:019(por.)	MLP MLP State of Hawai'i DHHL DHHL State of Hawai'i State of Hawai'i State of Hawai'i

Project construction covers approximately 11.5 acres which are surrounded by fields that were formerly in pineapple cultivation, but are now fallow and overgrown with trees, shrubs, and grasses. The project area is situated in a portion of a vast expanse of land below the foothills of the West Maui Mountains and is characterized as mountainous with steep ridges and deep valleys that slope westward. See **Appendix "A"**.

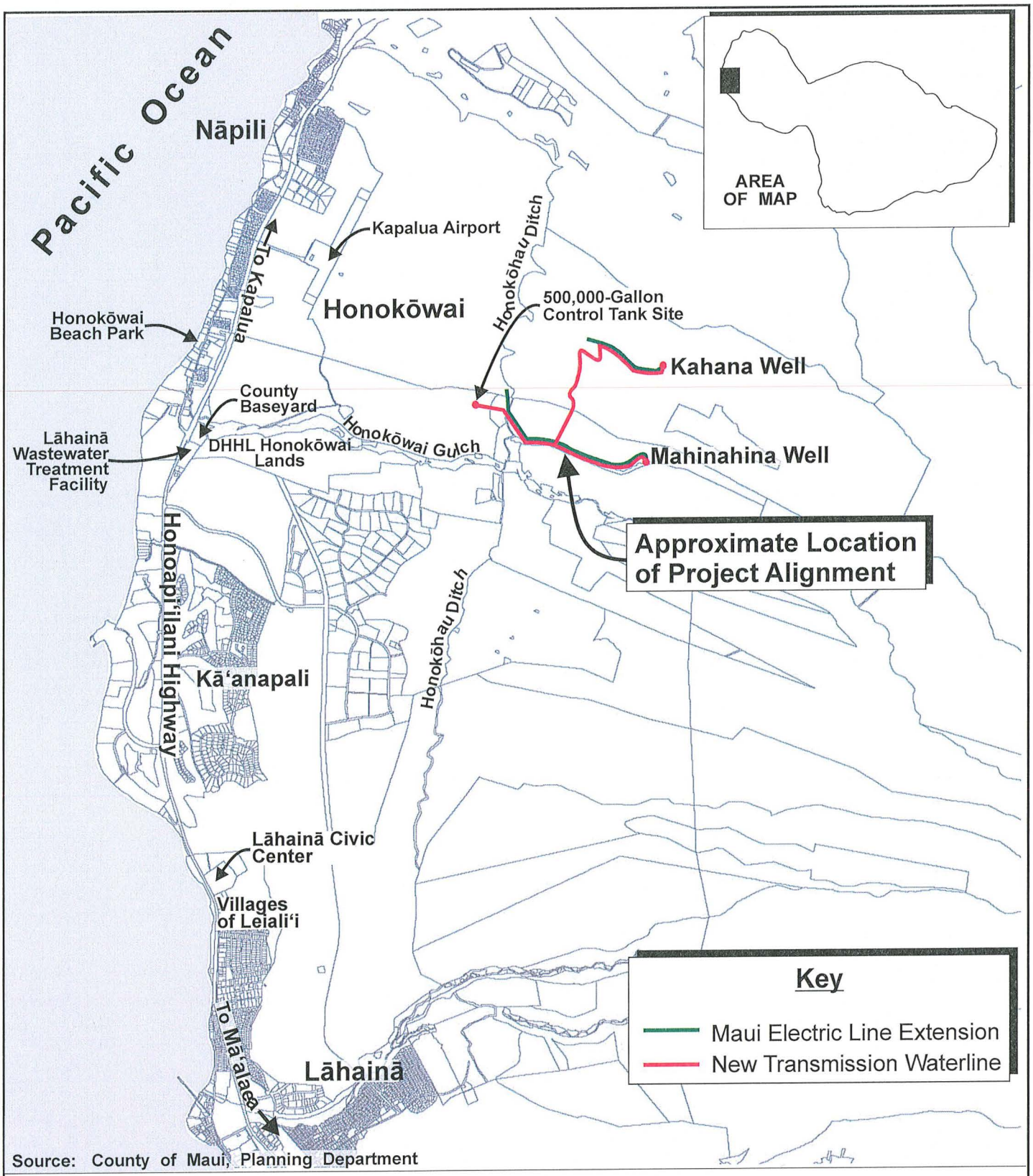


Figure 1 Proposed West Maui Source Development Project

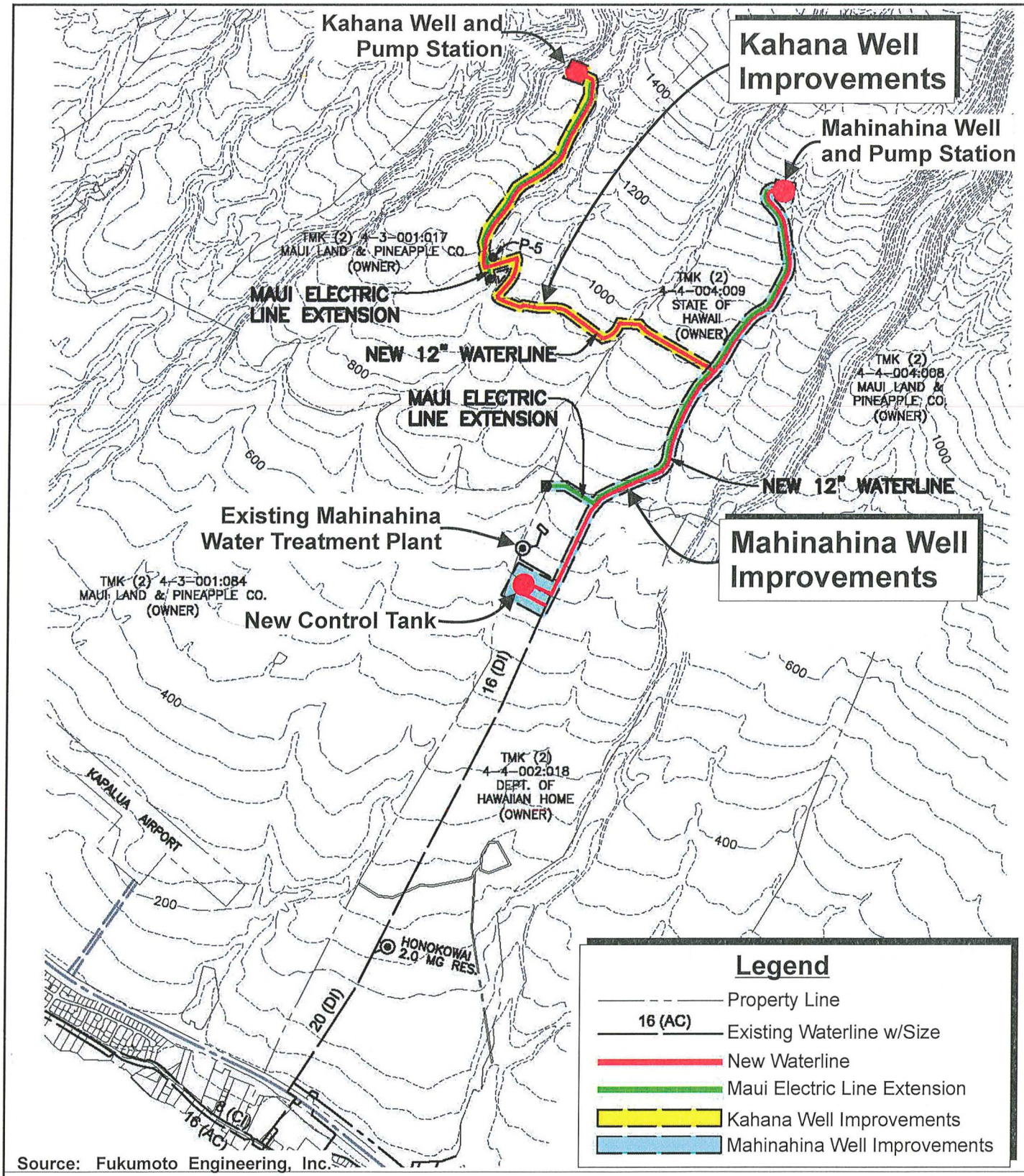
Regional Location Map

NOT TO SCALE

Prepared for: County of Maui, Department of Water Supply

MUNEKIYO HIRAGA

FE\Kahana Production Well\Applications\Figures\Reginal Location



Source: Fukumoto Engineering, Inc.

Figure 2 Proposed West Maui Source Development Project
Overall Conceptual Plan

NOT TO SCALE

Prepared for: County of Maui, Department of Water Supply

MUNEKIYO HIRAGA

FE\Kahana Production Well\Applications\Figures\Conceptual Site Plan (DEA)

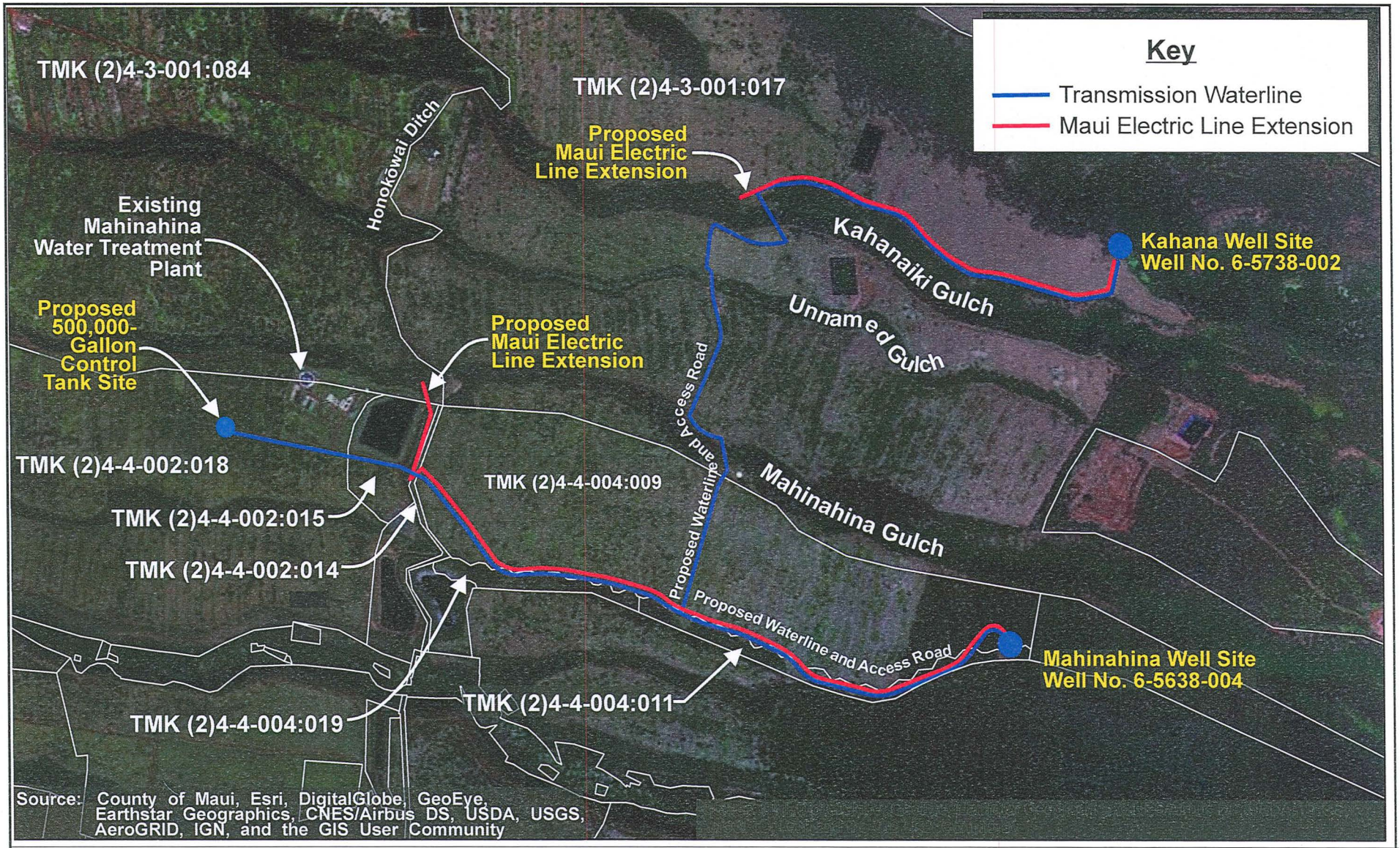


Figure 3

Proposed West Maui Source Development Project

Project Alignment Location Map

0 600 Feet
300 1200

Prepared for: County of Maui, Department of Water Supply

MUNEKIYO HIRAGA

FE\Kahana Production Well\Applications\Figures\Project Alignment Location Map

The lands underlying the project area are classified as "Agricultural" by the State Land Use District, designated "Agricultural" and "Open Space" by the West Maui Community Plan, and zoned "Agricultural" by the County of Maui Land Use Ordinances. See **Appendix "B"**.

B. BACKGROUND

The DWS West Maui Water System encompasses two (2) regions: the northern region, north of the Lahaina Civic Center, and the southern region, south of the Civic Center. The department's customers in both regions are served by surface water and groundwater sources. The Mahinahina Surface Water Treatment Plant (SWTP) treats surface water from the Honokōhau Stream and the Lahaina Treatment Plant treats surface water from Kanaha Stream. There are multiple groundwater wells within both regions.

C. PROPOSED ACTION

The proposed project involves conversion of the exploratory wells into production wells and development of related improvements to integrate the wells into the DWS West Maui Water System. The project components are summarized below. See **Appendix "C-1"** and **Appendix "C-2"** for project plans.

1. Mahinahina Well Site and Related Improvements (Well No. 6-5638-004)

a. A well pump up to 700 gallons per minute (gpm)
b. An approximate 300,000-gallon control tank
c. A 52-foot long and 20-foot wide concrete masonry unit control building to house chlorination system, supervisory control and data acquisition (SCADA) system, electrical equipment, and related appurtenances
d. Site development of approximately two (2) acres (grading, drainage, fencing, and landscaping)
e. Electric line extension from the existing Maui Electric Company (MECO) electric line to the well site

2. Kahana Well Site and Related Improvements (Well No. 6-5738-002)

a. An estimated 1,000 gpm well pump
b. An approximate 30,000-gallon control tank
c. A 56-foot long and 20-foot wide concrete masonry unit control building to house chlorination system, SCADA system, electrical equipment, and related appurtenances
d. Site development of approximately one (1) acre (grading, drainage, fencing, and landscaping)

e. Electrical site improvements, including offsite electric line extension from the existing MECO electric line to the well site, transformer, and emergency generator

3. 500,000-Gallon Control Tank

a. An estimated 500,000-gallon control tank, which will be located next to the Mahinahina SWTP on an approximately 1.8-acre site
b. Site development of approximately 1.8 acres (grading, drainage, fencing, and landscaping)

4. Transmission Waterlines and Access Roads

a. Approximately 6,500 feet of 12-inch waterline and an access road connecting the Mahinahina Well to the proposed estimated 500,000-gallon control tank near the Mahinahina SWTP
b. Approximately 8,300 feet of 12-inch waterline and an access road connecting the Kahana Well to the transmission waterline connecting the Mahinahina Well and the 500,000-gallon control tank

Upon completion of the proposed project, water from the Mahinahina Well will be pumped into the onsite 300,000 gallon control tank. The water will go through the chlorination unit for treatment and be transmitted by gravity via the 6,500 feet of 12-inch waterline to the 500,000-gallon control tank. Likewise, water from the Kahana Well will be pumped into the onsite 30,000-gallon control tank. After the chlorination process, the water will be transmitted by gravity via the 8,300 feet of 12-inch waterline which eventually connects to the transmission waterline connecting the Mahinahina Well and the 500,000-gallon control tank. The water from the 500,000-gallon control tank will then be transmitted to DWS' existing two (2) million gallon Honokōwai storage tank located approximately one (1) mile to the west of the Mahinahina SWTP. See **Appendix "D"** for sample photos and an elevation diagram of a control tank.

It is noted that the proposed 500,000 gallon control tank has been designed to accommodate water from the proposed Kahana Well and Mahinahina Well, as well as treated surface water from the Mahinahina SWTP and other future water sources. This may include the Honokōwai Well that is currently proposed by the DHHL.

The proposed transmission waterline from the Mahinahina Well will cross under Honokōhau Ditch. Refer to **Figure 3**. The waterline will be installed by horizontal directional drilling (HDD) at a depth ranging from eight (8) to ten (10) feet. This will allow the waterline to maintain a 3-foot vertical clearance to the Honokōhau Ditch. Refer to **Appendix "C-1".** Similarly, the proposed transmission waterline from Kahana Well will cross under Kahanaiki Gulch, Mahinahina Gulch, and an Unnamed Gulch located in between Kahanaiki and Mahinahina Gulches. Refer to **Figure 3**. The waterline will be

installed underground by means of HDD with a maximum depth of 45 feet. Refer to **Appendix "C-2"**.

D. PURPOSE AND NEED FOR PROJECT

The proposed West Maui Source Development Project will provide additional water source and system reliability to the DWS West Maui Water System. The wells will support the planned growth that is projected to occur in the West Maui region. Both the Kahana Well and Mahinahina Well are located within the West Maui Water System's northern region, but are intended to serve both the northern and southern regions. The Mahinahina Well will draw 0.672 million gallons per day (mgd) from the Honokōwai Aquifer, based on an operational schedule of 16 hours pumping per 24 hour period, and the Kahana Well will draw approximately 0.96 mgd from the Honolua Aquifer, based on an operational schedule of 16 hours pumping per 24 hour period.

The Mahinahina SWTP, operated and maintained by the County of Maui, draws surface water from the nearby Honokōhau Ditch. Availability or use of surface water is reduced during periods of drought, severe rainfall, or when the ditch is scheduled for repair or maintenance work. When these situations occur, groundwater sources are relied upon to meet the water needs of the region as groundwater is not influenced as much by these factors.

According to the Regional Plan for Lāhainā Aquifer Sector Area of the (Draft) Maui Island Water Use and Development Plan (WUDP), which is in the process of being updated by DWS, future water demand for the West Maui region will increase from nine (9) mgd to approximately 16 mgd by 2035, based on the Maui Island Plan's (MIP) population projections. The proposed project will provide approximately 1.63 mgd of additional water source to support the projected future water demands of the West Maui region while also providing backup redundancy for existing users.

E. REGULATORY CONTEXT

1. Chapter 343, Hawai'i Revised Statutes

The proposed project will involve the use of State lands and County and State funds. The use of State lands and County and State funds are triggers for the preparation of an Environmental Assessment (EA), pursuant to Chapter 343, Hawai'i Revised Statutes (HRS). Based on the scope of work for the proposed project, this Draft EA is being prepared in accordance with Chapter 200 of Title 11, Hawai'i Administrative Rules (HAR) in order to review the project's technical characteristics, environmental impacts, alternatives, and advances findings and conclusions relative to the significance of the project. The DWS will serve as the Approving Agency for the project.

2. Drinking Water State Revolving Fund Cross-Cutter Requirements

Funds from the State of Hawai'i's Drinking Water State Revolving Fund (DWSRF) may be utilized for the project. As such, compliance with applicable Federal cross-cutter requirements will also be addressed during the Chapter 343, HRS environmental review process.

3. Other Regulatory Considerations

As noted above, the proposed project involves installation of waterlines that cross three (3) gulches and the Honokōhau Ditch. The waterlines will be installed utilizing HDD under the water features. The U.S. Army Corps of Engineers (COE) has determined that the proposed project does not require a Department of Army Permit. See **Appendix "E"**.

Further, the State of Hawai'i, Commission of Water Resource Management (CWRM) provided a letter on August 3, 2018, confirming that the proposed project will not require a Stream Channel Alteration Permit Application to be submitted because the proposed project will only cross non-perennial streams that do not support instream uses. See **Appendix "F"**.

F. PROJECT COST AND IMPLEMENTATION SCHEDULE

The cost of the proposed West Maui Source Development project is estimated to be approximately $18.4 million for the development of the Kahana Well and Mahinahina Well, including related infrastructure. The project will likely implemented in two (2) phases due to funding constraints. Upon completion of the Chapter 343, HRS, EA process and receipt of applicable construction related permits, the Kahana Well and the transmission waterlines and access roads will be advertised for bids. The construction timeline will be approximately 18 months from the notice to proceed date for the Kahana Well. The Mahinahina Well will be developed at a later date to be determined.

DESCRIPTION OF EXISTING ENVIRONMENT, POTENTIAL IMPACTS, AND PROPOSED MITIGATION MEASURES

II

II. DESCRIPTION OF THE EXISTING ENVIRONMENT, POTENTIAL IMPACTS, AND MITIGATION MEASURES

A. PHYSICAL ENVIRONMENT

1. Surrounding Land Use

a. Existing Conditions

The proposed project is situated within the Honokōwai area and lies eastward of the State's West Maui Kapalua Airport. The project area covers terrain that lies between the West Maui Mountains and the existing Department of Water Supply's (DWS) Mahinahina Surface Water Treatment Plant (SWTP) and includes land owned by the State Department of Land and Natural Resources (DLNR), Department of Hawaiian Home Lands (DHHL), and Maui Land & Pineapple Company (MLP).

To the north and south of the project area are fields that were formerly in pineapple cultivation, but now lie fallow. The proposed well sites are located at the foothills of the West Maui Mountains, approximately 1.25 miles east of the Mahinahina SWTP at an approximate elevation of 1,300 feet mean sea level (msl). The two (2) well sites are located approximately 3,300 feet apart in a northeast/southwest direction. Refer to **Figure 2**. The closest residential and commercial areas are situated across Honoapi'ilani Highway to the west and are approximately two (2) miles away from the lower reaches of the proposed 500,000-gallon control tank site which lies at approximately 590 feet above sea level. The Honokōhau Ditch is a concrete-lined irrigation channel that runs in a north/south direction and is located to the east of the proposed 500,000-gallon control tank site.

b. Potential Impacts and Mitigation Measures

Land uses surrounding the project area consist of former agricultural lands. The project area sits below the conservation designated foothills of the West Maui Mountains and is located outside the existing urbanized areas that are within the coastal area of this region, about two (2) to three (3) miles away. DWS's existing infrastructure in the vicinity of the proposed project sites includes the Honokōwai 2.0 million gallon (MG) reservoir and the Mahinahina SWTP which are located east of Honoapi'ilani Highway and beyond the State West Maui Kapalua Airport, respectively. The proposed West Maui Source Development Project adds water source reliability to the

DWS West Maui Water System and provides benefit to the community in this region. The proposed project primarily consists of a 500,000-gallon control tank, two (2) production wells, underground waterlines, access roads, electric line extensions, and related improvements. The project is compatible with the adjacent fallow agricultural land uses and is not anticipated to have an adverse impact on other surrounding land uses within the area.

2. Climate

a. Existing Conditions

Like most areas of Hawai'i, West Maui's climate is relatively uniform year-round. West Maui's tropical latitude, its position relative to storm tracts and the Pacific anticyclone, and the surrounding ocean combine to produce this stable climate. Variations in climate among different regions on Maui are, therefore, dictated by the inherent characteristics of local terrain.

Average daily temperatures typically range between 69 degrees and 82 degrees Fahrenheit in Lāhainā. August and September are historically the warmest month, while January and February are the coolest (County of Maui, Office of Economic Development 2016).

Rainfall in West Maui is both low and highly seasonal in nature, with most precipitation occurring between the months of October and April when winter storms hit the area. December is the wettest month, with 4.54 inches on average, and September is the driest, with 1.00-inch of precipitation. Situated on the leeward side of the West Maui Mountains, this dry region receives most of its rainfall in late afternoon and early evening, after seabreezes take moisture upslope during the day (County of Maui, Office of Economic Development 2016).

The winds in the area are also seasonal, although northeasterly tradewinds are predominant and occur 90 percent of the time during the summer and just 50 percent of the time in winter with average wind speeds of approximately 16 miles per hour. Wind patterns also vary on a daily basis, with tradewinds generally being stronger in the afternoon. During the day, winds blow onshore toward the warmer land mass. This process reverses in the evening when breezes blow toward the relatively warm ocean. Between October and March, the southerly winds of Kona storms may be experienced.

b. Potential Impacts and Mitigation Measures

The proposed project is surrounded by vegetation and fallow agricultural lands and includes infrastructure components that will occupy a combined area of approximately 11.5 acres. Included with the project is a 500,000-gallon control tank, two (2) production wells, below ground waterlines, access roads, electric line extensions, and related improvements. The proposed project is not anticipated to have an adverse effect on climate. The proposed project will provide added water system reliability for the West Maui Water System during periods of drought.

3. Water Quality

a. Existing Conditions

The proposed project provides DWS with additional groundwater sources from the Honokōwai Aquifer (Mahinahina Well) and Honolua Aquifer (Kahana Well), which are located within the Lāhainā Aquifer Sector. Rain water and fog consist of approximately 96 percent of water sources for the Lāhainā Aquifer System, with the remainder from irrigation and other activities. The uplands of West Maui Mountain exhibit high recharge due to high rainfall, as well as considerable fog interception and low evapotranspiration due to persistent cloud cover (County of Maui, Department of Water Supply, 2017).

The DWS West Maui Water System relies on surface water sources that feed the existing Mahinahina SWTP located within the Honokōwai area and the existing Lāhaina SWTP located within the Launiupoko area and multiple groundwater source wells also within these areas. The proposed Mahinahina Well will draw groundwater from the Honokōwai Aquifer System which covers about 23.6 square miles. The Honokōwai Aquifer boundaries are Kahana Valley to the south, along the coastline from Kae'a Point to Pu'unoa Point, and Kahoma Valley to the north. The proposed Kahana Well will draw groundwater from the Honolua Aquifer system. The Honolua Aquifer boundaries are Kahana Valley to the south, along the coastline from Lipoa Point to Ka'ena Point, Honokahua to the west, and Honolua to the east (Mink, J.F., and Lau, L.S., 1990).

It is noted that four (4) existing wells, privately owned and managed by Hawaii Water Service Company, Inc., are located about 2,900 feet to 4,100 feet to the west and downslope of the Kahana Well. They are Kā'anapali Well P-4, Kā'anapali Well P-5, Kā'anapali Well P-5A, and Kā'anapali Well P-6. In addition, DHHL's proposed Honokōwai Well, in the vicintiy of Mahinihina Well, is being planned to be developed in the near future.

Table 2 below lists the approximate ground surface elevations and distances of the Kā'anapali wells from the Kahana Well.

Table 2. Elevations and Distances of Kā'anapali Wells from Kahana Well

Well	Elevation Above Mean Sea Level in Feet	Distance from Kahana Well in Feet
Kā'anapali P-4	870	4,100
Kā'anapali P-5	910	3,400
Kā'anapali P-5A	910	2,900
Kā'anapali P-6	950	3,400

Beginning at Kā'anapali P-4, the most southerly well, the Kā'anapali wells extend to the northeast and north and are separated by about 1,000 feet between each well. The 1,000-foot separation is a guideline to avoid interference between wells.

A geologist's report was prepared by Water Resource Associates in September 2014 (revised February 2015) for the Mahinahina Exploratory Well. See **Appendix "G-1"**. According to the geologist's report, water samples were collected and analyzed by Eurofins Eaton Analytical of Monrovia, California, for water quality parameters required by the State of Hawai'i, Department of Health (DOH). The Engineering Report for new drinking water source required by the DOH for the Mahinahina Well will be prepared in the development phase of the well.

The Engineering Report for new drinking water source for the Kahana Well was prepared by Fukumoto Engineering, Inc. in August 2018. The DOH-Safe Drinking Water Branch (SDWB) determined the engineering report as satisfactory on November 7, 2018 and granted conditional approval for the use of the Kahana Well. The report and approval letter from the DOH-SDWB are included in this Draft EA as **Appendix "G-2"**. A final engineering report for Kahana Well will be submitted to DOH for approval in the development phase of the well.

As reported from the geologist's report and engineering report noted above, the following **Table 3**, summarizes the detected contaminants and water quality parameters for the Mahinahina Well and Kahana Well.

Table 3. Detected Contaminants and Water Quality Parameters of Mahinahina Well and Kahana Well

Contaminant or Water Quality Parameter	Maximum Contaminant Level (MCL)	Unit	Mahinahina Well (tested 4/4/13)	Kahana Well (tested 6/27/17)
Barium	2	mg/l	ND	0.0032
Chromium	0.1	mg/l	ND	ND
Nitrate (as Nitrogen)	10	mg/l	0.24	0.54
Fluoride	4	mg/l	ND	0.065
Copper	1.3 (action level)	mg/l	0.0029	ND
Lead	0.015 (action level)	mg/l	ND	ND
Gross Alpha	15	pCi/l	5.8	2.19±1.58
Gross Beta	50 (screening level)	pCi/l	ND	2.73±1.11
Alkalinity	-	mg/l	37	49
Calcium	-	mg/l	6.9	15
Conductivity	-	µmho /cm	120	350
pH	-	-	8.0	7.74
Temperature	-	degrees F	65.8	71.4
Turbidity	5	NTU	0.30	0.14
DBCP (1,2-Dibromo-3-chloropropane)	0.00004	mg/l	ND	ND
TCP (1,2,3-Trichloropropane)	0.00060	mg/l	ND	ND

Note: Abbreviation Definitions
ND - not detected
mg/l - milligrams per liter
µmho/cm - micromhos per centimeter
degrees F - degrees Fahrenheit
NTU - nephelometric turbidity units

As shown in **Table 3**, the water quality of the Mahinahina Well and Kahana Well are similar. The wells have small amounts of the same contaminants and similar water quality parameters. The test results of the detected contaminants are substantially less than the allowable maximum contaminant levels. Refer to **Table 3**, **Appendix "G-1"**, and **Appendix "G-2"**.

b. Potential Impacts and Mitigation Measures

The Commission on Water Resource Management (CWRM) has established a sustainable yield of 6 million gallons per day (mgd) for the Honokōwai Aquifer and 8 mgd for the Honolua Aquifer (CWRM, June 2008). About 3.41 mgd from the Honokōwai Aquifer and 2.3 mgd of the Honolua Aquifer have been in use by private source developers. The availability of groundwater for new source development is about 2.59 mgd in the Honokōwai Aquifer and 5.7 mgd in the Honolua Aquifer (Fukunaga & Associates, Inc., 2011 and Munekiyo & Hiraga, Inc., 2014). The Mahinahina Well will draw of approximately 0.672 mgd from the Honokowai Aquifer, based on an operational schedule of 16 hours pumping per 24 hour period, and the Kahana Well will draw approximately 0.96 mgd from the Honolua Aquifer, based on an operational schedule of 16 hours pumping per 24 hour period. Pumpage from both wells will be within their respective aquifer's sustainable yield.

As noted previously, four (4) existing wells, privately owned and managed by Hawaii Water Service Company, Inc., are located about 2,900 feet to 4,100 feet to the west and downslope of the Kahana Well. The Kahana Well was located to avoid interference with the existing Kā'anapali wells. The separation distances between those wells and the Kahana Well are substantially more than the 1,000-foot separation guideline to avoid interference between wells. In addition, interference is unlikely due to the relatively small draw down of about 2.8 feet at a pumping rate of 1,000 gallons per minute (gpm) during the pump test of Kahana Well.

A Summary of Drilling and Well Testing, prepared by Glenn Bauer in July 2017 and included as Appendix "A" of the engineering report for the Kahana Well, noted that the result of the step-drawdown and constant rate tests indicated that the proposed 1,000 gpm pump will be below the maximum pumpage capacity and should be sustainable. Refer to **Appendix "G-2"**.

According to the geologist's report for the Mahinahina Well, two (2) step-drawdown tests for Mahinahina Well were conducted and the results indicated that the sustainable pumping capacity of the Mahinahina Well was estimated to be approximately 500 to 550 gpm. Based on an operational schedule of 16 hours pumping per 24 hour period, the geologist's report indicated that the Mahinahina Well can be outfitted with a 700 gpm permanent pump. As such, the proposed well pump up to 700 gpm at Mahinahina Well is deemed sustainable. Refer to **Appendix "G-1"**.

Both the Mahinahina Well and Kahana Well require pump installation permits from the CWRM. A pump installation permit for the Mahinahina Well was approved by the CWRM on September 1, 2011. A pump installation permit for the Kahana Well will be obtained prior to the initiation of development of this well. DWS will comply with applicable requirements of the DOH and CWRM to operate the Mahinahina Well and Kahana Well and their associated improvements. Copies of approved CWRM permits for the wells are presented in **Appendix "H-1"** and **Appendix "H-2"**.

The project area was previously used for pineapple cultivation until 2005. The engineering report identifies that potential contaminants that may leach into groundwater due to pineapple cultivation include 1, 2-dibromo-3-chloropropane (DBCP) and 1,2,3-trichloropropane (TCP). However, as shown in **Table 3**, the water quality tests indicate no adverse effect due to the former pineapple cultivation and the water meets drinking water standards. As such, the proposed locations for the Mahinahina Well and Kahana Well are suitable for potable groundwater development. Refer to **Appendix "G-1"** and **Appendix "G-2"**.

DWS is required to conduct water quality sampling and monitoring of the proposed system improvements to ensure the protection of public health and safety and applicable Federal and State water quality requirements are followed. Water testing will be completed prior to activation of the source. All of the laboratory analyses will be performed by a laboratory certified or approved by the State Laboratories Division (DOH-SLD), using Federal Environmental Protection Agency (EPA)-approved methods for drinking water.

Before performing any construction work, the site will be inspected for old containers or equipment that may have been used to store or apply such soil agricultural chemicals to reduce or eliminate the potential for contamination of the water sources. If such old containers or equipment are found, they will be disposed in a proper manner.

Based on the foregoing, the proposed Mahinahina Well and Kahana Well are not anticipated to result in significant adverse impacts to the water quality of this region. The wells are also deemed a suitable source for drinking water.

4. Topography and Soil Characteristics

a. Existing Conditions

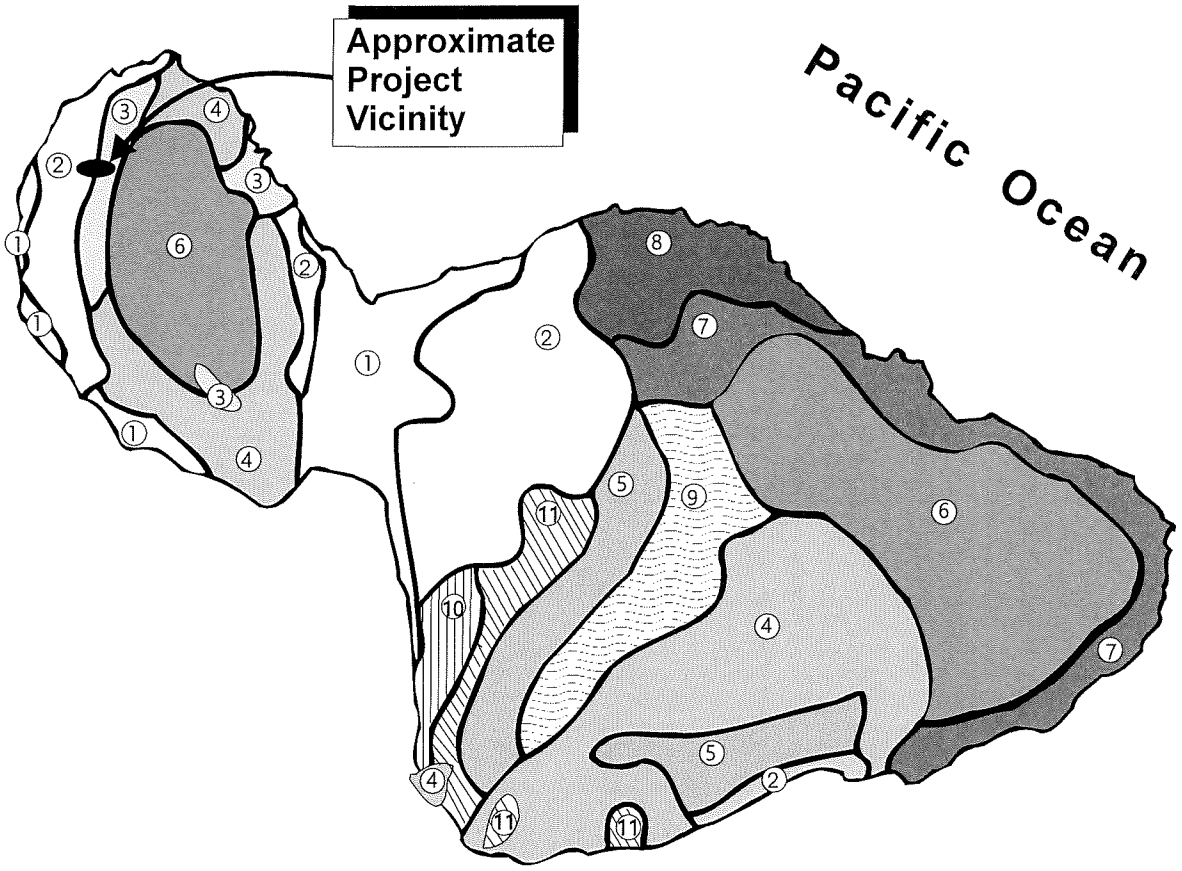
The project area gradually slopes westward from about 1,314 feet msl from the base of the West Maui Mountains to a lower elevation of 590 feet msl just west of the Honokōhau Ditch. The expansive plain below the West Maui Mountain foothills is characterized by steep ravines, deep valleys, and streams. The proposed Mahinahina Well and Kahana Well sites were previously cultivated for pineapple. The other portions of the project area are currently vacant and isolated from urbanized coastal areas.

According to the U.S. Department of Agriculture Soil Conservation Service (1972), soils within the subject property belong to the Waiakoa-Keauhua-Molokai and Honolua-Olelo associations. See **Figure 4**. The Waiakoa-Keauhua-Molokai Association is characterized by material moderately deep, nearly level to moderately steep, well-drained soils that have a port moderately fine textured subsoil. These soil types are typically used for sugar cane, pineapple, pasture, wildlife habitat and homesites. The Honolua-Olelo association is characterized by deep, gently sloping to moderately steep, well-drained soils that have a fine-textured subsoil; on intermediate uplands. These soil types are typically used for pineapple, pasture, woodland, waterlife habitat, and water supply.

The specific soil type underlying the project area are Alaeloa Silty Clay (AeC, 7 to 15 percent slopes and AeE, 15 to 35 percent slopes), Kahana Silty Clay (KbB, 3 to 7 percent slopes and KbC, 7 to 15 percent slopes), Rock Land (rRK), Rough Mountainous Land (rRT), Rough Broken and Stony Land (rRS), and Oleo Silty Clay (OFC, 3 to 15 percent slopes). See **Figure 5**. AeC and AeE are characterized by moderately rapid permeability and moderate to severe erosion hazard on steep slopes. KbB and KbC are characterized by moderate to rapid permeability. These soil types are typically used for sugar cane, truck crops, and pasture. rRK is characterized by rock outcrops and very shallow soils. rRT is characterized by rapid runoff and active erosion. rRS occurs in mountainous areas and consists of very steep land broken by numerous intermittent drainage channels. OFC occurs on narrow to broad ridge tops and is characterized by moderately rapid permeability, slow runoff, and slight erosion hazard.

LEGEND

- ① Pulehu-Ewa-Jaucas association
- ② Waiakoa-Keahua-Molokai association
- ③ Honolua-Olelo association
- ④ Rock land-Rough mountainous land association
- ⑤ Puu Pa-Kula-Pane association
- ⑥ Hydrandepts-Tropaquods association
- ⑦ Hana-Makaalae-Kailua association
- ⑧ Pauwela-Haiku association
- ⑨ Laumaia-Kaipoipoi-Olinda association
- ⑩ Keawakapu-Makena association
- ⑪ Kamaole-Oanapuka association



Source: U.S. Department of Agriculture, Natural Resources Conservation Service, 2006

Figure 4

Proposed West Maui Source Development Project
Soil Association Map

NOT TO SCALE

Prepared for: County of Maui, Department of Water Supply

MUNEKIYO HIRAGA

FE\Kahana Production Well\Applications\Figures\SOILS

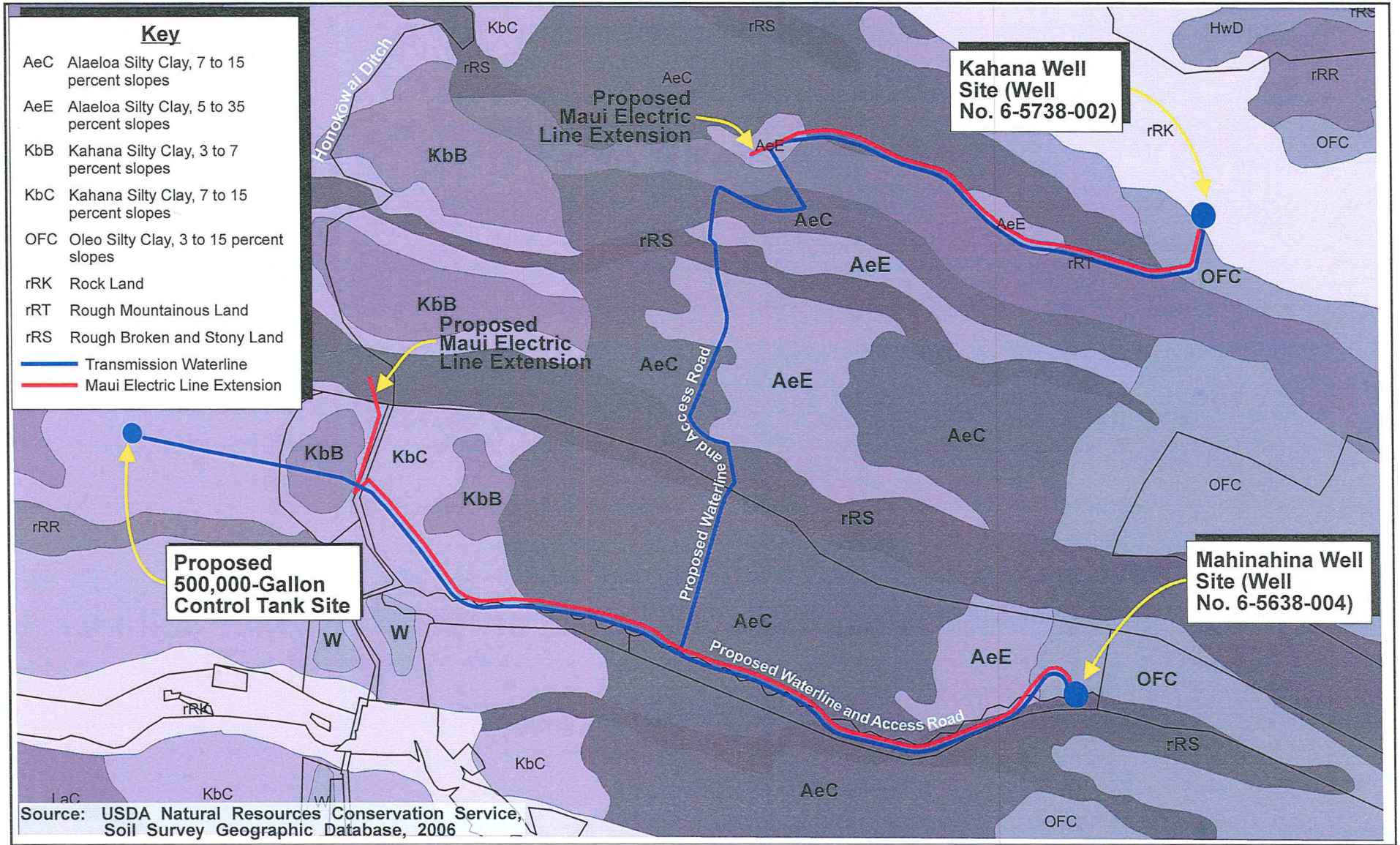


Figure 5

Proposed West Maui Source Development Project
Soil Classification Map

0 250 500 1000 Feet

Prepared for: County of Maui, Department of Water Supply

MUNEKIYO HIRAGA

FE\Kahana Production Well\Applications\Figures\Soil Classification

These soil types are typically used for sugar cane, pineapple, homesites, woodland, pasture, wildlife habitat, water supply, watershed, and recreation (U.S. Department of Agriculture, 1972).

b. Potential Impacts and Mitigation Measures

To prevent soil erosion during site work, the contractor will implement Best Management Practices (BMPs), which will include, but not be limited to, minimizing time of construction, sequencing construction to minimize exposure time of cleared surface area, installing and maintaining temporary sediment basins, temporary diversion berms and swales to intercept runoff, silt fences, dust fences and slope protection, and applying perennial vegetation for permanent soil stabilization as soon as practicable. The BMPs will be developed in compliance with the "Construction Best Management Practices for the County of Maui" (issued by the Department of Public Works and Waste Management in May 2001).

The total disturbed area of the proposed improvements is estimated to be approximately 11.5 acres. To minimize soil erosion, the contractor will be required to submit a soil erosion control plan. A grubbing and grading permit and National Pollutant Discharge Elimination System (NPDES) Permit will also be obtained for the project, prior to construction.

Due to terrain and slope characteristics of the general project area, a geotechnical Subsurface Investigation Report (October 16, 2012) was prepared by Fewell Geotechnical Engineering Ltd. to aid in the design of the Mahinahina Well and related improvements. Nine (9) test borings were drilled in the project area between July 27 and August 2, 2012, at depths between 6 and 50 feet below the existing ground surface. Samples of subsurface soils were obtained and tested to determine their general engineering characteristics, including in-situ moisture content, density, consolidation, direct shear strength, and expansion. These borings indicate that the project area is generally underlain by relatively competent residual soils and saprolites over weathered basalt which should provide adequate support for the planned project construction. See Appendix "I-1". Similarly, a Geotechnical Investigation Report (July, 2018) was prepared by Hawaii Geotechnical Consulting, Inc. for the Kahana Well control tank and control building site. A total of three (3) test pits were excavated and soil samples were taken for laboratory testing. The report indicated that the Kahana Well site was generally underlain by a residual (weathered in place from parent basalt) layer of orange brown silty sand with varying percentages of gravel and cobbles. Based on the field exploration and geotechnical analysis, the report concluded that the construction of the

Kahana Well control tank and control building is geotechnically feasible. See **Appendix "I-2"**.

These reports contain recommendations for site preparation and handling during project construction which DWS will follow as appropriate.

While the terrain will be locally modified to implement the project, the proposed action is not anticipated to significantly adversely alter topographic characteristics in the vicinity of the project area.

5. Agriculture

a. Existing Conditions

The project area is comprised of land that has been extensively used for agriculture. The area has been highly disturbed and altered due to repeated plowing and grading for pineapple cultivation. The pineapple cultivation was ceased and the agricultural land underlying the project sites has been fallow since 2005.

The State Department of Agriculture has established three (3) categories of Agricultural Lands of Importance to the State of Hawai'i (ALISH). The ALISH system classifies lands into "Prime", "Unique", and "Other Important Agricultural Land". The remaining lands are "Unclassified". Utilizing modern farming methods, "Prime" agricultural lands have the soil quality, growing season, and moisture supply needed to produce sustained crop yields economically, while "Unique" agricultural lands possess a combination of soil quality, location, growing season, and moisture supply currently used to produce sustained high yields of a specific crop. "Other Important Agricultural Land" includes those which have not been rated as "Prime" or "Unique". The majority of the project area is located on lands that have been defined as "Prime" agricultural lands by the ALISH rating system. Small portions of the project fall within lands that are rated as "Other" and unclassified by the ALISH system. See **Figure 6**.

In addition, the University of Hawai'i, Land Study Bureau (LSB) classifies productivity characteristics on a scale of "A" through "E", with lands designated as "A" reflecting the highest productivity and "E" representing lands with the lowest productivity. Lands underlying the project area have been designated as "A", "C", and "E" by the LSB (Land Study Bureau, 1967). See **Figure 7.**

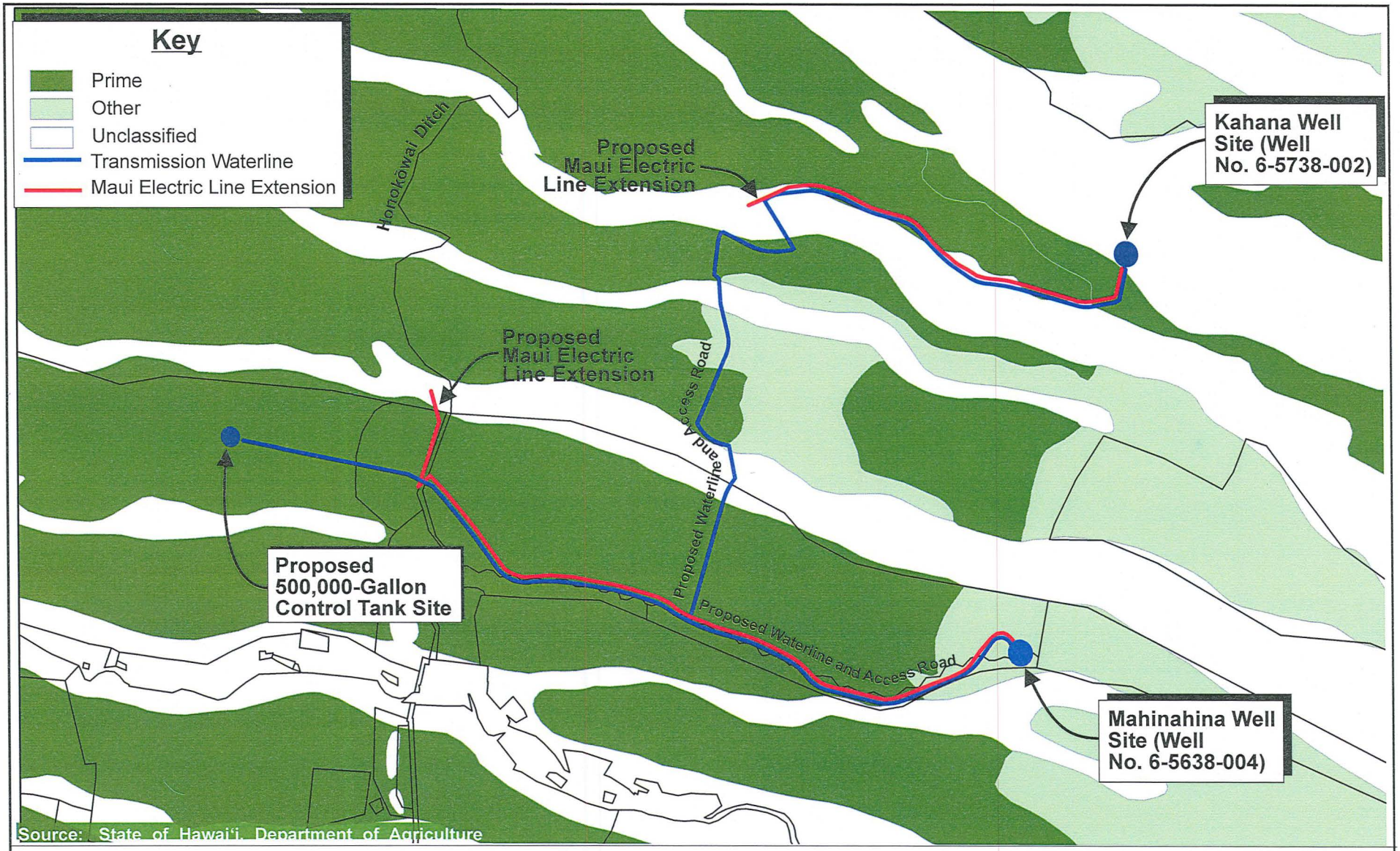


Figure 6

Proposed West Maui Source Development Project

Agricultural Lands of Importance to the State of Hawai'i Map

0 600 Feet
300 1200

Prepared for: County of Maui, Department of Water Supply

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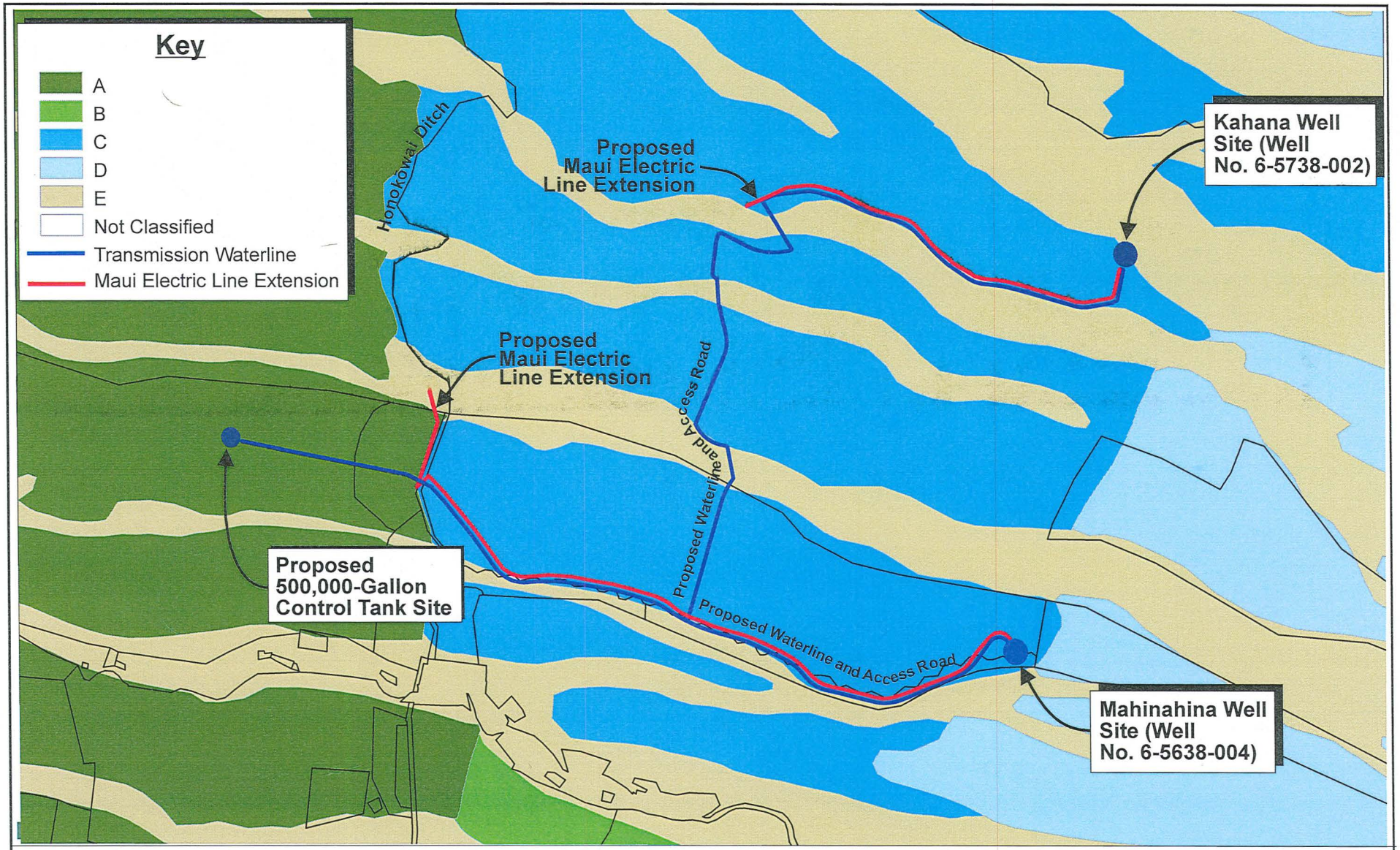

Figure 7

Proposed West Maui Source Development Project
Land Study Bureau Map

0 600 300 1200 Feet

Prepared for: County of Maui, Department of Water Supply

MUNEKIYO HIRAGA

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Furthermore, the U.S. Department of Agriculture's (USDA's) Farmland Protection Policy Act (FPPA) defines three (3) categories of farmlands, including prime farmland, unique farmland, and land of statewide or local importance. The purpose of the FPPA is to minimize the impact that federal programs would have on the unnecessary and irreversible conversion of farmland to nonagricultural uses. Within the project area, the three (3) types of soils, including AeC, KbB, and KbC, are classified as Prime Farmland if irrigated (U.S. Department of Agriculture, 1981). Refer to **Figure 5**.

b. Potential Impacts and Mitigation Measures

As mentioned previously, the lands under the proposed Mahinahina Well and Kahana Well were taken out of pineapple production in 2005. The proposed 500,000-gallon control tank will occupy approximately 1.8 acres on an area that is no longer in agriculture cultivation. The total project area is approximately 11.5 acres of which the well and tank sites encompass approximately 4.0 acres and the remaining 7.5 acres are related to the access and utilities for the project. The total project area is not significant in terms of the region's vast agricultural areas. The land required for the project is less than one (1) percent of the approximately 3,501 acres that comprise the parcels that are affected by the proposed project. Development of the proposed West Maui Source Development project will not result in significant adverse impacts to agricultural endeavors in this region.

6. Flood and Tsunami Hazard

a. Existing Conditions

The Flood Insurance Rate Map (FIRM) for this area of the island designates the project area as being within Zone "X" (unshaded) and is not subject to the Flood Hazard District Ordinance, Chapter 19.62 of the Maui County Code. Zone "X" (unshaded) indicates an area of minimal flooding and has no restrictions placed on development (Federal Emergency Management Agency, 2016). Specifically, the Federal Emergency Management Agency (FEMA) describes Flood Zone "X" to be areas of minimal flood hazard. Insurance purchase is not required in these zones.

The project area is not identified in the Tsunami Flood Zone Evacuation Maps as being located within a tsunami evacuation area (County of Maui, Civil Defense Agency, 2015).

b. Potential Impacts and Mitigation Measures

The proposed project is not located within a Special Flood Hazard Area and is not located within a tsunami evacuation area. No adverse impacts with regard to flood and tsunami hazard parameters are anticipated with the implementation of the project.

7. Streams and Wetlands

a. Existing Conditions

Within the project area is one major ditch, the Honokōhau Ditch system which brings surface water into the Honokōwai area from a diversion of Honokōhau Stream. The Honokōhau Ditch provides surface water to various users, as well as to the existing Mahinahina SWTP for treatment prior to placement into the DWS drinking water supply for West Maui.

Furthermore, three (3) gulches, Kahanaiki Gulch, an Unnamed Gulch, and Mahinahina Gulch, run in a west/east direction in the vicinity of the project site. No wetland is located within or in the vicinity of the project site. See **Figure 8**.

b. Potential Impacts and Mitigation Measures

The 12-inch transmission waterline from the Mahinahina Well connecting to the proposed 500,000-gallon control tank is proposed to be installed approximately three (3) inches below the invert of the Honokōhau Ditch by means of Horizontal Directional Drilling (HDD) method. Any construction work to cross the Honokōhau Ditch will be coordinated with the State of Hawai'i, the land owner, and Kaanapali Land Development Corp. (parent company of Pioneer Mill Company), the ditch owner, and will be designed to avoid adverse impacts to Honokōhau Ditch. A NPDES permit will be applied for and obtained prior to initiation of construction. Refer to **Appendix "C-1"**.

The proposed 12-inch transmission waterline from the Kahana Well will cross under Kahanaiki Gulch, Mahinahina Gulch, and an Unnamed Gulch located in between Kahanaiki and Mahinahina Gulches. The waterline will be installed underground through the HDD method with a maximum depth of 45 feet. Refer to **Appendix "C-2"**.

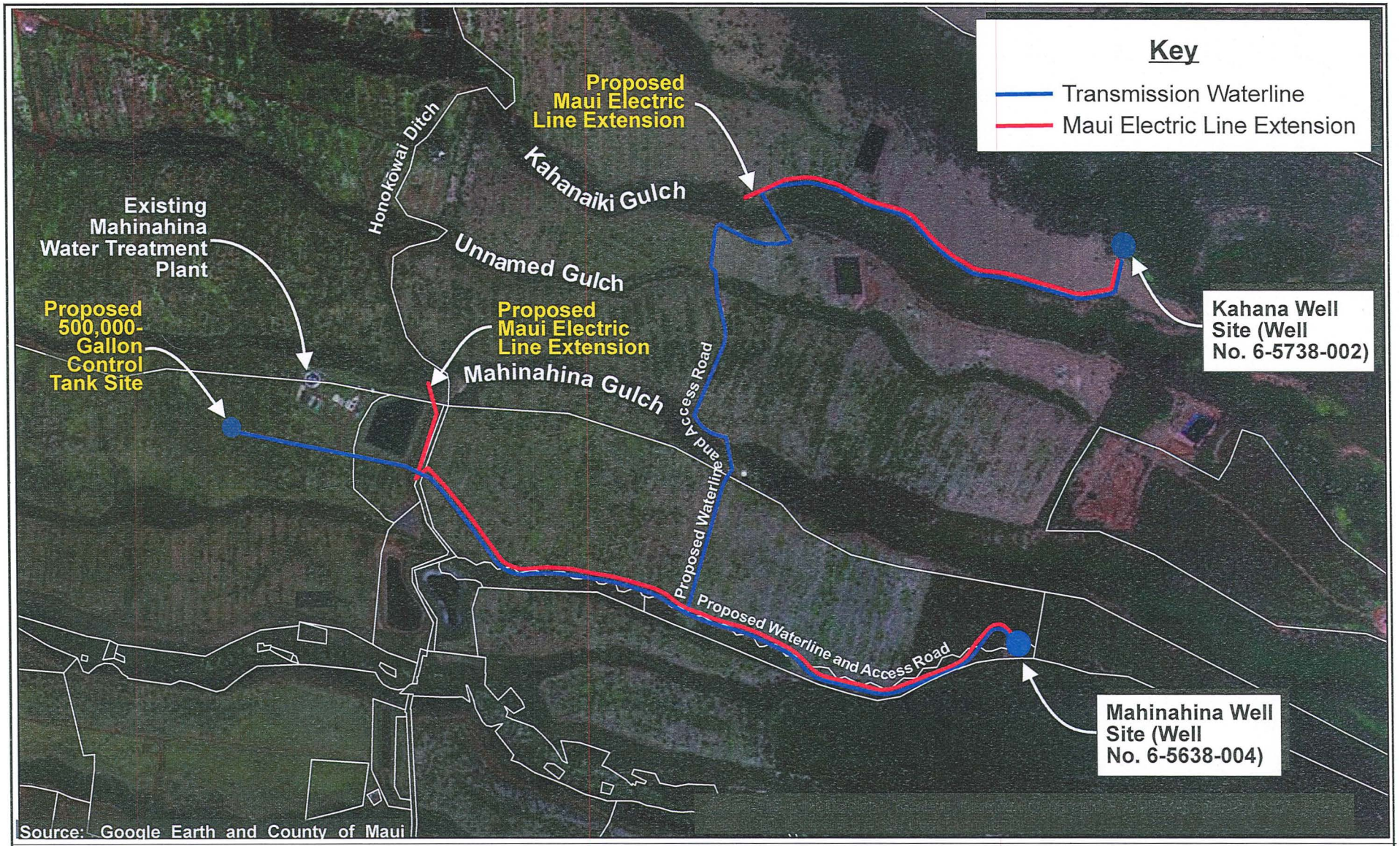

Figure 8

Proposed West Maui Source Development Project

Map of Nearby Ditch and Gulches

0 600 Feet
300 1200

Prepared for: County of Maui, Department of Water Supply

MUNEKIYO HIRAGA

FE\Kahana Production Well\Applications\Figures\US Map

As the HDD method will be utilized for the waterlines crossing the three (3) gulches and the Honokōhau Ditch, there will be no work within the waters of the U.S. A "No Permit Required" determination was provided by the U.S. Army Corps of Engineers (COE) for the proposed project. Refer to **Appendix "E"**. Furthermore, the Commission on Water Resources Management has determined that a Stream Channel Alteration Permit (SCAP) is not required because the proposed project will only cross non-perrenial streams that do not support in-stream uses. Refer to **Appendix "F"**.

Measures to mitigate contamination of the water source due to storm drainage include preventing offsite runoff from entering the production well sites, and collecting onsite runoff and conveying it to a drainage basin for disposal. During construction activities, storm runoff from the sites should be contained and prevented from entering the adjoining gulches. Geotechnical Subsurface Investigation Reports prepared for Mahinahina Well and Kahana Well by Fewell Geotechnical Engineering, Ltd. and Hawaii Geotechnical Consulting, Inc., respectively, include recommendations for site preparation during construction (i.e., grading and grubbing) which DWS will follow, as appropriate. As such, significant adverse impacts to the Honokōhau Ditch, nearby gulches, and wetlands are not anticipated with the implementation of the project. Refer to **Figure 8**.

8. Flora and Fauna

a. Existing Conditions

Robert W. Hobdy prepared three (3) Biological Resources Survey Reports in October 2012, September 2013, and May 2018 for the project.

- **Mahinahina Well and Related Improvements**

  A Biological Resources Survey for the Mahinahina Well and related improvements was prepared in October 2012. See **Appendix "J-1"**. The vegetation on the Mahinahina Well, along the transmission waterline alignment, consists mostly of non-native, weedy species that have colonized the former agricultural lands. Seventy-seven (77) species were noted during the survey, including four (4) non-native species, Formosa koa (*Acacia confusa*), sourgrass (*Digitaria insularis*), molasses grass (*Melinis minutiflora*), and Natal red top (*Melinis repens*), which were found to be the most common and

together dominated the area. Four (4) native plant species were found in the project area, ni'ani'au or sword fern (*Nephrolepis exaltata*), koali'awahia (*Ipomoea indica*), 'uhaloa (*Waltheria indica*) and ūlei (*Osteomeles anthyllidifolia*). All of these are indigenous native plants that are widespread in Hawai'i and on other Pacific islands.

There are extensive areas of protected native habitat in West Maui and a substantial number of endangered species which consists of dense native forests and summit bogs. The closest endangered plant is located in Honokōwai Canyon about one (1) mile to the southeast of the project area and include mahoe (*Alectryon macrococcus*) and *Bonamia menziesii,* which has no common name. The endangered species kauila (*Colubrina oppositifolia*) occurs in the Kapunakea Preserve about two (2) miles to the southeast of the project. These species, including the endangered plant species, occur in protected ecosystems in wet forests above the project area.

The survey report notes two (2) non-native mammals on two (2) site visits, including one (1) mongoose (*Herpestes auropunctatus*) and domestic dog. A few other non-native mammals can be expected in the project area, including rats (*Rattus spp.*), mice (*Mus domesticus*), and feral cats (*Felis catus*). An evening survey was conducted at two (2) locations of the project area to look for signs of the Hawaiian hoary bat. No bats were seen though visibility was excellent and a detection device was used. In regards to insects, the report noted that no endangered or threatened insect species were found during the survey and no known hosts of such species were recorded.

The project area contains bird life that is moderate in species representation and total numbers. Twelve non-native species were observed during two (2) site visits, including the zebra dove (*Geopelia striata*) that is common throughout the project area. The less commonly observed species were the house finch (*Carpodacus mexicanus*), spotted dove (*Streptopelia chinensis*), nutmeg manikin (*Lonchura punctulata*), common myna (*Acridotheres tristis*), gray francolin (*Francolinus pondicerianus*), and the migratory kolea (*Pluvialis fulva*). Of rare occurrence were the Java sparrow (*Padda oryzivora*), the migratory 'akekeke (*Arenaria interpres*), cattle egret (*Bubulcus ibis*), northern cardinal

(*Cardinalis cardinalis*), and Japanese white-eye (*Zosterops japonicus*).

The survey report notes that DWS personnel observed other birds around the Mahinahina SWTP, such as the endangered ae'o or Hawaiian stilt that occasionally visit the margins of the reservoir. The nene or Hawaiian goose is occasionally observed in flocks of up to 20 birds. The *pueo* or Hawaiian owl has also been seen on rare occasions.

An evening survey done at the Mahinahina Well and control tank site did not pick up any calls from the Hawaiian petrel or the Newell's shearwater. These seabird calls are loud and can be heard for great distances.

One non-native garden skink (*Lampropholis delicata*), which is widespread in Hawai'i, was seen in leaflitter in a forest at the well site.

A total of ten (10) species of insects were observed during the site visits. Of these, three (3) were widespread and common in the project area, the Sonoran carpenter bee (*Xylocopa sonorina*), the long tailed blue butterfly (*Lampides boeticus*), and the Argentine ant (*Linepithema humile*). Two (2) dragonfly species were found to be native to Hawai'i, the green darner (*Anax junius*) and the globe skimmer (*Pantalajlavescens*), both of which are indigenous. Both of them are widespread in Hawai'i and worldwide and have no endangered or threatened status. Refer to **Appendix "J-1"**.

- **Kahana Well Site**

A Biological Resources Survey was prepared for the Kahana Well Site in September 2013. See **Appendix "J-2"**. A total of only eight (8) non-native plant species were recorded at an approximately one (1) acre site for the Kahana Well and the control tank. The site is predominantly covered with molasses grass (*Melinis minutiflora*) that is very dense and about four (4) feet deep. No native plants were found during the survey.

Sign of one (1) non-native mammal specie was seen during two (2) site visits. Rooting activity of feral pigs (*Sus scrofa*) was seen along the margin of the project area. A few other non-native mammals would be expected to occur in the project area, including rats (*Rattus* spp.), mice (*Mus domesticus*), mongoose (*Herpestes*

auropunctatus), and possibly feral cats (*Felis catus*). A special effort was made to look for signs of the Hawaiian hoary bat by making an evening survey at two (2) locations in the project area, however, no bats were seen or detected by a bat detection device.

Birdlife was rather sparse on and around the project site and only four (4) birds were seen during the survey. This included the zebra dove (*Geopelia striata*), nutmeg mannikin (*Lonchura punctulata*), Japanese white-eye (*Zosterops japonicus*), and spotted dove (*Streptopelia chinensis*). A few other non-native bird species might be expected to occur here, including the house finch (*Carpodacus mexicanus*) and the common myna (*Acridotheres tristis*). The native pueo or short-eared owl (*Assio flammeus sandwichensis*) was not seen but might be expected to be occasionally seen flying overhead looking for rodents.

The habitat in the project area has nothing that would attract endangered waterbirds, the *ae'o* or black-necked stilt (*Himantopus mexicanus knudseni*) and the *'alae ke'oke'o* or Hawaiian coot (*Fulica alai*), or the endangered *nēnē* or Hawaiian goose (*Branta sandvicensis*), and none of them were seen during the survey. An evening survey conducted at the proposed Kahana Well site failed to pick up any calls from either the endangered Hawaiian petrel or the threatened Newell's shearwater.

A total of ten (10) species of insects were observed during two (2) site visits. Most prevalent were the Asian ambrosia beetle (*Euwallacea fornicateus*), dung fly (*Musca sorbens*), honey bee (*Apis mellifera*), big-headed ant (*Pheidole megacephala*), and passion flower butterfly (*Argaulis vanillae*). One (1) indigenous green darner dragonfly (*Anax junius*) was seen flying over the project area. The green darner is widespread and common in Hawai'i as well as across the southern USA and in Mexico and there is no particular conservation concern. Refer to **Appendix "J-2"**.

- **<u>Kahana Transmission Waterline, Electrical Line, and 500,000 Gallon Control Tank Sites</u>**

A Biological Resources Survey was prepared for the Kahana Transmission Waterline, electrical line, and 500,000 gallon control tank in May 2018. See **Appendix "J-3"**. The vegetation along the transmission waterline alignment, the electric powerline extension from the Kahana Well site, as well as the 500,000-gallon Control

Tank site is dominated by three (3) non-native plant species, including Guinea grass (*Megathyrsus maximus*), koa haole (*Leucaena leucocephala*), and smooth rattlebox (*Crotalaria pallida*). Ten (10) native plant species were recorded, including two (2) endemic species, kīlau fern (*Pteridium aquilinum subsp. decompositum*) and ʻōhiʻa (*Metrosideros polymorpha var. glaberrima*). Eight (8) species were indigenous, palaʻā fern (*Sphenomeris chinensis*), moa (*Psilotum nudum*), (*Cyperus polystachyos*) no common name, koali awahia (*Ipomoea indica*), ʻuhaloa (*Waltheria indica*), ʻuʻulei (*Osteomeles anthyllidifolia*), ʻaʻaliʻi (*Dodonaea viscosa*) and pōpolo (*Solanum americanum*). These ten (10) species of common native plants persist in small numbers, mostly along less disturbed field boundaries.

The Biological Survey notes no mammals or their signs were seen during the day in the project area due to the deep and dense nature of the vegetation. A few non-native mammals, however, would be expected to occur in the project area. These include feral pigs (*Sus scrofa*), rats (*Rattus spp.*), mice (*Mus domesticus*), mongoose (*Herpestes auropunctatus*) and possibly feral cats (*Felis catus*).

A special effort was made to look for sign of the Hawaiian hoary bat by making an evening survey in the project area. Prominent bat activity was detected at two of the three locations indicating a significant presence of bats.

Birdlife was moderate in both species diversity and in numbers observed. Thirteen (13) species were identified during the survey. One (1) species was common, the zebra dove (*Geopelia striata*). Five (5) species were uncommon, the cattle egret (*Bubulcus ibis*), spotted dove (*Streptopelia chinensis*), nutmeg mannikin (*Lonchura punctulata*), black francolin (*Francolinus francolinus*) and gray francolin (*Francolinus pondicerianus*). Seven (7) other birds were of rare occurrence.

Two (2) species were native to Hawaiʻi. One *pueo* or Hawaiian short-eared owl (*Asio flammeus sandwichensis*) was seen during the evening survey hunting for rodents. Five (5) kōlea or Pacific golden-plover (*Pluvialis fulva*) were gathering at the well site clearing for the evening.

None of the Endangered waterbirds, the *aeʻo* or black-necked stilt (*Himantopus mexicanus knudseni*), the ʻalae keʻokeʻo or Hawaiian

coot (*Fulica alai*), or the Endangered nēnē or Hawaiian goose (*Branta sandvicensis*) were seen.

An evening survey that was conducted along the transmission line corridors and at the Kahana Well site failed to pick up any calls from either the Endangered Hawaiian petrel, ua'u (*Pterodroma sandwichensis*) or the Threatened a'o (*Puffinus newelli*).

A total of 16 species of insects were found during the site visits. Common species include the southern house mosquito (*Culex quinquefasciatus*), long-tailed blue butterfly (*Lampides boeticus*), monarch butterfly (*Danaus plexippus*), and globe skimmer dragonfly (*Pantala flavescens*). Two (2) dragonflies were indigenous native species, the green darner (*Anax Junius*) and the globe skimmer. One (1) non-native mollusk, the giant African snail (*Achatina fulica*) was also observed during the survey. Refer to **Appendix "J-3"**.

b. <u>Potential Impacts and Mitigation Measures</u>

The survey reports concluded that the native plants in the West Maui Source Development project site are not federally endangered or threatened species and carry no special protections or concerns.

Two (2) indigenous native species of dragonflies, the green darner and globe skimmer, were observed. These insects are widespread and common in Hawai'i and does not present concern.

The endemic and endangered Hawaiian hoary bat was detected in significant numbers in the project area. Their endangered status provides federal protection that must be addressed in the scheduling of project implementation.

Two (2) native bird species, the *kōlea* and *pueo*, were found in the project area. The *kōlea* does not have any endangered or threatened status. The *pueo* is an endemic race of the American short-eared owl but is not federally listed as endangered or threatened.

As noted previously, the endangered *ae'o* or Hawaiian stilt, the *nēnē* or Hawaiian Goose, and the *pueo* or Hawaiian owl have been observed by the DWS personnel. Although not seen during the field survey, the endangered seabirds, the Hawai'i petrel and the threatened Newell's shearwater are known to fly over the project area to their nests in the higher

elevations of the West Maui Mountains. Refer to **Appendix "J-1"**, **Appendix "J-2"**, and **Appendix "J-3"**.

It is noted that the proposed electric line extensions are not expected to be a potential collision risk for the listed seabirds. Seabirds are known to have excellent vision in low light levels and fly up to the West Maui Mountains in the evenings in the region. The proposed electric line extensions will run in a mauka-makai direction, which will be parallel to the seabirds' flight. As such, the proposed electric line extension is not expected to have significant adverse impacts to the listed seabirds.

The project will include implementing mitigation measures to avoid and minimize adverse impacts on threatened and endangered species as recommended by the USFWS. See **Table 4**.

Table 4. Mitigation Measures for Threatened and Endangered Species

Endangered or Threatened Species	Mitigation Measures
Endangered Hawaiian hoary bat (*Lasiurus cinereus semotus*)	The construction plans for the project will include notes that woody plants greater than 15 feet tall will not be removed or trimmed during the Hawaiian hoary bat breeding season (June 1 to September 15). Barbed wire fencing is not included in this proposed work.
Hawaiian Stilt (*Himantopus mexicanus knudseni*)	Applicable BMPs will be incorporated regarding work in aquatic environments into the project design. If a nest or active brood is found, a 100-foot buffer will be established and maintained around all active nests until chicks/ducklings have fledged and the USFWS will be contacted for further guidance.
Hawaiian goose (*Branta sandvicensis*)	If a Hawaiian goose appears within 100 feet of ongoing construction work, all activity will be temporarily suspended until the bird moves off to a safe distance of its own volition. Moreover, if any number of Hawaiian geese are observed loafing or foraging within the area of the proposed project during the Hawaiian goose breeding season (October through April), a biologist familiar with the nesting behavior of the Hawaiian goose will survey in and around the proposed construction footprint prior to the resumption of any work, or after any subsequent delay of work of three (3) or more days (during which the birds may attempt to nest). If a nest is discovered within a radius of 150 feet of proposed construction work, or a previously undiscovered nest is found within said radius after work begins, all work will cease immediately and the USFWS will be contacted for further guidance.

Endangered or Threatened Species	Mitigation Measures
Seabirds (Hawaiian petrel) (*Pterodroma Sandwichensis*) and Threatened Newell's shearwater (Puffinus auricularis newelli))	Should any night work occur requiring artificial illumination for the project, such work will be avoided during the seabird fledging seasons (approximately September 1 through December 15). Outdoor lights will be shielded and directed downwards to avoid upward directed accent lighting in order to minimize impacts to seabirds.

With implementation of the mitigation measures recommended by the USFWS, the proposed project is not expected to result in any adverse impacts to the flora and fauna resources in the region.

9. Air Quality and Noise

a. Existing Conditions

The project area in general does not experience adverse air quality conditions. Airborne pollutants that do exist can largely be attributed to aircraft arriving and departing from the Kapalua Airport and automobile exhaust from Honoapi'ilani Highway which is about two (2) miles from the 500,000-gallon control tank site and about three (3) miles from the production well sites. These sources, however, are intermittent and prevailing winds quickly disperse the particulates generated by these temporary sources. The cessation of large scale agriculture on the surrounding agricultural lands mauka of Honoapi'ilani Highway and the slopes of West Maui Mountains may contribute to temporary adverse air quality conditions from airborne dust due to wind and erosion.

In general, noise is attributable to traffic on Honoapi'ilani Highway and local roadways and flight activities at the airport.

b. Potential Impacts and Mitigation Measures

In the short term, construction related activities will be the primary source of airborne pollutants and ambient noise. Site work involving clearing, grubbing and grading operations will generate fugitive dust. Emissions and noise from construction equipment and other vehicles involved in construction activities may temporarily affect the ambient air quality and noise within the immediate vicinity. These effects, however, can be mitigated by proper maintenance of construction equipment and vehicles. Equipment mufflers or other noise attenuating equipment may also be utilized. An application for a Community Noise Permit for construction activities will be submitted to the DOH for review and approval, as

applicable. Upon completion, the proposed project is not expected to be a source of long-term adverse noise conditions.

In addition, dust generated during construction, especially from earth-moving operations, such as excavating, trenching, and filling, may also result in a temporary decrease in ambient air quality. A program of BMPs will be implemented during construction to mitigate potential for dust-related impacts, including but not limited to, utilizing dust barriers, water wagons and/or sprinklers to control dust, and watering graded areas upon the completion of daily construction activities. On a long-term basis, the proposed project is not anticipated to generate adverse air quality impacts.

10. Historical and Archaeological Resources

a. Existing Conditions

Scientific Consultant Services, Inc. (SCS) prepared an Archaeological Assessment of the Kahana Well site in September 2013. See **Appendix "K-1"**. The Archaeological Assessment identified no historic sites, features, midden scatters, or artifacts at the Kahana Well site. The pedestrian survey concluded that the historic and recent agricultural activities altered the natural topography of the general project area and that surrounding lands consist of undeveloped, old pineapple cultivation lands that are fallow and covered in cane grass, molasses grass, and generally noxious weeds. The Archaeological Assessment also notes the Honokōhau Ditch as a historic property (State Site No. -1591).

An Archaeological Inventory Survey (AIS) was recently carried out for the project by SCS to identify the presence/absence of historic properties in the project area (including the Kahana Well site, Mahinahina Well site, 500,000-gallon control tank site, and transmission waterlines and access road alignments), assess the significance of any identified historic properties, to make a project effect determination, and to propose mitigation measures to address the project effect on historic properties, pursuant to Hawai'i Administrative Rules (HAR) Section 13-276. See **Appendix "K-2"**. The AIS involved a full pedestrian survey and no excavation work was completed during the AIS.

The result of the pedestrian survey identified one (1) historic site, Honokōhau Ditch (State Site No. -1594). No other sites were identified during the pedestrian survey nor were areas identified that would be amenable to locating subsurface cultural deposits through excavation work. The AIS determined the project area landscape has been intensively modified for pineapple cultivation through time.

b. Potential Impacts and Mitigation Measures

The Archaeological Assessment and the AIS identified one (1) site designated as State Site No. -1591. No other sites were identified nor were areas identified that would be amenable to locating subsurface cultural deposits through excavation work as SCS noted the project sites have been intensively modified in the past for pineapple cultivation. Based on its pedestrian surveys, SCS estimates the only possible impact for the project is the proposed waterline corridor crossing affecting the existing Honokōhau Ditch.

DWS will coordinate with Kaanapali Land Development Corp. (parent company of Pioneer Mill Company) and the State of Hawai'i, the respective owners of Honokōhau Ditch and underlying land, and SHPD as appropriate, to avoid adverse impacts to State Site No. -1591 relative to the project. It is noted that the transmission waterline between the Mahinahina Well and 500,000-gallon control tank will be constructed by horizontal directional drilling (HDD) at a depth ranging from eight (8) to ten (10) feet under the Honokōhau Ditch.

Originally, the proposed method of installing this pipeline involved trenching and backfilling across three (3) gulches. The new method of installing the pipeline, through HDD, will preserve both the ditch and landscape with this less invasive technique.

Given the results of the survey and the implementation of HDD beneath the ditch, the AIS recommends no further work for the entirety of the project area and all improvements. However, should the inadvertent discovery of significant cultural materials occur during construction, the contractor will halt all work in the immediate area of the find and notify SHPD to discuss mitigation, as appropriate. Refer to **Appendix "K-1"**and **Appendix "K-2"**.

11. Cultural Impact Assessment

a. Historical Context

A Cultural Impact Assessment (CIA) was prepared for the proposed project by SCS to identify the possibility of previous and/or currently conducted traditional cultural practices and traditional resources procured within the project area and greater *ahupua'a*, and to assess the potential for impacts to these cultural resources from the proposed action, alternatives to the proposed action, and mitigation measures on the cultural resources, practices and beliefs. See **Appendix "L"**. The CIA relied on archival and documentary research, as well as communication with

organizations and individuals having knowledge of the project area, its cultural resources and its practices and beliefs. SCS conducted one (1) interview via telephone, and an in-person group interview with knowledgeable cultural practitioners and informants. The salient aspects of the historical and cultural background of the project area provided in the CIA are summarized as follows:

The coastal and marine environments adjacent to the project area would have provided rich resources for traditional subsistence foragers and fishermen in the pre-Contact and early Historic Periods. A large number of fish species are found in the near-coastal waters of the Kā'anapali area such as: surmullet, *Kūmū* (goatfish), *mamo* (sergeant fish), *manini* (surgeonfish), *nenue* (rudder or pilot fish), *kōkala* (porcupine fish, *hinalea* (wrasse), *uhu* (parrot fish), *'ala'ihi* (squirrel fish), *kala* (surgeonfish or unicorn fish), and *nehu* (anchovy) to name a few.

The current project is located in the traditional District of Kā'anapali District, which is situated north of the traditional District of Lāhainā on the west side of the Island of Maui. The District extended north and west from Keka'a Point to 'Ili O Kukuipuka, encompassing five (5) major stream valleys draining the leeward slopes of West Maui (i.e., Honokōwai, Kahana, Honokahua, Honolua, and Honōkohau). These valleys are watered by the streams draining western slopes of the West Maui Watershed. The valleys of Honokōhau, Honolua, and Honokōwai merge together at around 4,000 feet above mean sea level (amsl), below Lake Manowai where the headwaters begin. During the pre-Contact Period, these valleys were all productive wet taro (lo'i) lands, with extensive systems of terracing reported from early historic and later times, into the early 20th century.

Valleys originating high in the West Maui Mountains and bordering the Mahinahina Ahupua'a to the north and south all had extensive taro lands located in the valley bottoms, where terraces rose tier upon tier in symmetrical stone-faced lo'i. Honokowai, itself, had been a canoe landing and was the last sandy inlet before the rocky shoreline of Mahinahina. Freshwater springs could be found at the water's edge of Honokōwai Bay.

Kahana played another important role in traditional life, in addition to providing a substantial amount of taro. The people of Lahaina also gathered their salt at Kahana.

An 1831 census estimated the entire population of the Kā'anapali District as 2,980 people, which was reduced to less than half (1,341) only five (5) years later. Whaling (centered on Lāhainā Town) was the first commercial

enterprise in West Maui, but it had more or less collapsed by the 1860s. Commercial sugar cane production was the next large capitalist venture in West Maui, starting as early as 1863, and it was focused between Kā'anapali and Lāhainā.

Once land became available through the Māhele, large grants of land in Districts throughout the island were leased or sold to foreigners for commercial ventures. During the middle to late 19th century and into the 20th century, sugar cane and pineapple became dominant cash crops in Hawai'i, particularly in the project area and environs. The lands have not been used for anything but industrial agriculture until modern construction commenced (water treatment plants, reservoirs, etc). Sugar cane production commenced in 1848 with the sugar mill in Lahaina, which by 1858 evolved into the Lahaina Sugar Company and by 1860, the Pioneer Mill Company. Infrastructure was set nearer to the coastline (railroads) and the upper elevation table lands (300 ft. to 1000 ft. amsl) from Lahaina to Kapalua were prime cultivation lands for these cash crops. The current project area, now an established County facility, was no exception, with sugar cane, and especially pineapple, cultivated on its lands.

The general area around the project area, which was located at the margins of sugar cane enterprises in West Maui, was most important as a center of commercial ranching (cattle raising) and, subsequently, pineapple production. However, these agricultural activities ceased in recent times and the area is now fallow. Refer to **Appendix "L"**.

b. Potential Impacts and Mitigation Measures

Cultural informants consulted during the preparation of the CIA identified the following cultural practices and resources within the project area and surrounding environs. Refer to **Appendix "L"**.

Gathering of Traditional Plants

While not identified by the cultural informant contacted in the CIA as growing or cultivated in the project area or the adjacent lands, the CIA notes that the 'ulu or breadfruit (*Artocarpus communis*) was and continues to be a staple in the Hawaiian diet.

The CIA also notes that the 'uhaloa (*Waltheria indica*), also known as hala 'uhaloa, 'ala'ala pū loa, hi'a loa and kanaka loa, can be found within the project area and surrounding environment. According to cultural informants who participated in the consultation process, the 'uhaloa is used to stimulate the immune system and to treat congestion.

The three (3) Biological Resources Surveys prepared for the project did not identify the 'ulu as being located within the project area. The 'uhaloa plant was identified in the Biological Resources Survey for the Mahinahina Well Site and Transmission Line and in the Biological Resources Survey for the Kahana Transmission Waterline, Electrical Line, and 500,000 gallon Control Tank; the 'uhaloa plant was not identified in the Biological Resources Survey for the Kahana Well Site. The Biological Resources Surveys noted that the 'uhaloa plant is widespread and common in Hawai'i. Refer to **Appendix "J-1"**, **Appendix "J-2",** and **Appendix "J-3"**. The construction of the proposed well sites, control tank, and transmission line will affect limited areas within larger parcels. Given the widespread and common presence of the 'uhaloa plant and the limited areas that will be impacted by the project, significant adverse impacts with respect to gathering of traditional plants are not anticipated.

Habitation and Agriculture

The CIA notes that one (1) traditional practitioner and lineal descendant is currently living within the proposed project area and actively cultivating two (2) acres of dry land taro on the property. Taro, or kalo, was and continues to be an important staple in the Hawaiian diet. While the information provided by Ms. Kamaile Makekau in the CIA indicates that the proposed Mahinahina Well is located on lands owned by Ms. Kamaile Makekau, further research conducted by DWS has found that Ms. Makekau's lands are identified as TMK No. (2)4-4-004:008, located to the south of the proposed Mahinahina Well. The proposed Mahinahina Well is located on TMK No. (2)4-4-004:009. The proposed project will not involve any improvements on TMK No. (2)4-4-004:008, Ms. Makekau's lands.

Hunting

While hunting is not a traditional activity in the sense that native Hawaiians were actively hunting prior to the arrival of Westerners in 1778, cultural informants noted that wild pig and axis deer within the project area and the surrounding environs are actively hunted by the Hawaiian population for subsidence. The proposed project covers several large parcels of land - 3,501 acres. However, improvements will be limited to 11.5 acres, or less than one (1) percent, for the well sites, control tank, and transmission line. As such, significant impacts to hunting practices are not anticipated.

Marine Resources

One (1) of the cultural informants consulted with during the preparation of the CIA identified the gathering of limu and fishing as traditional practices

that continue in the coastal regions of the ahupua'a. The proposed project will be located over three (3) miles from the coast and will not impact gathering of limu or fishing practices.

Burials, Grave Sites, and Historic Cemeteries

Cultural informants interviewed during the preparation of the CIA indicated that there are two (2) known family cemeteries in the vicinity of the two (2) well sites, as well as two (2) graves located on land owned by Ms. Kamaile Makekau. The two (2) family cemeteries are said to pre-date the Plantation Era, with their use continuing through the Plantation Era, and possibly, to the recent past. As previously mentioned, the land owned by Ms. Makekau is located to the south of the project and no work will be conducted on that parcel or near the two (2) grave sites on the property. The AIS conducted for the project did not identify any burial sites or cemeteries within the project area. As such, the proposed improvements are not anticipated to impact the family cemeteries or grave sites that are present in the surrounding environs. Should the inadvertent discovery of significant cultural materials occur during construction, the contractor will halt all work in the immediate area of the find and notify SHPD to discuss mitigation, as appropriate.

Water Rights and Access to Water

Water rights, access to water, and the distribution of water were identified as a concern to families living in the vicinity of the project area. Specifically, there was concern that there is the potential for water to be taken away from the local Hawaiian population in an effort to provide water for tourists and for properties under private ownership. Persons interviewed during the preparation of the CIA noted that the water table is low and the land would no longer be able to sustain itself. As previously discussed, water production from the Mahinahina Well and Kahana Well will be within the sustainable yield of the Honokōwai Aquifer and Honolua Aquifer.

12. Scenic and Open Space Resources

a. Existing Conditions

The project area consists of two (2) components: an area that runs westward in linear fashion from the Mahinahina Well site, the foot of the West Maui Mountains, ending east of the Mahinahina SWTP, and an area that runs westward from the Kahana Well site, the foot of the West Maui Mountains, to the north of Kahanaiki Gulch, turns southward and connects to the first component. Approximately 1.5 miles west of the proposed

500,000-gallon control tank, which is located on the western edge of the project area, is Honoapi'ilani Highway. This highway is West Maui's principal access route to the central and southern areas of Wailuku, Kahului, and Kīhei. Open space resources in the region seen from public roadways and facilities include the vast expanse of vacant agricultural lands that lie between the mountains and the existing urbanized coastal areas that include Lāhainā Town and Kā'anapali.

b. Potential Impacts and Mitigation Measures

The proposed West Maui Source Development Project involves the development of two (2) production wells, 500,000-gallon control tank, water transmission lines below ground, access roads, electric line extensions, and other related improvements. The proposed project will be compatible with the surrounding area which is characterized by former agricultural and open space use. The project is located within 40-foot wide area corridors that traverse from a high elevation of 1,340 ft. msl and gradually slope westward to a lower elevation of 590 ft. msl. The highest parts of the project (except for the utility poles for the electric line extensions), are the proposed antenna poles at the Kahana Well and Mahinahina Well sites, which will be no greater than allowed by the Maui County Zoning. The 500,000 gallon control tank will be approximately 24 ft. tall while the control buildings for the Mahinahina and Kahana well sites will be approximately 10 ft. and 11 ft. tall, respectively. The tallest MECO utility poles will be approximately 35 ft. to 70 ft. in height. As the project is upland and east of Honoapi'ilani Highway, views from this major roadway are not expected to be adversely impacted. The project will comply with the development standards for the "Agricultural" zoning district. The project is not expected to have significant adverse impacts on scenic and open space resources.

13. Traditional Beach and Mountain Access

a. Existing Conditions

According to the CIA, one (1) of the cultural informants noted the presence of an old trail, rock walls, and fruit trees in the vicinity of the Kahana Well. The CIA also noted that cultural practices conducted within the vicinity of the project area include gathering of traditional plants, such as 'ulu or breadfruit and 'uhaloa. Refer to **Appendix "L"**. There is a gated trail upland from the Kahana Well site that provides restricted access to Puu Kukui and higher elevation watershed areas of the West Maui Mountains.

b. Potential Impacts and Proposed Mitigation Measures

The proposed project covers several large parcels of land which span 3,501 acres. However, improvements will be limited to 11.5 acres, or less than one (1) percent of 3,501 acres, for the well sites, control tank, transmission waterlines, electrical lines, and access roads. Mitigation measures, as appropriate, will be implemented to prevent significant adverse impacts to traditional trails and traditional plant gathering.

B. SOCIO-ECONOMIC ENVIRONMENT

1. Land Use and Community Character

a. Existing Conditions

The project area is located mauka of the Honoapi'ilani Highway and on lands that occupy the higher elevation areas at the base of the West Maui Mountains. Surrounding lands are characterized by fallow agricultural land and natural open space. Urbanized lands occupy the coastal plain below Honoapi'ilani Highway and include the communities of Lāhainā, Kā'anapali, Honokōwai, Kahana, Nāpili, and Kapalua. The resort communities north of Lāhainā Town include hotels and visitor-oriented condominiums. Lāhainā Town is the commercial center of the West Maui region. The town contains several shopping centers and retail business areas, and serves as a core for the region's residents.

Part of West Maui's attraction can be attributed to its year-round dry and warm climate, complimented by its many white-sand beaches and scenic landscape. Visitor accommodations can be found in Lāhainā as well as the resort communities of Kā'anapali, Honokōwai, Kahana, Nāpili and Kapalua.

The Kapalua Airport at Mahinahina, owned by the State of Hawai'i, Department of Transportation, connects West Maui to Oahu and other neighbor islands.

Diversified agriculture occupies a portion of the land in the West Maui region. Pioneer Mill's and MLP's vacant agricultural fields and the State-owned open spaces span below the slopes of the West Maui Mountains.

b. Potential Impacts and Mitigation Measures

The proposed project is consistent with existing surrounding former agricultural land uses and open space and is not of a scale to significantly impact the regional setting of the area. This project provides an efficient

and beneficial use of vacant, open space land within the area as it adds reliability to the existing DWS water system to serve the West Maui community.

2. Population

a. Existing Conditions

The population of the County of Maui has exhibited moderate growth over the past seven (7) years. According to the U.S. Census, the resident population of the County of Maui in 2000 was estimated to be 128,094 and was estimated to be 154,834 in 2010. This represents a 20.9 percent increase over the past decade (U.S. Census Bureau, 2010). By 2030, the population of the County of Maui is projected to reach 189,947 (County of Maui, Planning Department, 2012).

The project area is located within the West Maui Community Plan region. The County's population has grown, including the resident population of the West Maui region. The estimated population of Lahaina District in 2000 was approximately 18,000 and approximately 22,200 in 2010 (U.S. Census Bureau, 2010). The resident population for this region in 2010 increased by 23 percent since 2000. By 2030, the population for the region is projected to reach approximately 29,000 by 2030 (County of Maui, Planning Department, 2012).

b. Potential Impacts and Mitigation Measures

The West Maui Source Development Project provides new water source and reliability to the DWS West Maui Water System during times of drought, severe rainfall, or when the Honokōhau Ditch is undergoing repair or maintenance. By providing new source and system reliability, DWS can support the water needs of the West Maui region. According to the Regional Plan for Lāhainā Aquifer Sector Area of (Draft) Maui Island Water Use and Development Plan (WUDP), which is in the process of being updated by DWS, future water demand for the West Maui region will increase from nine (9) mgd to approximately 16 mgd by 2035, based on the Maui Island Plan's (MIP) population projections. The proposed project will provide approximately 1.63 mgd of additional water source to support the future water demand of the West Maui region.

The proposed project will not adversely impact the regional population. Rather, the project will increase the system reliability and support the projected population growth in the West Maui region.

3. Economy and Labor Force

a. Existing Conditions

The economy of Maui is heavily dependent upon the visitor industry. The dependency on the visitor industry is especially evident in West Maui, which is one of the State's major resort destination areas. Major hotels in this region include the Hyatt Regency Maui, Maui Marriott Resort and Ocean Club, Westin Maui, the Sheraton Maui, Westin Kaanapali Ocean Resort, Honua Kai, and the Ritz-Carlton, Kapalua.

West Maui's visitor orientation is reflected in the unique character and history of Lāhainā Town, which serves as a center for retail outlets, as well as tourism activities. The 137,000 sq. ft. Lāhainā Gateway Shopping Center located to the south of the project area on the mauka side of Honoapi'ilani Highway and Keawe Street, currently represents the largest retail shopping center in Lāhainā. The 120,000 sq. ft. Lāhainā Cannery Mall is also located south of the project area.

The closure of the Pioneer Mill in 1999 marked the end of sugar cane cultivation in West Maui. In December 2009, MLP ceased larger scale pineapple cultivation. The cessation of these two (2) major plantation crops ended large scale plantation-style agriculture in the West Maui region. The largest agriculture operation in West Maui today is the 300-acre Kaanapali Coffee Farm.

As of January 2019, Maui County's non-seasonally adjusted unemployment rate stood at 2.9 percent, an increase of 0.5 percent from January 2018. Similarly, Maui Island's non-seasonally adjusted unemployment rate for January 2019 was 2.9 percent (State of Hawai'i, Department of Labor and Industrial Relations, 2019).

b. Potential Impacts and Mitigation Measures

The West Maui Source Development Project will provide short-term construction-related employment and services as expenditures are made during the construction of the project. In the long term, the project meets the water needs and will support residents as well as businesses in the West Maui region. As such, the proposed project is anticipated to have a positive impact upon the local economy and labor force.

4. Housing

a. Existing Conditions

The project area is located within the West Maui Community Plan region. According to the MIP, the total housing units for the West Maui region was approximately 7,440 units in 2005. Socio-economic forecast data prepared for the County of Maui's General Plan Update process reflects a continuing increase in housing demand. By the year 2030, the demand for West Maui resident housing units in the Maui Island Plan will be 4,000 units (County of Maui, Department of Planning, 2012).

b. Potential Impacts and Mitigation Measures

The proposed project provides new water source and reliability to the DWS West Maui Water System to support the water needs of the community in the West Maui region. The proposed project involves construction of water system improvements and includes two (2) permanent production wells, a 500,000-gallon control tank, water transmission lines, and related improvements. Upon completion, the proposed project will add approximately 1.63 mgd of additional water source to support the projected future water demands of the West Maui Region. No adverse effects to housing are anticipated.

C. PUBLIC SERVICES

1. Solid Waste Disposal

a. Existing Conditions

Single-family residential automated solid waste collection service is provided by the County of Maui on a twice-a-week basis. Residential solid waste collected by County crews is disposed at the County's 55-acre Central Maui Landfill, located four (4) miles southeast of the Kahului Airport. In addition to County-collected residential refuse, the Central Maui Landfill also accepts residential and commercial waste from private collection companies.

A recycling and refuse convenience center located about six (6) miles south of the project area at Olowalu serves West Maui residents and accommodates household refuse and green waste, as well as used oil and recyclable materials. No commercial waste is accepted at this facility. A private waste disposal service has been contracted by the County to transport waste from this facility to the Central Maui Landfill.

b. Potential Impacts and Mitigation Measures

During construction, solid waste will consist mainly of vegetation or green waste which is removed during grading and grubbing. Prior to project construction, a solid waste management plan will be coordinated with the County's Department of Environmental Management. After the project completion, the proposed project is not anticipated to generate solid waste. The proposed project is not anticipated to affect the service capabilities of County or private waste collection operations and disposal facilities.

2. Medical Facilities

a. Existing Conditions

The only major medical facility on the island is Maui Memorial Medical Center, located approximately 25 miles from Lāhainā, midway between Wailuku and Kahului. The 231-bed facility provides general, acute, and emergency care services. Emergency ambulance services are located at the Lāhainā Comprehensive Health Center at the Lāhainā Civic Center Complex and in Nāpili at the Nāpili Fire Station.

In addition, medical services are offered by the Maui Medical Group, Lāhainā Physicians, West Maui Healthcare Center, Kaiser Permanente's Lāhainā Clinic, and other private medical and dental offices.

b. Potential Impacts and Mitigation Measures

As the proposed project is limited to DWS water infrastructure improvements, it will not adversely impact or affect the existing service area for emergency medical services.

3. Police and Fire Protection

a. Existing Conditions

The project area is within the Maui Police Department's Lāhainā District service area. The Department's Lāhainā Station is located in the Lāhainā Civic Center complex at Wahikuli, approximately four (4) miles southwest of the project area. The Lāhainā Patrol includes approximately 32 full-time personnel, including management-level officers and field officers (County of Maui, Police Department, 2015). Additional personnel consist of public safety aides and administrative support staff.

Fire prevention, suppression and protection services for the Lāhainā District are provided by the Department of Fire and Public Safety's Lāhainā

Fire Station, in the Lāhainā Civic Center and the Nāpili Fire Station, located north of the project area in Nāpili. The Lāhainā Fire Station includes an engine and a ladder company, and is staffed by approximately 44 full-time personnel. The Napili Fire Station consists of an engine company including 15 full-time firefighting personnel (County of Maui, Department of Fire and Public Safety, 2015). All firefighting personnel are first-responders trained to provide emergency medical care.

b. Potential Impacts and Mitigation Measures

The proposed project involves water system improvements to assure reliable service to the West Maui region and is currently within existing service areas for fire and police. As such, it is not anticipated to present significant adverse impacts on the capabilities of existing police and fire services in the West Maui region. The project provides a dependable water source and supports fire suppression services in the area.

4. Schools

a. Existing Conditions

The West Maui area is served by four (4) public schools operated by the State of Hawai'i, Department of Education (DOE): Lāhainālуna High School, Lāhainā Intermediate School, Princess Nahi'ena'ena Elementary School and King Kamehameha III Elementary School. The region is also served by privately operated pre-elementary and elementary schools, such as Sacred Hearts Elementary School and Maui Preparatory Academy.

University of Hawai'i-Maui College (UH-Maui), which is located in Kahului, is a part of the University of Hawai'i system. In addition, there is a UH-Maui Lāhainā Education Center that opened in Fall 2007. UH-Maui is the primary higher education institution serving Maui.

b. Potential Impacts and Mitigation Measures

The proposed project is limited in scope to the construction of improvements to the DWS water system and is not anticipated to impact regional public education facilities.

5. Recreational Facilities

a. Existing Conditions

West Maui has numerous recreational facilities offering diverse opportunities for the region's residents. These facilities include several

County and State parks and beach parks. Approximately one-third of the County parks are situated along the shoreline and offer excellent swimming, diving, and snorkeling areas. In addition, Kā'anapali and Kapalua Resorts operate world-class golf courses available for public use.

Recreational facilities in Lāhainā town include the Lāhainā Aquatic Center, the West Maui Youth Center, the Lāhainā Recreation Center, and the Lāhainā Civic Center. The Lāhainā Aquatic Center contains an Olympic-size swimming pool, a children's wading pool, a paved parking lot, and office and storage space, as well as shower, restroom, and changing room facilities. The 15-acre addition to the Lāhainā Recreation Center includes fields, parking, and washroom facilities. The West Maui Youth Center has a building for youth activities, as well as paved parking, an outdoor playground, and a basketball court. The Lāhainā Recreation Center has baseball fields and other playfields for soccer and football, as well as restrooms and paved parking facilities. The Lāhainā Civic Center includes a gymnasium, amphitheater, and tennis courts complex, as well as restrooms and paved parking facilities.

The clear ocean waters and well-developed reef systems along the Lāhainā and Kā'anapali coastlines offer many recreational opportunities for residents and visitors. Fishing, by shorecasting and netting, is practiced in the waters near the outlet of Kauaula Stream and Makila Point. Edible seaweed collecting, octopus diving, and spearfishing occur on the adjacent reef flat fronting Kā'anapali. During periods of wave activity, the West Maui coastline is a good location for surfing.

b. Potential Impacts and Mitigation Measures

As the proposed project is located a distance away from urbanized and developed areas, as well as the coastline. It is not anticipated to adversely impact recreational facilities or opportunities in the West Maui region.

D. INFRASTRUCTURE

1. Roadways and Airport

a. Existing Conditions

The project area is located off Honoapi'ilani Highway, with access to the project area via Akahele Street and agricultural roads owned by Maui Oceanview LP and DHHL. The western edge of the project area, the proposed 500,000-gallon control tank, is located approximately 1.2 miles from Kapalua Airport.

b. Potential Impacts and Proposed Mitigation

The project area is located in a remote location and is removed from urbanized areas. The proposed project will require regular maintenance by DWS staff. However, maintenance is not anticipated to generate significant vehicular traffic and adverse impacts to traffic conditions and existing roads is not expected. DWS staff currently accesses portions of the project area to operate Mahinahina SWTP.

Significant traffic impacts during construction of the project is not anticipated. The project construction area is over one (1) mile away from public roadways.

The proposed project is compatible with normal airport operations, including aircraft landing and takeoff, at Kapalua Airport. The proposed project involves construction of two (2) permanent production wells, 500,000-gallon control tank, water transmission lines, and related improvements. The project will not attract hazardous wildlife within five (5) statute miles of the airport boundary. The proposed structures, including control tanks and control buildings, will not have reflective surfaces, and as such, will not result in glint and glare hazards.

2. Water System

a. Existing Conditions

A significant portion of the West Maui region is served by DWS's West Maui Water System, which areas include the coastal areas from Launiupoko to Kā`anapali and from Honokōwai to Nāpili. DWS's West Maui Water System consists of both surface water sources and ground water sources to provide fire protection and potable water to its customers. The Honokōhau Ditch, a concrete-lined irrigation ditch located within the project area, brings surface water into the Mahinahina SWTP from a diversion of Honokōhau Stream.

The Mahinahina SWTP is located within the Honokōwai area. Finished treated water from the Mahinahina SWTP is stored in a tank at the plant site and feeds water to the 2.0 MG Honokōwai tank located approximately one (1) mile west of the Mahinahina SWTP. The Honokōwai tank provides water to the DWS water system which serves the northern and southern regions of West Maui.

The Lahaina SWTP is located above Lahainaluna High School within the Launiupoko Area. The Kanaha Stream is the surface water source for the

Lahaina SWTP. Finished treated water from the Lahaina SWTP is stored in a tank onsite and then put into various distribution tanks within the Lāhainā area.

Hawai'i Water Service Company, Inc. owns and operates four (4) wells in the region, including Kā'anapali Well P-4, Kā'anapali Well P-5, Kā'anapali Well P-5A, and Kā'anapali Well P-6. These wells provide potable water to the developments in the Kā'anapali area.

b. Potential Impacts and Mitigation Measures

The proposed West Maui Source Development Project will provide DWS with two (2) additional groundwater sources. The proposed project will provide increased source and reliability in order for DWS to meet the water needs and projected growth of community in the West Maui service region. The proposed West Maui Source Development Project will also provide DWS with additional reliability of water source during the times of drought, severe rainfall, or when Honokōhau Ditch undergoes repair and maintenance work.

3. Wastewater System

a. Existing Conditions

The County of Maui, Department of Environmental Management's Wastewater Reclamation Division provides wastewater service for the West Maui region.

Wastewater from the Kā'anapali and Lāhainā areas is treated at the County's Lāhainā Wastewater Reclamation Facility (LWRF) located approximately three (3) miles south of the project area on the east (mauka) side of Honoapi'ilani Highway. The LWRF's total treatment capacity is 9.0 mgd.

b. Potential Impacts and Mitigation Measures

The proposed project scope of work is limited to improvements to the DWS water system. As such, the project is not anticipated to impact regional wastewater treatment facilities or the related collection system.

4. Drainage

a. Existing Conditions

The entire project site is located in Flood Zone X, an area of minimal flooding. Stormwater runoff at the Kahana Well site flows downslope into the surrounding agricultural fields following the existing topographic conditions. See **Appendix "M"**. The Mahinahina Well site presently generates approximately 2.4 cubic feet per second (cfs) of runoff during a 50-year, 1-hour storm. Surface runoff sheet flows across the Mahinahina Well site in an easterly to westerly direction, and then flows onto an abandoned pineapple field.

b. Potential Impacts and Mitigation Measures

All drainage improvements proposed as part of the project will conform to County standards and will be coordinated with the Department of Public Works to ensure there are no significant adverse effects on existing downstream properties.

The drainage system at the Kahana Well site will consist of grassed swales, grated drain inlets, drain pipes, and a drainage basin. Grassed swales located at the upper property line intercept offsite runoff and channel the runoff around the site. Grated drain inlets in the service yard will collect onsite runoff and drain pipes convey the runoff to the rock-lined drainage basin. The drainage basin will mitigate the increase in runoff due to development of the site. The drainage basin will also receive water from the pump control valve ("dump valve") upon startup of the deep well pump, from the control tank washout line during tank cleaning, and from the control tank overflow spillway.

Similarly, retention basins and diversion swales will be constructed both at the Mahinahina Well site and the 500,000-gallon control tank site for storm runoff mitigation and tank effluent containment. The proposed access roads along the transmission waterline from the Mahinahina Well will be partly equipped with drainage swales lined with a permanent geosynthetic erosion control liner.

Soil loss will be minimized during the construction period through the implementation of appropriate BMPs and erosion control measures, including but not limited to:

1. Minimizing the time of construction

2. Sequencing construction activities to minimize exposure time of cleared surface area

3. Initiating the early construction of drainage features

4. Stationing a water truck on site during the construction period to provide for immediate sprinkling, as needed, in active construction zones (weekends and holidays included)

5. Stormwater flowing toward the construction area shall be diverted by using temporary berms, filter berms, and cut-off ditches, or other appropriate measures, where needed, for control of erosion and pollution to protect surrounding water resources

6. Ensuring graded areas are thoroughly watered after construction activity has ceased for the day and on weekends and holidays

7. Applying perennial vegetation for permanent soil stabilization, as soon as practicable, after final grading to ensure all cut and fill slopes are sodded or planted

Based on the foregoing, the proposed project is not anticipated to adversely impact drainage conditions at the project area.

5. Electrical, Telephone, and Cable Television (CATV) Services

a. Existing Conditions

Electrical, telephone, and CATV service to the West Maui region is provided by Maui Electric Company, Ltd. (MECO), Hawaiian Telcom, and Oceanic Time Warner Cable (aka Spectrum), respectively.

b. Potential Impacts and Mitigation Measures

The proposed project is not anticipated to have significant impacts to electrical, telephone, or cable TV services.

The project proposes an installation of an overhead electrical line running from the Mahinahina Well site to the 500,000-gallon control tank site , an electric line extension from the existing MECO electric line to the Kahana Well site, and related electric site improvements at both Mahinahina Well and Kahana Well sites. This electrical installation will be coordinated with MECO.

E. CUMULATIVE AND SECONDARY IMPACTS

Pursuant to the Hawai'i Administrative Rules, Chapter 200, Section 11-200-2, entitled Environmental Impact Statement Rules, a cumulative impact means:

> *The impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.*

A key element in understanding the requirement for assessing cumulative impacts, therefore, is the need to recognize what constitutes "reasonably foreseeable actions".

Cumulative impacts are defined as the impact on the environment which results from the incremental impact of an action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions.

With respect to reasonably foreseeable water source developments in West Maui, DHHL is currently proposing to develop its existing Honokōwai Well, located approximately 1.5 miles southeast of the existing Mahinahina SWTP, as a potable water source for the future development of the Villages of Leiali'i and Honokōwai. The Honokōwai Well will pump groundwater from the Honokōwai Aquifer, which is the same aquifer that the Mahinahina Well will pump from. As discussed previously, the CWRM has established a sustainable yield of 6 million gallons per day (mgd) for the Honokōwai Aquifer (CWRM, June 2008). Approximately 3.41 mgd from the Honokōwai Aquifer has been in use by private source developers. The combined amount of ground water used by private source developers and drawn at the Mahinahina Well and the Honokōwai Well will be within the sustainable yield of the Honokōwai Aquifer. It is noted that the CWRM regulates well development and groundwater resources in the State. As such, the proposed action is not anticipated to result in significant adverse cumulative impacts to the Honokōwai Aquifer.

As noted in Chapter I, the proposed 500,000-gallon control tank has been designed to accommodate water from the proposed Kahana Well and Mahinahina Well, as well as other future water sources. These other future water sources may include the Honokōwai Well proposed by the DHHL. The DWS will continue to coordinate with the DHHL regarding the proposed Honokōwai Well and its implementation into the DWS West Maui Water System.

It is also noted that Section 221 of the Hawaiian Home Commission Act, as codified in the State Water Code, HRS, Section 174C-101, sets forth the DHHL's right to have *"adequate reserves of water for current and foreseeable development and use of Hawaiian home*

lands". The proposed Honokōwai Well is intended to provide water to lands owned by the DHHL at the Villages of Leiali'i and Honokōwai.

Secondary impacts are those which have the potential to occur later in time or farther in distance, but are still reasonably foreseeable. They can be viewed as actions of others that are taken because of the presence of the project.

With respect to larger and foreseeable actions, the County of Maui's General Plan provides a long-term, comprehensive vision for the physical, economic, and environmental development through the planning horizon of 2030. Among the components of the General Plan Update is the formulation of a MIP which will delineate urban and rural growth boundaries (UGBs and RGBs, respectively). The purpose of the UGBs and RGBs is to direct future urban and rural growth to selected areas of Maui Island, taking into account population projections and future demands for housing infrastructure, services, and public facilities. According to the land use forecast used by the County Department of Planning for the MIP adopted in December 2012, approximately 4,000 additional residential units are needed to accommodate the projected growth in West Maui to the year 2030. The inclusion of the urban growth areas to accommodate the future housing needs in the West Maui area in the MIP indicates that the secondary need for infrastructure and services to support this growth has been contemplated and taken into account by the MIP. Implementation and development of these new growth areas will be further refined and assessed through the West Maui Community Plan process and undergo environmental assessment in order to identify environmental impacts and mitigation measures.

The (draft) Maui Island WUDP, Regional Plan for Lāhainā Aquifer Sector, indicates that future potable water demand for the West Maui region will increase from nine (9) mgd to approximately 16 mgd by 2035, based on the MIP's population projections. After completion of the proposed West Maui Source Development project, approximately 1.63 mgd of water source will be added to the regional potable water source capacity.

The proposed project is to further develop reliability in the DWS West Maui Water System and to support additional water demand that results from the projected future population growth in the West Maui region. The proposed action is in consonance with the County General Plan and the (draft) Maui Island WUDP, and in context of the secondary impact definition, it is not considered to have significant adverse secondary impacts.

RELATIONSHIP TO GOVERNMENTAL PLANS, POLICIES, AND CONTROLS

III

III. RELATIONSHIP TO LAND USE PLANS, POLICIES, AND CONTROLS

A. STATE LAND USE DISTRICTS

Pursuant to Chapter 205A, Hawai'i Revised Statutes (HRS), all lands in the State have been divided and placed into one (1) of four (4) land use districts by the State Land Use Commission. These land use districts have been designated "Urban", "Rural", "Agricultural", and "Conservation". The project area is located within the State "Agricultural" district. The proposed action is compatible with, and deemed permissible within, the State "Agricultural" land use district. See **Figure 9**.

B. CHAPTER 226, HAWAI'I STATE PLAN

Chapter 226, HRS, also known as the Hawai'i State Plan, is a long-range comprehensive plan which serves as a guide for the future long-term development of the State by identifying goals, objectives, policies, and priorities, as well as implementation mechanisms. The Plan consists of three (3) parts. Part I includes the Overall Theme, Goals, Objectives, and Policies; Part II includes Planning, Coordination, and Implementation; and Part III establishes Priority Guidelines. Inasmuch as Part II of the State Plan covers its administrative structure and implementation process, discussion of the proposed project's applicability to Part II is not appropriate. Below is an analysis of the project's applicability to Part I and Part III of the Hawai'i State Plan.

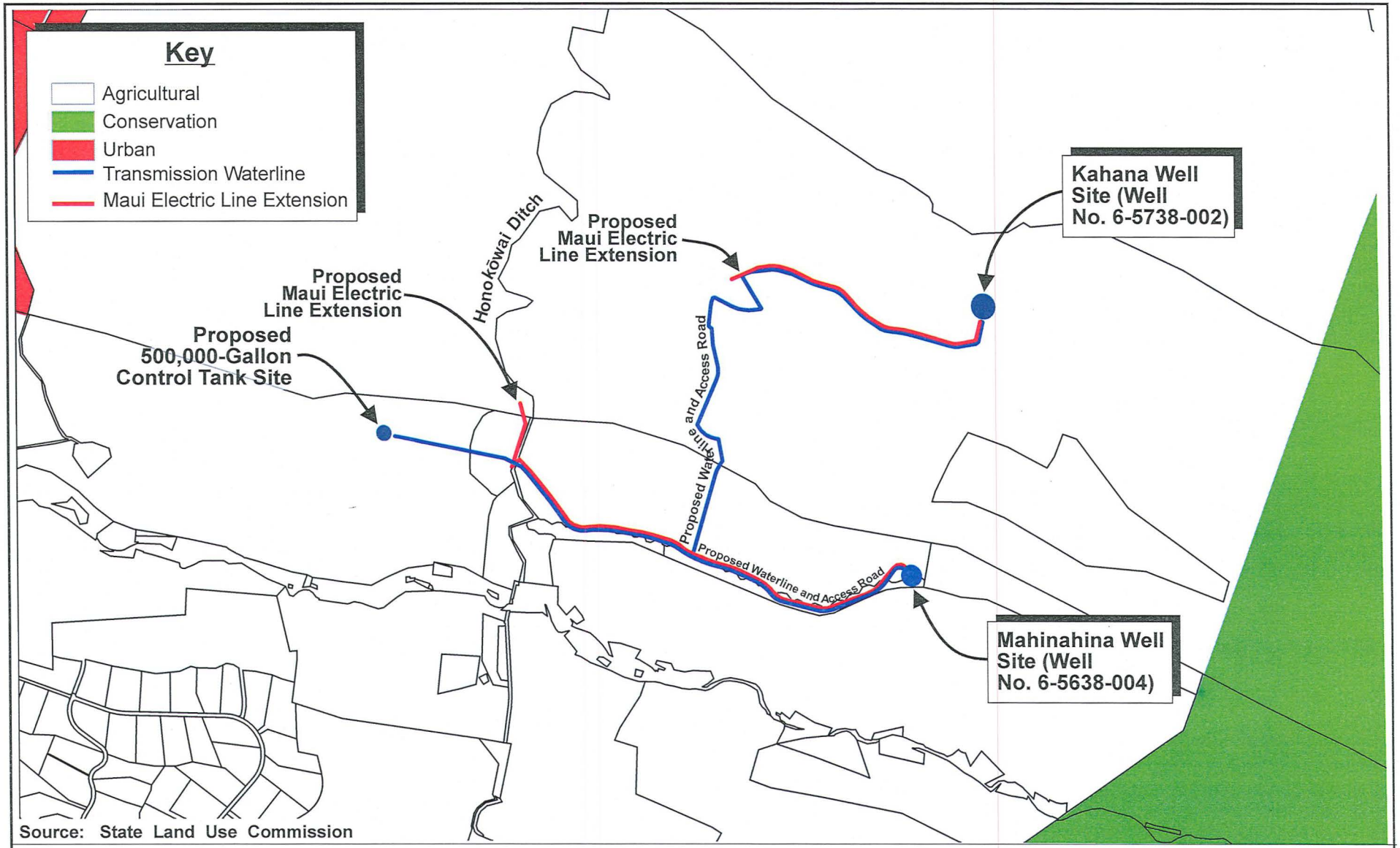

Figure 9

Proposed West Maui Source Development Project
State Land Use District Map

0 900 Feet
450 1800

Prepared for: County of Maui, Department of Water Supply

MUNEKIYO HIRAGA

FE\Kahana Production Well\Applications\Figures\SLUD

Hawai'i State Plan, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable	S	N/S	N/A
HRS 226-1: Findings and Purpose			
HRS 226-2: Definitions			
HRS 226-3: Overall Theme			
HRS 226-4: State Goals. In order to guarantee, for the present and future generations, those elements of choice and mobility that insure that individuals and groups may approach their desired levels of self-reliance and self determination, it shall be the goal of the State to achieve: (1) A strong, viable economy, characterized by stability, diversity, and growth, that enables the fulfillment of the needs and expectations of Hawaii's present and future generations. (2) A desired physical environment, characterized by beauty, cleanliness, quiet, stable natural systems, and uniqueness, that enhances the mental and physical well-being of the people. (3) Physical, social, and economic well-being, for individuals and families in Hawaii, that nourishes a sense of community responsibility, of caring, and of participation in community life.			
Analysis: **The proposed project is to provide a new source supply and system to meet the water needs of residents in the West Maui region during the periods when water availability is reduced.**			
Chapter 226-5 Objective and Policies for Population			
Objective: It shall be the objective in planning for the State's population to guide population growth to be consistent with the achievement of physical, economic and social objectives contained in this chapter.			
Policies:			
(1) Manage population growth statewide in a manner that provides increased opportunities for Hawaii's people to pursue their physical, social, and economic aspirations while recognizing the unique needs of each county.	✓		
(2) Encourage an increase in economic activities and employment opportunities on the neighbor islands consistent with community needs and desires.	✓		
(3) Promote increased opportunities for Hawaii's people to pursue their socio-economic aspirations throughout the islands.	✓		
(4) Encourage research activities and public awareness programs to foster an understanding of Hawaii's limited capacity to accommodate population needs and to address concerns resulting from an increase in Hawaii's population.			✓
(5) Encourage federal actions and coordination among major governmental agencies to promote a more balanced distribution of immigrants among the states, provided that such actions do not prevent the reunion of immediate family members.			✓
(6) Pursue an increase in federal assistance for states with a greater proportion of foreign immigrants relative to their state's population.			✓
(7) Plan the development and availability of land and water resources in a coordinated manner so as to provide for the desired levels of growth in each geographic area.			✓

Hawai'i State Plan, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable	S	N/S	N/A
***Analysis*: The proposed project involves water system improvements to assure reliable service to the West Maui region and is consistent with the policies regarding growth of population and socio-economic activities.**			
Chapter 226-6 Objectives and policies for the economy – – in general			
Objectives: Planning for the State's economy in general shall be directed toward achievement of the following objectives:			
(1) Increased and diversified employment opportunities to achieve full employment, increased income and job choice, and improved living standards for Hawaii's people, while at the same time stimulating the development and expansion of economic activities capitalizing on defense, dual-use, and science and technology assets, particularly on the neighbor islands where employment opportunities may be limited.			✓
(2) A steadily growing and diversified economic base that is not overly dependent on a few industries, and includes the development and expansion of industries on the neighbor islands.			✓
Policies:			
(1) Promote and encourage entrepreneurship within Hawaii by residents and nonresidents of the State.			✓
(2) Expand Hawaii's national and international marketing, communication, and organizational ties, to increase the State's capacity to adjust to and capitalize upon economic changes and opportunities occurring outside the State.			✓
(3) Promote Hawaii as an attractive market for environmentally and socially sound investment activities that benefit Hawaii's people.			✓
(4) Transform and maintain Hawaii as a place that welcomes and facilitates innovative activity that may lead to commercial opportunities.			✓
(5) Promote innovative activity that may pose initial risks, but ultimately contribute to the economy of Hawaii.			✓
(6) Seek broader outlets for new or expanded Hawaii business investments.			✓
(7) Expand existing markets and penetrate new markets for Hawaii's products and services.			✓
(8) Assure that the basic economic needs of Hawaii's people are maintained in the event of disruptions in overseas transportation.			✓
(9) Strive to achieve a level of construction activity responsive to, and consistent with, state growth objectives.			✓
(10) Encourage the formation of cooperatives and other favorable marketing arrangements at the local or regional level to assist Hawaii's small scale producers, manufacturers, and distributors.			✓
(11) Encourage labor-intensive activities that are economically satisfying and which offer opportunities for upward mobility.			✓
(12) Encourage innovative activities that may not be labor-intensive, but may otherwise contribute to the economy of Hawaii.			✓
(13) Foster greater cooperation and coordination between the government and private sectors in developing Hawaii's employment and economic growth opportunities.			✓

Hawai'i State Plan, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable	S	N/S	N/A
(14) Stimulate the development and expansion of economic activities which will benefit areas with substantial or expected employment problems.			✓
(15) Maintain acceptable working conditions and standards for Hawaii's workers.			✓
(16) Provide equal employment opportunities for all segments of Hawaii's population through affirmative action and nondiscrimination measures.			✓
(17) Stimulate the development and expansion of economic activities capitalizing on defense, dual-use, and science and technology assets, particularly on the neighbor islands where employment opportunities may be limited.			✓
(18) Encourage businesses that have favorable financial multiplier effects within Hawaii's economy, particularly with respect to emerging industries in science and technology.			✓
(19) Promote and protect intangible resources in Hawaii, such as scenic beauty and the aloha spirit, which are vital to a healthy economy.			✓
(20) Increase effective communication between the educational community and the private sector to develop relevant curricula and training programs to meet future employment needs in general, and requirements of new or innovative potential growth industries in particular.			✓
(21) Foster a business climate in Hawaii--including attitudes, tax and regulatory policies, and financial and technical assistance programs--that is conducive to the expansion of existing enterprises and the creation and attraction of new business and industry.			✓
***Analysis*: Not applicable.**			
Chapter 226-7 Objectives and policies for the economy – – agriculture.			
Objectives: Planning for the State's economy with regard to agriculture shall be directed towards achievement of the following objectives:			
(1) Viability of Hawaii's sugar and pineapple industries.			✓
(2) Growth and development of diversified agriculture throughout the State.			✓
(3) An agriculture industry that continues to constitute a dynamic and essential component of Hawaii's strategic, economic, and social well-being.			✓
Policies:			
(1) Establish a clear direction for Hawaii's agriculture through stakeholder commitment and advocacy.			✓
(2) Encourage agriculture by making the best use of natural resources.			✓
(3) Provide the governor and the legislature with information and options needed for prudent decision-making for the development of agriculture.			✓
(4) Establish strong relationships between the agricultural and visitor industries for mutual marketing benefits.			✓
(5) Foster increased public awareness and understanding of the contributions and benefits of agriculture as a major sector of Hawaii's economy.			✓

Hawai'i State Plan, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable	S	N/S	N/A
(6) Seek the enactment and retention of federal and state legislation that benefits Hawaii's agricultural industries.			✓
(7) Strengthen diversified agriculture by developing an effective promotion, marketing, and distribution system between Hawaii's food producers and consumers in the State, nation, and world.			✓
(8) Support research and development activities that strengthen economic productivity in agriculture, stimulate greater efficiency, and enhance the development of new products and agricultural by-products.			✓
(9) Enhance agricultural growth by providing public incentives and encouraging private initiatives.			✓
(10) Assure the availability of agriculturally suitable lands with adequate water to accommodate present and future needs.			✓
(11) Increase the attractiveness and opportunities for an agricultural education and livelihood.			✓
(12) In addition to the State's priority on food, expand Hawaii's agricultural base by promoting growth and development of flowers, tropical fruits and plants, livestock, feed grains, forestry, food crops, aquaculture, and other potential enterprises.			✓
(13) Promote economically competitive activities that increase Hawaii's agricultural self-sufficiency, including the increased purchase and use of Hawaii-grown food and food products by residents, businesses, and governmental bodies as defined under section 103D-104.			✓
(14) Promote and assist in the establishment of sound financial programs for diversified agriculture.			✓
(15) Institute and support programs and activities to assist the entry of displaced agricultural workers into alternative agricultural or other employment.			✓
(16) Facilitate the transition of agricultural lands in economically nonfeasible agricultural production to economically viable agricultural uses.			✓
(17) Perpetuate, promote, and increase use of traditional Hawaiian farming systems, such as the use of loko i'a, māla, and irrigated lo'i, and growth of traditional Hawaiian crops, such as kalo, 'uala, and 'ulu.			✓
(18) Increase and develop small-scale farms.			✓
Analysis: **Not applicable.**			
Chapter 226-8 Objective and policies for the economy – – visitor industry.			
Objectives: Planning for the State's economy with regard to the visitor industry shall be directed towards the achievement of the objective of a visitor industry that constitutes a major component of steady growth for Hawaii's economy.			
Policies:			
(1) Support and assist in the promotion of Hawaii's visitor attractions and facilities.			✓
(2) Ensure that visitor industry activities are in keeping with the social, economic, and physical needs and aspirations of Hawaii's people.			✓

Hawai'i State Plan, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable	S	N/S	N/A
(3) Improve the quality of existing visitor destination areas by utilizing Hawaii's strengths in science and technology.			✓
(4) Encourage cooperation and coordination between the government and private sectors in developing and maintaining well-designed, adequately serviced visitor industry and related developments which are sensitive to neighboring communities and activities.			✓
(5) Develop the industry in a manner that will continue to provide new job opportunities and steady employment for Hawaii's people.			✓
(6) Provide opportunities for Hawaii's people to obtain job training and education that will allow for upward mobility within the visitor industry.			✓
(7) Foster a recognition of the contribution of the visitor industry to Hawaii's economy and the need to perpetuate the aloha spirit.			✓
(8) Foster an understanding by visitors of the aloha spirit and of the unique and sensitive character of Hawaii's cultures and values.			✓
***Analysis*: Not applicable.**			
Chapter 226-9 Objective and policies for the economy – – federal expenditures.			
Objective: Planning for the State's economy with regard to federal expenditures shall be directed towards achievement of the objective of a stable federal investment base as an integral component of Hawaii's economy.			
Policies:			
(1) Encourage the sustained flow of federal expenditures in Hawaii that generates long-term government civilian employment;			✓
(2) Promote Hawaii's supportive role in national defense, in a manner consistent with Hawaii's social, environmental, and cultural goals by building upon dual-use and defense applications to develop thriving ocean engineering, aerospace research and development, and related dual-use technology sectors in Hawaii's economy;			✓
(3) Promote the development of federally supported activities in Hawaii that respect statewide economic concerns, are sensitive to community needs, and minimize adverse impacts on Hawaii's environment;			✓
(4) Increase opportunities for entry and advancement of Hawaii's people into federal government service;			✓
(5) Promote federal use of local commodities, services, and facilities available in Hawaii;			✓
(6) Strengthen federal-state-county communication and coordination in all federal activities that affect Hawaii; and			✓
(7) Pursue the return of federally controlled lands in Hawaii that are not required for either the defense of the nation or for other purposes of national importance, and promote the mutually beneficial exchanges of land between federal agencies, the State, and the counties.			✓
***Analysis:* Not applicable.**			

Hawai'i State Plan, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable	S	N/S	N/A
Chapter 226-10 Objective and policies for the economy – – potential growth and innovative activities.			
Objective: Planning for the State's economy with regard to potential growth and innovative activities shall be directed towards achievement of the objective of development and expansion of potential growth and innovative activities that serve to increase and diversify Hawaii's economic base.			
Policies:			
(1) Facilitate investment and employment growth in economic activities that have the potential to expand and diversify Hawaii's economy, including but not limited to diversified agriculture, aquaculture, renewable energy development, creative media, health care, and science and technology-based sectors;			✓
(2) Facilitate investment in innovative activity that may pose risks or be less labor-intensive than other traditional business activity, but if successful, will generate revenue in Hawaii through the export of services or products or substitution of imported services or products;			✓
(3) Encourage entrepreneurship in innovative activity by academic researchers and instructors who may not have the background, skill, or initial inclination to commercially exploit their discoveries or achievements;			✓
(4) Recognize that innovative activity is not exclusively dependent upon individuals with advanced formal education, but that many self-taught, motivated individuals are able, willing, sufficiently knowledgeable, and equipped with the attitude necessary to undertake innovative activity;			✓
(5) Increase the opportunities for investors in innovative activity and talent engaged in innovative activity to personally meet and interact at cultural, art, entertainment, culinary, athletic, or visitor-oriented events without a business focus;			✓
(6) Expand Hawaii's capacity to attract and service international programs and activities that generate employment for Hawaii's people;			✓
(7) Enhance and promote Hawaii's role as a center for international relations, trade, finance, services, technology, education, culture, and the arts;			✓
(8) Accelerate research and development of new energy-related industries based on wind, solar, ocean, underground resources, and solid waste;			✓
(9) Promote Hawaii's geographic, environmental, social, and technological advantages to attract new or innovative economic activities into the State;			✓
(10) Provide public incentives and encourage private initiative to attract new or innovative industries that best support Hawaii's social, economic, physical, and environmental objectives;			✓
(11) Increase research and the development of ocean-related economic activities such as mining, food production, and scientific research;			✓
(12) Develop, promote, and support research and educational and training programs that will enhance Hawaii's ability to attract and develop economic activities of benefit to Hawaii;			✓
(13) Foster a broader public recognition and understanding of the potential benefits of new or innovative growth-oriented industry in Hawaii;			✓

Hawai'i State Plan, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable	S	N/S	N/A
(14) Encourage the development and implementation of joint federal and state initiatives to attract federal programs and projects that will support Hawaii's social, economic, physical, and environmental objectives;			✓
(15) Increase research and development of businesses and services in the telecommunications and information industries;			✓
(16) Foster the research and development of nonfossil fuel and energy efficient modes of transportation; and			✓
(17) Recognize and promote health care and health care information technology as growth industries.			✓
***Analysis*:** **Not applicable.**			
Chapter 226-10.5 Objectives and policies for the economy – – information industry.			
Objective: Planning for the State's economy with regard to telecommunications and information technology shall be directed toward recognizing that broadband and wireless communication capability and infrastructure are foundations for an innovative economy and positioning Hawaii as a leader in broadband and wireless communications and applications in the Pacific Region.			
Policies:			
(1) Promote efforts to attain the highest speeds of electronic and wireless communication within Hawaii and between Hawaii and the world, and make high speed communication available to all residents and businesses in Hawaii;			✓
(2) Encourage the continued development and expansion of the telecommunications infrastructure serving Hawaii to accommodate future growth and innovation in Hawaii's economy;			✓
(3) Facilitate the development of new or innovative business and service ventures in the information industry which will provide employment opportunities for the people of Hawaii;			✓
(4) Encourage mainland- and foreign-based companies of all sizes, whether information technology-focused or not, to allow their principals, employees, or contractors to live in and work from Hawaii, using technology to communicate with their headquarters, offices, or customers located out-of-state;			✓
(5) Encourage greater cooperation between the public and private sectors in developing and maintaining a well-designed information industry;			✓
(6) Ensure that the development of new businesses and services in the industry are in keeping with the social, economic, and physical needs and aspirations of Hawaii's people;			✓
(7) Provide opportunities for Hawaii's people to obtain job training and education that will allow for upward mobility within the information industry;			✓
(8) Foster a recognition of the contribution of the information industry to Hawaii's economy; and			✓
(9) Assist in the promotion of Hawaii as a broker, creator, and processor of information in the Pacific.			✓
Analysis: **Not applicable.**			

Hawai'i State Plan, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable	S	N/S	N/A
Chapter 226-11 Objectives and policies for the physical environment – – land based, shoreline, and marine resources.			
Objectives: Planning for the State's physical environment with regard to land-based, shoreline, and marine resources shall be directed towards achievement of the following objectives:			
(1) Prudent use of Hawaii's land-based, shoreline, and marine resources.			✓
(2) Effective protection of Hawaii's unique and fragile environmental resources.			✓
Policies:			
(1) Exercise an overall conservation ethic in the use of Hawaii's natural resources.	✓		
(2) Ensure compatibility between land-based and water-based activities and natural resources and ecological systems.			✓
(3) Take into account the physical attributes of areas when planning and designing activities and facilities.			✓
(4) Manage natural resources and environs to encourage their beneficial and multiple use without generating costly or irreparable environmental damage.			✓
(5) Consider multiple uses in watershed areas, provided such uses do not detrimentally affect water quality and recharge functions.			✓
(6) Encourage the protection of rare or endangered plant and animal species and habitats native to Hawaii.			✓
(7) Provide public incentives that encourage private actions to protect significant natural resources from degradation or unnecessary depletion.			✓
(8) Pursue compatible relationships among activities, facilities, and natural resources.			✓
(9) Promote increased accessibility and prudent use of inland and shoreline areas for public recreational, educational, and scientific purposes.			✓
Analysis: **The proposed project involves water system improvements to assure reliable service to the West Maui region and is compatible with surrounding vegetation and fallow agricultural land uses. BMPs will be implemented as part of the project to ensure protection of Hawai'i's natural resources.**			
Chapter 226-12 Objective and policies for the physical environment – – scenic, natural beauty, and historic resources.			
Objective: Planning for the State's physical environment shall be directed towards achievement of the objective of enhancement of Hawaii's scenic assets, natural beauty, and multi-cultural/historical resources.			
Policies:			
(1) Promote the preservation and restoration of significant natural and historic resources.	✓		
(2) Provide incentives to maintain and enhance historic, cultural, and scenic amenities.			✓
(3) Promote the preservation of views and vistas to enhance the visual and aesthetic enjoyment of mountains, ocean, scenic landscapes, and other natural features.	✓		

Hawai'i State Plan, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable	S	N/S	N/A
(4) Protect those special areas, structures, and elements that are an integral and functional part of Hawaii's ethnic and cultural heritage.			✓
(5) Encourage the design of developments and activities that complement the natural beauty of the islands.			✓
***Analysis*: The proposed project involves water system improvements to assure reliable service to the West Maui region and the project area and the land required for the project is less than one (1) percent of the parcels that are affected by the project. BMPs will be implemented as part of the project. As such, the proposed project is consistent with the policies regarding physical environment.**			
Chapter 226-13 Objectives and policies for the physical environment – – land, air, and water quality.			
Objectives: Planning for the State's physical environment with regard to land, air, and water quality shall be directed towards achievement of the following objectives.			
(1) Maintenance and pursuit of improved quality in Hawaii's land, air, and water resources.	✓		
(2) Greater public awareness and appreciation of Hawaii's environmental resources.			✓
Policies:			
(1) Foster educational activities that promote a better understanding of Hawaii's limited environmental resources.			✓
(2) Promote the proper management of Hawaii's land and water resources.	✓		
(3) Promote effective measures to achieve desired quality in Hawaii's surface, ground, and coastal waters.	✓		
(4) Encourage actions to maintain or improve aural and air quality levels to enhance the health and well-being of Hawaii's people.			✓
(5) Reduce the threat to life and property from erosion, flooding, tsunamis, hurricanes, earthquakes, volcanic eruptions, and other natural or man-induced hazards and disasters.			✓
(6) Encourage design and construction practices that enhance the physical qualities of Hawaii's communities.			✓
(7) Encourage urban developments in close proximity to existing services and facilities.			✓
(8) Foster recognition of the importance and value of the land, air, and water resources to Hawaii's people, their cultures and visitors.			✓
***Analysis*: The proposed project involves water system improvements to assure reliable service to the West Maui region while not adversely affecting the land, air, and water resource. As such, the proposed project is consistent with the policies regarding physical environment.**			
Chapter 226-14 Objective and policies for facility systems – – in general.			
Objective: Planning for the State's facility systems in general shall be directed towards achievement of the objective of water, transportation, waste disposal, and energy and telecommunication systems that support statewide social, economic, and physical objectives.			

Hawai'i State Plan, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable	S	N/S	N/A
Policies:			
(1) Accommodate the needs of Hawaii's people through coordination of facility systems and capital improvement priorities in consonance with state and county plans.	✓		
(2) Encourage flexibility in the design and development of facility systems to promote prudent use of resources and accommodate changing public demands and priorities.	✓		
(3) Ensure that required facility systems can be supported within resource capacities and at reasonable cost to the user.	✓		
(4) Pursue alternative methods of financing programs and projects and cost-saving techniques in the planning, construction, and maintenance of facility systems.			✓
***Analysis*: The proposed project will provide water system reliability and meet West Maui's water demands.**			
Chapter 226-15 Objectives and policies for facility systems – – solid and liquid waste.			
Objectives: Planning for the State's facility systems with regard to solid and liquid wastes shall be directed towards the achievement of the following objectives:			
(1) Maintenance of basic public health and sanitation standards relating to treatment and disposal of solid and liquid wastes.			✓
(2) Provision of adequate sewerage facilities for physical and economic activities that alleviate problems in housing, employment, mobility, and other areas.			✓
Policies:			
(1) Encourage the adequate development of sewerage facilities that complement planned growth.			✓
(2) Promote re-use and recycling to reduce solid and liquid wastes and employ a conservation ethic.			✓
(3) Promote research to develop more efficient and economical treatment and disposal of solid and liquid wastes.			✓
***Analysis*: Not applicable.**			
Chapter 226-16 Objective and policies for facility systems – – water.			
Objective: Planning for the State's facility systems with regard to water shall be directed towards achievement of the objective of the provision of water to adequately accommodate domestic, agricultural, commercial, industrial, recreational, and other needs within resource capacities.			
Policies:			
(1) Coordinate development of land use activities with existing and potential water supply.	✓		
(2) Support research and development of alternative methods to meet future water requirements well in advance of anticipated needs.	✓		
(3) Reclaim and encourage the productive use of runoff water and wastewater discharges.			✓
(4) Assist in improving the quality, efficiency, service, and storage capabilities of water systems for domestic and agricultural use.			✓

Hawai'i State Plan, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable	S	N/S	N/A
(5) Support water supply services to areas experiencing critical water problems.	✓		
(6) Promote water conservation programs and practices in government, private industry, and the general public to help ensure adequate water to meet long-term needs.	✓		
***Analysis*: The proposed project will provide water system reliability and meet the water demands of West Maui.**			
Chapter 226-17 Objectives and policies for facility systems – – transportation.			
Objectives: Planning for the State's facility systems with regard to transportation shall be directed towards the achievement of the following objectives:			
(1) An integrated multi-modal transportation system that services statewide needs and promotes the efficient, economical, safe, and convenient movement of people and goods.			✓
(2) A statewide transportation system that is consistent with and will accommodate planned growth objectives throughout the State.			✓
Policies:			
(1) Design, program, and develop a multi-modal system in conformance with desired growth and physical development as stated in this chapter;			✓
(2) Coordinate state, county, federal, and private transportation activities and programs toward the achievement of statewide objectives;			✓
(3) Encourage a reasonable distribution of financial responsibilities for transportation among participating governmental and private parties;			✓
(4) Provide for improved accessibility to shipping, docking, and storage facilities;			✓
(5) Promote a reasonable level and variety of mass transportation services that adequately meet statewide and community needs;			✓
(6) Encourage transportation systems that serve to accommodate present and future development needs of communities;			✓
(7) Encourage a variety of carriers to offer increased opportunities and advantages to interisland movement of people and goods;			✓
(8) Increase the capacities of airport and harbor systems and support facilities to effectively accommodate transshipment and storage needs;			✓
(9) Encourage the development of transportation systems and programs which would assist statewide economic growth and diversification;			✓
(10) Encourage the design and development of transportation systems sensitive to the needs of affected communities and the quality of Hawaii's natural environment;			✓
(11) Encourage safe and convenient use of low-cost, energy-efficient, non-polluting means of transportation;			✓
(12) Coordinate intergovernmental land use and transportation planning activities to ensure the timely delivery of supporting transportation infrastructure in order to accommodate planned growth objectives; and			✓
(13) Encourage diversification of transportation modes and infrastructure to promote alternate fuels and energy efficiency.			✓

Hawai'i State Plan, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable	S	N/S	N/A
***Analysis*:** **Not applicable.**			
Chapter 226-18 Objectives and policies for facility systems – – energy.			
Objectives: Planning for the State's facility systems with regard to energy shall be directed toward the achievement of the following objectives, giving due consideration to all:			
(1) Dependable, efficient, and economical statewide energy systems capable of supporting the needs of the people;			✓
(2) Increased energy security and self-sufficiency through the reduction and ultimate elimination of Hawaii's dependence on imported fuels for electrical generation and ground transportation.			✓
(3) Greater diversification of energy generation in the face of threats to Hawaii's energy supplies and systems;			✓
(4) Reduction, avoidance, or sequestration of greenhouse gas emissions from energy supply and use; and			✓
(5) Utility models that make the social and financial interests of Hawaii's utility customers a priority.			✓
(b) To achieve the energy objectives, it shall be the policy of this State to ensure the short- and long-term provision of adequate, reasonably prices, and dependable energy services to accommodate demand.			✓
Policies:			
(1) Support research and development as well as promote the use of renewable energy sources;			✓
(2) Ensure that the combination of energy supplies and energy-saving systems is sufficient to support the demands of growth;			✓
(3) Base decisions of least-cost supply-side and demand-side energy resource options on a comparison of their total costs and benefits when a least-cost is determined by a reasonably comprehensive, quantitative, and qualitative accounting of their long-term, direct and indirect economic, environmental, social, cultural, and public health costs and benefits;			✓
(4) Promote all cost-effective conservation of power and fuel supplies through measures, including:			✓
(A) Development of cost-effective demand-side management programs;			✓
(B) Education;			✓
(C) Adoption of energy-efficient practices and technologies; and			✓
(D) Increasing energy efficiency and decreasing energy use in public infrastructure.			✓
(5) Ensure, to the extent that new supply-side resources are needed, that the development or expansion of energy systems uses the least-cost energy supply option and maximizes efficient technologies; and			✓
(6) Support research, development, demonstration, and use of energy efficiency, load management, and other demand-side management programs, practices, and technologies;			✓

Hawai'i State Plan, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable	S	N/S	N/A
(7) Promote alternate fuels and transportation energy efficiency;			✓
(8) Support actions that reduce, avoid, or sequester greenhouse gases in utility, transportation, and industrial sector applications;			✓
(9) Support actions that reduce, avoid, or sequester Hawaii's greenhouse gas emissions through agriculture and forestry initiatives;			✓
(10) Provide priority handling and processing for all state and county permits required for renewable energy projects;			✓
(11) Ensure that liquefied natural gas is used only as a cost-effective transitional, limited-term replacement of petroleum for electricity generation and does not impede the development and use of other cost-effective renewable energy sources; and			✓
(12) Promote the development of indigenous geothermal energy resources that are located on public trust land as an affordable and reliable source of firm power for Hawaii.			✓
***Analysis*: Not applicable.**			
Chapter 226-18.5 Objectives and policies for facility systems – – telecommunications.			
Objectives: (a) Planning for the State's telecommunications facility systems shall be directed towards the achievement of dependable, efficient, and economical statewide telecommunications systems capable of supporting the needs of the people. (b) To achieve the telecommunications objective, it shall be the policy of this State to ensure the provision of adequate, reasonably priced, and dependable telecommunications services to accommodate demand.			
Policies:			
(1) Facilitate research and development of telecommunications systems and resources;			✓
(2) Encourage public and private sector efforts to develop means for adequate, ongoing telecommunications planning;			✓
(3) Promote efficient management and use of existing telecommunications systems and services; and			✓
(4) Facilitate the development of education and training of telecommunications personnel.			✓
***Analysis*: Not applicable.**			
Chapter 226-19 Objectives and policies for socio-cultural advancement – – housing.			
Objectives: Planning for the State's socio-cultural advancement with regard to housing shall be directed toward the achievement of the following objectives:			
(1) Greater opportunities for Hawaii's people to secure reasonably priced, safe, sanitary, and livable homes, located in suitable environments that satisfactorily accommodate the needs and desires of families and individuals, through collaboration and cooperation between government and nonprofit and for-profit developers to ensure that more affordable housing is made available to very low-, low- and moderate-income segments of Hawaii's population.			✓

Hawai'i State Plan, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable	S	N/S	N/A
(2) The orderly development of residential areas sensitive to community needs and other land uses.			✓
(3) The development and provision of affordable rental housing by the State to meet the housing needs of Hawaii's people.			✓
Policies:			
(1) Effectively accommodate the housing needs of Hawaii's people.			✓
(2) Stimulate and promote feasible approaches that increase housing choices for low-income, moderate-income, and gap-group households.			✓
(3) Increase homeownership and rental opportunities and choices in terms of quality, location, cost, densities, style, and size of housing.			✓
(4) Promote appropriate improvement, rehabilitation, and maintenance of existing housing units and residential areas.			✓
(5) Promote design and location of housing developments taking into account the physical setting, accessibility to public facilities and services, and other concerns of existing communities and surrounding areas.			✓
(6) Facilitate the use of available vacant, developable, and underutilized urban lands for housing.			✓
(7) Foster a variety of lifestyles traditional to Hawaii through the design and maintenance of neighborhoods that reflect the culture and values of the community.			✓
(8) Promote research and development of methods to reduce the cost of housing construction in Hawaii.			✓
***Analysis*: Not applicable.**			
Chapter 226-20 Objectives and policies for socio-cultural advancement – – health.			
Objectives: Planning for the State's socio-cultural advancement with regard to health shall be directed towards achievement of the following objectives:			
(1) Fulfillment of basic individual health needs of the general public.			✓
(2) Maintenance of sanitary and environmentally healthful conditions in Hawaii's communities.			✓
(3) Elimination of health disparities by identifying and addressing social determinants of health.			✓
Policies:			
(1) Provide adequate and accessible services and facilities for prevention and treatment of physical and mental health problems, including substance abuse.			✓
(2) Encourage improved cooperation among public and private sectors in the provision of health care to accommodate the total health needs of individuals throughout the State.			✓
(3) Encourage public and private efforts to develop and promote statewide and local strategies to reduce health care and related insurance costs.			✓
(4) Foster an awareness of the need for personal health maintenance and preventive health care through education and other measures.			✓

Hawai'i State Plan, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable	S	N/S	N/A
(5) Provide programs, services, and activities that ensure environmentally healthful and sanitary conditions.			✓
(6) Improve the State's capabilities in preventing contamination by pesticides and other potentially hazardous substances through increased coordination, education, monitoring, and enforcement.			✓
(7) Prioritize programs, services, interventions, and activities that address identified social determinants of health to improve native Hawaiian health and well-being consistent with the United States Congress' declaration of policy as codified in title 42 United States Code section 11702, and to reduce health disparities of disproportionately affected demographics, including native Hawaiians, other Pacific Islanders, and Filipinos. The prioritization of affected demographic groups other than native Hawaiians may be reviewed every ten years and revised based on the best available epidemiological and public health data.			✓
***Analysis*: Not applicable.**			
Chapter 226-21 Objectives and policies for Socio-cultural advancement – – education.			
Objective: Planning for the State's socio-cultural advancement with regard to education shall be directed towards achievement of the objective of the provision of a variety of educational opportunities to enable individuals to fulfill their needs, responsibilities, and aspirations.			
Policies:			
(1) Support educational programs and activities that enhance personal development, physical fitness, recreation, and cultural pursuits of all groups.			✓
(2) Ensure the provision of adequate and accessible educational services and facilities that are designed to meet individual and community needs.			✓
(3) Provide appropriate educational opportunities for groups with special needs.			✓
(4) Promote educational programs which enhance understanding of Hawaii's cultural heritage.			✓
(5) Provide higher educational opportunities that enable Hawaii's people to adapt to changing employment demands.			✓
(6) Assist individuals, especially those experiencing critical employment problems or barriers, or undergoing employment transitions, by providing appropriate employment training programs and other related educational opportunities.			✓
(7) Promote programs and activities that facilitate the acquisition of basic skills, such as reading, writing, computing, listening, speaking, and reasoning.			✓
(8) Emphasize quality educational programs in Hawaii's institutions to promote academic excellence.			✓
(9) Support research programs and activities that enhance the education programs of the State.			✓
***Analysis*: Not applicable.**			
Chapter 226-22 Objective and policies for socio-cultural advancement – – social services.			
Objective: Planning for the State's socio-cultural advancement with regard to social services shall be directed towards the achievement of the objective of improved public and private social services and activities that enable individuals, families, and groups to become more self-reliant and confident to improve their well-being.			

Hawai'i State Plan, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable	S	N/S	N/A
Policies:			
(1) Assist individuals, especially those in need of attaining a minimally adequate standard of living and those confronted by social and economic hardship conditions, through social services and activities within the State's fiscal capacities.			✓
(2) Promote coordination and integrative approaches among public and private agencies and programs to jointly address social problems that will enable individuals, families, and groups to deal effectively with social problems and to enhance their participation in society.			✓
(3) Facilitate the adjustment of new residents, especially recently arrived immigrants, into Hawaii's communities.			✓
(4) Promote alternatives to institutional care in the provision of long-term care for elder and disabled populations.			✓
(5) Support public and private efforts to prevent domestic abuse and child molestation, and assist victims of abuse and neglect.			✓
(6) Promote programs which assist people in need of family planning services to enable them to meet their needs.			✓
***Analysis*: Not applicable.**			
Chapter 226-23 Objective and policies for socio-cultural advancement – – leisure.			
Objective: Planning for the State's socio-cultural advancement with regard to leisure shall be directed towards the achievement of the objective of the adequate provision of resources to accommodate diverse cultural, artistic, and recreational needs for present and future generations.			
Policies:			
(1) Foster and preserve Hawaii's multi-cultural heritage through supportive cultural, artistic, recreational, and humanities-oriented programs and activities.			✓
(2) Provide a wide range of activities and facilities to fulfill the cultural, artistic, and recreational needs of all diverse and special groups effectively and efficiently.			✓
(3) Enhance the enjoyment of recreational experiences through safety and security measures, educational opportunities, and improved facility design and maintenance.			✓
(4) Promote the recreational and educational potential of natural resources having scenic, open space, cultural, historical, geological, or biological values while ensuring that their inherent values are preserved.			✓
(5) Ensure opportunities for everyone to use and enjoy Hawaii's recreational resources.			✓
(6) Assure the availability of sufficient resources to provide for future cultural, artistic, and recreational needs.			✓
(7) Provide adequate and accessible physical fitness programs to promote the physical and mental well-being of Hawaii's people.			✓
(8) Increase opportunities for appreciation and participation in the creative arts, including the literary, theatrical, visual, musical, folk, and traditional art forms.			✓

Hawai'i State Plan, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable	S	N/S	N/A
(9) Encourage the development of creative expression in the artistic disciplines to enable all segments of Hawaii's population to participate in the creative arts.			✓
(10) Assure adequate access to significant natural and cultural resources in public ownership.			✓
***Analysis*: Not applicable.**			
Chapter 226-24 Objective and policies for socio-cultural advancement – – individual rights and personal well-being.			
Objective: Planning for the State's socio-cultural advancement with regard to individual rights and personal well-being shall be directed towards achievement of the objective of increased opportunities and protection of individual rights to enable individuals to fulfill their socio-economic needs and aspirations.			
Policies:			
(1) Provide effective services and activities that protect individuals from criminal acts and unfair practices and that alleviate the consequences of criminal acts in order to foster a safe and secure environment.			✓
(2) Uphold and protect the national and state constitutional rights of every individual.			✓
(3) Assure access to, and availability of, legal assistance, consumer protection, and other public services which strive to attain social justice.			✓
(4) Ensure equal opportunities for individual participation in society.			✓
***Analysis*: Not applicable.**			
Chapter 226-25 Objective and policies for socio-cultural advancement – – culture.			
Objective: Planning for the State's socio-cultural advancement with regard to culture shall be directed toward the achievement of the objective of enhancement of cultural identities, traditions, values, customs, and arts of Hawaii's people.			
Policies:			
(1) Foster increased knowledge and understanding of Hawaii's ethnic and cultural heritages and the history of Hawaii.			✓
(2) Support activities and conditions that promote cultural values, customs, and arts that enrich the lifestyles of Hawaii's people and which are sensitive and responsive to family and community needs.			✓
(3) Encourage increased awareness of the effects of proposed public and private actions on the integrity and quality of cultural and community lifestyles in Hawaii.			✓
(4) Encourage the essence of the aloha spirit in people's daily activities to promote harmonious relationships among Hawaii's people and visitors.			✓
***Analysis*: Not applicable.**			
Chapter 226-26 Objectives and policies for socio-cultural advancement – – public safety.			
Objective: Planning for the State's socio-cultural advancement with regard to public safety shall be directed towards the achievement of the following objectives:			
(1) Assurance of public safety and adequate protection of life and property for all people.			✓

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(2) Optimum organizational readiness and capability in all phases of emergency management to maintain the strength, resources, and social and economic well-being of the community in the event of civil disruptions, wars, natural disasters, and other major disturbances.			✓
(3) Promotion of a sense of community responsibility for the welfare and safety of Hawaii's people.			✓
Policies:			
(1) Ensure that public safety programs are effective and responsive to community needs.			✓
(2) Encourage increased community awareness and participation in public safety programs.			✓
Policies:			
(1) Support criminal justice programs aimed at preventing and curtailing criminal activities.			✓
(2) Develop a coordinated, systematic approach to criminal justice administration among all criminal justice agencies.			✓
(3) Provide a range of correctional resources which may include facilities and alternatives to traditional incarceration in order to address the varied security needs of the community and successfully reintegrate offenders into the community.			✓
Policies:			
(1) Ensure that responsible organizations are in a proper state of readiness to respond to major war-related, natural, or technological disasters and civil disturbances at all times.			✓
(2) Enhance the coordination between emergency management programs throughout the State.			✓
***Analysis*: Not applicable.**			
Chapter 226-27 Objectives and policies for socio-cultural advancement – – government.			
Objectives: Planning the State's socio-cultural advancement with regard to government shall be directed towards the achievement of the following objectives:			
(1) Efficient, effective, and responsive government services at all levels in the State.			✓
(2) Fiscal integrity, responsibility, and efficiency in the state government and county governments.			✓
Policies:			
(1) Provide for necessary public goods and services not assumed by the private sector.			✓
(2) Pursue an openness and responsiveness in government that permits the flow of public information, interaction, and response.			✓
(3) Minimize the size of government to that necessary to be effective.			✓
(4) Stimulate the responsibility in citizens to productively participate in government for a better Hawaii.			✓

Hawai'i State Plan, Chapter 226, HRS Part I. Overall Themes, Goals, Objectives and Policies Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable	S	N/S	N/A
(5) Assure that government attitudes, actions, and services are sensitive to community needs and concerns.			✓
(6) Provide for a balanced fiscal budget.			✓
(7) Improve the fiscal budgeting and management system of the State.			✓
(8) Promote the consolidation of state and county governmental functions to increase the effective and efficient delivery of government programs and services and to eliminate duplicative services wherever feasible.			✓
***Analysis*:** **Not applicable.**			

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART III. PRIORITY GUIDELINES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
Chapter 226-101: Purpose. The purpose of this part is to establish overall priority guidelines to address areas of statewide concern.			
Chapter 226-102: Overall direction. The State shall strive to improve the quality of life for Hawaii's present and future population through the pursuit of desirable courses of action in seven major areas of statewide concern which merit priority attention: economic development, population growth and land resource management, affordable housing, crime and criminal justice, quality education, principles of sustainability, and climate change adaptation.			
Chapter 226-103: Economic priority guidelines.			
(a) Priority guidelines to stimulate economic growth and encourage business expansion and development to provide needed jobs for Hawaii's people and achieve a stable and diversified economy:			
(1) Seek a variety of means to increase the availability of investment capital for new and expanding enterprises.			✓
(A) Encourage investments which:			
(i) Reflect long term commitments to the State;			✓
(ii) Rely on economic linkages within the local economy;			✓
(iii) Diversify the economy;			✓
(iv) Reinvest in the local economy;			✓
(v) Are sensitive to community needs and priorities; and			✓
(vi) Demonstrate a commitment to provide management opportunities to Hawaii residents; and			✓
(B) Encourage investments in innovative activities that have a nexus to the State, such as:			
(i) Present or former residents acting as entrepreneurs or			✓
(ii) Academic support from an institution of higher education in Hawaii;			✓
(iii) Investment interest from Hawaii residents;			✓
(iv) Resources unique to Hawaii that are required for innovative activity; and			✓
(v) Complementary or supportive industries or government programs or projects.			✓

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART III. PRIORITY GUIDELINES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(2) Encourage the expansion of technological research to assist industry development and support the development and commercialization of technological advancements.			✓
(3) Improve the quality, accessibility, and range of services provided by government to business, including data and reference services and assistance in complying with governmental regulations.			✓
(4) Seek to ensure that state business tax and labor laws and administrative policies are equitable, rational, and predictable.			✓
(5) Streamline the processes for building and development permit and review, and telecommunication infrastructure installation approval and eliminate or consolidate other burdensome or duplicative governmental requirements imposed on business, where scientific evidence indicates that public health, safety and welfare would not be adversely affected.			✓
(6) Encourage the formation of cooperatives and other favorable marketing or distribution arrangements at the regional or local level to assist Hawaii's small-scale producers, manufacturers, and distributors.			✓
(7) Continue to seek legislation to protect Hawaii from transportation interruptions between Hawaii and the continental United States.			✓
(8) Provide public incentives and encourage private initiative to develop and attract industries which promise long-term growth potentials and which have the following characteristics:			✓
(A) An industry that can take advantage of Hawaii's unique location and available physical and human resources.			✓
(B) A clean industry that would have minimal adverse effects on Hawaii's environment.			✓
(C) An industry that is willing to hire and train Hawaii's people to meet the industry's labor needs at all levels of employment.			✓
(D) An industry that would provide reasonable income and steady employment.			✓
(9) Support and encourage, through educational and technical assistance programs and other means, expanded opportunities for employee ownership and participation in Hawaii business.			✓
(10) Enhance the quality of Hawaii's labor force and develop and maintain career opportunities for Hawaii's people through the following actions:			✓
(A) Expand vocational training in diversified agriculture, aquaculture, information industry, and other areas where growth is desired and feasible.			✓
(B) Encourage more effective career counseling and guidance in high schools and post-secondary institutions to inform students of present and future career opportunities.			✓
(C) Allocate educational resources to career areas where high employment is expected and where growth of new industries is desired.			✓
(D) Promote career opportunities in all industries for Hawaii's people by encouraging firms doing business in the State to hire residents.			✓
(E) Promote greater public and private sector cooperation in determining industrial training needs and in developing relevant curricula and on- the-job training opportunities.			✓
(F) Provide retraining programs and other support services to assist entry of displaced workers into alternative employment.			✓

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART III. PRIORITY GUIDELINES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(b) Priority guidelines to promote the economic health and quality of the visitor industry:			
(1) Promote visitor satisfaction by fostering an environment which enhances the Aloha Spirit and minimizes inconveniences to Hawaii's residents and visitors.			✓
(2) Encourage the development and maintenance of well-designed, adequately serviced hotels and resort destination areas which are sensitive to neighboring communities and activities and which provide for adequate shoreline setbacks and beach access.			✓
(3) Support appropriate capital improvements to enhance the quality of existing resort destination areas and provide incentives to encourage investment in upgrading, repair, and maintenance of visitor facilities.			✓
(4) Encourage visitor industry practices and activities which respect, preserve, and enhance Hawaii's significant natural, scenic, historic, and cultural resources.			✓
(5) Develop and maintain career opportunities in the visitor industry for Hawaii's people, with emphasis on managerial positions.			✓
(6) Support and coordinate tourism promotion abroad to enhance Hawaii's share of existing and potential visitor markets.			✓
(7) Maintain and encourage a more favorable resort investment climate consistent with the objectives of this chapter.			✓
(8) Support law enforcement activities that provide a safer environment for both visitors and residents alike.			✓
(9) Coordinate visitor industry activities and promotions to business visitors through the state network of advanced data communication techniques.			✓
(c) Priority guidelines to promote the continued viability of the sugar and pineapple industries:			
(1) Provide adequate agricultural lands to support the economic viability of the sugar and pineapple industries.			✓
(2) Continue efforts to maintain federal support to provide stable sugar prices high enough to allow profitable operations in Hawaii.			✓
(3) Support research and development, as appropriate, to improve the quality and production of sugar and pineapple crops.			✓
(d) Priority guidelines to promote the growth and development of diversified agriculture and aquaculture:			
(1) Identify, conserve, and protect agricultural and aquacultural lands of importance and initiate affirmative and comprehensive programs to promote economically productive agricultural and aquacultural uses of such lands.			✓
(2) Assist in providing adequate, reasonably priced water for agricultural activities.			✓
(3) Encourage public and private investment to increase water supply and to improve transmission, storage, and irrigation facilities in support of diversified agriculture and aquaculture.			✓
(4) Assist in the formation and operation of production and marketing associations and cooperatives to reduce production and marketing			✓
(5) Encourage and assist with the development of a waterborne and airborne freight and cargo system capable of meeting the needs of Hawaii's agricultural community.			✓
(6) Seek favorable freight rates for Hawaii's agricultural products from interisland and overseas transportation operators.			✓

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART III. PRIORITY GUIDELINES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(7) Encourage the development and expansion of agricultural and aquacultural activities which offer long-term economic growth potential and employment opportunities.			✓
(8) Continue the development of agricultural parks and other programs to assist small independent farmers in securing agricultural lands and			✓
(9) Require agricultural uses in agricultural subdivisions and closely monitor the uses in these subdivisions.			✓
(10) Support the continuation of land currently in use for diversified			✓
(11) Encourage residents and visitors to support Hawaii's farmers by purchasing locally grown food and food products.			✓
(e) Priority guidelines for water use and development:			
(1) Maintain and improve water conservation programs to reduce the overall water consumption rate.			✓
(2) Encourage the improvement of irrigation technology and promote the use of nonpotable water for agricultural and landscaping purposes.			✓
(3) Increase the support for research and development of economically feasible alternative water sources.	✓		
(4) Explore alternative funding sources and approaches to support future water development programs and water system improvements.			✓
(f) Priority guidelines for energy use and development:			
(1) Encourage the development, demonstration, and commercialization of renewable energy sources.			✓
(2) Initiate, maintain, and improve energy conservation programs aimed at reducing energy waste and increasing public awareness of the need to conserve energy.			✓
(3) Provide incentives to encourage the use of energy conserving technology in residential, industrial, and other buildings.			✓
(4) Encourage the development and use of energy conserving and cost-efficient transportation systems.			✓
(g) Priority guidelines to promote the development of the information industry:			
(1) Establish an information network, with an emphasis on broadband and wireless infrastructure and capability, that will serve as the foundation of and catalyst for overall economic growth and diversification in Hawaii.			✓
(2) Encourage the development of services such as financial data processing, a products and services exchange, foreign language translations, telemarketing, teleconferencing, a twenty-four-hour international stock exchange, international banking, and a Pacific Rim management center.			✓
(3) Encourage the development of small businesses in the information field such as software development; the development of new information systems, peripherals, and applications; data conversion and data entry services; and home or cottage services such as computer programming, secretarial, and accounting services.			✓
(4) Encourage the development or expansion of educational and training opportunities for residents in the information and telecommunications fields.			✓
(5) Encourage research activities, including legal research in the information and telecommunications fields.			✓
(6) Support promotional activities to market Hawaii's information industry services.			✓

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART III. PRIORITY GUIDELINES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(7) Encourage the location or co-location of telecommunication or wireless information relay facilities in the community, including public areas, where scientific evidence indicates that the public health, safety, and welfare would not be adversely affected.			✓
***Analysis*: The proposed project will supplement water from the Mahinahina Surface Water Treatment Plant (SWTP), serving as an additional source that will provide greater system reliability for West Maui.**			
Chapter 226-104: Population growth and land resources priority guidelines.			
(a) Priority guidelines to effect desired statewide growth and distribution:			
(1) Encourage planning and resource management to insure that population growth rates throughout the State are consistent with available and planned resource capacities and reflect the needs and desires of Hawaii's people.			✓
(2) Manage a growth rate for Hawaii's economy that will parallel future employment needs for Hawaii's people.			✓
(3) Ensure that adequate support services and facilities are provided to accommodate the desired distribution of future growth throughout the State.			✓
(4) Encourage major state and federal investments and services to promote economic development and private investment to the neighbor islands, as appropriate.			✓
(5) Explore the possibility of making available urban land, low-interest loans, and housing subsidies to encourage the provision of housing to support selective economic and population growth on the neighbor islands.			✓
(6) Seek federal funds and other funding sources outside the State for research, program development, and training to provide future employment opportunities on the neighbor islands.			✓
(7) Support the development of high technology parks on the neighbor islands.			✓
(b) Priority guidelines for regional growth distribution and land resource utilization:			
(1) Encourage urban growth primarily to existing urban areas where adequate public facilities are already available or can be provided with reasonable public expenditures, and away from areas where other important benefits are present, such as protection of important agricultural land or preservation of lifestyles.			✓
(2) Make available marginal or nonessential agricultural lands for appropriate urban uses while maintaining agricultural lands of importance in the agricultural district.			✓
(3) Restrict development when drafting of water would result in exceeding the sustainable yield or in significantly diminishing the recharge capacity of any groundwater area.			✓
(4) Encourage restriction of new urban development in areas where water is insufficient from any source for both agricultural and domestic use.			✓
(5) In order to preserve green belts, give priority to state capital-improvement funds which encourage location of urban development within existing urban areas except where compelling public interest dictates development of a noncontiguous new urban core.			✓
(6) Seek participation from the private sector for the cost of building infrastructure and utilities, and maintaining open spaces.			✓

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(7) Pursue rehabilitation of appropriate urban areas.			✓
(8) Support the redevelopment of Kakaako into a viable residential, industrial, and commercial community.			✓
(9) Direct future urban development away from critical environmental areas or impose mitigating measures so that negative impacts on the environment would be minimized.			✓
(10) Identify critical environmental areas in Hawaii to include but not be limited to the following: watershed and recharge areas; wildlife habitats (on land and in the ocean); areas with endangered species of plants and wildlife; natural streams and water bodies; scenic and recreational shoreline resources; open space and natural areas; historic and cultural sites; areas particularly sensitive to reduction in water and air quality; and scenic resources.			✓
(11) Identify all areas where priority should be given to preserving rural character and lifestyle.			✓
(12) Utilize Hawaii's limited land resources wisely, providing adequate land to accommodate projected population and economic growth needs while ensuring the protection of the environment and the availability of the shoreline, conservation lands, and other limited resources for future generations.			✓
(13) Protect and enhance Hawaii's shoreline, open spaces, and scenic resources.			✓
***Analysis*: Not applicable.**			
Chapter 226-105: Crime and criminal justice.			
Priority guidelines in the area of crime and criminal justice:			
(1) Support law enforcement activities and other criminal justice efforts that are directed to provide a safer environment.			✓
(2) Target state and local resources on efforts to reduce the incidence of violent crime and on programs relating to the apprehension and prosecution of repeat offenders.			✓
(3) Support community and neighborhood program initiatives that enable residents to assist law enforcement agencies in preventing criminal activities.			✓
(4) Reduce overcrowding or substandard conditions in correctional facilities through a comprehensive approach among all criminal justice agencies which may include sentencing law revisions and use of alternative sanctions other than incarceration for persons who pose no danger to their community.			✓
(5) Provide a range of appropriate sanctions for juvenile offenders, including community-based programs and other alternative sanctions.			✓
(6) Increase public and private efforts to assist witnesses and victims of crimes and to minimize the costs of victimization.			✓
***Analysis*: Not applicable.**			
Chapter 226-106: Affordable housing.			
Priority guidelines for the provision of affordable housing:			
(1) Seek to use marginal or nonessential agricultural land and public land to meet housing needs of low- and moderate-income and gap-group households.			✓

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART III. PRIORITY GUIDELINES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(2) Encourage the use of alternative construction and development methods as a means of reducing production costs.			✓
(3) Improve information and analysis relative to land availability and suitability for housing.			✓
(4) Create incentives for development which would increase home ownership and rental opportunities for Hawaii's low- and moderate-income households, gap-group households, and residents with special needs.			✓
(5) Encourage continued support for government or private housing programs that provide low interest mortgages to Hawaii's people for the purchase of initial owner-occupied housing.			✓
(6) Encourage public and private sector cooperation in the development of rental housing alternatives.			✓
(7) Encourage improved coordination between various agencies and levels of government to deal with housing policies and regulations.			✓
(8) Give higher priority to the provision of quality housing that is affordable for Hawaii's residents and less priority to development of housing intended primarily for individuals outside of Hawaii.			✓
***Analysis*: Not applicable.**			
Chapter 226-107: Quality education.			
Priority guidelines to promote quality education:			
(1) Pursue effective programs which reflect the varied district, school, and student needs to strengthen basic skills achievement;			✓
(2) Continue emphasis on general education "core" requirements to provide common background to students and essential support to other university programs;			✓
(3) Initiate efforts to improve the quality of education by improving the capabilities of the education work force;			✓
(4) Promote increased opportunities for greater autonomy and flexibility of educational institutions in their decision making responsibilities;			✓
(5) Increase and improve the use of information technology in education by the availability of telecommunications equipment for:			✓
(A) The electronic exchange of information;			✓
(B) Statewide electronic mail; and			✓
(C) Access to the Internet.			✓
(6) Encourage programs that increase the public's awareness and understanding of the impact of information technologies on our lives;			✓
(7) Pursue the establishment of Hawaii's public and private universities and colleges as research and training centers of the Pacific;			✓
(8) Develop resources and programs for early childhood education;			✓
(9) Explore alternatives for funding and delivery of educational services to improve the overall quality of education; and			✓
(10) Strengthen and expand educational programs and services for students with special needs.			✓
***Analysis:* Not applicable.**			
CHAPTER 226-108: Sustainability			
Priority guidelines and principles to promote sustainability shall include:			
(1) Encouraging balanced economic, social, community, and environmental priorities;			✓

HAWAI'I STATE PLAN, CHAPTER 226, HRS – PART III. PRIORITY GUIDELINES (Key: S = Supportive, N/S = Not Supportive, N/A = Not Applicable)	S	N/S	N/A
(2) Encouraging planning that respects and promotes living within the natural resources and limits of the State;			✓
(3) Promoting a diversified and dynamic economy;			✓
(4) Encouraging respect for the host culture;			✓
(5) Promoting decisions based on meeting the needs of the present without compromising the needs of future generations;			✓
(6) Considering the principles of the ahupuaa system; and			✓
(7) Emphasizing that everyone, including individuals, families, communities, businesses, and government, has the responsibility for achieving a sustainable Hawaii.			✓
Analysis: **Not applicable.**			
CHAPTER 226-109: Climate change adaptation			
Priority guidelines and principles to promote climate change adaptation shall include:			
(1) Ensure that Hawaii's people are educated, informed, and aware of the impacts climate change may have on their communities;			✓
(2) Encourage community stewardship groups and local stakeholders to participate in planning and implementation of climate change policies;			✓
(3) Invest in continued monitoring and research of Hawaii's climate and the impacts of climate change on the State;			✓
(4) Consider native Hawaiian traditional knowledge and practices in planning for the impacts of climate change;			✓
(5) Encourage the preservation and restoration of natural landscape features, such as coral reefs, beaches and dunes, forests, streams, floodplains, and wetlands, that have the inherent capacity to avoid, minimize, or mitigate the impacts of climate change;			✓
(6) Explore adaptation strategies that moderate harm or exploit beneficial opportunities in response to actual or expected climate change impacts to the natural and built environments;	✓		
(7) Promote sector resilience in areas such as water, roads, airports, and public health, by encouraging the identification of climate change threats, assessment of potential consequences, and evaluation of adaptation options;	✓		
(8) Foster cross-jurisdictional collaboration between county, state, and federal agencies and partnerships between government and private entities and other nongovernmental entities, including nonprofit entities;			✓
(9) Use management and implementation approaches that encourage the continual collection, evaluation, and integration of new information and strategies into new and existing practices, policies, and plans; and			✓
(10) Encourage planning and management of the natural and built environments that effectively integrate climate change policy.			✓
Analysis: **The proposed project will provide greater water system reliability by providing a groundwater source to supplement water from the Mahinahina Surface Water Treatment Plant, which may be reduced during periods of drought.**			

C. STATE FUNCTIONAL PLANS

A key element of the Statewide Planning System is the Functional Plans which set forth the policies, statewide guidelines, and priorities within a specific field of activity. There are 13 Functional Plans which have been developed by the State agency primarily responsible for a given functional area. Together with the County General Plans, the State Functional Plans establish more specific strategies for implementation. In particular, State Functional Plans provide for the following:

- Identify major Statewide priority concerns
- Define current strategies for each functional area
- Identify major relationships among functional areas
- Provide direction and strategies for departmental policies, programs, and priorities
- Provide a guide for the allocation of resources
- Coordinate State and County roles and responsibilities in the implementation of the Hawai'i State Plan

Thirteen (13) Functional Plans have been prepared by State agencies. **Table 5** provides an assessment of the relationship between the proposed action and each of the 13 Functional Plans.

Table 5. Relationship Between the Proposed West Maui Source Development Project and the State Functional Plans

No.	State Functional Plan	State Coordinating Agency	Purpose	Analysis
1	Agriculture Functional Plan (1991)	Department of Agriculture	Continued viability of agriculture throughout the State	Not applicable.
2	Conservation Lands State Functional Plan (1991)	Department of Land and Natural Resources	Addresses issues of population and economic growth and its strain on current natural resources; broadening public use of natural resources while protecting lands and shorelines from overuse; additionally, promotes the aquaculture industry	Not applicable.
3	Education State Functional Plan (1989)	Department of Education	Improvements to Hawai'i's educational curriculum, quality of educational staff, and access to adequate facilities	Not applicable.
4	Employment State Functional Plan (1990)	Department of Labor and Industrial Relations	Improve the qualifications, productivity, and effectiveness of the State's workforce through better education and training of workers as well as efficient planning of economic development, employment opportunities, and training activities	Not applicable.
5	Energy State Functional Plan (1991)	Department of Business, Economic Development and Tourism	Lessen the reliance on petroleum and other fossil fuels in favor of alternative sources of energy so as to keep up with the State's increasing energy demands while also becoming a more sustainable island state; achieving dependable, efficient, and economical statewide energy systems	Not applicable.
6	Health State Functional Plan (1989)	Department of Health	Improve health care system by providing for those who don't have access to private health care providers; increasing preventative health measures; addressing 'quality of care' elements in private and public sectors to cut increasing costs	Not applicable.
7	Higher Education Functional Plan (1984)	University of Hawai'i	Prepare Hawai'i's citizens for the demands of an increasingly complex world through providing technical and intellectual tools	Not applicable.
8	Historic Preservation State Functional Plan (1991)	Department of Land and Natural Resources	Preservation of historic properties, records, artifacts and oral histories; provide public with information/education on the ethnic and cultural heritages and history of Hawai'i	Not applicable.

Table 5. Relationship Between the Proposed West Maui Source Development Project and the State Functional Plans (continued)

No.	State Functional Plan	State Coordinating Agency	Purpose	Analysis
9	Housing State Functional Plan (1989)	Hawai'i Housing Finance and Development Corporation	Provide affordable rental and for-sale housing; increase homeownership and amount of rental housing units; acquiring public and privately-owned lands for future residential development; maintain a statewide housing data system	Not applicable.
10	Human Services State Functional Plan (1989)	Department of Human Services	Refining support systems for families and individuals by improving elderly care, increasing preventative measures to combat child/spousal abuse and neglect; providing means for 'self-sufficiency'	Not applicable.
11	Recreation State Functional Plan (1991)	Department of Land and Natural Resources	Manage the use of recreational resources via addressing issues: (1) ocean and shoreline recreation, (2) mauka, urban, and other recreation opportunities, (3) public access to shoreline and upland recreation areas, (4) resource conservation and management, (5) management of recreation programs/facilities/areas, and (6) wetlands protection and management	Not applicable.
12	Tourism State Functional Plan (1991)	Department of Business, Economic Development and Tourism	Balance tourism/economic growth with environmental and community concerns; development that is cognizant of the limited land and water resources of the islands; maintaining friendly relations between tourists and community members; development of a productive workforce and enhancement of career and employment opportunities in the visitor industry	Not applicable.
13	Transportation State Functional Plan (1991)	Department of Transportation	Development of a safer, more efficient transportation system that also is consistent with planned physical and economic growth of the state; construction of facility and infrastructure improvements; develop a transportation system balanced with new alternatives; pursue land use initiatives which help reduce travel demand	Not applicable.

D. MAUI COUNTY GENERAL PLAN

As indicated by the Maui County Charter, the purpose of the General Plan shall be to:

> *... indicate desired population and physical development patterns for each island and region within the county; shall address the unique problems and needs of each island and region; shall explain opportunities and the social, economic, and environmental consequences related to potential developments; and shall set forth the desired sequence, patterns and characteristics of future developments. The general plan shall identify objectives to be achieved, and priorities, policies, and implementing actions to be pursued with respect to population density; land use maps, land use regulations, transportation systems, public and community facility locations, water and sewage systems, visitor destinations, urban design, and other matters related to development.*

Chapter 2.80B of the Maui County Code (MCC), relating to the general plan and community plans, implements the foregoing Charter provision through enabling legislation which calls for a Countywide Policy Plan and a Maui Island Plan. The Countywide Policy Plan was adopted as Ordinance No. 3732 and took effect on March 24, 2010, while the Maui Island Plan, which delineates areas for future urban and rural growth as part of a Directed Growth Strategy, was adopted as Ordinance No. 4004 on December 21, 2012.

1. The Countywide Policy Plan

With regard to the Countywide Policy Plan, Section 2.80B.030 of the MCC states the following:

> *The countywide policy plan shall provide broad policies and objectives which portray the desired direction of the County's future. The countywide policy plan shall include:*
>
> *1. A vision for the County;*
>
> *2. A Statement of core themes or principles for the county; and*
>
> *3. A list of countywide objectives and policies for population, land use, the environment, the economy, and housing.*

Core principles set forth in the Countywide Policy Plan are listed as follows:

> *1. Excellence in the stewardship of the natural environment and cultural resources;*
>
> *2. Compassion for and understanding of others;*
>
> *3. Respect for diversity;*
>
> *4. Engagement and empowerment of Maui County residents;*

5. *Honor for all cultural traditions and histories;*

6. *Consideration of the contributions of past generations as well as the needs of future generations;*

7. *Commitment to self-sufficiency;*

8. *Wisdom and balance in decision making;*

9. *Thoughtful, island-appropriate innovation; and*

10. *Nurturance of the health and well-being of our families and our communities.*

Congruent with these core principles, the Countywide Policy Plan identifies goals, objectives, policies and implementing actions for pertinent functional planning categories, which are identified as follows:

1. *Natural environment*

2. *Local cultures and traditions*

3. *Education*

4. *Social and healthcare services*

5. *Housing opportunities for residents*

6. *Local economy*

7. *Parks and public facilities*

8. *Transportation options*

9. *Physical infrastructure*

10. *Sustainable land use and growth management*

11. *Good governance*

With respect to the West Maui Source Development project, the following goals, objectives, policies and implementing actions are illustrative of the project's compliance with the Countywide Policy Plan:

IMPROVE PHYSICAL INFRASTRUCTURE

Goal:

Maui County's physical infrastructure will be maintained in optimum condition and will provide for and effectively serve the needs of the County through clean and sustainable technologies.

Objective:

Improve water systems to assure access to sustainable, clean, reliable, affordable sources of water.

Policies:

- *Develop and fund improved water delivery systems.*
- *Retain and expand public control and ownership of water resources and delivery systems.*
- *Improve the management of water systems so that surface-water and groundwater resources are not degraded by overuse or pollution.*
- *Seek reliable long-term sources of water to serve developments that achieve consistency with appropriate Community Plans.*

Objective:

Direct growth in a way that makes efficient use of existing infrastructure and to areas where there is available infrastructure capacity.

Policy:

- *Utilize appropriate infrastructure technologies in the appropriate locations.*

Objective:

Improve the planning and management of infrastructure systems.

Policies:

- *Provide a reliable and sufficient level of funding to enhance and maintain infrastructure systems.*
- *Maintain inventories of infrastructure capacity, and project future infrastructure needs.*
- *Ensure that basic infrastructure needs can be met during a disaster.*

In summary, the West Maui Source Development project provides additional water source and allows for reliable service to the communities in the West Maui region. As such, the project is consistent with the theme and principles of the Countywide Policy Plan.

2. Maui Island Plan

The Maui Island Plan (MIP) is applicable to the island of Maui only, providing more specific policy-based strategies for population, land use, transportation, public and community facilities, water and sewage systems, visitor destinations, urban design, and other matters related to future growth.

As provided by Chapter 2.808, the MIP shall include the following components:

1. *An island-wide land use strategy, including a managed and directed growth plan*
2. *A water element assessing supply, demand and quality parameters*
3. *A nearshore ecosystem element assessing nearshore waters and requirements for preservation and restoration*
4. *An implementation program which addresses the County's 20-year capital improvement requirements, financial program for implementation, and action implementation schedule*
5. *Milestone indicators designed to measure implementation progress of the MIP*

It is noted that the Ordinance No. 4004 does not address the component relating to the implementation program. Chapter 2.808 of the Maui County Code, relating to the General Plan, was amended by Ordinance No. 3979, effective October 5, 2012, to provide that the implementation program component be adopted no later than one (1) year following the effective date of Ordinance No. 4004. In December 2013 and March 2014, the Council approved time extensions for adopting the implementation program component of the MIP. The implementation program component was adopted by Ordinance No. 4126 on May 19, 2014.

The MIP addresses a number of planning categories with detailed policy analysis and recommendations which are framed in terms of goals, objectives, policies and implementing actions. These planning categories address the following areas:

1. *Population*
2. *Heritage Resources*
3. *Natural Hazards*
4. *Economic Development*

5. *Housing*

6. *Infrastructure and Public Facilities*

7. *Land Use*

Additionally, an essential element of the MIP is its directed growth plan which provides a management framework for future growth in a manner that is fiscally, environmentally, and culturally prudent. Among the directed growth management tools developed through the MIP process are maps delineating urban growth boundaries (UGB), small town boundaries (STB), and rural growth boundaries (RGB). The respective boundaries identify areas appropriate for future growth and their corresponding intent with respect to development character.

The proposed project provides new sources of water supply and reliability for the DWS West Maui Water System. In this regard, it does not conflict with the directed growth strategy defined via growth maps adopted in the MIP.

In addition, the proposed project has been reviewed with respect to pertinent goals, objectives, policies, and implementing actions of the MIP. A summary of these policy statements are provided below.

HERITAGE RESOURCES

Watersheds, Streams, and Wetland Issues

Goal:

2.3 Healthy watersheds, streams, and riparian environments

Objective:

2.3.1 Greater protection and enhancement of watersheds, streams, and riparian environments.

Policy:

2.3.1.h Maui will protect all watersheds and streams in a manner that guarantees a healthy, sustainable riparian environment.

Implementing Action:

2.3.1-Action 2 Work with the State and Federal government to ensure instream assessment to assure the reproductive system/cycle for Native species and for other purposes

INFRASTRUCTURE AND PUBLIC FACILITIES

Water

Goal:

6.3 Maui will have an environmentally sustainable, reliable, safe, and efficient water system.

Objective:

6.3.2 Increase the efficiency and capacity of the water systems in striving to meet the needs and balance the island's water needs.

Policies:

6.3.2.a Ensure the efficiency of all water system elements including well and stream intakes, water catchment, transmission lines, reservoirs, and all other system infrastructure.

* * *

6.3.2.f Acquire and develop additional sources of potable water.

Implementing Action:

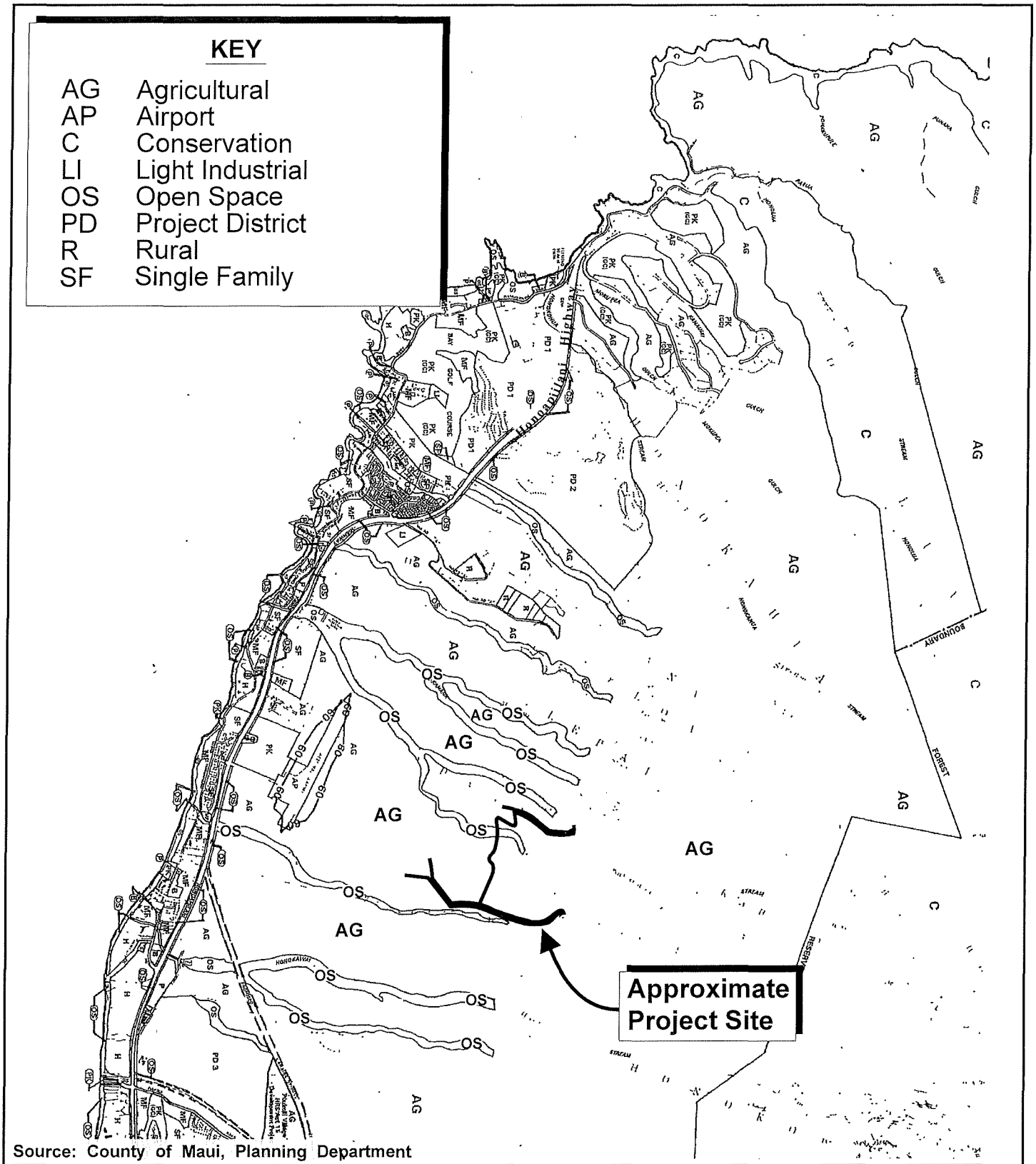
6.3.2-Action 4. Pursue development of additional potable water sources to keep pace with the County's needs.

E. WEST MAUI COMMUNITY PLAN

The project area is located in the West Maui Community Plan region, one (1) of the nine (9) Community Plan regions established in the County of Maui. Planning for each region is guided by the respective Community Plans, which are designed to implement the Maui County General Plan. Each Community Plan contains recommendations and standards which guide the sequencing, patterns, and characteristics of development in the region.

Land use guidelines are established by the West Maui Community Plan land use map. The land use map for the West Maui Community Plan designates the majority of the project area for "Agricultural" use and a small portion of the project area as "Open Space". See. **Figure 10**.

The proposed action is in keeping with the following West Maui Community Plan goals, objectives, policies, and implementing actions:



Source: County of Maui, Planning Department

Figure 10 Proposed West Maui Source Development Project

Community Plan Land Use Designations

NOT TO SCALE

Prepared for: County of Maui, Department of Water Supply

MUNEKIYO HIRAGA

INFRASTRUCTURE

Goal:

Timely and environmentally sound planning, development, and maintenance of infrastructure systems which serve to protect and preserve the safety and health of the region's residents, commuters, and visitors through the provision of clean water, effective waste disposal and efficient transportation systems which meets the needs of the community.

Water and Utilities

Objectives and Policies:

- *Protect ground water resources in the region.*
- *Improve the quality of domestic water.*
- *Improve and expand the West Maui water development program projected by the County to meet future residential expansion needs and establish water treatment facilities where necessary.*

GOVERNMENT

Goal:

Government that demonstrates the highest standards of fairness, responsiveness to the needs of the community, fiscal integrity, effectiveness in planning and implementing programs and projects to accommodate a stable social and economic well-being for residents, a fair and equitable approach to taxation, and efficient and results-oriented management.

Objectives and Policies:

- *Insure that adequate infrastructure is or will be available to accommodate planned development.*
- *Improve the availability of government services to the community.*

It is noted that as a requirement of Maui County Code 2.80B, the Community Plans are to be updated every 10 years. The West Maui Community Plan Update is currently underway. The County of Maui, Department of Planning is updating the West Maui Community Plan in five (5) phases as follows. See **Table 6.**

Table 6. West Maui Community Plan Update Process

Phase No.	West Maui Community Plan Update	Time Frame
I	Research	Spring 2017-Summer 2017
II	Community Workshops	Fall 2017-Winter 2019
III	Community Plan Advisory Committee Meetings	Winter 2019-Summer 2019
IV	Maui Planning Commission Review	Summer 2019-Winter 2020
V	Maui County Council Approval	Winter 2020-Winter 2021

F. COUNTY ZONING

The subject property is designated as "Agricultural" by Maui County Zoning. Minor utility facilities are permitted within the "Agricultural" district. Section 19.04.040 of the Maui County Code defines minor utility facilities as *"transmission lines used directly in the distribution of utility services that have minor impact on adjacent land uses which include, but which are not limited to, twenty-three kilovolt transmission substations, vaults, water wells, tanks and distribution equipment, sewage pump stations, and other similar type uses".* The West Maui Source Development Project is a minor utility and permitted by Maui County Zoning. The proposed project will comply with the development standards of the "Agricultural" district.

G. MAUI COUNTY WATER USE AND DEVELOPMENT PLAN

Hawai'i State Law requires each County to prepare, periodically update, and adopt a Water Use and Development Plan (WUDP) to serve as the long-range planning blueprint for all water uses in each County. DWS is currently in the process of updating its WUDP for Maui Island and the draft document was published on DWS's website in 2017. A Draft WUDP includes Regional Plans for six (6) Aquifer Sector Areas, including Wailuku, Central, Ko'olau, Hana, Kahikinui, and Lāhainā. The proposed action is in keeping with the following planning objectives and recommended strategies identified in the Lahaina Regional Plans of the Draft WUDP:

Planning Objectives:

Maintain sustainable resources

Protect water resources

Minimize adverse environmental impacts

Conventional Water Source Strategies

* * *

4. *Develop basal groundwater wells to provide adequate water supply for planned population growth, maintaining a buffer to sustainable yield*

H. COASTAL ZONE MANAGEMENT

The Hawai'i Coastal Zone Management Program (HCZMP), as formalized in Chapter 205A, HRS, establishes objectives and policies for the preservation, protection, and restoration of natural resources of Hawai'i's coastal zone. The project area lies approximately three (3) miles away from the coast, outside of the County of Maui's Special Management Area (SMA). As such, a SMA Use permit for coastal zone management is not required for the project. Although the project area is not located in a coastal area, the proposed project has been assessed relative to the coastal zone management considerations, as set forth in Chapter 205A, HRS.

1. Recreational Resources

Objective:

Provide coastal recreational opportunities accessible to the public.

Policies:

a. *Improve coordination and funding of coastal recreational planning and management; and*

b. *Provide adequate, accessible, and diverse recreational opportunities in the coastal zone management area by:*

   i. *Protecting coastal resources uniquely suited for recreational activities that cannot be provided in other areas;*

   ii. *Requiring replacement of coastal resources having significant recreational value, including but not limited to, surfing sites, fishponds, and sand beaches, when such resources will be unavoidably damaged by development; or requiring reasonable monetary compensation to the State for recreation when replacement is not feasible or desirable;*

   iii. *Providing and managing adequate public access, consistent with conservation of natural resources, to and along shorelines with recreational value;*

   iv. *Providing an adequate supply of shoreline parks and other recreational facilities suitable for public recreation;*

   v. *Ensuring public recreational use of county, state, and federally owned or controlled shoreline lands and waters having recreational value consistent with public safety standards and conservation of natural resources;*

   vi. *Adopting water quality standards and regulating point and non-point sources of pollution to protect, and where feasible, restore the*

recreational value of coastal waters;

vii. *Developing new shoreline recreational opportunities, where appropriate, such as artificial lagoons, artificial beaches, and artificial reefs for surfing and fishing; and*

viii. *Encouraging reasonable dedication of shoreline areas with recreational value for public use as part of discretionary approvals or permits by the land use commission, board of land and natural resources, and county authorities; and crediting such dedication against the requirements of Section 46-6.*

Response: The project area does not abut the shoreline and is located inland on the slopes of the West Maui Mountains and away from shoreline resources. The proposed actions will, therefore, not affect coastal recreational opportunities.

2. Historic Resources

Objective:

Protect, preserve and, where desirable, restore those natural and manmade historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture.

Policies:

a. *Identify and analyze significant archeological resources;*

b. *Maximize information retention through preservation of remains and artifacts or salvage operations; and*

c. *Support state goals for protection, restoration, interpretation, and display of historic resources.*

Response: As stated previously, an archaeological assessment and Archaeolgoical Inventory Survey (AIS) of the proposed project area have been prepared. Refer to **Appendix "K-1"** and **Appendix "K-2"**. The reports identified one (1) historic site, State Site No. -1591, the Honokōhau Ditch. The waterline will be placed under the ditch using the horizontal directional drilling (HDD) to avoid adverse impacts to the ditch. No further archaeological work is recommended for the project. Should there be an inadvertent discovery during ground altering activities, work will stop in the immediate area of the find and the State Historic Preservation Division (SHPD) will be contacted to establish the appropriate level of mitigation measures.

Furthermore, a Cultural Impact Assessment (CIA) was conducted for the project. The CIA indicated that cultural practices were previously and continue to be conducted within the project area and the surrounding environment. Specifically,

gathering of the 'uhaloa plant occurs in the vicinity. The Biological Resources Studies prepared for the project note that the 'uhaloa plant is widespread and common in Hawai'i. In addition, wild pig and axis deer are actively hunted by the Hawaiian population for subsistence. The proposed project covers several large parcels of land which span 3,501 acres. However, improvements will be limited to 11.5 acres, or less than one (1) percent, for the well sites, control tank, transmission waterlines, electrical lines, and access roads. As such, significant impacts to traditional plant gathering and hunting practices are not anticipated. One (1) traditional practitioner and lineal descendant indicated that the proposed Mahinahina Well is located on lands owned by Ms. Kamaile Makekau. However, further research conducted by DWS has found that Ms. Makekau's lands are identified as TMK (2)4-4-004:008, located to the south of the Mahinahina Well which will be located on TMK (2)4-4-004:009. Cultural informants indicated that there are burial sites and cemeteries in the region. The AIS did not identify any burial sites or cemeteries within the project boundaries. Nevertheless, should the inadvertent discovery of significant cultural materials occur during construction, the contractor will halt all work in the immediate area of the find and notify SHPD to discuss mitigation, as appropriate.

3. **Scenic and Open Space Resources**

Objective:

Protect, preserve and, where desirable, restore or improve the quality of coastal scenic and open space resources.

Policies:

a. *Identify valued scenic resources in the coastal zone management area;*

b. *Ensure that new developments are compatible with their visual environment by designing and locating such developments to minimize the alteration of natural landforms and existing public views to and along the shoreline;*

c. *Preserve, maintain, and, where desirable, improve and restore shoreline open space and scenic resources; and*

d. *Encourage those developments which are not coastal dependent to locate in inland areas.*

Response: The proposed improvements will not have a significant adverse impact upon scenic or open space resources. The proposed actions involve the construction of water infrastructure in areas that are more than two (2) miles away from public roadways and would not impact any scenic or open space resources.

4. Coastal Ecosystems

Objective:

Protect valuable coastal ecosystems, including reefs, from disruption and minimize adverse impacts on all coastal ecosystems.

Policies:

a. *Exercise an overall conservation ethic, and practice stewardship in the protection, use, and development of marine and coastal resources;*

b. *Improve the technical basis for natural resource management;*

c. *Preserve valuable coastal ecosystems, including reefs, of significant biological or economic importance;*

d. *Minimize disruption or degradation of coastal water ecosystems by effective regulation of stream diversions, channelization, and similar land and water uses, recognizing competing water needs; and*

e. *Promote water quantity and quality planning and management practices that reflect the tolerance of fresh water and marine ecosystems and maintain and enhance water quality through the development and implementation of point and nonpoint source water pollution control measures.*

Response: The proposed project is not anticipated to result in any adverse impacts to coastal ecosystems as the project area is located over three (3) miles away from the ocean. Appropriate Best Management Practices (BMPs) and erosion-control measures will be implemented to mitigate runoff during construction-related activities.

5. Economic Uses

Objective:

Provide public or private facilities and improvements important to the State's economy in suitable locations.

Policies:

a. *Concentrate coastal dependent development in appropriate areas;*

b. *Ensure that coastal dependent development such as harbors and ports, and coastal related development such as visitor industry facilities and energy generating facilities, are located, designed, and constructed to minimize adverse social, visual, and environmental impacts in the coastal zone management area; and*

c. *Direct the location and expansion of coastal dependent developments to*

areas presently designated and used for such developments and permit reasonable long-term growth at such areas, and permit coastal dependent development outside of presently designated areas when:

i. Use of presently designated locations is not feasible;

ii. Adverse environmental effects are minimized; and

iii. The development is important to the State's economy.

Response: The project is supportive of the objective and policies for economic uses in terms of supporting the existing commercial uses in the West Maui area.

6. Coastal Hazards

Objective:

Reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, subsidence and pollution.

Policies:

a. Develop and communicate adequate information about storm wave, tsunami, flood, erosion, subsidence, and point and nonpoint source pollution hazards;

b. Control development in areas subject to storm wave, tsunami, flood, erosion, hurricane, wind, subsidence, and point and nonpoint source pollution hazards;

c. Ensure that developments comply with requirements of the Federal Flood Insurance Program; and

d. Prevent coastal flooding from inland projects.

Response: The project is not located in a coastal area. The project area is located in Flood Zone X, an area outside of the 1 percent annual chance floodplain. Appropriate BMPs will be implemented during construction to ensure downstream and adjacent properties will not be adversely impacted. The project is also located outside of the tsunami evacuation zone.

7. Managing Development

Objective:

Improve the development review process, communication, and public participation in the management of coastal resources and hazards.

Policies:

a. Use, implement, and enforce existing law effectively to the maximum extent

possible in managing present and future coastal zone development;

b. *Facilitate timely processing of applications for development permits and resolve overlapping or conflicting permit requirements; and*

c. *Communicate the potential short and long-term impacts of proposed significant coastal developments early in their life cycle and in terms understandable to the public to facilitate public participation in the planning and review process.*

Response: In compliance with the requirements of Chapter 343, HRS, this Environmental Assessment (EA) has been prepared to facilitate public understanding and involvement in project development. All aspects of the development will be conducted in accordance with applicable Federal, State and County standards. Compliance with applicable regulatory requirements advances the objective and policies for managing development.

8. **Public Protection**

Objective:

Stimulate public awareness, education, and participation in coastal management.

Policies:

a. *Promote public involvement in coastal zone management processes;*

b. *Disseminate information on coastal management issues by means of educational materials, published reports, staff contact, and public workshops for persons and organizations concerned with coastal issues, developments, and government activities; and*

c. *Organize workshops, policy dialogues, and site-specific mediations to respond to coastal issues and conflicts.*

Response: Opportunities for public awareness and participation for the project are facilitated through the notification, review and comment processes of the EA requirements of Chapter 343, HRS. The proposed project is not contrary to the objectives of public awareness, education, and participation.

9. **Beach Protection**

Objective:

Protect beaches for public use and recreation.

Policies:

a. *Locate new structures inland from the shoreline setback to conserve open space, minimize interference with natural shoreline processes, and*

minimize loss of improvements due to erosion;

b. *Prohibit construction of private erosion-protection structures seaward of the shoreline, except when they result in improved aesthetic and engineering solutions to erosion at the sites and do not interfere with existing recreational and waterline activities; and*

c. *Minimize the construction of public erosion-protection structures seaward of the shoreline.*

d. *Prohibit private property owners from creating a public nuisance by inducing or cultivating the private property owner's vegetation in a beach transit corridor; and*

e. *Prohibit private property owners from creating a public nuisance by allowing the private property owner's unmaintained vegetation to interfere or encroach upon a beach transit corridor.*

Response: The proposed project is not located in proximity to shoreline areas, nor is it anticipated to impact shoreline activities or beach processes.

10. Marine Resources

Objective:

Promote the protection, use, and development of marine and coastal resources to assure their sustainability.

Policies:

a. *Ensure that the use and development of marine and coastal resources are ecologically and environmentally sound and economically beneficial;*

b. *Coordinate the management of marine and coastal resources and activities to improve effectiveness and efficiency;*

c. *Assert and articulate the interests of the State as a partner with federal agencies in the sound management of ocean resources within the United States exclusive economic zone;*

d. *Promote research, study, and understanding of ocean processes, marine life,/and other ocean resources in order to acquire and inventory information necessary to understand how ocean development activities relate to and impact upon ocean and coastal resources; and*

e. *Encourage research and development of new, innovative technologies for exploring, using, or protecting marine and coastal resources.*

Response: The proposed project is not anticipated to impact marine or coastal resources as the project area is located over three (3) miles away from the ocean.

In addition to the foregoing objectives and policies, HRS Section 205A-30.5 Prohibitions, provides specifications for the limitation of lighting in coastal shoreline areas in relation to the granting of SMA permits:

> *No special management area use permit or special management area minor permit shall be granted for structures that allow artificial light from floodlights, uplights, or spotlights used for decorative or aesthetic purposes when the light:*
>
> *(1) Directly illuminates the shoreline and ocean waters; or*
>
> *(2) Is directed to travel across property boundaries toward the shoreline and ocean waters.*
>
> *(b) Subsection (a) shall not apply to special management area use permits for structures with:*
>
> *(3) Artificial lighting provided by a government agency or its authorized users for government operations, security, public safety, or navigational needs; provided that a government agency or its authorized users shall make reasonable efforts to properly position or shield lights to minimize adverse impacts.*

Response: All outdoor lighting for the proposed project will be shielded and down cast. There will be no lighting along the access road. Construction is anticipated to occur during the daylight hours and as such, no lighting during construction is anticipated.

I. HAWAI'I DRINKING WATER STATE REVOLVING FUND ENVIRONMENTAL CROSSCUTTERS

The proposed project may be funded in part by the Hawai'i Drinking Water State Revolving Fund (SRF). As such, the project will comply with the Environmental Cross-Cutters and Federal Requirements for Drinking Water SRF projects. **Table 7** below, provides a listing of the environmental cross-cutters as well as the documentation received for the proposed project in addressing the requirement criteria.

Table 7. Environmental Cross-Cutters and Project Documentation

No.	Environmental Authority	Procedure	Responsible Agency	Response	Project Documentation
1.	Archaeological and Historical Preservation Act of 1974	Obtain review for all projects.	State Historic Preservation Division (SHPD).	An Archaeological Assessment and an Archaeological Inventory Survey (AIS) were prepared in 2013 and 2019, respectively. The 2013 Archaeological Assessment was approved by SHPD and the 2019 AIS was submitted to SHPD for review and approval. The Draft EA will be provided to SHPD for review and comment.	Refer to 2013 Archaeological Assessment and SHPD approval letter in **Appendix "K-1"**, and 2019 AIS in **Appendix "K-2"**.
2.	Bald and Golden Eagle Protection Act	Permit required for taking eagles.	U.S. Department of the Interior	Not applicable. Bald and Golden Eagles do not exist in Hawai'i.	Not applicable.
3.	Clean Air Act	Coordinate to assure project conforms with State Implementation Plan (SIP).	State Department of Health, Clean Air Branch.	The Draft EA will be provided to the Department of Health for review and comment.	See **Chapter II** (Section A-9) of this EA document for discussion of potential air quality impacts and mitigation measures.
4.	Coastal Barrier Resources Act	Obtain review, if project is located on a coastal barrier island.	State Coastal Zone Management Agency.	Not applicable. Project site is not located on a coastal barrier island.	Not applicable.
5.	Coastal Zone Management Act	Obtain review, if project is located in coastal zone.	State Coastal Zone Management Agency.	Pursuant to Chapter 205A-1, HRS, the project site is within the Coastal Zone Management Area, which encompasses all lands of the State. The project site is, however, outside of the Special Management Area (SMA). A SMA permit is not required.	See **Chapter III** (Section I) of this EA document for discussion of the Coastal Zone Management Program review criteria.
6.	Endangered Species Act	Obtain review by U.S. Fish and Wildlife Service for all projects.	U.S. Fish and Wildlife Service (USFWS).	A copy of the early consultation letter (ECL) was sent to USFWS on April 24, 2018.	See **Chapter IX** of this EA document for the early consultation agency list.

Table 7. Environmental Cross-Cutters and Project Documentation (continued)

No.	Environmental Authority	Procedure	Responsible Agency	Response	Project Documentation
7.	Environmental Justice	Are low income and minority groups affected?	U.S. Environmental Protection Agency (EPA)	No low-income or minority groups will be adversely affected as a result of the proposed project. The Draft EA will be provided to the EPA for review and comment.	Refer to **Chapter II** (Section B) of this EA document for a discussion of socioeconomic and demographic parameters.
8.	Floodplain Management	Obtain review, if project is located in or affects 100-year flood plain.	Federal Emergency Management Agency (FEMA)	Not applicable. Project site is located in Flood Zone X and is not located in, nor will it affect a 100-year flood plain.	Refer to **Chapter II** (Section A-6) of this EA document for a discussion of flood and tsunami hazards.
9.	Protection of Wetlands	Obtain review, if project area contains wetlands.	U.S. Army Corps of Engineers (COE)	Not applicable. The project site does not contain any wetlands.	Refer to **Chapter II** (Section A-7) of this EA document for a discussion of streams and groundwater.
10.	Farmland Protection Policy Act	Obtain review, if project area contains prime farmland.	Natural Resources Conservation Service (NRCS)	A small portion of the project area is located within the prime farmland. A copy of the ECL was sent to NRCS on April 24, 2018.	Refer to **Chapter IX** of this EA document for the early consultation agency list. Refer to **Chapter II** (Section A-5) of this EA document for a discussion of agriculture.
11.	Fish and Wildlife Coordination Act	Obtain review for all projects.	USFWS	A copy of the ECL was sent to USFWS on April 24, 2018.	Refer to **Chapter IX** of this EA document for the early consultation agency list. Refer to **Chapter II** (Section A-8) of this EA document for discussion of flora and fauna resources.
12.	Marine Mammal Protection Act	Permit required for taking of marine mammals.	USFWS	Not applicable. The project site is located over three (3) miles inland of the nearest coastline. The proposed project will not affect essential fish habitats.	Refer to **Chapter III** (section I) of this EA document for a discussion of coastal zone management.

Table 7. Environmental Cross-Cutters and Project Documentation (continued)

No.	Environmental Authority	Procedure	Responsible Agency	Response	Project Documentation
13.	Migratory Bird Treaty Act	Obtain review, if project impacts breeding bird species.	USFWS	A copy of the ECL was sent to USFWS on April 24, 2018.	Refer to **Chapter IX** of this EA document for the early consultation agency list. Refer to **Chapter II** (Section A-8) of this EA document for discussion of flora and fauna resources.
14.	National Historic Preservation Act	Obtain review for all projects.	SHPD	An Archaeological Assessment and an AIS were prepared in 2013 and 2019, respectively, for the project. The 2013 Archaeological Assessment was approved by SHPD and the 2019 AIS was submitted to SHPD for review and approval. The Draft EA will be provided to SHPD for review and comment. Consultation pursuant to Section 106 of the National Historic Preservation Act will be undertaken.	Refer to 2013 Archaeological Assessment and SHPD approval letter in **Appendix "K-1"** and 2019 AIS in **Appendix "K-2"**.
15.	Rivers and Harbors Act	Obtain review, if project requires construction of any structure in or over a navigable water of the U.S. or if structure or work will affect the course, location, or condition of a water body.	COE	The proposed waterline will cross under three (3) gulches and the Honokōhau Ditch using the Horizontal Directional Drilling (HDD) method. As the HDD method will be utilized, there will be no work within the waters of the U.S. A "No Permit Required" determination was provided by COE for the proposed project.	Refer to **Appendix "E"** for a letter from COE.
16.	Safe Drinking Water Act	Obtain review, if project could affect sole source aquifer.	State Department of Health, Safe Drinking Water Branch (DOH-SDWB)	The proposed project will not affect a sole source aquifer. The Draft EA will be provided to the DOH-SDWB for review and comment.	Refer to **Chapter II** (Section A-3 and Section A-7) of this EA document for a discussion of waterresources.

Table 7. Environmental Cross-Cutters and Project Documentation (continued)

No.	Environmental Authority	Procedure	Responsible Agency	Response	Project Documentation
17.	Wild and Scenic Rivers Act	Obtain review, if project is located in area with Wild and Scenic Rivers.	National Park Service	Not applicable. The project site is not located in an area with Wild or Scenic Rivers. There are no Wild or Scenic Rivers in the State of Hawai'i.	Not applicable.
18.	Consultation Process Under the Magnuson-Stevens Fishery Conservation and Management Act	Obtain review, if it will affect essential fish habitat.	National Marine Fisheries Service	Not applicable. The project site is located over three (3) miles inland of the nearest coastline. The proposed project will not affect essential fish habitats.	Not applicable.

SUMMARY OF ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED

IV

IV. SUMMARY OF ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED

Assessment of construction-related impacts, noise and air quality impacts, and potential impacts on the physical and socio-economic, as well as an archaeological inventory survey were carried out as part of an environment assessment documentation process. The proposed project will have a limited, unavoidable construction-related impact on the environment, as described in **Chapter II**.

Construction-related impacts include those related to noise generation occurring from heavy equipment used for site preparation and construction activities. In addition, temporary air quality impacts associated with dust generation from construction activities and exhaust emissions discharged by construction equipment are also likely. However, during construction, these impacts are temporary and will be mitigated through the use of appropriate Best Management Practices (BMPs), such as dust barriers, water wagons and/or sprinklers to control dust, and watering graded areas upon completion of daily construction activities. Upon completion, the proposed project is not expected to be a source of long-term adverse air or noise conditions. The proposed project includes site and road drainage systems designed as a mitigation control measure to protect downstream properties and coastal waters from stormwater runoff.

Any construction work to cross the Honokōhau Ditch will be coordinated with the State of Hawai'i, the land owner, and Kaanapali Land Development Corp. (parent company of Pioneer Mill Company), the ditch owner, and designed to avoid adverse impacts to the Honokōhau Ditch. A National Pollution Discharge Elimination System (NPDES) permit will be applied for and obtained prior to construction. BMPs will be implemented as part of project construction to minimize impacts to topography, soils and downstream properties and water bodies. Geotechnical Subsurface Investigation Reports prepared by Fewell Geotechnical Engineering, Ltd. and Hawai'i Geotechnical Consulting, Inc. include recommendations for site preparation during construction (i.e., grading and grubbing) which DWS will follow as appropriate.

The State Commission on Water Resource Management (CWRM) established a sustainable yield estimate as 6 million gallons per day (mgd) for the Honokōwai Aquifer system and 8 mgd for the Honolua Aquifer. The Mahinahina Well will draw from the Honokōwai Aquifer approximately 0.672 mgd, based on an operation schedule of 16 hours pumping per 24 hour period, and the Kahana Well will draw from Honolua Aquifer approximately 0.96 mgd, based on an operation schedule of 16 hours pumping per 24 hour period. The water production from these wells is expected to be within their respective aquifer's sustainable yield. All testing and monitoring will meet requirements of the State Department of Health, Safe Water Drinking Branch (DOH-SWDB) and Federal Environmental Protection Agency (EPA) regulations.

ALTERNATIVES TO THE PROPOSED ACTION

V

V. ALTERNATIVES TO THE PROPOSED ACTION

A. PREFERRED ALTERNATIVE

The proposed project, as outlined in Chapter I, Project Overview, is the preferred alternative and involves improvements to the water system and infrastructure on westward sloping areas from the foot of the West Maui Mountains running to the west of Honokōhau Ditch. The proposed project will provide approximately 1.63 mgd of additional water source to support the projected future water demands of the West Maui region and backup redundancy for existing users.

Both the Mahinahina Well and Kahana Well sit at an approximate elevation of 1,300 feet above sea level and are located on the far upper reaches of former pineapple fields. The water quality test results for both wells show that the water quality is well within the requirements of the State of Hawai'i, Department of Health (DOH). The Mahinahina Well will draw of 0.672 mgd from the Honokōwai Aquifer, based on an operational schedule of 16 hours pumping per 24 hour period, and the Kahana Well will draw approximately 0.96 mgd from the Honolua Aquifer, based on an operational schedule of 16 hours pumping per 24 hour period. Both wells are not anticipated to adversely impact the Honokōwai and Honolua aquifers.

The development of these groundwater sources is, therefore, considered to be a viable preferred alternative. The project will supply DWS's West Maui water system additional water source to support the water needs of the community and provides overall water system reliability.

B. DEMAND SIDE MANAGEMENT ALTERNATIVE

The demand side management (DSM) alternative uses water conservation or efficiency-based measures that improve existing infrastructure to reduce or eliminate leaky pipes, reduce waste, or reduce use. DWS has a number of programs to address DSM. They are listed below with a brief description:

Leak Detection- DWS has a proactive Leak Detection program surveying the infrastructure to locate pipe breaks, leaking pipes, leaking connections, etc.

Annual Water System Audit- DWS conducts water audits on their own system to identify and correct areas showing high water loss.

Residential Water Audit- DWS will provide assistance to residents with high water bills, to evaluate the source of the high water use and assist in reducing the high water use areas, (eg., best management practice for irrigation use, repairing leaking customer laterals).

Fixture Retrofit- DWS has worked with high use customers to retrofit toilets and faucets to reduce water use.

Public Education- DWS staff educate customers and keiki by visiting schools to teach students about the value of water, participate in community events, encourage water conservation by running ads in the paper and on radio and conduct a student water conservation poster contest.

DWS also helps to fund watershed protection projects for watersheds in Maui County. Projects involve restoring degraded watersheds through proper planting, eradicating invasive species, and fencing to better manage feral unregulated populations.

The DWS programs listed above help in many ways, but will not reduce water usage enough to be a competitive alternative to providing sufficient new water source to support the future needs of the West Maui region.

C. NEW SURFACE SOURCE DEVELOPMENT ALTERNATIVE

DWS's West Maui Water System has an existing surface water treatment facility at Mahinahina that treats surface water collected from Honokōhau Stream and also utilizes a raw water reservoir to maximize the storage of surface water collected.

The existing surface water source is dependent on climate conditions (e.g., rainfall, drought) and the source may not be available during times when the Honokōhau Ditch is undergoing repair and maintenance work or the source is not treatable during periods of heavy rainfall due to high level of sediments.

As such, the new surface water source development alternative is not viable.

D. NO ACTION ALTERNATIVE

The no action alternative maintains the DWS West Maui Water System in its existing condition.

The no action alternative has not been selected for implementation as it does not address the future increase of water needs due to population growth expected in the West Maui region and also does not provide increased reliability of the existing water system.

E. DEFERRED ACTION ALTERNATIVE

Similar to the no action alternative, the deferred action alternative maintains the DWS West Maui Water System in its current state and does not address the future increase of water needs due to population growth expected in the West Maui region and also does not provide increased reliability of the existing water system.

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

VI

VI. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

The proposed project is anticipated to result in the irreversible and irretrievable commitment of natural and fiscal resources. Other resource commitments include energy, labor, and material resources. Impacts relating to the use of these resources are not considered significant when weighed against the expected positive socio-economic and community benefits derived from the project.

The State Commission on Water Resource Management (CWRM) established a sustainable yield estimated as 6 mgd for the Honokōwai Aquifer and 8 mgd for the Honolua Aquifer. The amount of groundwater pumped from the Honokōwai Aquifer by the Mahinahina Well is approximately 0.672 mgd, based on an operational schedule of 16 hours pumping per 24 hour period. The amount of groundwater pumped from the Honolua Aquifer by the Kahana Well is approximately 0.96 mgd, based on an operational schedule of 16 hours pumping per 24 hour period. The water production of both wells is expected to be within their respective aquifers' sustainable yields. All testing and monitoring will meet requirements of the State Department of Health, Safe Water Drinking Branch (DOH-SWDB) and Federal Environmental Protection Agency (EPA) regulations.

SIGNIFICANCE CRITERIA ASSESSMENT

VII

VII. SIGNIFICANCE CRITERIA ASSESSMENT

The proposed project includes the use of State lands and State and County funds. As such, an Environmental Assessment (EA) has been prepared pursuant to Chapter 343, Hawai'i Revised Statutes (HRS) and Chapter 200 of Title 11, Hawai'i Administrative Rules (HAR) of the State Department of Health, Environmental Impact Statement Rules.

The "Significance Criteria", Section 12 of the HAR, Title 11, Chapter 200, Environmental Impact Statement Rules, were reviewed and analyzed to determine whether the proposed project will have significant impacts to the environment. The following analysis is provided.

1. **The proposed action does not involve an irrevocable commitment to loss or destruction of any natural or cultural resources.**

   An archaeological assessment and an Archaeological Inventory Survey (AIS) for the project identified one (1) site designated as State Site No. -1591. No other sites were identified nor were areas identified that would be amenable to locating subsurface cultural deposits through excavation work as Scientific Consultant Services, Inc. (SCS) noted the project area has been intensively modified for pineapple cultivation. Based on its pedestrian surveys, SCS notes the only potential impact for the project on historical resources is the proposed waterline corridor crossing affecting the existing Honokōhau Ditch. SCS recommended the pipeline be either placed under or over the Ditch to avoid adverse effect on the system. The Department of Water Supply (DWS) will follow the recommendations and locate the waterline under the ditch. The proposed waterline will be installed by Horizontal Directional Drilling (HDD) at a depth ranging from eight (8) to ten (10) feet. No further work is recommended for the project area. Refer to **Appendix "K-1"**and **Appendix "K-2"**.

   DWS will coordinate with Kaanapali Land Management Corp. (parent company of Pioneer Mill Company, Ltd.) and the State of Hawai'i, the respective owners of Honokōhau Ditch and underlying land, and the State Historic Preservation Division (SHPD), as appropriate, to mitigate adverse impact to State Site No. -1591 (Honokōhau Ditch) relative to the project. Should the inadvertent discovery of significant cultural materials occur during construction, the contractor will halt all work in the immediate area of the find and notify SHPD to discuss mitigation, as appropriate.

   The proposed project is not anticipated to result in the irrevocable commitment to loss or destruction of natural or cultural resources.

2. **The proposed action would not curtail the range of beneficial use of the environment.**

The proposed project and the commitment of limited land resources are not anticipated to curtail the range of beneficial uses of the environment. Three (3) Biological Resources Survey Reports were conducted for the project and concluded that the project area has been altered by over a century of agricultural activity and is currently overwhelmingly inhabited by non-native botanical species. The immediate surrounding habitat is similar. The native plants in the project area do not present any particular environmental concern and no special native plant habitats were observed. Two (2) indigenous native species of dragonflies, the green darner and globe skimmer, were observed during the survey, however, these insects are widespread and common in Hawai'i and do not present concerns. Furthermore, two (2) native bird species, the *kōlea* and *pueo*, were found in the project area, however, they are not federally listed as endangered or threatened.

The endemic and endangered Hawaiian hoary bat was detected in the vicinity of the Kahana Well project site. The reports also note the presence of *ae'o*, or Hawaiian Stilt, and the *nēnē*, Hawaiian Goose. Also the *pueo*, or Hawaiian owl, has been observed by the DWS personnel. Although not seen during the survey, the reports note the potential presence of endangered seabirds, the Hawaiian petrel and the threatened Newell's shearwater. With implementation of Best Management Practices (BMPs) during construction, the proposed project is not expected to result in significant adverse effects on beneficial uses of the environments.

3. **The proposed action does not conflict with the state's long-term, environmental policies or goals and guidelines as expressed in Chapter 344, HRS, and any revisions thereof and amendments thereto, court decisions, or executive orders.**

The State's Environmental Policy and Guidelines are set forth in Chapter 344, HRS. The project is located east of Honoapi'ilani Highway and about three (3) miles away from the coastal shore. BMPs will be implemented during project construction. Drainage systems included as part of the project are designed to protect downstream properties and coastal resources from stormwater runoff. The proposed action is not contrary to the policies and guidelines set forth in Chapter 344, HRS.

4. **The proposed action does not substantially affect the economic welfare, social welfare, and cultural practices of the community or State.**

As previously noted, the archaeological assessment and the AIS identified State Site No. -1591 (Honokōhau Ditch), and no other sites were identified nor were

areas identified that would be amenable to locating subsurface cultural deposits. Based on the pedestrian surveys, SCS noted the only potential impact for the project was the proposed waterline corridor crossing affecting the existing Honokōhau Ditch.

DWS will coordinate with Kaanapali Land Development Corp. (parent company of Pioneer Mill Company, Ltd.) and the State of Hawai'i, the respective owners of Honokōhau Ditch and the underlying land, and SHPD as appropriate, to mitigate potential adverse impacts to State Site No. -1591 relative to the project. The proposed waterline will be installed by HDD at a depth ranging from eight (8) to ten (10) feet. As such, no adverse impacts to the Honokōhau Ditch is anticipated as a result of the transmission waterline installation. Should the inadvertent discovery of significant cultural materials occur during construction, the contractor will halt all work in the immediate area of the find and notify SHPD to discuss mitigation, as appropriate. Refer to **Appendix "K-1"** and **Appendix "K-2"**.

A Cultural Impact Assessment (CIA) was carried out for the proposed project. The CIA indicated that cultural practices were previously and continue to be conducted within the project area and the surrounding environment. Specifically, gathering of the 'uhaloa plant occurs in the vicinity. The Biological Resources Studies prepared for the project note that the 'uhaloa plant is widespread and common in Hawai'i. In addition, wild pig and axis deer are actively hunted by the Hawaiian population for subsistence. The proposed project covers several large parcels of land which span 3,501 acres. However, improvements will be limited to 11.5 acres, or less than one (1) percent, for the well sites, control tank, transmission waterlines, electrical lines, and access roads. As such, significant impacts to traditional plant gathering and hunting practices are not anticipated. One (1) traditional practitioner and lineal descendant indicated that the proposed Mahinahina Well is located on lands owned by Ms. Kamaile Makekau. However, further research conducted by DWS has found that Ms. Makekau's lands are identified as TMK (2)4-4-004:008, located to the south of the Mahinahina Well which will be located on TMK (2)4-4-004:009. Cultural informants indicated that there are burial sites and cemeteries in the region. The AIS did not identify any burial sites or cemeteries within the project boundaries. Nevertheless, should the inadvertent discovery of significant cultural materials occur during construction, the contractor will halt all work in the immediate area of the find and notify SHPD to discuss mitigation, as appropriate. Refer to **Appendix "L"**.

The proposed project will benefit the economy by providing construction and construction-related employment. There is benefit to the social welfare of the community as the project will allow water needs to be met when surface water sources are reduced.

5. **The proposed action does not substantially affect public health.**

No adverse impact to public health or welfare is anticipated as a result of the proposed project. Appropriate mitigation measures will be implemented to address anticipated temporary noise and air quality impacts in the area, resulting from project construction. After project implementation, DWS will comply with the drinking water requirements of the State Department of Health (DOH) and U.S. Environmental Protection Agency (EPA). The project provides additional water source and a reliable backup water source, which benefits public health.

6. **The proposed action does not involve substantial secondary impacts, such as population changes or effects on public facilities.**

A secondary impact is generally defined as an impact which is caused by a specific action and which takes place later in time or further removed in distance but is still reasonably forseeable. No substantial secondary impacts or effects on public facilities or on population changes are anticipated as a result of project implementation. Population changes are guided by the planning policies and land uses set in the Maui Island Plan and West Maui Community Plan. The proposed project is to further develop reliability in the DWS West Maui Water System and to accommodate additional water demand that results from the future population growth in the West Maui region.

7. **The proposed action does not involve a substantial degradation of environmental quality.**

During the construction phase, there will be short-term air quality and noise quality impacts as a result of the project. In the long term, there will be no significant adverse impacts on air quality and ambient noise levels. The proposed action will not significantly affect the open space and scenic character of the region.

The proposed project is located approximately three (3) miles away from the shoreline on the landward (mauka) side of Honoapi'ilani Highway. The proposed project includes drainage systems on the Mahinahina Well and Kahana Well sites and on the 500,000-gallon control tank site. The drainage systems are permanent BMPs to protect downstream coastal waters from stormwater runoff.

Temporary BMPs will be implemented as part of project construction to minimize impacts to topography, soils and downstream properties and water bodies.

Subsurface Investigation Reports prepared for the Mahinahina Well site and Kahana Well site by Fewell Geotechnical Engineering, Ltd. and Hawaii Geotechnical Consulting, Inc., respectively, include recommendations for site

preparation during construction (i.e., grading and grubbing) which DWS will follow, as appropriate.

The project is not anticipated to involve a substantial degradation of environmental quality.

8. **The proposed action is individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger actions.**

The Commission on Water Resource Management (CWRM) has issued sustainable yields of 6 million gallons per day (mgd) for the Honokōwai Aquifer and 8 mgd for the Honolua Aquifer. The water production of both wells is expected to be within the aquifers' sustainable yields. It is noted that the State of Hawai'i, Department of Hawaiian Home Lands (DHHL) is proposing to develop its existing Honokōwai Well. Both the Mahinahina Well and DHHL's Honokōwai Well will utilize groundwater from the Honokōwai Aquifer. The total amount of groundwater that will be pumped from these wells will be within the sustainable yield for the Honokōwai Aquifer.

Water testing will be completed prior to activation of the source. All of the laboratory analyses will be performed by a laboratory certified or approved by the State Laboratories Division (DOH-SLD), using Federal EPA-approved methods for drinking water.

The proposed project is presented in its entirety and is not part of a larger action.

9. **The proposed action does not substantially affects a rare, threatened, or endangered species of animal or plant, or its habitat.**

As noted previously, three (3) Biological Resources Survey Reports were prepared for the project and concluded that the native plants in the project area did not present any particular environmental concern and that no special native plant habitats were observed. The survey indicated that the project area has been altered by over a century of agricultural activity and is currently overwhelmingly inhabited by non-native botanical species. The immediate surrounding habitat is similar.

Two (2) indigenous native species of dragonflies, the green darner and globe skimmer, were observed during the survey. These insects are widespread and common in Hawai'i and did not present concern. The endemic and endangered Hawaiian hoary bat was detected in the vicinity of the Kahana Well project site. Two (2) native bird species, the *kōlea* and *pueo*, were found in the project area. The *kōlea* does not have any endangered or threatened status. The *pueo* is an

endemic race of the American short-eared owl but is not federally listed as endangered or threatened. The reports also note the presence of *ae'o,* or Hawaiian Stilt, and the *nēnē*, Hawaiian Goose. Also the *pueo*, or Hawaiian owl, has been observed by the DWS personnel. Although not seen during the survey, the reports note the potential presence of endangered seabirds, the Hawaiian petrel, and the threatened Newell's shearwater. With implementation of BMPs during construction, the proposed project is not anticipated to substantially affect a rare, threatened, or endangered species of animal or plant, or its habitat.

10. <u>The proposed action does not detrimentally affect air or water quality or ambient noise levels.</u>

Short-term construction activities will have an impact on air and noise quality; these impacts will be minimal and temporary. Dust control measures, such as regular watering and sprinkling, will be implemented to minimize wind-blown emissions. Noise impacts will be mitigated by limiting construction activities to daylight work hours. Implementation of drainage improvements designed in accordance with the Drainage Standards of the County of Maui to address storm water runoff from the project area will include permanent BMPs to protect water quality and coastal resources in the area.

Any construction work that involves crossing the Honokōhau Ditch will be coordinated with Kaanapali Land Development, Corp. (parent company of Pioneer Mill Company, Ltd.) and the State of Hawai'i, the owner of the Ditch and underlying land, respectively. BMPs will be implemented as part of project construction to minimize and mitigate impacts to topography, soils and downstream properties and water bodies.

In the long term, with appropriate mitigative measures in place, the proposed action is not anticipated to have a significant impact on air and water quality or ambient noise levels.

11. <u>The proposed action does not affect and is not likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, beach, erosion-prone area, geological hazardous land, estuary, fresh water, or coastal waters.</u>

The proposed project is not located within any environmentally sensitive areas, such as wetlands, coastal areas including beaches and coastal water, fresh water, estuaries, erosion-prone areas, or tsunami zone.

The proposed project is located about three (3) miles away from shoreline and is located in Flood Zone X, an area of minimal flooding. The project crosses under a segment of the Honokōhau Ditch. During the permitting process, appropriate

mitigation measures will be developed in consultation with applicable governmental agencies, Kaanapali Land Development Corp. (parent company of Pioneer Mill Company), the ditch owner, and the State of Hawai'i, the land owner. During construction, BMP's will be implemented for erosion and sedimentation control to mitigate potential impacts from construction on the ditch and nearby waterbodies. The project also includes drainage systems as permanent BMPs to protect coastal waters and nearby properties.

The proposed project is not anticipated to affect any environmentally sensitive areas.

12. **The proposed Project does not substantially affect scenic vistas and viewplanes identified in county or state plans or studies.**

The project includes structures (e.g., a well, tanks and buildings) that are relatively low profile and will be located on land that slopes from 1,340 feet mean sea level (msl) at the base of the West Maui Mountains to a low elevation of 590 feet msl west of Honokōhau Ditch. Taller elements will be limited to the utility poles for the electrical line extension and the antennae poles. The proposed project will be located upland and two (2) miles away from Honoapi'ilani Highway, the major roadway in West Maui and, as such, will not be readily visible from residences or roadways.

The proposed project is not expected to adversely affect scenic viewplanes.

13. **The proposed action does not require substantial energy consumption.**

The proposed action will involve the short-term commitment of fuel for equipment, vehicles and machinery during construction. The proposed project components require electricity which will be provided by extension of electrical lines from the existing Maui Electric's system. This use is not expected to result in substantial consumption of energy resources.

Based on the foregoing findings, it is anticipated that the proposed action will result in a Finding of No Significant Impact (AFNSI) determination by the DWS as the approving agency.

LIST OF PERMITS AND APPROVALS

VIII

VIII. LIST OF PERMITS AND APPROVALS

The following list of permits and approvals are anticipated to be needed for project implementation:

Federal

1. Section 106, National Historic Preservation Act

State

1. Department of Health, NPDES Permit for stormwater discharges due to construction activities
2. Department of Health, Noise Permit, as applicable
3. Department of Health, Disability and Communication Access Board (DCAB)'s Review
4. Department of Health, Engineering Report for New Drinking Water Source
5. Department of Land and Natural Resources, Commission on Water Resource Management Pump Installation Permits

County of Maui

1. Construction Permits (Building, Electrical)
2. Grading and Grubbing Permits

AGENCIES CONSULTED DURING THE PREPARATION OF THE DRAFT ENVIRONMENTAL ASSESSMENT, LETTERS RECEIVED, AND RESPONSES TO SUBSTANTIVE COMMENTS

IX

IX. AGENCIES CONSULTED DURING THE PREPARATION OF THE DRAFT ENVIRONMENTAL ASSESSMENT, LETTERS RECEIVED, AND RESPONSES TO SUBSTANTIVE COMMENTS

The following list of agencies, organizations, and individuals were consulted in the preparation of the Draft Environmental Assessment (EA). Agency comments and responses to substantive comments are included herein.

FEDERAL

1. Larry Yamamoto, State Conservationist
U.S. Department of Agriculture
Natural Resources Conservation Service
P.O. Box 50004
Honolulu, Hawai'i 96850-0001

2. Ranae Ganske-Cerizo, Soil Conservationist
U.S. Department of Agriculture
Natural Resources Conservation Service
77 Ho'okele Street, Suite 202
Kahului, Hawai'i 96732

3. Wally Jennings
U.S. Department of Agriculture
Natural Resources Conservation Service
P. O. Box 396
Hoolehua, Hawai'i 96729

4. Tunis W. McElwain, Acting Chief
U.S. Department of the Army
U.S. Army Engineer District, Honolulu
Regulatory Branch, Building 230
Fort Shafter, Hawai'i 96858-5440

5. U.S. Department of the Army
Army Corps of Engineers
Pacific Ocean Division
Building 525, Suite 300
Fort Shafter, Hawai'i 96858-5440

6. Department of Commerce
National Marine Fisheries Service
Pacific Islands Regional Office
1611 Kapi'olani Boulevard, Suite 1110
Honolulu, Hawai'i 96814

7. Department of Interior
National Parks Service
Pacific Islands Support Office
300 Ala Moana Boulevard, Room 6-226
Honolulu, Hawai'i 96850

8. Dave Wesley, Deputy Regional Director
U.S. Fish and Wildlife Service
Pacific Region
911 NE 11th Avenue
Portland, Oregon 97232

9. U.S. Department of Transportation
Federal Aviation Administration
300 Ala Moana Boulevard, Room 7-128
Honolulu, Hawai'i 96850-7128

10. Ron V. Simpson, Manager
Federal Aviation Administration
Honolulu Airports District Office
Airports – Western Pacific Region
Box 50244
Honolulu, Hawai'i 96850

11. Alexis Strauss, Acting Regional Administrator
U.S. Environmental Protection Agency
Region 9
75 Hawthorne Street
San Francisco, California 94105

STATE OF HAWAII

12. Roderick Becker, Comptroller
State of Hawai'i
Department of Accounting and General Services
1151 Punchbowl Street, #426
Honolulu, Hawai'i 96813

13. Scott Enright, Chair
State of Hawai'i
Department of Agriculture
1428 South King Street
Honolulu, Hawai'i 96814-2512

14. Luis P. Salaveria, Director
State of Hawai'i
Department of Business, Economic Development & Tourism
P.O. Box 2359
Honolulu, Hawai'i 96804

15. Virginia "Ginny" Pressler, MD, MBA, FACS, Director
State of Hawai'i
Department of Health
919 Ala Moana Blvd., Room 300
Honolulu, Hawai'i 96814

16. Lene Ichinotsubo
State of Hawai'i
Department of Health
919 Ala Moana Blvd., Room 212
Honolulu, Hawai'i 96814

17. Alec Wong, P.E., Chief
State of Hawai'i
Department of Health
Clean Water Branch
Hale Ola, Room 225
2827 Waimano Home Road
Pearl City, Hawai'i 96782

18. Joanna L. Seto, P.E., Chief
State of Hawai'i
Department of Health
Environmental Management Division
Safe Drinking Water Branch
2385 Waimano Home Road, Suite 110
Uluakupu Building 4
Pearl City, Hawai'i 96782-1400

19. Laura McIntyre, AICP
State of Hawaii
Department of Health
Environmental Planning Office
919 Ala Moana Blvd., Suite 312
Honolulu, Hawai'i 96814

20. Patti Kitkowski
State of Hawai'i
Department of Health
Maui Sanitation Branch
54 South High Street, Room 300
Wailuku, Hawai'i 96793

21. Suzanne Case, Chairperson
State of Hawai'i
Department of Land and Natural Resources
P. O. Box 621
Honolulu, Hawai'i 96809

22. Alan Downer, Administrator
State of Hawai'i
Department of Land and Natural Resources
State Historic Preservation Division
601 Kamokila Blvd., Room 555
Kapolei, Hawai'i 96707

23. Matthew Barker Farris, Ph.D.
State of Hawai'i
Department of Land and Natural Resources
State Historic Preservation Division
101 Maalaea Boat Harbor Road
Wailuku, Hawai'i 96793

24. Nolan Espinda, Director
State of Hawai'i
Department of Public Safety
919 Ala Moana Boulevard, 4th Floor
Honolulu, Hawai'i 96814

25. Jade Butay, Interim Director
State of Hawai'i
Department of Transportation
869 Punchbowl Street
Honolulu, Hawai'i 96813

26. Marvin Moniz, District Manager Islands of Maui, Moloka'i, and Lāna'i
State of Hawai'i
Department of Transportation
Airports Division
1 Kahului Airport Road, Unit 5
Kahului, Hawai'i 96732

27. Brigadier General Arthur "Joe" Logan,
Adjutant General
Hawai'i State Civil Defense
3949 Diamond Head Road
Honolulu, Hawai'i 96816

28. Jobie Masagatani, Chair
State of Hawai'i
Department of Hawaiian Home Lands
P.O. Box 1879
Honolulu, Hawai'i 96805

29. Scott Glenn, Director
State of Hawai'i
Office of Environmental Quality Control
235 S. Beretania Street, Suite 702
Honolulu, Hawai'i 96813

30. Dr. Kamana'opono Crabbe, Chief
Executive Officer
State of Hawai'i
Office of Hawaiian Affairs
560 N. Nimitz Highway, Suite 200
Honolulu, Hawai'i 96817

31. Leo R. Asuncion, Jr., AICP, Director
State of Hawai'i
Office of Planning
P. O. Box 2359
Honolulu, Hawai'i 96804

32. Dan Orodenker, Executive Officer
State of Hawai'i
State Land Use Commission
P.O. Box 2359
Honolulu, Hawai'i 96804

33. Senator Rosalyn H. Baker
Hawai'i State Senate
Hawai'i State Capitol, Room 230
415 S. Beretania Street
Honolulu, Hawai'i 96813

34. Representative Angus L.K. McKelvey
House of Representatives
Hawai'i State Capitol, Room 320
415 S. Beretania Street
Honolulu, Hawai'i 96813

COUNTY OF MAUI

35. Stewart Stant, Director
County of Maui
Department of Environmental
Management
2050 Main Street, Suite 2B
Wailuku, Hawai'i 96793

36. Jeffrey A. Murray, Chief
County of Maui
Department of Fire and Public Safety
200 Dairy Road
Kahului, Hawai'i 96732

37. Carol Reimann, Director
County of Maui
Department of Housing and Human
Concerns
One Main Plaza
2200 Main Street, Suite 546
Wailuku, Hawai'i 96793

38. Ka'ala Buenconsejo, Director
County of Maui
Department of Parks and Recreation
700 Hali'a Nakoa Street, Unit 2F
Wailuku, Hawai'i 96793

39. William Spence, Director
County of Maui
Department of Planning
2200 Main Street, Suite 315
Wailuku, Hawai'i 96793

40. Tivoli Faaumu, Chief
County of Maui
Department of Police
55 Mahalani Street
Wailuku, Hawai'i 96793

41. David Goode, Director
County of Maui
Department of Public Works
200 South High Street, 4th Floor
Wailuku, Hawai'i 96793

42. Don Medeiros, Director
County of Maui
Department of Transportation
2145 Kaohu Street
David Trask Building, Suite 102
Wailuku, Hawai'i 96793

43. Herman Andaya, Interim Emergency
Management Officer
County of Maui
Emergency Management Agency
200 South High Street
Wailuku, Hawai'i 96793

44. Mayor Alan Arakawa
County of Maui
200 South High Street
Wailuku, Hawai'i 96793

45. Honorable Elle Cochran
Maui County Council
200 South High Street
Wailuku, Hawai'i 96793

ORGANIZATIONS

46. Hawaiian Telcom
60 South Church Street
Wailuku, Hawai'i 96793

47. Michael Grider, Manager, Engineering
Maui Electric Company, Ltd.
P.O. Box 398
Kahului, Hawai'i 96733

48. State of Hawai'i
Department of Education
Hawai'i State Library
Hawai'i Documents Center
478 S. King Street
Honolulu, Hawai'i 96813

MAY 08 2018

DEPARTMENT OF THE ARMY
HONOLULU DISTRICT, U.S. ARMY CORPS OF ENGINEERS
FORT SHAFTER, HAWAII 96858-5440

May 7, 2018

SUBJECT: Comments Regarding the Proposed West Maui Water Source Development Project, Honokowai, Island of Maui, Hawaii, Department of the Army File Number: POH-2018-00106

Munekiyo & Hiraga, Incorporated
Attention: Yukino Uchiyama
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Ms. Yukino:

The United States (U.S.) Army Corps of Engineers, Honolulu District (Corps) is providing this letter as a written comment to the April 24, 2018, County of Maui, Department of Water Supply's (DWS) proposed West Maui Water Source Development Project Scoping Letter. The project site is located within Tax Map Keys (TMK) (2)4-3-001:017, 084, (2)4-4-002:014, 015, 018, (2)4-4-004:009, 011, and 019; near Honokowai, Hawaii. Your project has been assigned number POH-2018-00106, West Maui Water, which should be referred to in all future correspondence with us.

The Corps' regulatory authorities are based on two laws: Section 10 of the Rivers and Harbors Act (RHA) of 1899 (33 USC 403), which prohibits the obstruction or alteration of navigable waters of the U.S. without a permit from the Corps; and Section 404 of the Clean Water Act (CWA), which prohibits the discharge of dredged or fill material into waters of the U.S. without a Corps permit. Based on information provided, and available to our office, portions of the proposed work may occur in waters of the U.S. and would, therefore, be within the Corps' jurisdiction.

Waters of the U.S. include, but are not limited to, tidal waters, rivers, both perennial and intermittent streams, and wetlands. Wetlands are defined as areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands include swamps, marshes, bogs, and similar areas.

The Corps' evaluation of a Section 10 and/or a Section 404 permit application involves multiple analyses, including (1) evaluating the proposal's impacts in accordance with the National Environmental Policy Act (NEPA) (33 CFR part 325), (2) determining whether the proposal is contrary to the public interest (33 CFR § 320.4), and (3) in the case of a Section 404 permit, determining whether the proposal complies with the Section 404(b)(1) Guidelines (Guidelines) (40 CFR part 230).

If the proposal requires a Section 404 permit application, the Guidelines specifically require that "no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences" (40 CFR § 230.10(a)). Time and money spent on the proposal prior to applying for a Section 404 permit cannot be factored into the Corps' decision whether there is a less damaging practicable alternative to the proposal.

If an application for a Corps permit has not yet been submitted, the project proposer may request a pre-application consultation meeting with the Corps to obtain information regarding the data, studies or other information that will be necessary for the permit evaluation process. A pre-application consultation meeting is strongly recommended if the proposal has substantial impacts to waters of the United States, or if it is a large or controversial project.

Nothing in this letter excuses you from compliance with other Federal, State, or local statutes, ordinances, or regulations.

Please contact me via email at Jason.D.Brewer@usace.army.mil, by mail at the address above, or by phone at (808) 835-4107 if you have questions. For more information about the District Regulatory Program, please visit our website at: www.poh.usace.army.mil/Missions/Regulatory.aspx. Thank you for your cooperation with the Honolulu District Regulatory Program.

Sincerely,

Jason Brewer
Regulatory Specialist

MUNEKIYO HIRAGA
Planning, Project Management, Sustainable Solutions

Michael T. Munekiyo
CHAIRMAN
Karlynn K. Fukuda
PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

March 21, 2019

Jason Brewer, Regulatory Specialist
U.S. Department of the Army
U.S. Army Engineer District, Honolulu
Regulatory Branch, Building 230
Fort Shafter, Hawai'i 96858-5440

SUBJECT: Early Consultation for Proposed West Maui Source Development Project (State Well No. 6-5638-004 and State Well No. 6-5738-002), Lahaina, Maui, Hawai'i (File Number: POH-2018-00106)

Dear Mr. Brewer:

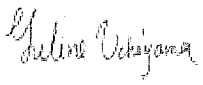
Thank you for your letter dated May 7, 2018, providing early consultation comments for the proposed West Maui Source Development Project in Lāhainā, Maui, Hawai'i. On behalf of the County of Maui, Department of Water Supply (DWS), we offer the following information in response to the comments noted in your letter.

The proposed project will involve installation of water transmission lines below three (3) gulches and the Honokōhau Ditch. The waterlines will be installed underground by means of Horizontal Directional Drilling (HDD). Your letter dated December 31, 2018 confirmed that installation of the waterlines utilizing HDD is not an activity regulated by the Corps of Engineers and a Department of Army Permit is not required.

Maui: 305 High Street, Suite 104 Wailuku, Hawaii 96793 Tel: 808.244.2015 Fax: 808.244.8729
Oahu: 735 Bishop Street, Suite 321 Honolulu, Hawaii 96813 Tel: 808.983.1233
www.munekiyohiraga.com

We appreciate your input and will include a copy of your comment letter and this response letter in the Draft Environmental Assessment for the project. Should you have any questions or require additional information, please feel free to contact me at 983-1233.

Very truly yours,



Yukino Uchiyama
Associate

YU:yp
cc: Curtis Eaton, Department of Water Supply
Ronald M. Fukumoto, Fukumoto Engineering, Inc.
Alan L. Unemori, Warren S. Unemori Engineering, Inc.
K:\DATA\FE\Kahana Production Well\Applications\ECL\EC Response\US Army.ltr.doc

MAY 10 2018

DAVID Y. IGE
GOVERNOR

RODERICK K. BECKER
Comptroller

AUDREY HIDANO
Deputy Comptroller

STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P.O. BOX 119, HONOLULU, HAWAII 96810-0119

(P)1124.8

MAY 7 2018

Ms. Erin Mukai, Senior Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Ms. Mukai:

Subject: Early Consultation Request for the
Proposed West Maui Source Development Project
(State Well No. 6-5638-004 and State Well No. 6-5738-002)
Lahaina, Maui, Hawaii

We have no comments to offer at this time as the proposed project does not impact any of the Department of Accounting and General Services' projects or existing facilities.

If you have any questions, your staff may call Ms. Dora Choy of the Public Works Division at 586-0488.

Sincerely,

RODERICK K. BECKER
Comptroller

MUNEKIYO HIRAGA
Planning Project Management Sustainable Solutions

Michael T. Munekiyo
CHAIRMAN
Karlynn K. Fukuda
PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

March 21, 2019

Roderick K. Becker, Comptroller
State of Hawai'i
Department of Accounting and General Services
P.O. Box 119
Honolulu, Hawai'i 96810-0119

SUBJECT: Early Consultation for Proposed West Maui Source Development Project (State Well No. 6-5638-004 and State Well No. 6-5738-002), Lahaina, Maui, Hawai'i

Dear Mr. Becker:

Thank you for your letter dated May 7, 2018, providing early consultation comments for the proposed West Maui Source Development project in Lāhainā, Maui, Hawai'i. On behalf of the County of Maui, Department of Water Supply (DWS), we appreciate your letter of confirmation that the subject project does not impact any of the Department's projects or existing facilities and you have no comments to offer at the present time.

We appreciate your input and will include a copy of your comment letter and this response letter in the Draft Environmental Assessment for the project. Should you have any questions or require additional information, please feel free to contact me at 983-1233.

Very truly yours,

Yukino Uchiyama

Yukino Uchiyama
Associate

YU:yp
cc: Curtis Eaton, Department of Water Supply
Ronald M. Fukumoto, Fukumoto Engineering, Inc.
Alan L. Unemori, Warren S. Unemori Engineering, Inc.
K:\DATA\FE\Kahana Production Well\Applications\ECL\EC Response\DAGS.ltr.doc

MAY 22 2018

DAVID Y. IGE
GOVERNOR OF HAWAII

VIRGINIA PRESSLER, M.D.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
SAFE DRINKING WATER BRANCH
2385 WAIMANO HOME ROAD, SUITE 110
ULUAKUPU BLDG. 4
PEARL CITY, HI 96782-1400

In reply, please refer to:
File: SDWB
Uchiyama01.docx

May 22, 2018

Ms. Yukino Uchiyama, Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawaii 96793
[via yukino@munekiyohiraga.com only]

Dear Ms. Uchiyama:

SUBJECT: CHAPTER 343, HAWAII REVISED STATUES, EARLY CONSULTATION REQUEST FOR PROPOSED WEST MAUI WATER SOURCE DEVELOPMENT PROJECT (STATE WELL NO. 6-5638-004 AND STATE WELL NO. 6-5738-002), LAHAINA, MAUI, HAWAII

Thank you for the opportunity to provide input on the subject project. The Safe Drinking Water Branch (SDWB) has reviewed the subject document and has the following comments:

1. Projects that propose development of new sources of drinking water serving or proposed to serve a public water system must comply with the terms of Hawaii Administrative Rules (HAR) Section 11-20-29, "Use of new sources of raw water for public water systems." This section requires that all new public water system sources be approved by the Director of Health (Director) prior to its use. Such approval is based primarily upon the submission of a satisfactory engineering report which addresses the requirements set in HAR Section 11-20-29.

2. The engineering report must identify all potential sources of contamination and evaluate alternative control measures which could be implemented to reduce or eliminate the potential for contamination, including treatment of the water source. In addition, water quality analyses for all regulated contaminants, performed by a laboratory certified by the State Laboratories Division of the State of Hawaii, must be submitted as part of the report to demonstrate compliance with all drinking water standards. Additional parameters may be required by the Director for this submittal or additional tests required upon his or her review of the information submitted.

3. All sources of public water systems must undergo a source water assessment which will delineate a source water protection area. This process is preliminary to the creation of a source water protection plan for that source and activities which will take place to protect the source of drinking water.

4. All projects which propose the establishment of a potentially contaminating activity (as identified in the Hawai`i Source Water Assessment Plan) within the source water protection area of an existing source of water for a public water supply should address

this potential and activities that will be implemented to prevent or reduce the potential for contamination of the drinking water source.

5. The SDWB has reviewed the pump drawdown test for West Maui Well No. 1, Exploratory, and has concerns that the well may not perform as expected. SDWB will work directly with the County of Maui, Department of Water Supply (DWS) to address these concerns.

6. Injection wells used for the subsurface disposal of wastewater, sewage effluent, or surface runoff are subject to environmental regulation and permitting under HAR Section 11-11-23, titled Underground Injection Control (UIC). The DOH's approval must first be obtained before any injection well construction commences. A UIC permit must be issued before any injection well operation occurs.

7. Since the project will receive funds from the Hawaii Drinking Water State Revolving Fund (DWSRF), please ensure the attached Environmental Review Checklist is filled and all required crosscutters are considered.

8. This project is subject to the National Historic Preservation Act (NHPA) Section 106 review, which must be initiated by the Department of Health, through the SDWB, as EPA's delegated agency. Please provide a softcopy draft letter to initiate the review along with the Hawaii Revised Statutes (HRS) Chapter 6E-8 determination and all supporting documentation to Ms. Joan Corrigan at Joan.Corrigan@doh.hawaii.gov. If you have questions about this process, you may contact Ms. Joan Corrigan via email or at 808-586-4258.

9. For further information concerning the application of capacity, new source approval, operator certification, source water assessment, backflow/cross-connection prevention or other public water system programs, please contact the Safe Drinking Water Branch at 586-4258.

If there are any questions, please call Ms. Joan Corrigan of the SDWB Engineering Section at 586-4258.

Sincerely,

For

JOANNA L. SETO, P.E., CHIEF
Safe Drinking Water Branch

JC:mc

Enclosures
1. Environmental Review Checklist
2. DWSRF Environmental Crosscutters

Hawaii Department of Health
State Revolving Fund Program
Exemption Declaration and Environmental Assessment Review Checklist

Check the box that applies to this submittal:

◯ CWSRF Project ◯ DWSRF Project

Check the box that applies to this submittal:

◯ Exemption Declaration ◯ Environmental Assessment (EA) ◯ EA Reaffirmation

APPLICANT INFORMATION	
Applicant:	
Contact Person:	Contact Phone:
Project Name:	Project No:
Project Description:	

For sections A-C below, check applicable "Yes", "No", or "N/A" box next to the given statements.

A. DOCUMENT SUBMITTAL & PUBLIC NOTICE	YES	NO	N/A	DOH REVIEW/ CONCURRENCE YES	DOH REVIEW/ CONCURRENCE NO
Environmental Document Title: *(Fill in)* Environmental Documents submitted: *(Fill in)*	◯	◯	◯	◯	◯
If a prior-decision document submitted, is it less than 5 years old?	◯	◯	◯	◯	◯
If no, has the prior decision document been reaffirmed?	◯	◯	◯	◯	◯
Have public notice requirements been met?	◯	◯	◯	◯	◯
Have public meeting requirements been met?	◯	◯	◯	◯	◯
Have response to public comment requirements been met?	◯	◯	◯	◯	◯

B. SERP CRITERIA ADDRESSED	YES	NO	N/A	DOH REVIEW/ CONCURRENCE YES	DOH REVIEW/ CONCURRENCE NO
1. Identification of applicant	◯	◯	◯	◯	◯
2. Identification of approving agency	◯	◯	◯	◯	◯
3. All agencies consulted	◯	◯	◯	◯	◯
4. Detailed Project Description (maps, technical data, economic and cultural effects and historical perspective)	◯	◯	◯	◯	◯
5. Description of affected environment	◯	◯	◯	◯	◯
6. Impacts and alternatives analysis	◯	◯	◯	◯	◯
7. Mitigation measures	◯	◯	◯	◯	◯
8. Determination	◯	◯	◯	◯	◯
9. Findings and reasons	◯	◯	◯	◯	◯
10. List of federal, state, and county permits and required approval	◯	◯	◯	◯	◯
11. Early consultation, solicitation of written comments and responses	◯	◯	◯	◯	◯
12. Population projections current	◯	◯	◯	◯	◯
13. Range of alternatives considered including "No-action" alternative	◯	◯	◯	◯	◯
a. Designation of a study area comparable to the final system	◯	◯	◯	◯	◯
b. Present and future conditions	◯	◯	◯	◯	◯
14. Impact analysis addressed:	◯	◯	◯	◯	◯
a. primary and secondary impacts	◯	◯	◯	◯	◯
b. land use/social parameters	◯	◯	◯	◯	◯
c. cumulative impacts	◯	◯	◯	◯	◯
d. other public works projects	◯	◯	◯	◯	◯
e. sensitive issues	◯	◯	◯	◯	◯
f. Consistency with population projects used to develop State implementation plans under the Clean Air Act	◯	◯	◯	◯	◯

C. CROSS-CUTTERS ADDRESSED (APPLIES TO EXEMPTION DECLARATION AND ENVIRONMENTAL ASSESSMENT):	YES	NO	N/A	DOH REVIEW/ CONCURRENCE YES	DOH REVIEW/ CONCURRENCE NO	U.S. EPA REVIEW/ CONCURRENCE (when req'd) YES	U.S. EPA REVIEW/ CONCURRENCE (when req'd) NO
1. Archeological and Historic Preservation Act (16 U.S.C. § 469a-1)	○	○	○	○	○	○	○
2. Bald and Golden Eagle Protection Act (16 U.S.C. §§ 668-668c)	○	○	○	○	○	○	○
3. Clean Air Act (42 U.S.C. § 7401)	○	○	○	○	○	○	○
4. Coastal Barriers Resources Act (16 U.S.C. § 3501)	○	○	○	○	○	○	○
5. Coastal Zone Management Act (16 U.S.C. § 1451)	○	○	○	○	○	○	○
6. Endangered Species Act (16 U.S.C. § 1531)	○	○	○	○	○	○	○
7. Environmental Justice (Executive Order 12898)	○	○	○	○	○	○	○
8. Farmland Protection Policy Act (7 U.S.C. § 4201)	○	○	○	○	○	○	○
9. Fish and Wildlife Coordination Act (16 U.S.C. § 661)	○	○	○	○	○	○	○
10. Floodplain Management (Executive Order 11988, as amended by Executive Orders 12148 and 13690)	○	○	○	○	○	○	○
11. Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. §§ 1801 *et seq.*)	○	○	○	○	○	○	○
12. Marine Mammal Protection Act (16 U.S.C. §§ 703 *et seq.)*	○	○	○	○	○	○	○
13. Migratory Bird Treaty Act (16 U.S.C. §§ 703 *et seq.*)	○	○	○	○	○	○	○
14. National Historic Preservation Act (54 U.S.C. §§ 300101 *et seq.*)	○	○	○	○	○	○	○
15. Protection of Wetlands (Executive Order 11990 (1977), as amended by Executive Order 12608 (1997))	○	○	○	○	○	○	○
16. Rivers and Harbors Act, (33 U.S.C. § 403)	○	○	○	○	○	○	○
17. Safe Drinking Water Act (42 U.S.C. § 300f)	○	○	○	○	○	○	○
18. Wild and Scenic Rivers Act (16 U.S.C. § 1271)	○	○	○	○	○	○	○

PLEASE CHECK THE BOX THAT APPLIES TO THE PROJECT:

◯ The County has reviewed the impacts of the proposed project, and recommends that the project is exempt from preparation of an Environmental Assessment (EA) or Environmental Impact Statement (EIS) in accordance with Chapter 343 of the Hawaii Revised Statues (HRS) and Chapter 11-200 of the Hawaii Administrative Rules (HAR), and 40 CFR §35.3140 (for CWSRF projects), or 40 CFR §35.3580 (for DWSRF projects). Where there are differences between the Hawaii Statutes/Rules and the USEPA statutes and regulations, the Project must comply with the USEPA statutes and regulations in order to qualify for the SRF program's loan.

◯ The County has prepared an EA of a Finding of No Significant Impact (FONSI) or mitigated FONSI in accordance with Chapter 343 of the HRS and Section 11-200 of the HAR, and 40 CFR §35.3140(b)(3)(i) (for CWSRF projects), or 40 CFR §35.3580(c)(3)(i) (for DWSRF projects). Where there are differences between the Hawaii Statutes/Rules and the USEPA statues and regulations, the Project must comply with the USEPA statutes and regulations in order to qualify for the SRF Program's loan. The County recommends that the Department of Health (DOH) approve the EA FONSI or mitigated FONSI.

◯ The County recommends that the project qualifies for a reaffirmation or modification of a decision contained in a previously issued exemption, or EA/FONSI or mitigated FONSI in accordance with 40 CFR §35.3140(b)(3)(iii) (for CWSRF projects) or 40 CFR §35.3580(c)(3)(iii) (for DWSRF projects).

TO BE FILLED OUT BY THE SRF PROGRAM:

◯ DOH has conducted a review of the proposed project for the County in accordance with 40 CFR §35.3140 (for CWSRF projects) or 40 CFR §35.3580 (for DWSRF projects); and HRS, Chapter 343; and Chapter 11-200, HAR. The DOH has determined that this project is eligible for an Exemption. Accordingly, the project is exempt from further substantive environmental review requirements under the above stated authorities.

◯ DOH concurs with the County's recommendation and approves the EA/FONSI or mitigated FONSI, in accordance with 40 CFR §35.3140(b)(3)(i) (for CWSRF projects) or 40 CFR §35.3580(c)(3)(i) for (DWSRF projects); and HAR, Chapter 11-200, based on the information provided by the County. However, this decision may be reconsidered if a discovery of new information concerning potential environmental impacts of the project occurs.

◯ DOH concurs with the County's recommendation and approves the reaffirmation or modification of the previously issued exemption, or reaffirmation or modification of the previously issued EA/FONSI or mitigated FONSI, in accordance with 40 CFR §35.3140(b)(3)(iii) (for CWSRF projects) or 40 CFR §35.3580(c)(3)(iii) (for DWSRF projects), based on the information provided by the County. However, this decision may be reconsidered if a discovery of information concerning potential environmental impacts of the project occurs.

◯ DOH does not concur or approve *(fill in type of action and briefly explain reasons)*

DOH Reviewer: _____ Date: _____

DWSRF Environmental Crosscutters

Environmental Authorities	Procedure	Responsible Agency
Archaeological and Historical Preservation Act of 1974, Pub. L. 86-523, as amended	Obtain review for all projects	State Historic Preservation Office
Clean Air Act, Pub. L. 84-159, as amended	Coordinate to assure project conforms with state implementation plan (SIP)	State Department of Health, Clean Air Branch
Coastal Barrier Resources Act, Pub. L. 92-348	Obtain review if project is located on a coastal barrier island	State Coastal Zone Management Agency
Coastal Zone Management Act, Pub. L. 92-583, as amended	Obtain review if project is located in coastal zone	State Coastal Zone Management Agency
Endangered Species Act, Pub. L. 93-205, as amended	Obtain review by U.S. Fish and Wildlife Service for all projects	U.S. Fish and Wildlife Service
Environmental Justice, Executive Order (EO) 12898	Are low income and minority groups affected?	U.S. Environmental Protection Agency
Floodplain Management, Executive Order 11988 as amended by EO 12148	Obtain review if project is located in or affects 100-year flood plain	Federal Emergency Management Agency
Protection of Wetlands, Executive Order 11990	Obtain review if project area contains wetlands	U.S. Army Corps of Engineers
Farmland Protection Policy Act, Pub. L. 97-98	Obtain review if project area contains prime farmland	Natural Resources Conservation Service- State Conservationist
Fish and Wildlife Coordination Act, Pub. L. 85-624, as amended	Obtain review for all projects	U.S. Fish and Wildlife Service
National Historic Preservation Act of 1966, PL 89-665, as amended	Obtain review for all projects	State Historic Preservation Office
Safe Drinking Water Act, Pub. L. 93-523, as amended	Obtain review if project could affect sole source aquifer	State Department of Health, Safe Drinking Water Branch
Wild and Scenic Rivers Act, Pub. L. 90-542, as amended	Obtain review if project is located in area with Wild and Scenic Rivers	National Park Service
Essential Fish Habitat consultation process under the Magnuson-Stevens Fishery Conservation and Management Act	Obtain review if it will affect essential fish habitat	National Marine Fisheries Service (NMFS)

MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
CHAIRMAN
Karlynn K. Fukuda
PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

March 21, 2019

Joanna L. Seto, P.E., Chief
State of Hawai'i
Department of Health
Safe Drinking Water Branch
2385 Waimano Home Road, Suite 110
Uluakupu Bldg. 4
Pearl City, Hawai'i 96782-1400

SUBJECT: Early Consultation for Proposed West Maui Source Development Project (State Well No. 6-5638-004 and State Well No. 6-5738-002), Lahaina, Maui, Hawai'i

Dear Ms. Seto:

Thank you for your letter dated May 22, 2018, providing early consultation comments for the proposed West Maui Source Development Project in Lāhainā, Maui, Hawai'i. On behalf of the County of Maui, Department of Water Supply (DWS), we offer the following information in response to the comments noted in your letter.

1. Thank you for your information. The project will comply with the terms of Hawai'i Administrative Rules (HAR), Section 11-20-29, "Use of new sources of raw water for public water systems".

2. The engineering report for Kahana Well and geologist's report for Mahinahina Well will be included as part of the Draft Environmental Assessment (EA). The engineering report and the geologist's report will identify all potential sources of contamination and evaluate alternative control measures which could be implemented to reduce or eliminate the potential for contaminations, including treatment of the water source. A water quality analysis for all regulated contaminants was submitted as part of the Kahana Well engineering report to demonstrate compliance with all drinking water standards. A copy of the Kahana Well engineering report and the approval letter will be included in the Draft EA. A engineering report for Mahinahina Well is currently being prepared and will be submitted to your Branch for review and approval prior to the initiation of the use of the water source.

3. The applicant, prior to the creation of a source water protection plan, will undergo a source water assessment to delineate a source water protection area.

4. The Draft EA will address the potential for contamination within the source water protection area and activities that will be implemented to prevent or reduce the potential contamination of the drinking water source.

5. The DWS will work directly with your Branch to address your concerns about the West Maui Well No. 1 (Mahinahina Well) pump performance.

6. Thank you for your information. The applicant will obtain the Department of Health's (DOH) approval before any injection well construction commences and a Underground Injection Control (UIC) permit will be obtained before any injection well operation occurs.

7. Since the proposed project will receive funds from the Hawai'i Drinking Water State Revolving Fund (DWSRF), the Environmental Review Checklist will be filed with DOH upon completion of the EA process and a compliance with applicable Federal cross-cutter requirements will be addressed in the Draft EA.

8. A softcopy draft letter will be provided to initiate the National Historic Preservation Act (NHPA), Section 106 review along with the Hawai'i Revised Statutes (HRS), Chapter 6E-8 determination and supporting documentation.

9. Thank you for your contact information.

We appreciate your input and will include a copy of your comment letter and this response letter in the Draft EA for the project. Should you have any questions or require additional information, please feel free to contact me at 983-1233.

Very truly yours,

Yukino Uchiyama

Yukino Uchiyama
Associate

YU:yp
cc: Curtis Eaton, Department of Water Supply
Ronald M. Fukumoto, Fukumoto Engineering, Inc.
Alan L. Unemori, Warren S. Unemori Engineering, Inc.
K:\DATA\FE\Kahana Production Well\Applications\ECL\EC Response\DOH SDWB.ltr.doc

MAY 17 2018

DAVID Y. IGE
GOVERNOR OF HAWAII

VIRGINIA PRESSLER, M.D.
DIRECTOR OF HEALTH

LORRIN W. PANG, M.D., M.P.H.
DISTRICT HEALTH OFFICER

STATE OF HAWAII
DEPARTMENT OF HEALTH
MAUI DISTRICT HEALTH OFFICE
54 HIGH STREET
WAILUKU, HAWAII 96793-3378

May 14, 2018

Ms. Yukino Uchiyama
Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Ms. Uchiyama:

Subject: Chapter 343, Hawaii Revised Statutes, Early Consultation Request for Proposed West Maui Water Source Development Project (State Well No. 6-5638-004 and State Well No.6-5738-002), Lahaina, Maui, Hawaii)

Thank you for the opportunity to comment on this project. We have no comments to offer.

If you have any questions, please contact me at 808 984-8230 or email me at patricia.kitkowski@doh.hawaii.gov.

Sincerely,

Patti Kitkowski

Patti Kitkowski
District Environmental Health Services Office

MUNEKIYO HIRAGA
Planning Project Management and Sustainable Solutions

Michael T. Munekiyo
CHAIRMAN
Karlynn K. Fukuda
PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

March 21, 2019

Patti Kitkowski
State of Hawai'i
Department of Health
Maui District Health Office
54 High Street
Wailuku, Hawai'i 96793-3378

SUBJECT: Early Consultation for Proposed West Maui Source Development Project (State Well No. 6-5638-004 and State Well No. 6-5738-002), Lahaina, Maui, Hawai'i

Dear Ms. Kitkowski:

Thank you for your letter dated May 14, 2018, providing early consultation comments for the proposed West Maui Source Development project in Lāhainā, Maui, Hawai'i. On behalf of the County of Maui, Department of Water Supply (DWS), we appreciate your letter of confirmation that you have no comments on the subject project at the present time.

We appreciate your input and will include a copy of your comment letter and this response letter in the Draft Environmental Assessment for the project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,

Yukino Uchiyama

Yukino Uchiyama
Associate

YU:yp
cc: Curtis Eaton, Department of Water Supply
Ronald M. Fukumoto, Fukumoto Engineering, Inc.
Alan L. Unemori, Warren S. Unemori Engineering, Inc.
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MAY 2 1 2018

DAVID Y. IGE
GOVERNOR OF HAWAII

VIRGINIA PRESSLER, M.D.
DIRECTOR OF HEALTH

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

In reply, please refer to:
File:

LUD – 2 4 3 001 017 Early Cons
West Maui Water Source Dev-ID4008

May 16, 2018

Ms. Yukino Uchiyama
Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Ms. Uchiyama:

Subject: Chapter 343, Hawaii Revised Statutes, Early Consultation Request for Proposed West Maui Water Source Development Project
State Well No. 6-5638-004 and State Well No. 6-55738-002
Lahaina, Maui, Hawaii

Thank you for allowing us the opportunity to provide comments for the proposed project. Based on current records on file, there are four (4) septic tank systems located on the property, identified as TMK: (2) 4-3-001:017, where West Maui Well No. 2 will be constructed. We recommend that the West Maui Well No. 2 should be sited a distance of at least a 1,000 feet radius away from any of the four (4) existing septic tank systems on the property.

Should you have any questions, please call Mr. Mark Tomomitsu at (808) 586-4294.

Sincerely,

SINA PRUDER, P.E., CHIEF
Wastewater Branch

LM:lmj

c: Mr. Roland Tejano, DOH-WWB's Maui Staff, via email

MUNEKIYO HIRAGA
Planning Project Management Environmental Services

Michael T. Munekiyo
CHAIRMAN
Karlynn K. Fukuda
PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

March 21, 2019

Sina Pruder, P.E., Chief
State of Hawai'i
Department of Health
Wastewater Branch
P.O. Box 3378
Honolulu, Hawai'i 96801-3378

SUBJECT: Early Consultation for Proposed West Maui Source Development Project (State Well No. 6-5638-004 and State Well No. 6-5738-002), Lahaina, Maui, Hawai'i (LUD 2 4 3 001 017 Early Cons West Maui Water Source Dev-ID4008)

Dear Ms. Pruder:

Thank you for your letter dated May 16, 2018, providing early consultation comments for the proposed West Maui Source Development project in Lāhainā, Maui, Hawai'i. On behalf of the County of Maui, Department of Water Supply (DWS), we offer the following information in response to the comments noted in your letter.

It is noted that Kahana Well (West Maui Well No. 2) will be located at least a 1,000 feet radius away from any of the four (4) existing septic tank systems on the property.

Maui: 305 High Street, Suite 104 Wailuku, Hawaii 96793 Tel: 808.244.2015 Fax: 808.244.8729
Oahu: 735 Bishop Street, Suite 321 Honolulu, Hawaii 96813 Tel: 808.983.1233
www.munekiyohiraga.com

We appreciate your input and will include a copy of your comment letter and this response letter in the Draft Environmental Assessment for the project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,

Yukino Uchiyama
Associate

YU:yp
cc: Curtis Eaton, Department of Water Supply
Ronald M. Fukumoto, Fukumoto Engineering, Inc.
Alan L. Unemori, Warren S. Unemori Engineering, Inc.
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MAY 18 2018

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

May 17, 2018

Munekiyo Hiraga, Inc.
Attention: Ms. Yukino Uchiyama
305 High Street, Suite 104
Wailuku, Hawaii 96793

via email: planning@munekiyohiraga.com

Dear Ms. Uchiyama:

SUBJECT: Early Consultation Request for Proposed **West Maui Water Source Development Project** (State Well Nos. 6-5638-004 and 6-5738002) located at Lahaina, Island of Maui; TMK: (2) 4-4-Various and (2) 4-3-001: Various

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

At this time, enclosed are comments from the (a) Commission on Water Resource Management and (b) Office of Conservation & Coastal Lands on the subject matter. Should you have any questions, please feel free to call Darlene Nakamura at (808) 587-0417. Thank you.

Sincerely,

Russell Y. Tsuji
Land Administrator

Enclosures
cc: Central Files

DAVID Y. IGE
GOVERNOR OF HAWAII

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

RECEIVED
COMMISSION ON WATER
RESOURCE MANAGEMENT
2018 MAY -7 PM 3:04

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

May 7, 2018

RECEIVED
LAND DIVISION
2018 MAY 11 AM 11:23
DEPT OF LAND & NATURAL RESOURCES
STATE OF HAWAII

MEMORANDUM

TO: **DLNR Agencies:**
___Div. of Aquatic Resources
___Div. of Boating & Ocean Recreation
_X_Engineering Division
_X_Div. of Forestry & Wildlife
___Div. of State Parks
_X_Commission on Water Resource Management
_X_Office of Conservation & Coastal Lands
_X_Land Division – Maui District
_X_Historic Preservation

FROM: Russell Y. Tsuji, Land Administrator
SUBJECT: Early Consultation Request for Proposed **West Maui Water Source Development Project** (State Well Nos. 6-5638-004 and 6-5738002)
LOCATION: Lahaina, Island of Maui; TMK: (2) 4-4-Various and (2) 4-3-001: Various
APPLICANT: Munekiyo Hiraga on behalf of County of Maui, Department of Water Supply

Transmitted for your review and comment is information on the above-referenced subject matter. We would appreciate your comments by **May 15, 2018.**

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact Darlene Nakamura at 587-0417. Thank you.

Attachments

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

Signed: /s/ Jeffrey T. Pearson, P.E.

Print Name: Deputy Director

Date: May 9, 2018

cc: Central Files

DAVID Y. IGE
GOVERNOR OF HAWAII

SUZANNE D. CASE
CHAIRPERSON

WILLIAM D. BALFOUR, JR.
KAMANA BEAMER, PH.D.
MICHAEL G. BUCK
NEIL J. HANNAHS
PAUL J. MEYER
VIRGINIA PRESSLER, M.D.

JEFFREY T. PEARSON, P.E.
DEPUTY DIRECTOR

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

May 3, 2018

REF: RFD.4840.6

TO: Yukino Uchiyama, Associate
Munekiyo Hiraga

FROM: Jeffrey T. Pearson, P.E., Deputy Director
Commission on Water Resource Management

SUBJECT: Chapter 343, Hawaii Revised Statutes, Early Consultation Request for Proposed West Maui Water Source Development Project (State Well No. 6-5638-004 and State Well No. 6-5738-002), Lahaina, Maui, Hawaii

FILE NO.: RFD.4840.6
TMK NO.: (2) 4-4-004:009, 011, 019, (2) 4-3-001:017, (2) 4-4-002:018, (2) 4-3-001:017, 084, (2) 4-4-002:014, 015

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.
- [ ] 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.
- [X] 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: Both wells have been constructed and accepted as complete and meet the Hawaii Well Construction Standards and certificates have been issued. Pump installation permits are now required for both.

If you have any questions, please contact W. Roy Hardy of the Commission staff at 587-0225.

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

May 7, 2018

MEMORANDUM

TO: **DLNR Agencies:**
___Div. of Aquatic Resources
___Div. of Boating & Ocean Recreation
_X_Engineering Division
_X_Div. of Forestry & Wildlife
___Div. of State Parks
_X_Commission on Water Resource Management
_X_Office of Conservation & Coastal Lands
_X_Land Division – Maui District
_X_Historic Preservation

FROM: Russell Y. Tsuji, Land Administrator
SUBJECT: Early Consultation Request for Proposed **West Maui Water Source Development Project** (State Well Nos. 6-5638-004 and 6-5738002)
LOCATION: Lahaina, Island of Maui; TMK: (2) 4-4-Various and (2) 4-3-001: Various
APPLICANT: Munekiyo Hiraga on behalf of County of Maui, Department of Water Supply

Transmitted for your review and comment is information on the above-referenced subject matter. We would appreciate your comments by **May 15, 2018.**

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact Darlene Nakamura at 587-0417. Thank you.

Attachments

( ) We have no objections.
(✓) We have no comments.*
( ) Comments are attached.

Signed: K. Tiger Mills
Print Name: K. Tiger Mills
Date: May 9 2018

* Not In The Conservation District

cc: Central Files

MUNEKIYO HIRAGA
Planning Project Management Subdivision Entitlements

Michael T. Munekiyo
CHAIRMAN
Karlynn K. Fukuda
PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

March 21, 2019

Russell Y. Tsuji, Land Administrator
State of Hawai'i
Department of Land and Natural Resources
P.O. Box 621
Honolulu, Hawai'i 96809

SUBJECT: Early Consultation for Proposed West Maui Source Development Project (State Well No. 6-5638-004 and State Well No. 6-5738-002), Lahaina, Maui, Hawai'i

Dear Mr. Tsuji:

Thank you for your letter dated May 17, 2018, providing early consultation comments for the proposed West Maui Source Development project in Lāhainā, Maui, Hawai'i. On behalf of the County of Maui, Department of Water Supply (DWS), we offer the following information in response to the comments noted in your letter.

Commission on Water Resource Management

As applicable, Pump Installation Permit(s) will be obtained before groundwater is developed as a source of supply for the subject project.

Office of Conservation and Coastal Lands

We appreciate your confirmation that the subject project is not within the State Conservation District and you have no comment to offer at the present time.

We appreciate your input and will include a copy of your comment letter and this response letter in the Draft Environmental Assessment for the project. Should you have any questions or require additional information, please feel free to contact me at 983-1233.

Very truly yours,

Yukino Uchiyama
Associate

YU:yp
cc: Curtis Eaton, Department of Water Supply
Ronald M. Fukumoto, Fukumoto Engineering, Inc.
Alan L. Unemori, Warren S. Unemori Engineering, Inc.
K:\DATA\FE\Kahana Production Well\Applications\ECL\EC Response\DLNR OCCL.ltr.doc

MAY 21 2018

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

May 21, 2018

Munekiyo Hiraga, Inc.
Attention: Ms. Yukino Uchiyama
305 High Street, Suite 104
Wailuku, Hawaii 96793

via email: planning@munekiyohiraga.com

Dear Ms. Uchiyama:

SUBJECT: Early Consultation Request for Proposed **West Maui Water Source Development Project** (State Well Nos. 6-5638-004 and 6-5738002) located at Lahaina, Island of Maui; TMK: (2) 4-4-Various and (2) 4-3-001: Various

Thank you for the opportunity to review and comment on the subject matter. In addition to the comments previously sent you on May 17, 2018, enclosed are comments from the Engineering Division on the subject matter. Should you have any questions, please feel free to call Darlene Nakamura at (808) 587-0417. Thank you.

Sincerely,

Russell Y. Tsuji
Land Administrator

Enclosure
cc: Central Files

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

May 7, 2018

'18 MAY 07 PM 1:21 ENGINEERING
RECEIVED
LAND DIVISION

2018 MAY 17 AM 10:35
DEPT OF LAND & NATURAL RESOURCES
STATE OF HAWAII

MEMORANDUM

TO: **DLNR Agencies:**
___Div. of Aquatic Resources
___Div. of Boating & Ocean Recreation
X Engineering Division
X Div. of Forestry & Wildlife
___Div. of State Parks
X Commission on Water Resource Management
X Office of Conservation & Coastal Lands
X Land Division – Maui District
X Historic Preservation

FROM: Russell Y. Tsuji, Land Administrator
SUBJECT: Early Consultation Request for Proposed **West Maui Water Source Development Project** (State Well Nos. 6-5638-004 and 6-5738002)
LOCATION: Lahaina, Island of Maui; TMK: (2) 4-4-Various and (2) 4-3-001: Various
APPLICANT: Munekiyo Hiraga on behalf of County of Maui, Department of Water Supply

Transmitted for your review and comment is information on the above-referenced subject matter. We would appreciate your comments by **May 15, 2018.**

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact Darlene Nakamura at 587-0417. Thank you.

Attachments

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

Signed: _____

Print Name: Carty S. Chang, Chief Engineer

Date: 5/15/18

cc: Central Files

DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

LD/Russell Y. Tsuji

Ref: Early Consultation Request for Proposed West Maui Water Source Development Project (State Well Nos. 6-5638-004 and 6-5738002), Lahaina, Island of Maui; TMK: (2) 4-4-Various and (2) 4-3-001: Various

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.hawaiinfip.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) 241-4846.

Signed: _____
CARTY S. CHANG, CHIEF ENGINEER

Date: 5/15/18

MUNEKIYO HIRAGA
Planning, Project Management, Environmental Services

Michael T. Munekiyo
CHAIRMAN
Karlynn K. Fukuda
PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

March 21, 2019

Russell Y. Tsuji, Land Administrator
State of Hawai'i
Department of Land Natural Resources
Land Division
P.O. Box 621
Honolulu, Hawai'i 96809

SUBJECT: Early Consultation for Proposed West Maui Source Development Project (State Well No. 6-5638-004 and State Well No. 6-5738-002), Lahaina, Maui, Hawai'i

Dear Mr. Tsuji:

Thank you for your letter dated May 21, 2018, providing early consultation comments for the proposed West Maui Source Development project in Lāhainā, Maui, Hawai'i. On behalf of the County of Maui, Department of Water Supply (DWS), we offer the following information in response to the comments noted in your letter.

Engineering Division

Thank you for your information. The Draft Environmental Assessment (EA) will include discussion regarding the Flood Hazard Zone designation for the project.

Maui: 305 High Street, Suite 104 Wailuku, Hawaii 96793 Tel: 808.244.2015 Fax: 808.244.8729
Oahu: 735 Bishop Street, Suite 321 Honolulu, Hawaii 96813 Tel: 808.983.1233
www.munekiyohiraga.com

We appreciate your input and will include a copy of your comment letter and this response letter in the Draft EA for the project. Should you have any questions or require additional information, please feel free to contact me at 983-1233.

Very truly yours,

Yukino Uchiyama
Associate

YU:yp
cc: Curtis Eaton, Department of Water Supply
Ronald M. Fukumoto, Fukumoto Engineering, Inc.
Alan L. Unemori, Warren S. Unemori Engineering, Inc.
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DAVID Y. IGE
GOVERNOR

MAY 23 2018

JADE T. BUTAY
DIRECTOR

Deputy Directors
ROY CATALANI
ROSS M. HIGASHI
EDWIN H. SNIFFEN
DARRELL T. YOUNG

IN REPLY REFER TO:
DIR 0490
STP 8.2425

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

May 21, 2018

Ms. Yukino Uchiyama
Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Ms. Uchiyama:

Subject: West Maui Water Source Development Project
Early Consultation for Draft Environmental Assessment (DEA)
TMK: (2) 4-3-001:017, 018 (pors.); 4-4-002:014, 015, 018 (pors.);
4-4-004:009, 011, 019 (pors.)

The Department of Transportation (DOT) understands, the County of Maui, Department of Water Supply (DWS) is proposing the West Maui Water Source Development Project, which involves development (installation of permanent well pumps) of two (2) groundwater wells: State Well No. 6-5638-004 (Mahinahina Well), which is hereinafter referred to as West Maui Well No. 1, and State Well No. 6-5738-002 (Kahana Well), which is hereinafter referred to as West Maui Well No. 2, and construction of related improvements necessary to connect the wells to DWS's West Maui Water System.

DOT comments on the subject project are as follows:

Airports Division

1. The proposed improvements are located on multiple parcels within five miles of Kapalua Airport. All developments within five miles of Hawaii State airports are subject to the State of Hawaii, Office of Planning, Technical Assistance Memorandum: http://files.hawaii.gov/dbedt/op/docs/TAM-FAA-DOT-Airports_08-01-2016.pdf.

2. If any of the project features attract hazardous wildlife, create a glint and glare hazard to pilots, or create an aerial obstruction hazard to flight operations, the Applicant/Property Owner must coordinate with proper officials and agencies and must implement appropriate mitigation to address the hazards.

It is strongly recommended that you review the Federal Aviation Administration Advisory Circular 150/5200-33B, *Hazardous Wildlife Attractants On or Near Airports* for guidance.

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

Sincerely,

JADE T. BUTAY
Director of Transportation

MUNEKIYO HIRAGA
Planning, Project Management, Sustainable Solutions

Michael T. Munekiyo
CHAIRMAN
Karlynn K. Fukuda
PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

March 21, 2019

Jade T. Butay, Director of Transportation
State of Hawai'i
Department of Transportation
869 Punchbowl Street
Honolulu, Hawai'i 96813-5097

SUBJECT: Early Consultation for Proposed West Maui Source Development Project (State Well No. 6-5638-004 and State Well No. 6-5738-002), Lahaina, Maui, Hawai'i (DIR 0490 STP 8.2425)

Dear Mr. Butay:

Thank you for your letter dated May 21, 2018, providing early consultation comments for the proposed West Maui Source Development Project in Lāhainā, Maui, Hawai'i. On behalf of the County of Maui, Department of Water Supply (DWS), we offer the following information in response to the comments noted in your letter.

Airports Division

1. Thank you for your information. The analysis of the potential effect of the proposed project on Kapalua Airport will be included in the Draft Environmental Assessment (EA). A copy of your letter was provided to the project's engineers for review and consideration during the engineering design phase of the project.

2. If determined necessary, the applicant will coordinate with proper officials and agencies and implement appropriate mitigations to address hazardous wildlife, possible glint and glare hazards to pilots, and/or aerial obstructions to flight operations.

We appreciate your input and will include a copy of your comment letter and this response letter in the Draft EA for the project. Should you have any questions or require additional information, please feel free to contact me at 983-1233.

Very truly yours,

Yukino Uchiyama
Associate

YU:yp
cc: Curtis Eaton, Department of Water Supply
Ronald M. Fukumoto, Fukumoto Engineering, Inc.
Alan L. Unemori, Warren S. Unemori Engineering, Inc.
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DAVID Y. IGE
GOVERNOR

MAY 07 2018

ARTHUR J. LOGAN
MAJOR GENERAL
ADJUTANT GENERAL

KENNETH S. HARA
BRIGADIER GENERAL
DEPUTY ADJUTANT GENERAL

STATE OF HAWAII
DEPARTMENT OF DEFENSE
OFFICE OF THE ADJUTANT GENERAL
3949 DIAMOND HEAD ROAD
HONOLULU, HAWAII 96816-4495

May 2, 2018

Munekiyo Hiraga
Attn: Ms. Yukino Uchiyama, Associate
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Ms. Uchiyama:

Subject: Chapter 343, Hawai'i Revised Statutes,
Early Consultation Request for Proposed Water Source Development Project
(State Well No. 6-5638-004 and State Well No. 6-5738-002),
Lahaina, Maui, Hawaii

Thank you for the opportunity to comment on the above project. The State of Hawaii Department of Defense has no comments to offer relative to the project.

If you have any questions or concerns, please have your staff contact Mr. Wade Ishii, Acting Assistant Chief Engineering Officer at (808) 733-8441.

Sincerely,

NEAL S. MITSUYOSHI
Colonel, Hawaii National Guard
Chief Engineering Officer

c: Ms. Havinne Okamura, Hawaii Emergency Management Agency

MUNEKIYO HIRAGA
Planning Project Management Sustainable Solutions

Michael T. Munekiyo
CHAIRMAN
Karlynn K. Fukuda
PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

March 21, 2019

Neal S. Mitsuyoshi, Colonel
Chief Engineering Officer
State of Hawai'i
Department of Defense
3949 Diamond Head Road
Honolulu, Hawai'i 96816-4495

SUBJECT: Early Consultation for Proposed West Maui Source Development Project (State Well No. 6-5638-004 and State Well No. 6-5738-002), Lahaina, Maui, Hawai'i

Dear Colonel Mitsuyoshi:

Thank you for your letter dated May 2, 2018, providing early consultation comments for the proposed West Maui Source Development project in Lāhainā, Maui, Hawai'i. On behalf of the County of Maui, Department of Water Supply (DWS), we appreciate the letter confirming that you have no comment at the present time.

We appreciate your input and will include a copy of your comment letter and this response letter in the Draft Environmental Assessment for the project. Should you have any questions or require additional information, please feel free to contact me at 983-1233.

Very truly yours,

Yukino Uchiyama

Yukino Uchiyama
Associate

YU:yp
cc: Curtis Eaton, Department of Water Supply
Ronald M. Fukumoto, Fukumoto Engineering, Inc.
Alan L. Unemori, Warren S. Unemori Engineering, Inc.
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MAY 29 2018

DAVID Y. IGE
GOVERNOR
STATE OF HAWAII

DOUGLAS S. CHIN
LT. GOVERNOR
STATE OF HAWAII

JOBIE M. K. MASAGATANI
CHAIRMAN
HAWAIIAN HOMES COMMISSION

WILLIAM J. AILA, JR.
DEPUTY TO THE CHAIRMAN

STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS

P. O. BOX 1879
HONOLULU, HAWAII 96805

May 22, 2018

Yukino Uchiyama, Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawai`i 96793

Subject: Chapter 343, Hawai'i Revised Statutes, Early Consultation Comments for the Proposed West Maui Water Source Development Project (State Well No. 6-5638-004 and State Well No. 6-5738-002); Lahaina, Maui, Hawai'i

Dear Ms. Uchiyama:

The Department of Hawaiian Home Lands (DHHL) acknowledges receiving the request for early consultation comments on the above-mentioned project. After reviewing the information provided, we anticipate impacts to Hawaiian Home Lands resulting from the project due to its proximity to our lands at Honokōwai.

We note that the DHHL highly encourages all agencies to consult with Hawaiian Homestead community associations and other (N)native Hawaiian organizations when preparing environmental review documents in order to better assess the potential for impacts to cultural and natural resources, access, and other rights of Native Hawaiians. We appreciate your effort in this regard.

We understand the proposed project will involve the development of two (2) groundwater wells and related improvements necessary to connect the wells to the Department of Water Supply's (DWS) West Maui Water System.

The DHHL is currently in the process of developing a new well on State lands in Honokōwai which is intended to serve potential future development in the area. The DHHL's 2004 Maui Island Plan identifies the Honokōwai tract for residential, community, industrial, commercial, and general agriculture uses.

The analysis contained in the Draft Environmental Assessment (EA) for the proposed project should discuss potential impacts that may result from the development of the DWS' proposed wells to DHHL's well and land uses.

In addition, the Draft EA should examine and discuss the rights that the DHHL has to "adequate reserves of water for current and foreseeable development and use of Hawaiian home lands as set forth in section 221 of the Hawaiian Homes Commission Act", as codified in the State Water Code, Hawai'i Revised Statutes, Section 174C-101.

We note that the DHHL continues to collaborate on the design and construction of County of Maui water improvements in West Maui. As such, we are in support of the proposed 500,000 gallon tank on DHHL lands as we understand that it is also intended to accept transmission water from DHHL's proposed Honokōwai Well mentioned above. DHHL has an interest in the County's proposed well improvements and continues to coordinate the design and construction of potable source and other improvements situated on Hawaiian Home Lands which ultimately assists with planned DHHL development in the region.

Mahalo for the opportunity to provide comments. If you have any questions, please call Bryan Esmeralda, Maui Planner for the DHHL Planning Office at 760-5125 or contact via email at bryan.k.esmeralda@hawaii.gov.

Sincerely,

Jobie M.K. Masagatani, Chairman
Hawaiian Homes Commission

MUNEKIYO HIRAGA
Planning, Project Management & Sustainable Solutions

Michael T. Munekiyo
CHAIRMAN
Karlynn K. Fukuda
PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

March 21, 2019

Jobie M.K. Masagatani, Chairman
State of Hawai'i
Department of Hawaiian Homelands
P.O. Box 1879
Honolulu, Hawai'i 96805

SUBJECT: Early Consultation for Proposed West Maui Source Development Project (State Well No. 6-5638-004 and State Well No. 6-5738-002), Lahaina, Maui, Hawai'i

Dear Ms. Masagatani:

Thank you for your letter dated May 22, 2018, providing early consultation comments for the proposed West Maui Source Development Project in Lāhainā, Maui, Hawai'i. On behalf of the County of Maui, Department of Water Supply (DWS), we offer the following information in response to the comments noted in your letter.

We understand your concern regarding the potential impacts to the Hawaiian Home Lands due to its proximity to lands owned at Honokōwai and that Department of Hawaiian Home Lands (DHHL) is in the process of developing a new well on State land in Honokōwai intended to serve potential future development in the area.

Consultation with Hawaiian Homestead Community Associations and other native Hawaiian organizations will be undertaken through the Environmental Assessment (EA) process and National Historic Preservation Act, Section 106 process.

As recommended, the Draft EA will discuss potential impacts that may result from the development of the DWS' proposed wells to the DHHL's well and land uses. In addition, the Draft EA will examine and discuss the rights the DHHL has, set forth in section 221 of the Hawaiian Homes Commission Act, as codified in the State Water Code, Hawai'i Revised Statutes, Section 174C-101.

We appreciate your support for the proposed 500,000 gallon tank on the DHHL land and it is DWS' intention to continue to collaborate with DHHL on the design and construction of the proposed project.

We appreciate your input and will include a copy of your comment letter and this response letter in the Draft EA for the project. Should you have any questions or require additional information, please feel free to contact me at 983-1233.

Very truly yours,

Yukino Uchiyama
Associate

YU:yp
cc: Curtis Eaton, Department of Water Supply
Ronald M. Fukumoto, Fukumoto Engineering, Inc.
Alan L. Unemori, Warren S. Unemori Engineering, Inc.
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MAY 14 2018

OFFICE OF PLANNING
STATE OF HAWAII

DAVID Y. IGE
GOVERNOR

LEO R. ASUNCION
DIRECTOR
OFFICE OF PLANNING

235 South Beretania Street, 6th Floor, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

Telephone: (808) 587-2846
Fax: (808) 587-2824
Web: http://planning.hawaii.gov/

DTS201805111351RI

May 11, 2018

Ms. Yukino Uchiyama
Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Ms. Uchiyama:

Subject: Early Consultation Request for Proposed West Maui Water Source Development Project (State Well No. 6-5638-004 and State Well No. 6-5738-002), Lahaina, Maui;
TMKs: (2) 4-3-001: 017; 4-3-001: 084; 4-4-002: 014, 015, and 018; 4-4-004: 009, 011, and 019

Thank you for the opportunity to provide comments on the early consultation request for the preparation of a Draft Environmental Assessment (Draft EA) for the West Maui Water Source Development project. The early consultation review material was transmitted to our office via letter dated April 24, 2018.

It is our understanding the County of Maui, Department of Water Supply (DWS) is proposing a water source expansion project for West Maui. The water development project involves the installation of permanent well pumps of two groundwater wells, as well as related improvements that will connect the wells to DWS's West Maui Water System. The project as envisioned will provide an additional source of potable water to West Maui. These additional groundwater sources are expected to improve the reliability of the DWS water system year-round.

The Office of Planning (OP) has reviewed the transmitted material and has the following comments to offer:

1. The Hawaii State Planning Act. Pursuant to Hawaii Administrative Rules (HAR) § 11-200-10(4) – general description of the action's technical, economic, social, and environmental characteristics; this project must demonstrate that it is consistent with State environmental, social, economic goals, and policies. Hawaii Revised Statutes (HRS) Chapter 226, the Hawaii State Planning Act, provides goals, objectives, policies, planning coordination and implementation, and priority guidelines for growth, development, and the allocation of resources throughout the State.

The Draft EA should include a discussion on the project's ability to meet all parts of HRS Chapter 226. The analysis should examine consistency with these statutes, clarify where it is in conflict with them, and what steps will be taken for it be in compliance with HRS Chapter 226. If any of these statutes are not applicable to the project, the analysis should affirmatively state such determination, followed by discussion paragraphs.

2. The Hawaii Coastal Zone Management Program. The Coastal Zone Management (CZM) area is defined as "all lands of the State and the area extending seaward from the shoreline to the limit of the State's police power and management authority, including the U.S. territorial sea" (HRS § 205A-1).

   The Draft EA should include an assessment as to how the proposed action conforms to each of the goals and objectives as listed in HRS § 205A-2. Compliance with HRS § 205A-2 is an important component for satisfying the requirements of HRS Chapter 343.

3. Stormwater Runoff, Erosion Control, and Flood Mitigation. Pursuant to HAR § 11-200-10(6) – identification and summary of impacts and alternatives considered; to ensure that the surface water and nearshore environment along the coastal area of West Maui remain protected, the negative effects of stormwater inundation from this project should be evaluated in the Draft EA.

   Issues that may be examined include, but are not limited to, project site characteristics in relation to flood and erosion prone areas, the potential vulnerability of surface water resources, the soil absorption characteristics in the project area, and the amount of permeable versus impervious surfaces. Assessing the need for mitigation measures in the protection for surface water resources and the coastal ecosystem should take this into account, pursuant to HAR § 11-200-10(7).

   It is noted that the West Maui Well No. 1, Well No. 2, and the 500,000-gallon Control Tank project components involve site development activities such as grading, drainage installation, and landscaping, which are consistent with stormwater runoff control methods and may limit the area's vulnerability to soil erosion and land-based pollutants from impacting the downslope coastal environment.

   To assist in the development of additional stormwater runoff strategies, OP has developed the Stormwater Impact Assessment. This guidance can be used in your stormwater impact evaluation. This document can be used to identify and evaluate

information on hydrology, stressors, sensitivity of aquatic and riparian resources, and management measures to control runoff occurrences. Mitigation measures and best management practices listed in this document can be applied to water runoff strategies to prevent damage to coastal ecosystems. This document will assist in integrating stormwater impact assessment within the planning and environmental review process of a project.

The document can be viewed or downloaded via our website at: http://files.hawaii.gov/dbedt/op/czm/initiative/stomwater_imapct/final_stormwater_impact_assessments_guidance.pdf.

If you have any questions regarding this comment letter, please contact Joshua Hekekia of our office at (808) 587-2845.

Sincerely,

Leo R. Asuncion
Director

MUNEKIYO HIRAGA
Planning, Project Management, Sustainable Solutions

Michael T. Munekiyo
CHAIRMAN
Karlynn K. Fukuda
PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

March 21, 2019

Leo R. Asuncion, Director
State of Hawai'i
Office of Planning
P. O. Box 2359
Honolulu, Hawai'i 96804

SUBJECT: Early Consultation for Proposed West Maui Source Development Project (State Well No. 6-5638-004 and State Well No. 6-5738-002), Lahaina, Maui, Hawai'i (DTS201805111351RI)

Dear Mr. Asuncion:

Thank you for your letter dated May 11, 2018, providing early consultation comments for the proposed West Maui Source Development Project in Lāhainā, Maui, Hawai'i. On behalf of the County of Maui, Department of Water Supply (DWS), we offer the following information in response to the comments noted in your letter.

1. The Hawai'i State Planning Act

Pursuant to Hawai'i Administrative Rules (HAR) 11-200-10(4), the proposed project will demonstrate consistency with State environmental, social, economic goals, and policies. The Draft Environmental Assessment (EA) will include an analysis that will examine the consistency with the statues as well as clarify where there is conflict and what steps will be taken to reach compliance with Hawai'i Revised Statutes (HRS), Chapter 226.

2. The Hawai'i Coastal Zone Management Program

The Draft EA will include an assessment as to how the proposed actions conform to each of the goals and objectives as listed in HRS 205A-2, to satisfy HRS Chapter 343 requirements.

3. Stormwater Runoff, Erosion Control, and Flood Mitigation

Pursuant to HAR 11-200-10(6), the negative effects of stormwater inundation from this project will be evaluated in the Draft EA to ensure that the surface water

and nearshore environment, along the coastal area of West Maui remain protected.

An assessment on the needed mitigation measures will examine a variety of issues, pursuant to HAR 11-200-10(7). These issues will include, but are not limited to, project site characteristics in relation to flood and erosion prone areas, potentially vulnerable surface water resources, and onsite soil absorption characteristics.

Thank you for the information regarding the Stormwater Impact Assessment guide. This will be used during the stormwater impact evaluation to identify and examine information on hydrology, stressors, sensitivity of aquatic and riparian resources, and management measures to control runoff occurrences. Mitigation measures and best management practices listed in the document will be used when applicable for the subject project.

We appreciate your input and will include a copy of your comment letter and this response letter in the Draft EA for the project. Should you have any questions or require additional information, please feel free to contact me at 983-1233.

Very truly yours,

Yukino Uchiyama
Associate

YU:yp
cc: Curtis Eaton, Department of Water Supply
Ronald M. Fukumoto, Fukumoto Engineering, Inc.
Alan L. Unemori, Warren S. Unemori Engineering, Inc.
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ALAN M. ARAKAWA
Mayor

STEWART STANT
Director

MICHAEL M. MIYAMOTO
Deputy Director

JUN 25 2018

MICHAEL RATTE
Solid Waste Division

ERIC NAKAGAWA, P.E.
Wastewater Reclamation Division

COUNTY OF MAUI
DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT
2050 MAIN STREET, SUITE 2B
WAILUKU, MAUI, HAWAII 96793

June 6, 2018

Munekiyo Hiraga
Attention: Ms. Yukino Uchiyama, Associate
305 High Street, Suite 104
Wailuku, Hawaii 96793

SUBJECT: WEST MAUI WATER SOURCE DEVELOPMENT PROJECT EARLY CONSULTATION REQUEST (STATE WELL NO. 6-5638-004 AND 6-5738-002) LAHAINA, MAUI, HAWAII

We reviewed the subject application and have the following comments:

1. Solid Waste Division comments:

   a. None.

2. Wastewater Reclamation Division (WWRD) comments:

   a. WWRD has upcoming plans to work on the reservoirs adjacent to the existing Mahinahina Water Treatment Plant, therefore the Department of Water Supply shall coordinate the subject project with the WWRD.

If you have any questions regarding this letter, please contact Michael Miyamoto at 270-8230.

Sincerely,

MICHAEL M. MIYAMOTO
Deputy Director of Environmental Management

MUNEKIYO HIRAGA
Planning, Project Management, Sustainable Solutions

Michael T. Munekiyo
CHAIRMAN
Karlynn K. Fukuda
PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

March 21, 2019

Michael M. Miyamoto, Director
County of Maui
Department of Environmental Management
2050 Main Street, Suite 2B
Wailuku, Hawai'i 96793

SUBJECT: Early Consultation for Proposed West Maui Water Source Development Project (State Well No. 6-5638-004 and State Well No. 6-5738-002), Lahaina, Maui, Hawai'i

Dear Mr. Miyamoto:

Thank you for your letter dated June 6, 2018, providing early consultation comments for the proposed West Maui Source Development project in Lāhainā, Maui, Hawai'i. On behalf of the County of Maui, Department of Water Supply (DWS), we offer the following responses in the order of your comments.

1. Solid Waste Division

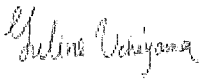
Thank you for your confirmation that you have any comments on the subject project at the present time.

2. Wastewater Reclamation Division (WWRD)

Thank you for your information. We will coordinate with the WWRD regarding the upcoming plans to work on the reservoirs adjacent to the existing Mahinahina Water Treatment Plant.

We appreciate your input and will include a copy of your comment letter and this response letter in the Draft Environmental Assessment for the project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,



Yukino Uchiyama
Associate

YU:yp
cc: Curtis Eaton, Department of Water Supply
Ronald M. Fukumoto, Fukumoto Engineering, Inc.
Alan L. Unemori, Warren S. Unemori Engineering, Inc.
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DEPARTMENT OF
HOUSING AND HUMAN CONCERNS
COUNTY OF MAUI

APR 30 2018

ALAN M. ARAKAWA
Mayor
CAROL K. REIMANN
Director
JAN SHISHIDO
Deputy Director

2200 MAIN STREET • SUITE 546 • WAILUKU, HAWAII 96793 • PHONE (808) 270-7805 • FAX (808) 270-7165
MAILING ADDRESS: 200 SOUTH HIGH STREET • WAILUKU, HAWAII 96793 • EMAIL: director.hhc@mauicounty.gov

April 26, 2018

Ms. Yukino Uchiyama, Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Ms. Uchiyama:

SUBJECT: Chapter 343, Hawaii Revised Statutes, Early Consultation Request for Proposed West Maui Water Source Development Project (State Well No. 6-5638-004 and State Well No. 6-5738-002), Lahaina, Maui, Hawaii

The Department has reviewed the request for Early Consultation for the above subject project. Based on our review, we have determined that the subject project is not subject to Chapter 2.96, Maui County Code. At the present time, the Department has no additional comments to offer.

Please call Mr. Buddy Almeida of our Housing Division at (808)270-7351 if you have any questions.

Sincerely,

CAROL K. REIMANN
Director of Housing and Human Concerns

xc: Housing Division

MUNEKIYO HIRAGA
Planning Project Management Sustainable Solutions

Michael T. Munekiyo
CHAIRMAN
Karlynn K. Fukuda
PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

March 21, 2019

Lori Tsuhako, Acting Director
County of Maui
Department of Housing and Human Concerns
2200 Main Street, Suite 546
Wailuku, Hawai'i 96793

SUBJECT: Early Consultation for Proposed West Maui Source Development Project (State Well No. 6-5638-004 and State Well No. 6-5738-002), Lahaina, Maui, Hawai'i

Dear Ms. Tsuhako:

Thank you for your department's letter dated April 26, 2018, providing early consultation comments for the proposed West Maui Source Development project in Lāhainā, Maui, Hawai'i. On behalf of the County of Maui, Department of Water Supply (DWS), we appreciate your letter of confirmation that the proposed project is not subject to Chapter 2.96, Maui County Code and that the Department has no additional comments.

We appreciate your input and will include a copy of your comment letter and this response letter in the Draft Environmental Assessment for the project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,

Yukino Uchiyama
Associate

YU:yp
cc: Curtis Eaton, Department of Water Supply
Ronald M. Fukumoto, Fukumoto Engineering, Inc.
Alan L. Unemori, Warren S. Unemori Engineering, Inc.
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ALAN M. ARAKAWA
Mayor

KA'ALA BUENCONSEJO
Director

BRIANNE L. SAVAGE
Deputy Director

(808) 270-7230
FAX (808) 270-7934

MAY 07 2018

DEPARTMENT OF PARKS & RECREATION

700 Hali'a Nakoa Street, Unit 2, Wailuku, Hawaii 96793

May 1, 2018

Ms. Yukino Uchiyama, Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, HI 96793

Dear Ms. Uchiyama:

SUBJECT: CHAPTER 343, HAWAII REVISED STATUTES, EARLY CONSULTATION REQUEST FOR PROPOSED WEST MAUI WATER SOURCE DEVELOPMENT PROJECT (STATE WELL NO. 6-5638-004 AND STATE WELL NO. 6-5738-002), LAHAINA, MAUI, HAWAII

Thank you for the opportunity to review and comment on the proposed West Maui Water Source Development Project. The Department is in support of this project and would like to review the project as it develops. In accordance with the requirements of Chapter 343, Hawaii Revised Statutes (HRS) and Section 11-2-00-6, Hawaii Administrative Rules (HAR) please provide a copy of the Draft Environmental Assessment (EA).

Feel free to contact me or Robert Halvorson, Chief of Planning and Development, at 270-7387, should you have any questions.

Sincerely,

KA'ALA BUENCONSEJO
Director

c: Robert Halvorson, Chief of Planning and Development

KB:RH:do

MUNEKIYO HIRAGA
Planning Project Management Sustainable Solutions

Michael T. Munekiyo
CHAIRMAN
Karlynn K. Fukuda
PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

March 21, 2019

Karla Peters, Director
County of Maui
Department of Parks & Recreation
700 Hali'a Nakoa Street, Unit 2
Wailuku, Hawai'i 96793

SUBJECT: Early Consultation for Proposed West Maui Source Development Project (State Well No. 6-5638-004 and State Well No. 6-5738-002), Lahaina, Maui, Hawai'i

Dear Ms. Peters:

Thank you for your department's letter dated May 1, 2018, providing early consultation comments for the proposed West Maui Source Development project in Lāhainā, Maui, Hawai'i. On behalf of the County of Maui, Department of Water Supply (DWS), we appreciate your letter confirming that your Department is in support of the project. A copy of the Draft Environmental Assessment (EA) will be provided for your review.

We appreciate your input and will include a copy of your comment letter and this response letter in the Draft EA for the project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,

Yukino Uchiyama
Associate

YU:yp
cc: Curtis Eaton, Department of Water Supply
Ronald M. Fukumoto, Fukumoto Engineering, Inc.
Alan L. Unemori, Warren S. Unemori Engineering, Inc.
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ALAN M. ARAKAWA
Mayor

WILLIAM R. SPENCE
Director

MICHELE CHOUTEAU McLEAN
Deputy Director

MAY 15 2018

COUNTY OF MAUI
DEPARTMENT OF PLANNING

May 16, 2018

Ms. Yukino Uchiyama, Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Ms. Uchiyama:

SUBJECT: EARLY CONSULTATION IN PREPARATION OF A DRAFT ENVIRONMENTAL ASSESSMENT (EA) FOR THE PROPOSED WEST MAUI WATER SOURCE DEVELOPMENT PROJECT (STATE WELL NUMBERS 6-5638-004 AND 6-5738-002), LAHAINA, ISLAND OF MAUI, HAWAII; TMKS: (2) 4-4-004:011, (2) 4-4-004:009, (2) 4-3-001:017, (2) 4-4-002:018, (2) 4-3-001:084, (2) 4-4-002:014, (2) 4-4-002:015, (2) 4-4-004:019 (RFC 2018/0037)

The Department of Planning (Department) is in receipt of your letter, dated April 24, 2018, requesting comments for the above-referenced project. The Department understands the proposed action includes the following:

- Construction of two (2) wells: Well number one (1) will include a 750 gallons per minute (gpm) well pump, 300,000-gallon control tank, site development of approximately two (2) acres and electrical improvements. Well number two (2) will include a 1,000 gpm well pump, 30,000-gallon control tank, site development of approximately one (1) acre and electrical improvements.

- Construction of a 50,000-gallon control tank, which will include site development of approximately 1.8 acres.

- Installation of waterlines and access roads. Well number one (1) will require the installation of 6,500 feet (ft.) of 12-inch waterline and construction of an access road, connecting to the control tank. Well number two (2) will require the installation of approximately 7,600 ft. of 8-inch and 12-inch waterline and access road construction.

- The proposed action is a "minor utility facility," as defined in Section 19.04.040, Maui County Code (MCC) and is considered a permitted use in the Agricultural District.

- Inasmuch as the proposed action involves the use of County and State funds and County and State lands, an EA is required.

- The Department of Water Supply is the approving agency of the Final EA.

Based on the foregoing, the Department provides the following comments in preparation of the Draft EA:

1. Please ensure that the Draft EA includes land use designations for all parcels. Please include the Zoning and Flood Confirmation forms that were completed by the Department. We noticed that previously, the Final EA for the Mahinahina Exploratory Well only mentioned parcel (2) 4-4-004:009. The Final EA for the West Maui Exploratory Well only mentioned (2) 4-3-001:017. The proposed action will involve more parcels, so the designations need to be considered during our project review.

2. The project will occur on land owned by the Maui Land and Pineapple Company (MLP) and Department of Hawaiian Home Lands (DHHL). Please indicate whether there has been any coordination with them throughout the design of the project and whether easements will be recorded with the Bureau of Conveyances and whether Right of Entry permits will be obtained for access to the parcels.

3. Include photographs of the project area, existing water tank, immediate surrounding area, and if possible, a rendering of how the new tank will look once it is installed.

4. Please indicate how the proposed project will address population growth and potable water demands, and the impact that the new wells will have to meet the demand in the Draft EA.

5. In the early consultation request for the West Maui Exploratory Well, the U.S. Fish and Wildlife Service commented that there should be no removal or trimming of trees greater than fifteen (15) ft. tall during the Hawaiian Hoary Bat breeding season. They also commented construction activities should cease if the Hawaiian goose is found within 100 ft. and if a nest is found within 150 ft. of the site. The agency further requested that lights should be down-shielded so as not to pose a risk to seabirds that may fly over the site. Since the proposed project will involve the same parcel, we encourage the Applicant to undertake the same mitigation measures and include it in the Draft EA.

6. Please work with the Department of Health Safe Drinking Water Branch to submit a satisfactory engineering report that addresses the requirements of Hawaii Administrative Rules 11-20-29.

7. A National Pollutant Discharge Elimination System Permit may be required for stormwater runoff, and we recommend that the Applicant contact the Department of Health Clean Water Branch for compliance.

8. In the Final EA for the West Maui Exploratory Well No. 2, the Department of Land and Natural Resources (DLNR) Commission on Water Resource Management commented that four (4) wells lie down gradient, about 2/3 miles away, from the proposed West Maui Well No. 2 and pump tests should have been done to determine whether there will be any interference. Please mention briefly whether any tests were done and whether it can be determined there be no interference in the Draft EA.

9. The project may have non-point impacts to coastal waters. Since the parcels are zoned "Agricultural," please review the Hawaii Watershed Guidance Section 5 for agriculture management measures for runoff.

10. Please ensure that Best Management Practices (BMPs) are implemented prior to project construction to mitigate impacts to air and water quality.

11. The proposed electrical line extensions and waterlines will cross the Honokohau Ditch and some gulches. For the Draft EA, please indicate all of the water bodies, including wetlands, ditches, gulches and streams that will be impacted as a result of the proposed project, in order for the United States Army Corps. of Engineers to determine whether the features will be subject to the Clean Water Act. Please indicate how the electrical and waterlines will cross the areas and how any adverse impacts, such as soil erosion, will be mitigated.

12. Please discuss whether there were any archaeological surveys conducted on the parcels not covered by the previous EAs. Please coordinate with the Department of Land and Natural Resources-State Historic Preservation Division (DLNR-SHPD) to ensure that no historic properties will be impacted and that archaeological monitoring will not be necessary during project construction.

13. Discuss construction activities and timelines of the proposed work.

Thank you for the opportunity to comment. Please include the Department on the distribution list for the Draft EA. Should you require further clarification, please contact Staff Planner Tara Furukawa by email at tara.furukawa@mauicounty.gov or by phone at (808) 270-7520.

Sincerely,

for WILLIAM SPENCE
Planning Director

xc: Clayton I. Yoshida, AICP, Planning Program Administrator (PDF)
Curtis Eaton, Department of Water Supply (PDF)
John Rapacz, Planning Program Administrator (PDF)
Pam Eaton, Planning Program Administrator (PDF)
Tara K. Furukawa, Staff Planner (PDF)

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MUNEKIYO HIRAGA
Planning. Project Management. Sustainable Solutions.

Michael T. Munekiyo
CHAIRMAN
Karlynn K. Fukuda
PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

March 21, 2019

Michele Chouteau McLean, Director
County of Maui
Department of Planning
2200 Main Street, Suite 315
Wailuku, Hawai'i 96793

SUBJECT: Early Consultation for Proposed West Maui Source Development Project (State Well No. 6-5638-004 and State Well No. 6-5738-002), Lahaina, Maui, Hawai'i

Dear Ms. McLean:

Thank you for your department's letter dated May 16, 2018, providing early consultation comments for the proposed West Maui Source Development Project in Lāhainā, Maui, Hawai'i. On behalf of the County of Maui, Department of Water Supply (DWS), we offer the following information in response to the comments noted in your letter.

1. The Draft Environmental Assessment (EA) will include land use designations for all parcels involved in the project. In addition, the Zoning and Flood confirmation forms, completed by the Department, will be included in the Draft EA.

2. DWS has been coordinating with the Maui Land and Pineapple Company (MLP), Department of Land and Natural Resources (DLNR), and Department of Hawaiian Home Lands (DHHL) throughout the design phase and is in process of obtaining Right-of-Entry or easements for access to the parcels.

3. The Draft EA will include photographs of the project area, existing water tank, immediate surrounding area, and a sample photo of a water tank and an elevation diagram.

4. The Draft EA will include discussion regarding how the proposed project will address population growth and potable water demands, and the impact that the new wells will have in meeting the demand.

5. The proposed project involves the same parcel as the West Maui Exploratory Well. The same mitigation measures recommended by the U.S. Fish and Wildlife

Service for the West Maui Exploratory Well will be applied to the proposed project and included in the Draft EA.

6. The Applicant will work with the Department of Health Safe Drinking Water Branch (DOH-SDWB) to submit a satisfactory engineering report that addresses the requirements of Hawai'i Administrative Rules (HAR) 11-20-29. The engineering report and approval leter for Kahana Well and geologist's report for Mahinahina Well will be included in the Draft EA. It is noted that an engineering report for Mahinahina Well is currently being prepared and will be submitted to DOH-SDWB for review and approval prior to the initiation of the use of the water source.

7. The Applicant will contact the Department of Health Clean Water Branch to determine the need for a National Pollutant Discharge Elimination System Permit. If applicable, demonstration of compliance will be included in the Draft EA.

8. The Draft EA explains that the Kahana Well (West Maui Exploratory Well No. 2) was located to avoid interference with the four (4) existing downslope wells. The distances between the Kahana Well and the existing wells are substantially more than the 1,000-foot separation guideline to avoid interference between wells. Additionally, interference is unlikely due to the relatively small drawdown during the Kahana Well pump test.

9. Thank you for your information. The project engineers will review the Hawai'i Watershed Guidance Section 5 for agriculture management measures for runoff to determine any non-point impacts to coastal waters. As applicable, appropriate mitigation measures will be incorporated into the project.

10. Best Management Practices will be implemented prior to project construction to mitigate impacts to air and water quality.

11. The Draft EA will indicate all bodies of water, including wetlands, ditches, gulches and streams that will be impacted as a result of the proposed project, in order for the U.S. Army Corps of Engineers to determine if project features are subject to the Clean Water Act. In addition, the Draft EA will indicate how the electrical lines and waterlines will cross the area and how any adverse impacts will be mitigated.

12. An Archaeological Assessment and an Archaeological Inventory Survey have been prepared for the proposed project and included in the Draft EA. In addition,

the DWS has initiated consultation with the State Historic Preservation Division (SHPD) pursuant to Section 6E, Hawai'i Revised Statutes.

13. As recommended, construction activities and timelines for the proposed work will be included in the Draft EA.

We appreciate your input and will include a copy of your comment letter and this response letter in the Draft EA for the project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,

Yukino Uchiyama

Yukino Uchiyama
Associate

YU:yp
cc: Curtis Eaton, Department of Water Supply
Ronald M. Fukumoto, Fukumoto Engineering, Inc.
Alan L. Unemori, Warren S. Unemori Engineering, Inc.
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MAY 07 2018

POLICE DEPARTMENT

COUNTY OF MAUI

ALAN M. ARAKAWA
MAYOR

OUR REFERENCE

YOUR REFERENCE

55 MAHALANI STREET
WAILUKU, HAWAII 96793
(808) 244-6400
FAX (808) 244-6411

TIVOLI S. FAAUMU
CHIEF OF POLICE

DEAN M. RICKARD
DEPUTY CHIEF OF POLICE

May 3, 2018

Ms. Yukino Uchiyama
Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawaii 96793

Subject: Chapter 343, Hawai'i Revised Statutes, Early Consultation Request for Proposed West Maui Water Source Development Project (State Well No. 6-5638-004 and State Well No. 6-5738-002), Lahaina, Maui, Hawai'i

Dear Ms. Uchiyama:

This is in response to your letter dated April 24, 2018 requesting comments to the County of Maui, Department of Water Supply (DWS) proposed West Maui Water Source Development Project.

In review of the submitted documents, we have no comments or recommendations.

Thank you for giving us the opportunity to comment on this project.

Sincerely,

Acting Assistant Chief David Silva
for: TIVOLI S. FAAUMU
Chief of Police

MUNEKIYO HIRAGA
Planning Project Management Sustainable Solutions

Michael T. Munekiyo
CHAIRMAN
Karlynn K. Fukuda
PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

March 21, 2019

Tivoli S. Faaumu, Chief of Police
County of Maui
Police Department
55 Mahalani Street
Wailuku, Hawai'i 96793

SUBJECT: Early Consultation for Proposed West Maui Source Development Project (State Well No. 6-5638-004 and State Well No. 6-5738-002), Lahaina, Maui, Hawai'i

Dear Chief Faaumu:

Thank you for your letter dated May 3, 2018, providing early consultation comments for the proposed West Maui Source Development project in Lāhainā, Maui, Hawai'i. On behalf of the County of Maui, Department of Water Supply (DWS), we appreciate your letter of confirmation that you have no comments on the subject project at the present time.

We appreciate your input and will include a copy of your comment letter and this response letter in the Draft Environmental Assessment for the project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,

Yukino Uchiyama

Yukino Uchiyama
Associate

YU:yp
cc: Curtis Eaton, Department of Water Supply
Ronald M. Fukumoto, Fukumoto Engineering, Inc.
Alan L. Unemori, Warren S. Unemori Engineering, Inc.
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ALAN M. ARAKAWA
Mayor

DAVID C. GOODE
Director

ROWENA M. DAGDAG-ANDAYA
Deputy Director

Telephone: (808) 270-7845
Fax: (808) 270-7955

JUN 04 2018

GLEN A. UENO, P.E., P.L.S.
Development Services Administration

CARY YAMASHITA, P.E.
Engineering Division

JOHN R. SMITH, P.E.
Highways Division

COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
200 SOUTH HIGH STREET, ROOM NO. 434
WAILUKU, MAUI, HAWAII 96793

May 30, 2018

Ms. Yukino Uchiyama, Associate
MUNEKIYO HIRAGA
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Ms. Uchiyama:

SUBJECT: CHAPTER 343, HAWAII REVISED STATUTES, EARLY CONSULTATION REQUEST FOR PROPOSED WEST MAUI WATER SOURCE DEVELOPMENT PROJECT (STATE WELL NO. 6-5638-004 AND STATE WELL NO. 6-5738-002), LAHAINA, MAUI, HAWAII; TMK: (2) 4-3-001:017, 084; (2) 4-4-002:014:015, 018 AND (2) 4-4-004:009, 011, 019

We reviewed the subject application and have no comments at this time.

If you have any questions regarding this memorandum, please call Rowena Dagdag-Andaya at 270-7845.

Sincerely,

DAVID C. GOODE
Director of Public Works

DCG:RMDA:da
xc: Engineering Division
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MUNEKIYO HIRAGA
Planning, Project Management, Sustainable Solutions

Michael T. Munekiyo
CHAIRMAN
Karlynn K. Fukuda
PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

March 21, 2019

David C. Goode, Acting Director
County of Maui
Department of Public Works
200 South High Street, Room No. 434
Wailuku, Maui, Hawai'i 96793

SUBJECT: Early Consultation for Proposed West Maui Source Development Project (State Well No. 6-5638-004 and State Well No. 6-5738-002), Lahaina, Maui, Hawai'i

Dear Mr. Goode:

Thank you for your letter dated May 30, 2018, providing early consultation comments for the proposed West Maui Source Development project in Lāhainā, Maui, Hawai'i. On behalf of the County of Maui, Department of Water Supply (DWS), we appreciate your letter confirming that you have no comments at the present time.

We appreciate your input and will include a copy of your comment letter and this response letter in the Draft Environmental Assessment for the project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,

Yukino Uchiyama
Associate

YU:yp
cc: Curtis Eaton, Department of Water Supply
Ronald M. Fukumoto, Fukumoto Engineering, Inc.
Alan L. Unemori, Warren S. Unemori Engineering, Inc.
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ALAN M. ARAKAWA
Mayor

DON MEDEIROS
Director

JOHN L. BUCK III
Deputy Director

(808) 270-7511

MAY 10 2018

DEPARTMENT OF TRANSPORTATION

COUNTY OF MAUI
2145 Kaohu Street, Suite 102
Wailuku, Hawaii, USA 96793

May 4, 2018

Munekiyo Hiraga
Attention: Yukino Uchiyama, Associate
305 High Street, Suite 104
Wailuku, HI 96793

Subject: Early Consultation Request for Proposed West Maui Water Source Development Project

Dear Ms. Uchiyama,

Thank you for the opportunity to comment on this project. We have no comments to make regarding this project at this time.

Please feel free to contact me if you have any questions.

Sincerely,

Don Medeiros
Director

MUNEKIYO HIRAGA
Planning Project Management Sustainable Solutions

Michael T. Munekiyo
CHAIRMAN
Karlynn K. Fukuda
PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

March 21, 2019

Marc Takamori, Director
County of Maui
Department of Transportation
2145 Kaohu Street, Suite 102
Wailuku, Hawai'i 96793

SUBJECT: Early Consultation for Proposed West Maui Source Development Project (State Well No. 6-5638-004 and State Well No. 6-5738-002), Lahaina, Maui, Hawai'i

Dear Mr. Takamori:

Thank you for your department's letter dated May 4, 2018, providing early consultation comments for the proposed West Maui Source Development project in Lāhainā, Maui, Hawai'i. On behalf of the County of Maui, Department of Water Supply (DWS), we appreciate your letter of confirmation that you have no comments on the subject project at the present time.

We appreciate your input and will include a copy of your comment letter and this response letter in the Draft Environmental Assessment for the project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,

Yukino Uchiyama
Associate

YU:yp
cc: Curtis Eaton, Department of Water Supply
Ronald M. Fukumoto, Fukumoto Engineering, Inc.
Alan L. Unemori, Warren S. Unemori Engineering, Inc.
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JUN 15 2018

June 12, 2018

Ms. Yikino Uchiyama, Associate
Munekiyo Hiraga
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Ms. Uchiyama,

Subject: West Maui Water Source Development Project
Chapter 343, Hawaii Revised Statutes, Early Consultation Request
(State Well No. 6-5638-004 and State Well No. 6-5738-002)
Lahaina, Maui, Hawaii
Tax Map Key: (2) 4-4-004:009, 011, (2) 4-3-001:017 and various neighboring parcels

Thank you for allowing us to comment on the the subject project.

In reviewing our records and the information received, Maui Electric Company, Limited has no objection to the project at this time. We highly encourage the customer's electrical consultant to submit the electrical demand requirements, motor electrical characteristics, and project time schedule as soon as practical so that any service upgrade or new service can be provided on a timely basis.

Should you have any other questions or concerns, please feel free to call me at 871-2340.

Sincerely,

Ray Okazaki
Engineer II, Engineering

MUNEKIYO HIRAGA
Planning, Project Management, Environmental Solutions

Michael T. Munekiyo
CHAIRMAN
Karlynn K. Fukuda
PRESIDENT
Mark Alexander Roy
VICE PRESIDENT
Tessa Munekiyo Ng
VICE PRESIDENT

March 21, 2019

Ray Okazaki, Engineer II
Engineering
Maui Electric Company, Ltd.
P.O. Box 398
Kahului, Hawai'i 96733-6898

SUBJECT: Early Consultation for Proposed West Maui Source Development Project (State Well No. 6-5638-004 and State Well No. 6-5738-002), Lahaina, Maui, Hawai'i

Dear Mr. Okazaki:

Thank you for your letter dated June 12, 2018, providing early consultation comments for the proposed West Maui Source Development project in Lāhainā, Maui, Hawai'i. On behalf of the County of Maui, Department of Water Supply (DWS), we offer the following response to the comment noted in your letter.

Thank you for your confirmation that Maui Electric Company has no objection to the project at this time. The subject project's electrical consultant will submit the electrical demand requirements, motor electrical characteristics, and project time schedule, as applicable.

We appreciate your input and will include a copy of your comment letter and this response letter in the Draft Environmental Assessment for the project. Should you have any questions or require additional information, please feel free to contact me at (808) 983-1233.

Very truly yours,

Yukino Uchiyama
Associate

YU:yp
cc: Curtis Eaton, Department of Water Supply
Ronald M. Fukumoto, Fukumoto Engineering, Inc.
Alan L. Unemori, Warren S. Unemori Engineering, Inc.
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