

**Environmental  
Assessment /  
Environmental  
Impact Statement  
Preparation Notice**

**MAUI RESEARCH &  
TECHNOLOGY PARK  
MASTER PLAN UPDATE**

**Applicant:**

Maui R&T Partners, LLC  
1300 North Holopono, Suite 201  
Kihei, Hawaii 96753

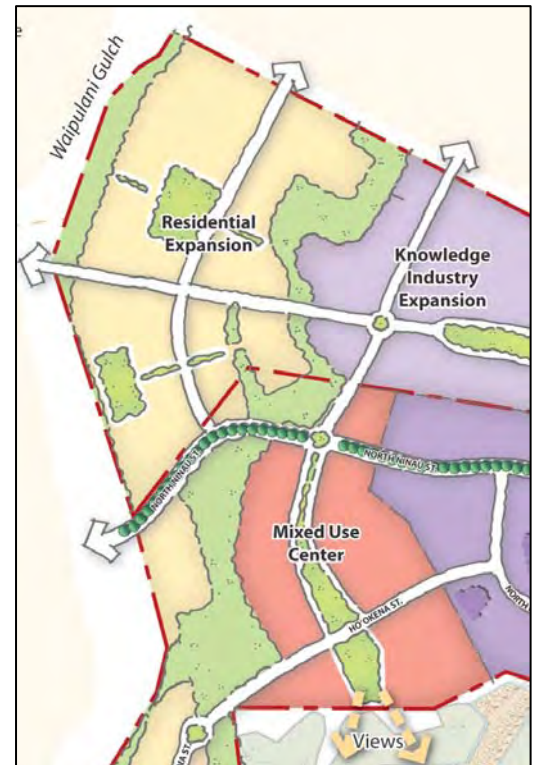
**Prepared by:**

Chris Hart & Partners, Inc.  
115 North Market Street  
Wailuku, Hawaii 96793-1717

**Accepting Authority:**

Land Use Commission  
Department of Business,  
Economic Development &  
Tourism  
State of Hawaii

**July 2010**



# EXECUTIVE SUMMARY

<b><i>Project Name:</i></b>	Maui Research & Technology Park Master Plan Update
<b><i>Type of Document:</i></b>	Environmental Assessment / Draft Environmental Impact Statement Preparation Notice
<b><i>Applicable Chapter 343 Review "Trigger":</i></b>	Amendment to Kihei-Makena Community Plan
<b><i>Approving Agency:</i></b>	Land Use Commission Department of Business, Economic Development & Tourism State of Hawaii Contact: Mr. Orlando Davidson, Executive Officer (808.587.3822)
<b><i>Applicant:</i></b>	Maui R&T Partners, LLC. 1300 North Holopono, Suite 201 Kihei, Hawaii 96753 Contact: Mr. Steve Perkins (808.270.5944)
<b><i>Consultant:</i></b>	Chris Hart & Partners, Inc. 115 North Market Street, Wailuku, Hawaii 96753 Contact: Mr. Michael Summers (808.242.1955)
<b><i>Property:</i></b>	Kihei, Maui TMK's (2) 2-2-024:1-9, 14-17, 31, 34; (2) 2-2-002:54 (por.)
<b><i>Land Use Controls:</i></b>	State Land Use: Urban, Agricultural Community Plan: Project District 6, Public/Quasi-Public County Zoning: Kihei Research & Technology Park, Agricultural
<b><i>Project Summary:</i></b>	The applicant is seeking to update the Master Plan for the Maui Research & Technology Park. The <i>vision</i> is to transform the current single-use large lot research and technology campus into an <i>integrated and vibrant mixed-use community</i> focused around a <i>regional high-technology employment base</i> . Implementation will require amendments to the Kihei-Makena Community Plan, State Land Use District Boundary, and County Zoning.
<b><i>Anticipated Impacts:</i></b>	There are no significant long-term impacts anticipated to be associated with the proposed project. Short-term impacts include noise and air impacts from construction vehicles associated with roadway improvements and subsequent grading and construction activities.



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## **I. PROJECT OVERVIEW**

### **A. Property Location**

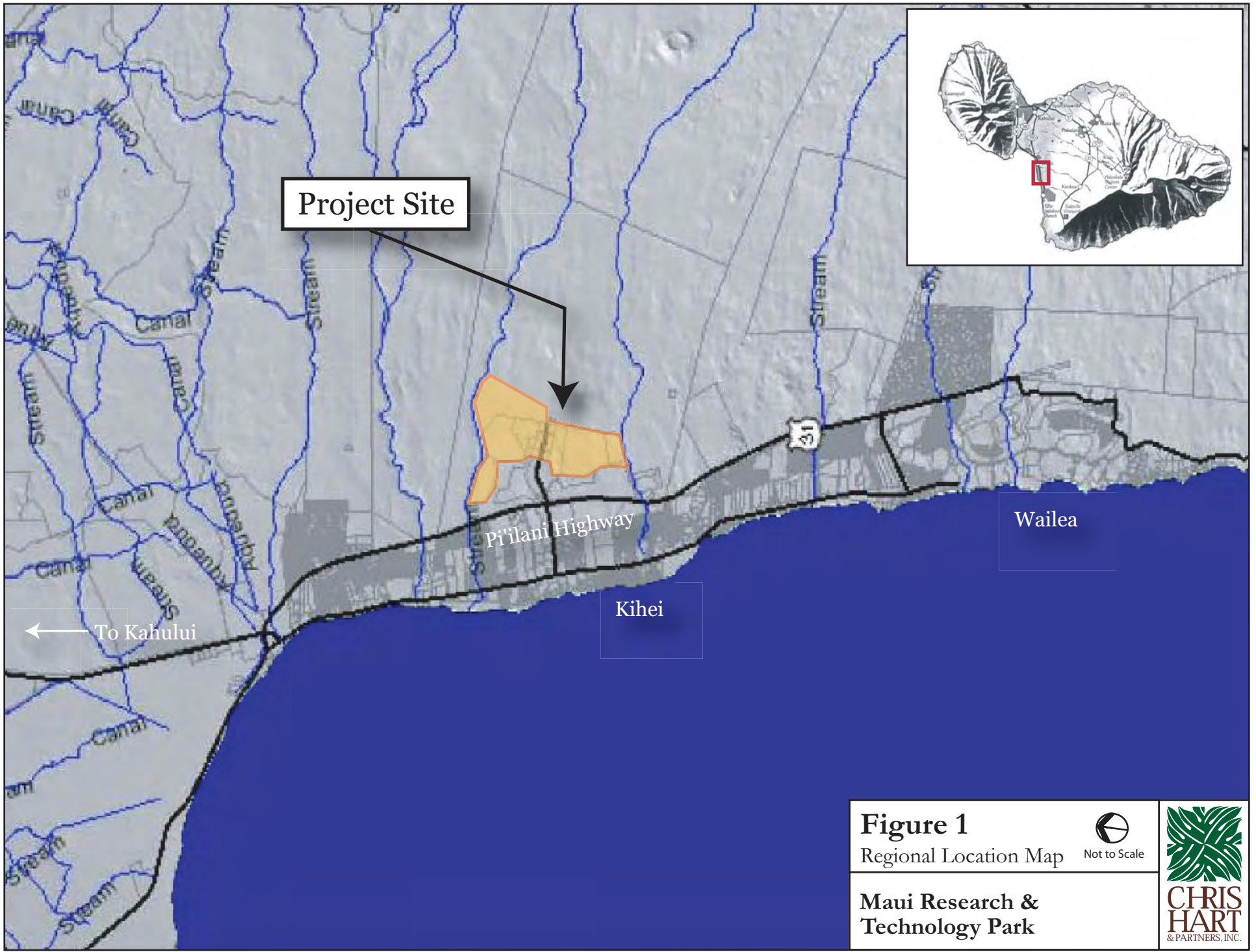
The Maui Research and Technology Park (hereafter “MRTP” or “the Park”) is located in Kihei, on Maui’s South Side. See: Figure 1, “Regional Location Map” and Figure 2, “Aerial Photograph”. The Park is situated immediately *mauka* (landwards) of Pi’ilani Highway. The property is identified by Tax Map Key Numbers (2) 2-2-024:1-9, 14-17, 31, 34 and a portion of (2) 2-2-002:54. See: Figure 3, “Tax Map”.

### **B. Land Ownership and Project Applicant**

The lands comprising the MRTP, approximately 431.873 acres, are owned in fee simple by various land owners. Maui R&T Partners, LLC (“Applicant”) owns approximately 231.229 acres and Haleakala Ranch is the owner of 123.843 acres. Roadway lots and lands in ownership by others comprise 76.801 acres.

### **C. Existing and Historical Land Use**

Prior to its development, the lands comprising the MRTP were part of the Haleakala Ranch. The MRTP was the vision of a core group of community leaders in the early 80’s who sought to diversify the economic and employment base on Maui beyond tourism and agriculture. These efforts to diversify Maui’s economy by creating the requisite infrastructure (like the MRTP) were made possible via public/private alliances, and the MRTP is now the locus for technology activity for the Maui community. The MRTP is home to a diverse range of companies and government projects working in such areas as space surveillance, communications, scientific research, advanced materials development, optics, and photonics.



Project Site



Pi'ilani Highway

Wailea

Kihei

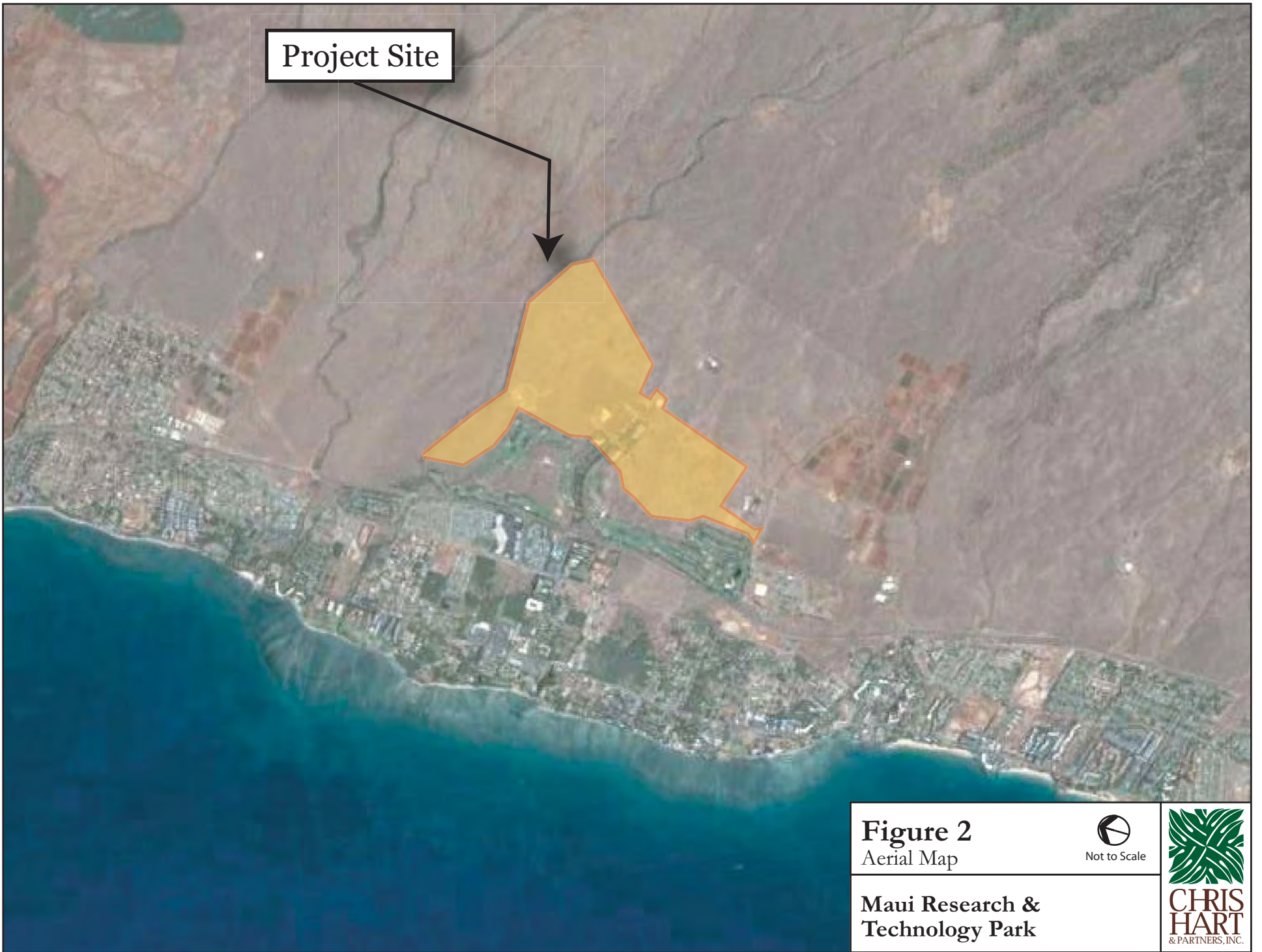
To Kahului

**Figure 1**  
Regional Location Map

Not to Scale

Maui Research &  
Technology Park





Project Site

**Figure 2**  
Aerial Map

  
Not to Scale

**Maui Research &  
Technology Park**

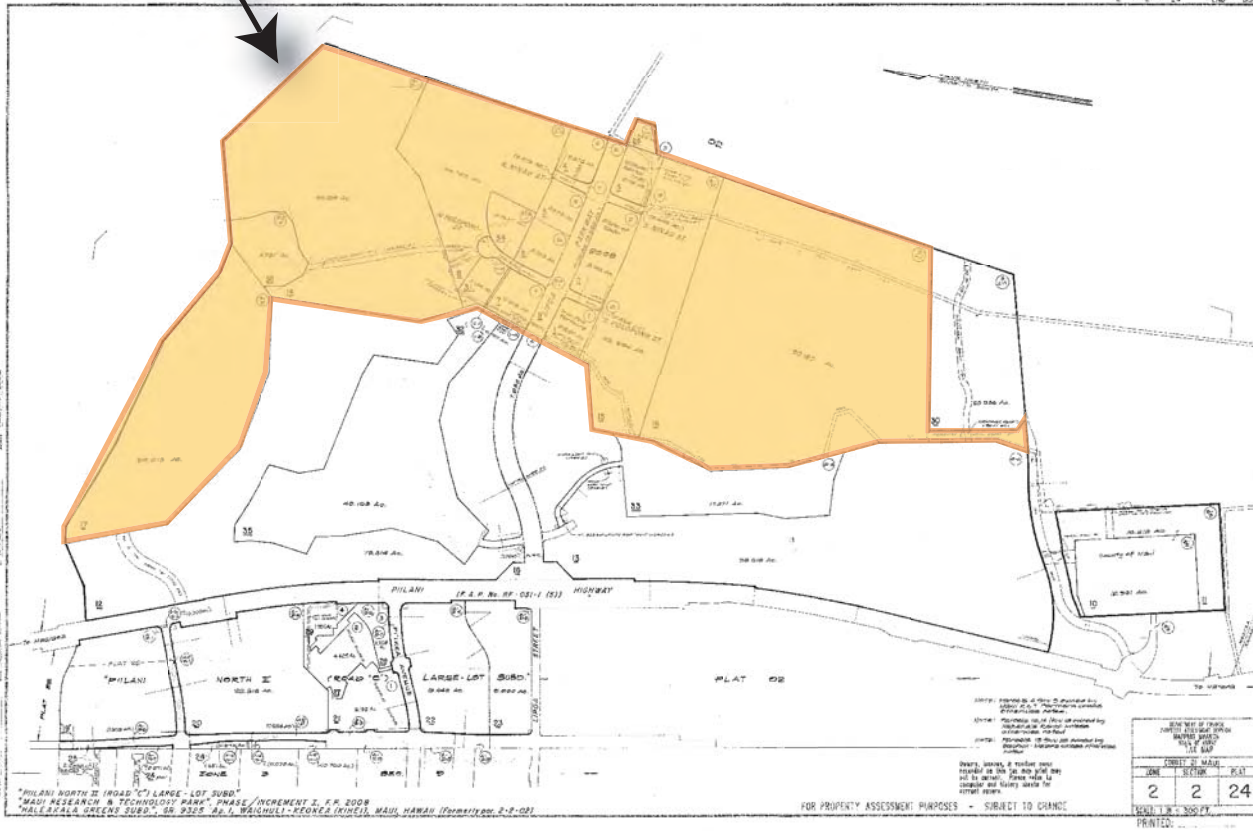
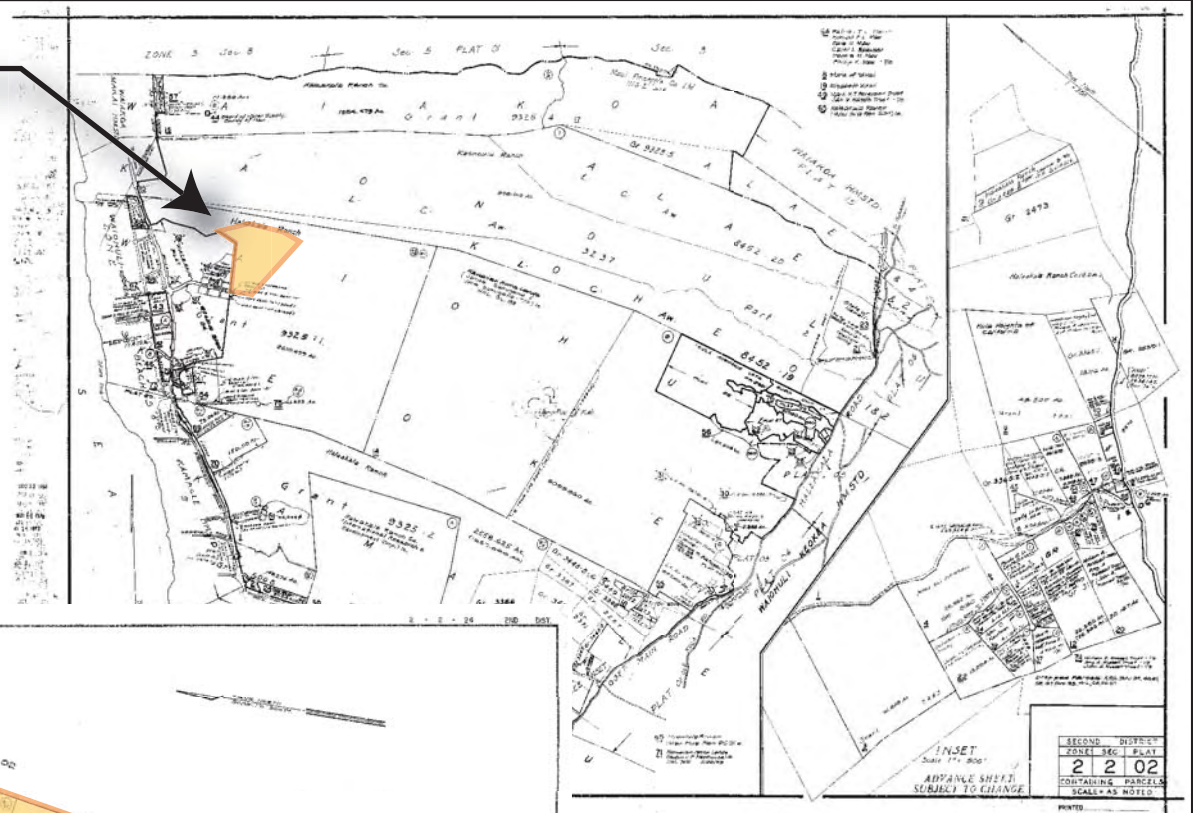




Project Site

Parcels 54 (por.)

Parcels 1 - 9, 14 - 17, 31 & 34



**Figure 3**  
TMK Parcel Location Maps

Not to Scale

**Maui Research &  
Technology Park**



**CHRIS  
HART  
& PARTNERS, INC.**



Chapter 19.33 of the Maui County Code, *Kihei Research and Technology Park District*, was adopted in 1986 to allow the fulfillment of the vision discussed above. That Chapter provides specific uses allowed within the MRTP and procedures for permitting. See: Appendix A, “Maui County Code, Chapter 19.33, *Kihei Research & Technology Park District*”. The *Kihei-Makena Community Plan* update of 1998 further identified the project as “Project District 6 (R&T Park)”, with the objective of encouraging the development of non-polluting research and technology on individual 1 to 5-acre sites planned and built in accordance with specific standards and guidelines. Design guidelines were intended to encourage low-rise, low-density developments with ample setbacks and open space, underground utilities, and architectural and signage controls in accordance with the Parks’ theme.

The Park currently contains five buildings providing Class A commercial office space to 19 tenants. The individual buildings, with respective tenants for each, are listed below.

**Maui Economic Development Board Building-Ke Alahele**

Akimeka, LLC  
Maui Economic Development Board, Inc.  
Science Applications International Corp.  
Pacific Disaster Center

**Maui Research & Technology Center:**

Clear Wire  
Oceanit  
Schafer Corporation  
University of Hawaii

**Maui Park Plaza building:**

21st Century Group  
E.R. Williams  
Goodfellow Bros., Inc. Corporate Offices  
Margaret Garcia, DDS



Pacific Defense Solutions

Small Business Development Center/Business Research Library

**Maui High Performance Computing Center:**

Research Corporation of the University of Hawaii

**Premier Place:**

Air Force Research Laboratory Det 15

Boeing

Textron

Paradise Dream Wedding Photography

## **D. Proposed Action**

Development activity at the MRTP during the past two decades has occurred at a significantly slower rate than initially expected. This lag is due to multiple factors, including the limited Hawaii market for pure research and technology users, overly-restrictive development standards (such as a minimum lot size of two acres), and the limited scope of uses allowed within the MRTP. Attracting high-technology to Maui has been further complicated by the island's relatively remote location in the Pacific, high housing costs, relatively small technically-skilled labor force and the lack of a research-oriented university on Maui.

Since its inception in the late 1980's, the approximate 432 acre MRTP is only at approximately 10 percent build-out, with 11 lots sold and approximately 175,000 square feet of structures in five (5) buildings with a total of 400 employees. Today, everyone working in the Park commutes since the development has no housing; few support services and no amenities. Over twenty years have passed since the original controlling documents for the development have been updated. Best practices in planning, land development, and strategies for economic development through diversification have changed dramatically since the initial development of the Park. The development plan for MRTP needs to conform to current state of the art practices in modern, successful employment centers in order to deliver the economic development benefits desired by the community.



This Master Plan Update will be presented in detail in the Draft EIS. The general approach proposed utilizes the principles of New Urbanism and Smart Growth to transform the current, single-use large lot research and technology campus into an integrated and vibrant mixed-use community focused around a regional knowledge-based industry<sup>1</sup> employment base. While the current Park tenants provide a high-quality foundation on which to build, implementation of this vision will require a broadening of the development standards to allow smaller lots sizes for the use of smaller firms and of the list of permitted uses to include such diverse fields as telecommunications, health sciences, education, health-care, and support uses including professional services, restaurants, retail, and housing. The Update aligns with the current draft of the *Maui Island Plan* (Chapter 8, Directed Growth Plan), which supports the continued expansion of the MRTP to include a mixed-use new town.

The approach has been developed following extensive research into successful employment center in other locations. The research indicates that knowledge based industries are attracted to locations offering not only office and lab space, but support services and amenities, including a mix of workforce housing opportunities for employees; commercial, retail, and professional services; and parks and open spaces.

The Applicant has engaged the internationally recognized urban design and land planning firm Calthorpe Associates to prepare the Master Plan Update. The firm's planning team – led by firm founder Peter Calthorpe, one of the pioneers of new urbanism – has developed a Concept Master Plan illustrating the vision and potential opportunities for the Park (See: Figure 4, "Concept Master Plan"). Significant elements of the Master Plan Update include:

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<sup>1</sup> Industries characterized by highly-skilled workers in science and research, information technology, education, healthcare and medicine, manufacturing and professional services and similarly related knowledge-based organizations.

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1. A mix of housing, office, civic, live-work, park, and retail uses within a “Village Center” comprising approximately 58 acres of the site.
2. Residential units on approximately 100 acres to the east and west of the Village Center, within easy walking distance of schools, retail, services, and jobs.

# Maui Research and Technology Park: OVERALL CONCEPT DIAGRAM

Mauka / East



**LEGEND**

- - - Project Boundary
- Mixed-Use
- Knowledge Industry
- Knowledge Industry Expansion
- Residential & Expansion
- Open Space / Parks

*THESE DRAWINGS ARE CONCEPTUAL AND ARE FOR ILLUSTRATIVE PURPOSES ONLY. ALL DESIGN ELEMENTS ARE SUBJECT TO CHANGE, INCLUDING PROGRAM COMPONENTS AND ARRANGEMENTS ON THE SITE.*

**MAUI RESEARCH & TECHNOLOGY PARK**  
Kihei, Maui, Hawaii

February 12, 2010



Makai / West



3. Knowledge based industry expansion along Lipoa parkway which takes advantage of existing infrastructure and subdivided lots.
4. Long-term expansion opportunities on approximately 217 acres of land within the existing employment core and to the south and east.
5. This plan accomplishes a key Park priority - to be the development of choice for knowledge based industry on Maui Island. The resulting critical mass of companies will contribute to sound economic development of the island.

## **E. Alternatives**

The Draft EIS will analyze the potential impacts of various, alternative Master Plans, as well as allowing the current MRTP to remain as it is.

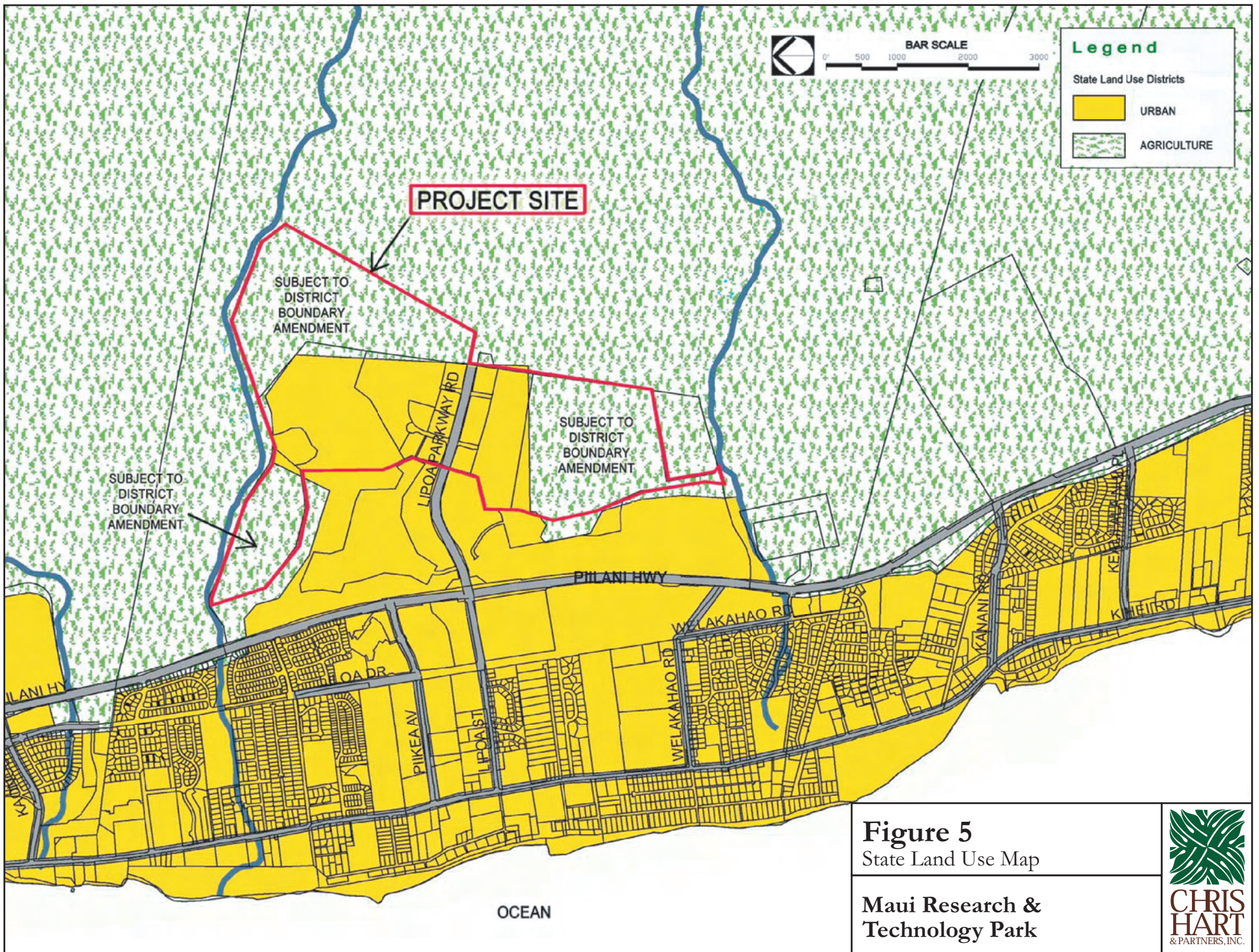
## **F. Entitlements and Approvals**

### **1. State Land Use District Boundary Amendment (DBA)**

The proposed Master Plan Update will require a State Land Use District Boundary Amendment in order to bring the entire Park site into the *Urban* district, as outlying portions remain classified as *Agricultural*. The total land area expected to be affected comprises approximately 253.05 acres and is identified by Tax Map Parcels (2) 2-2-024:16 and 17 and a portion of (2) 2-2-002:54 (hereafter "Parcels 16, 17, and 54 por."). Additionally, the proposal would require amendments to the conditions placed upon currently urbanized lands, comprising approximately 157.89 acres. See: Figure 5, "State Land Use Map".

### **2. Community Plan Amendment (CPA)**

Updating of the Master Plan will require amending the Kihei-Makena Community Plan from Project District and Public-Quasi Public to a district that better aligns with the Master Plan vision and anticipated changes to Maui County Code (MCC) Title 19.33 "Kihei Research & Technology Park District".



**Figure 5**  
State Land Use Map

**Maui Research &  
Technology Park**



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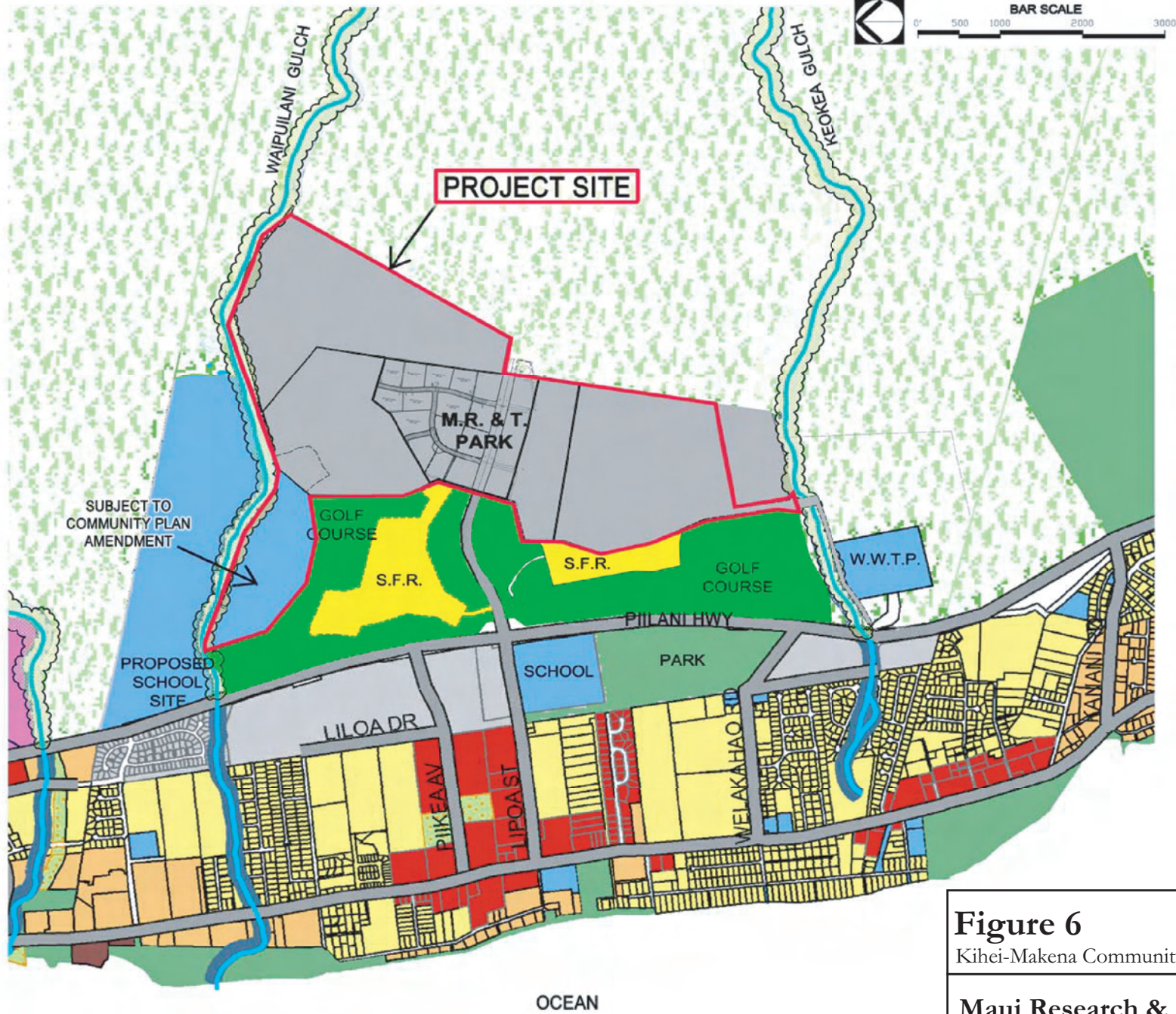
See: Figure 6, “Kihei-Makena Community Plan Map”.

### **3. Change in Zoning (CIZ)**

The Master Plan Update will similarly require a Change in County Zoning in order to bring the entire Park site into the *Research and Technology Park* district, whereas portions are currently zoned *Agricultural*. As above, changes will also be sought to the language of Chapter 19.33, MCC, to allow for a more diversified development that better aligns with the Master Plan Update. See: Figure 7, “Maui County Zoning Map”.

### **4. Environmental Impact Statement (EIS)**

The Community Plan Amendment is a “trigger” action for Hawaii’s Environmental Impact Statement law, Chapter 343, Hawaii Revised Statutes. Additionally, off-site infrastructure work affecting State and County rights-of-way are anticipated which may also act as triggers. Therefore, an Environmental Impact Statement will be prepared to examine potential impacts and mitigation measures resulting from implementation of the Master Plan Update. The State Land Use Commission will serve as the Approving Agency for the EIS. This EIS Preparation Notice serves as official notice that the Approving Agency has determined that the project may have significant effect and that an EIS is required. Upon publication of this Notice in the Environmental Bulletin, the public has 45 days to request to become a consulted party and make written comment upon the proposed action.



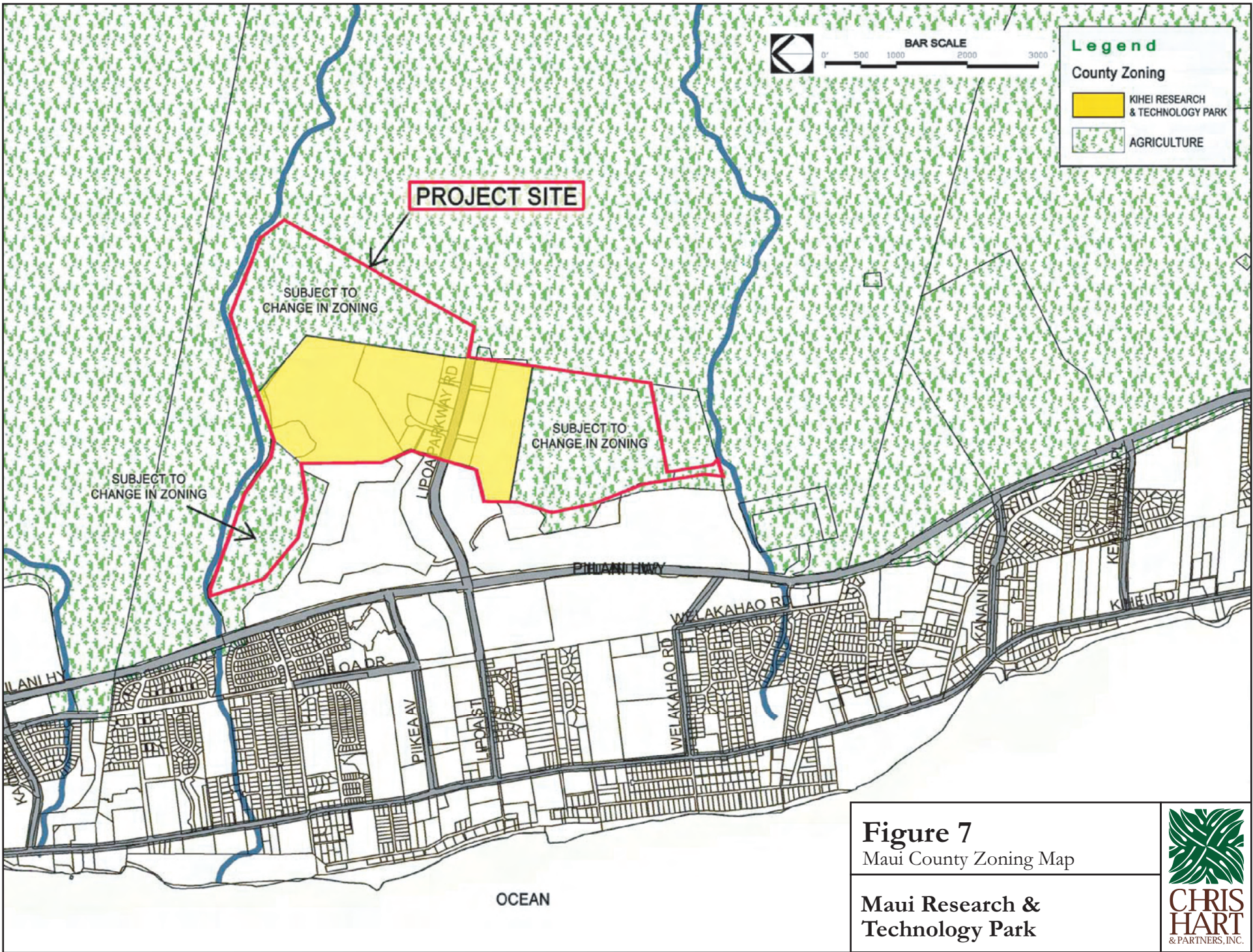
**Figure 6**

Kihei-Makena Community Plan Map

**Maui Research & Technology Park**



**CHRIS HART**  
& PARTNERS, INC.



**Figure 7**  
Maui County Zoning Map

**Maui Research & Technology Park**



**CHRIS HART**  
& PARTNERS, INC.



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## II. AFFECTED ENVIRONMENT, POTENTIAL IMPACTS AND MITIGATION MEASURES

### A. Physical Environment

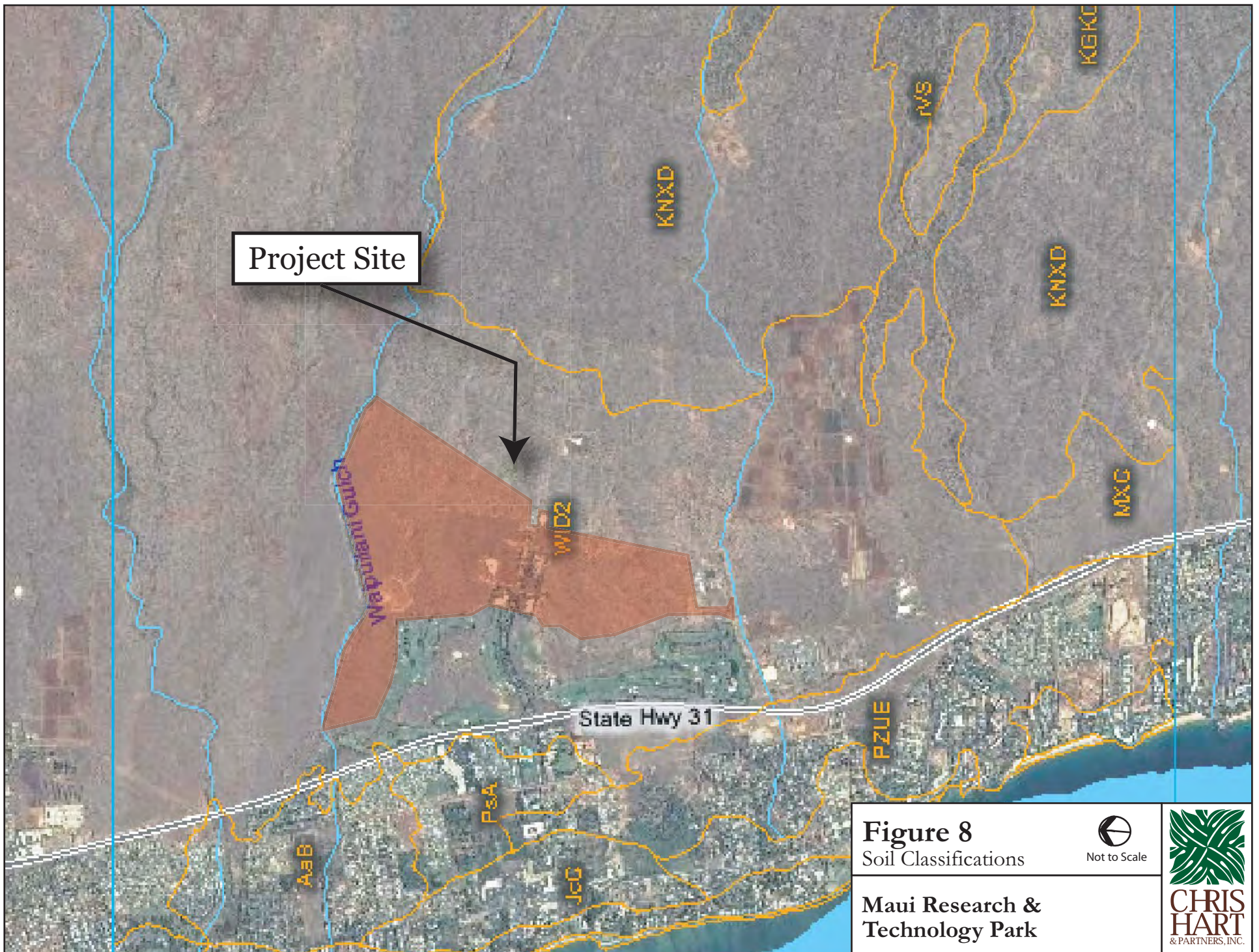
#### 1. Surrounding Land Uses

*Existing Conditions.* The MRTP is surrounded by undeveloped agricultural lands of the Haleakala and Kaonoulu Ranches to the north, east, and south. Seaward to the west, across Piilani Highway, are the developed lands of Kihei Town, including single and multi-family subdivisions, the Kihei Community Center, Piilani Shopping Village, South Maui Community Park as well as industrial and public/quasi-public developments. Waipui'lani Gulch abuts the property on the north and Keokea Gulch abuts on the south. The new South Maui High School is proposed for land abutting the north-west corner of the property, across Waipuilani Gulch.

*Potential Impacts and Mitigation Measures.* The project area is community plan designated Project District 6, "Kihei Research & Technology Park" and "Public/Quasi-Public" and has thus been considered for future urban development. During the preparation of the Draft EIS the potential impact to surrounding land uses from the implementation of the Master Plan Update will be fully assessed.

#### 2. Topography and Soils

*Existing Conditions.* Geologically, the island of Maui is comprised of two shield volcanoes, Mauna Kahalawai (West Maui Mountains) in the west, and Haleakala to the east. These land forms create the subsections of Maui characterized as East and West Maui.



**Figure 8**  
Soil Classifications

Maui Research &  
Technology Park

Not to Scale





The site of the MRTP includes a single soil type, as described in the *Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii*. See: Figure 8, "Soils Map". This soil type, "Waiakoa extremely stony silty clay", is characterized by medium runoff and severe erosion hazard, with at least half the surface layer eroded in most areas.

***Potential Impacts and Mitigation Measures.*** Implementation of the master plan will require grading for roads and buildings upon development, for areas not currently developed.

A National Pollutant Discharge Elimination System (NPDES) permit will be required from the State of Hawaii Department of Health (DOH) prior to grading activities. During site preparation, storm runoff from the MRTP will be controlled in compliance with the County's "Soil Erosion and Sediment Control Standards". Typical mitigation measures include appropriately stockpiling materials on-site to prevent runoff and building over or establishing landscaping as early as possible on disturbed soils to minimize length of exposure.

Impacts to the soils include the potential for soil erosion and the generation of dust during construction. Clearing and grubbing activities will temporarily disturb the soil retention values of the existing vegetation and expose soils to erosion forces. Some wind erosion of soils could occur without a proper watering and re-vegetation program. Heavy rainfall could also cause erosion of soils within disturbed areas of land.

To the extent possible, improvements will conform to the contours of the land, further limiting the need for extensive grading of the site. In addition, graded areas will be limited to specific areas for short periods of time.

Measures taken to control erosion during the site development period may include:



- Minimizing the time of construction;
- Retaining existing ground cover as long as possible;
- Constructing drainage control features early;
- Using temporary area sprinklers in non-active construction areas when ground cover is removed;
- Providing a water truck on-site during the construction period to provide for immediate sprinkling as needed;
- Using temporary berms and cut-off ditches, where needed, for control of erosion;
- Watering graded areas when construction activity for each day has ceased;
- Grassing or planting all cut and fill slopes immediately after grading work has been completed; and
- Installing silt screens where appropriate.

All construction activities will comply with all applicable Federal, State and County regulations and rules for erosion control. Before issuance of a grading permit by the County of Maui, the final erosion control plan and best management practices required for the NPDES permit will be completed. All construction activities will also comply with the provisions of Chapter 11-60.1, HAR, Section 11-60.1-33, Fugitive Dust.

After construction, the establishment of permanent landscaping will provide long-term erosion control.

### **3. Natural Hazards**

*Existing Conditions.* Natural hazards impacting the Hawaiian Islands include hurricanes, tsunamis, volcanic eruptions, earthquakes, and flooding.

Devastating hurricanes have impacted Hawaii twice since 1980: Hurricane Iwa in 1982 and Hurricane Iniki in 1992. While it is difficult to predict these natural occurrences, it is reasonable to assume that future events could be likely given the recent record.



Tsunamis are large, rapidly moving ocean waves triggered by a major disturbance of the ocean floor, which is usually caused by an earthquake but sometimes can be produced by a submarine landslide or a volcanic eruption. About 50 tsunamis have been reported in the Hawaiian Islands since the early 1800s. Seven caused major damage, and two of these were locally generated. The MRTP is outside of the Civil Defense Tsunami Evacuation Zone.

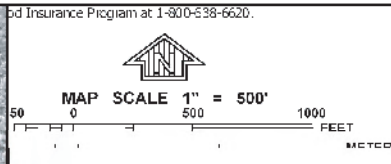
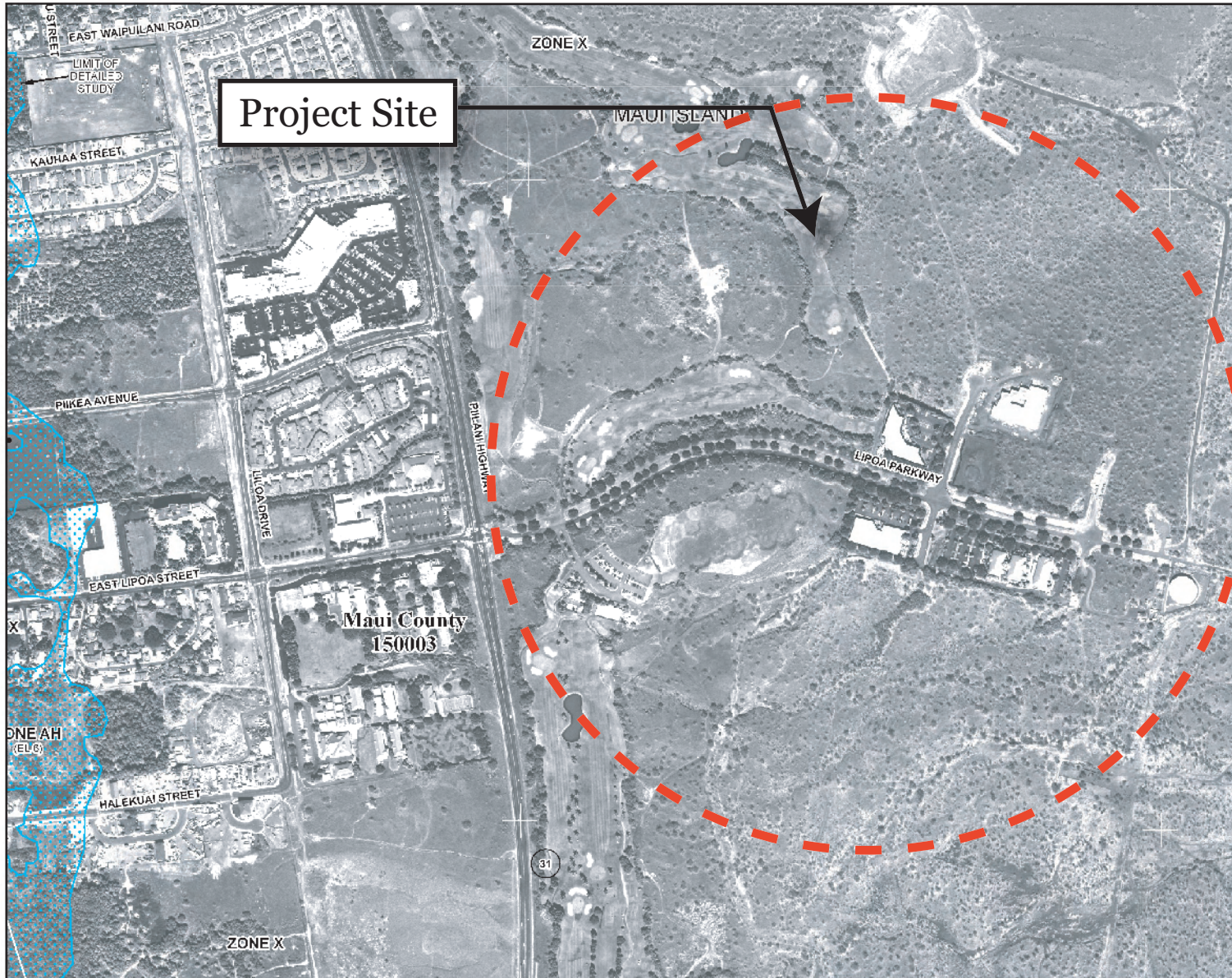
Volcanic hazards are not a concern in the South Maui area due to the dormant status of Haleakala.

In Hawaii, most earthquakes are linked to volcanic activity, unlike other areas where a shift in tectonic plates is the cause of an earthquake. Each year, thousands of earthquakes occur in Hawaii, the vast majority of them so small they are detectable only with highly sensitive instruments. However, moderate and disastrous earthquakes have also occurred.

The 1938 Maui Earthquake, with a magnitude of 6.7-6.9 on the Richter scale and an epicenter six (6) miles north of Maui, created landslides and forced the closure of the road to Hana. Damaged water pipes and ground fractures also were reported in Lahaina.

Flood hazards are primarily identified by the Flood Insurance Rate Map (FIRM) prepared by the Federal Emergency Management Agency (FEMA), National Flood Insurance Program. According to the September 2009 update of FIRM Panel 1500030586E, the MRTP is located in Zone X, an area outside of flood hazard. See: Figure 9, "Flood Map."





**LEGEND**

SPECIAL FLOOD HAZARD AREAS SUBJECT TO FLOODING BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AV, A1-30, V, and VE. The Base Flood Elevation is the water surface elevation of the 1% annual chance flood.

**ZONE A** No special flood hazard determination.

**ZONE AE** Base Flood Elevation determined.

**ZONE AH** Flood depths of 1 to 3 feet (quality class of ponding); special Flood Risk areas determined.

**ZONE AO** Flood depths of 1 to 3 feet (quality class of ponding); average depths determined. For areas of shallow ponding, depths also determined.

**ZONE AR** Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that has subsequently deteriorated. Some AR areas may include former flood control systems that are no longer in service from the 1% annual chance flood.

**ZONE A99** Areas to be protected from the annual chance flood by a Federal Flood protection system (levee, dike, or other flood protection system).

**ZONE V** Coastal flood zone with velocity hazard (wave action); Base Flood Elevation determined.

**ZONE VE** Coastal flood zone with velocity hazard (wave action); Base Flood Elevation determined.

FLOODWAY AREAS IN ZONE A/F

The floodway is the channel of a stream or any adjacent floodplain area that must be free of obstruction so that the 1% annual chance flood can be carried without substantial increases in flood stage.

**OTHER FLOOD AREAS**

**ZONE X** Areas of 0.2% annual chance flood; areas of 1% annual chance flood will average 1.5 to 3 feet, or 1 foot, or with no surge areas less than 1.5 to 3 feet; and areas protected by levees from 1% annual chance flood.

**OTHER AREAS**

**ZONE X** Areas determined to be outside the 0.2% annual chance floodplain.

**ZONE D** Areas of 1% annual chance flood.

COASTAL BARRIER RESOURCE SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

OPAs are areas of 1% annual chance flood that are not Special Flood Hazard Areas.

This is an official copy of a portion of the above referenced flood map was developed using F-MIT One Inc. This map does not reflect changes or amendments which may have been made subsequent to the date of the file lock. For the latest product information about Flood Insurance Program Flood maps, check the F-MIT One Inc. Website at [www.flood.gov](http://www.flood.gov)

**Figure 9**  
Flood Map

**Maui Research & Technology Park**





*Potential Impacts and Mitigation Measures.* Although the project is not anticipated to exacerbate any hazardous conditions, the potential impacts will be fully assessed during the preparation of the Draft EIS. Any structures built by buyers of individual lots will be constructed for protection from earthquakes and the destructive winds and torrential rainfall of tropical hurricanes in accordance with the Building Code adopted by the County of Maui. All work will comply with applicable flood zone standards, such as those set forth in Chapter 19.62, “Flood Hazard Areas”, Maui County Code. The proposed project is not anticipated to significantly impact the neighboring properties with regard to flood hazard potential.

#### **4. Hazardous Substances**

*Existing Conditions.* A Phase I Environmental Site Assessment was prepared for the MRTP in May 2007. See: Appendix B, “Environmental Site Assessment”. Utilizing review of records, interviews with knowledgeable individuals, and site reconnaissance, the Environmental Site Assessment (ESA) noted that there were no current investigations of the site under any federal, state, or local environmental agency. The field survey noted that there are very limited amounts of soil-staining from ineffectively stored waste oil and that a limited amount of solid waste dumping, including special waste requiring proper management, was occurring. The ESA found no evidence of recognized environmental conditions at the property.

*Potential Impacts and Mitigation Measures.* No impacts from hazardous substances are anticipated at the MRTP site, based on the work conducted during the preparation of the Phase I ESA. The potential concerns identified by the ESA are limited in scope and will be mitigated during project development.



## 5. Flora and Fauna

*Existing Conditions.* Botanical and Faunal Surveys were conducted for the MRTP site in October 2008. See: Appendix C, “Botanical and Faunal Surveys”. The project site was originally populated with dry native forest/scrubland plant species. These species have gradually diminished over the past 150 years as the area was used for grazing. Introduced Axis deer and human-resultant fires have further reduced the native plant population.

The site is now dominated by two (2) non-native species: *kiawe* trees and buffelgrass. A total of 14 species were noted during site surveys, of which two (2) were native to the Hawaiian Islands: *‘ilima* and *‘uhaloa*.

Three (3) mammalian species were noted in the report: cattle, Axis deer, and feral cats. Fourteen non-native bird species were recorded as well. Using sight survey and a bat listening device, the report found no evidence of the native hoary bat; neither was there evidence of Blackburn’s sphinx moth.

*Potential Impacts and Mitigation Measures.* Based upon the Botanical and Faunal Surveys conducted in October 2008, no impacts on flora and fauna are anticipated as a result of project development. The Survey report recommends that native plant species on-site be incorporated into landscape design and that some standard measures are taken regarding seabirds.

## 6. Air Quality

*Existing Conditions.* The air quality in the South Maui area is generally good. Existing impacts to air quality include periodic impacts from distant volcanic emissions (VOG) and possibly occasional localized impacts from traffic congestion or agricultural activities.



Both Federal and State standards have been established to maintain ambient air quality. Seven parameters are regulated: particulate matter, sulfur dioxide, hydrogen sulfide, nitrogen dioxide, carbon monoxide, ozone, and lead. State of Hawaii air quality standards are either equally or more stringent than the comparable national standards.

Regional and local climate together with the amount and type of human activity generally dictate the air quality of a given location. The climate of the South Maui area is very much affected by its location on the southern side of Haleakala. A generally semi-arid climate pertains, with an average monthly rainfall of 1.218 inches in 2007 (the latest available data).

*Potential Impacts and Mitigation Measures.* During development, grading and construction-related activities will result in short-term impacts to air quality. Best Management Practices (BMPs) will help to mitigate such impacts. Adequate dust control measures, in compliance with Section 11-60-1-33, "Fugitive Dust", of the Hawaii Administrative Rules will be implemented during all phases of construction.

Mitigation measures will be implemented to minimize potential air quality impacts, as listed below.

Short-Term Construction Activities. All construction activities will comply with the provisions of HAR, Chapter 11-60.1, "Air Pollution Control," Section 11-60.1-33, Fugitive Dust. In compliance with these provisions a dust control plan will be implemented during all phases of construction.

Fugitive dust emissions will be controlled to a large extent by watering of active work areas, using wind screens, keeping adjacent paved roads clean, and by covering of open-bodied trucks. Other dust control measures that may be implemented include limiting the area disturbed at any given time and/or mulching or stabilizing inactive areas that have been worked. Paving and landscaping early in the construction schedule will also reduce dust emissions.



Exhaust emissions from construction equipment can be mitigated by moving equipment and workers to and from the site during off-peak traffic hours.

Potential long-term impacts to air quality will be assessed in the Draft EIS.

## 7. Noise Quality

*Existing Conditions.* The dominant noise sources in the vicinity of the project are from vehicles using Pi'ilani Highway. The MRTP is located landward of the residential areas of central Kihei. Existing commercial uses within the MRTP generally occur only during daytime hours.

*Potential Impacts and Mitigation Measures.* The potential impact to short- and long-term ambient noise levels will be more thoroughly assessed during the preparation of the Draft EIS. Grading and construction-related activities will be limited to normal daylight hours in order to limit noise impacts and adhere to the Department of Health's noise regulations for construction equipment.

## 8. Historical and Archaeological Resources

*Existing Conditions.* An Archaeological Inventory Survey was prepared for the project in September 2008. See: Appendix D, "Archaeological Inventory Survey". A total of five (5) sites were noted in the survey report, three (3) on Parcel 17 and two (2) on the portion of Parcel 54. The State Site Numbers and descriptions of the sites themselves follow:

- Site 50-50-10-6239:* an historic modified outcropping
- Site 50-50-10-6240:* an historic modified outcropping
- Site 50-50-10-6241:* a traditional or historic boundary wall
- Site 50-50-10-6587:* an L-shaped military training feature
- Site 50-50-10-6588:* three (3) mounds which are traditional location markers



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***Potential Impacts and Mitigation Measures.*** The following significance evaluations are broad criteria established for the State and National Register of Historic Places. These criteria are as follows:

*Criterion A:* Site is associated with events that have made a significant contribution to the broad patterns of our history.

*Criterion B:* Site is associated with the lives of persons significant to our past.

*Criterion C:* Site embodies the distinctive characteristics of a type, period, or method of construction; or represents the work of a master; or possesses high artistic value; or represents a significant and distinguishable entity whose components may lack individual construction.

*Criterion D:* Site has yielded or has the potential to yield information important in prehistory or history.

*Criterion E:* Site has an important traditional cultural value to the native Hawaiian people or to another ethnic group of the state due to associations with traditional cultural practices once carried out, or still carried out, at the property or due to associations with traditional beliefs, events, or oral accounts (State of Hawaii criterion only).

Sites can be considered no longer significant when they meet only Criterion D and sufficient information has been collected from them during archaeological investigation.

All sites identified by the Inventory Survey have been assessed as significant under only Criterion D. Save for orange protective fencing to be placed along the northern ridgeline boundary of Parcel 17 to protect undocumented rock shelters occurring below in Waipuilani Gulch, no fur-



ther archaeological work or protective measures are recommended for this project area.

## **9. Cultural Impact Assessment**

*Existing Conditions.* The MRTP has been used for agricultural uses, primarily grazing, for some 150 years. Prior to ranching, the land comprising the MRTP did not attract significant settlements of Hawaiians. Cultural activities are not currently taking place on the property and cultural resources of importance to native Hawaiians for cultural practices were not identified in a Cultural Impact Assessment report or Archaeological Inventory Surveys conducted on the property (See: Appendices D and E)

*Potential Impacts and Mitigation Measures.* The Cultural Impact Assessment prepared for the project documents the history of the site and assesses potential cultural impacts resulting from the project. The Draft EIS will fully document the potential cultural impacts associated with development of the project area.

## **10. Visual Resources**

*Existing Conditions.* The subject property is located on the southern slope of Haleakala, *mauka* (landward) of Kihei Town. Notable visual resources in the area include the Pacific Ocean and the island of Kahoolawe to the west, and the mountain of Haleakala to the east.

*Potential Impacts and Mitigation Measures.* Visual impacts will be assessed in the Draft EIS.

## **11. Agricultural Resources**

*Existing Conditions.* The project site was historically used for passive agricultural purposes, specifically grazing for cattle ranching. Agricultural activities ceased upon the development of the MRTP.



ALISH. In 1977, the State Department of Agriculture developed a classification system to identify Agricultural Lands of Importance to the State of Hawaii (ALISH). The classification system is based primarily, though not exclusively, upon the soil characteristics of the lands. The three (3) classes of ALISH lands are: “Prime”, “Unique”, and “Other”, with all remaining lands termed “Unclassified”. When utilized with modern farming methods, “Prime” agricultural lands have a soil quality, growing season, and moisture supply necessary to produce sustained crop yields economically. “Unique” agricultural lands possess a combination of soil quality, growing season, and moisture supply to produce sustained high yields of a specific crop. “Other” agricultural lands include those that have not been rated as “Prime” or “Unique” but are still considered important agricultural lands.

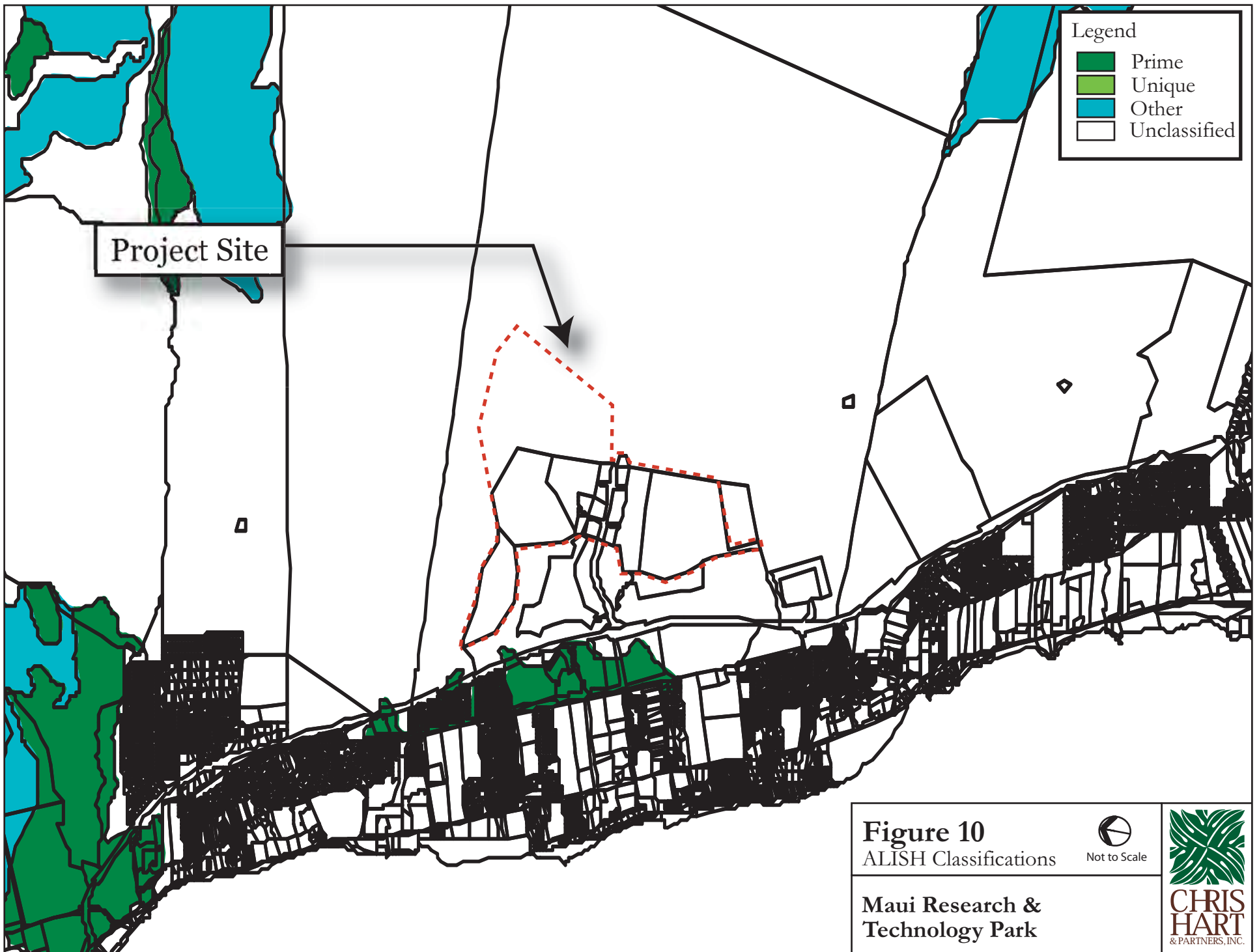
The lands underlying the MRTP are “Unclassified”. “Unclassified” lands do not meet the criteria for being rated “Prime”, “Unique” or “Other” and are not considered to be agricultural lands of importance to the State of Hawaii. See: Figure 10, “ALISH Map”.

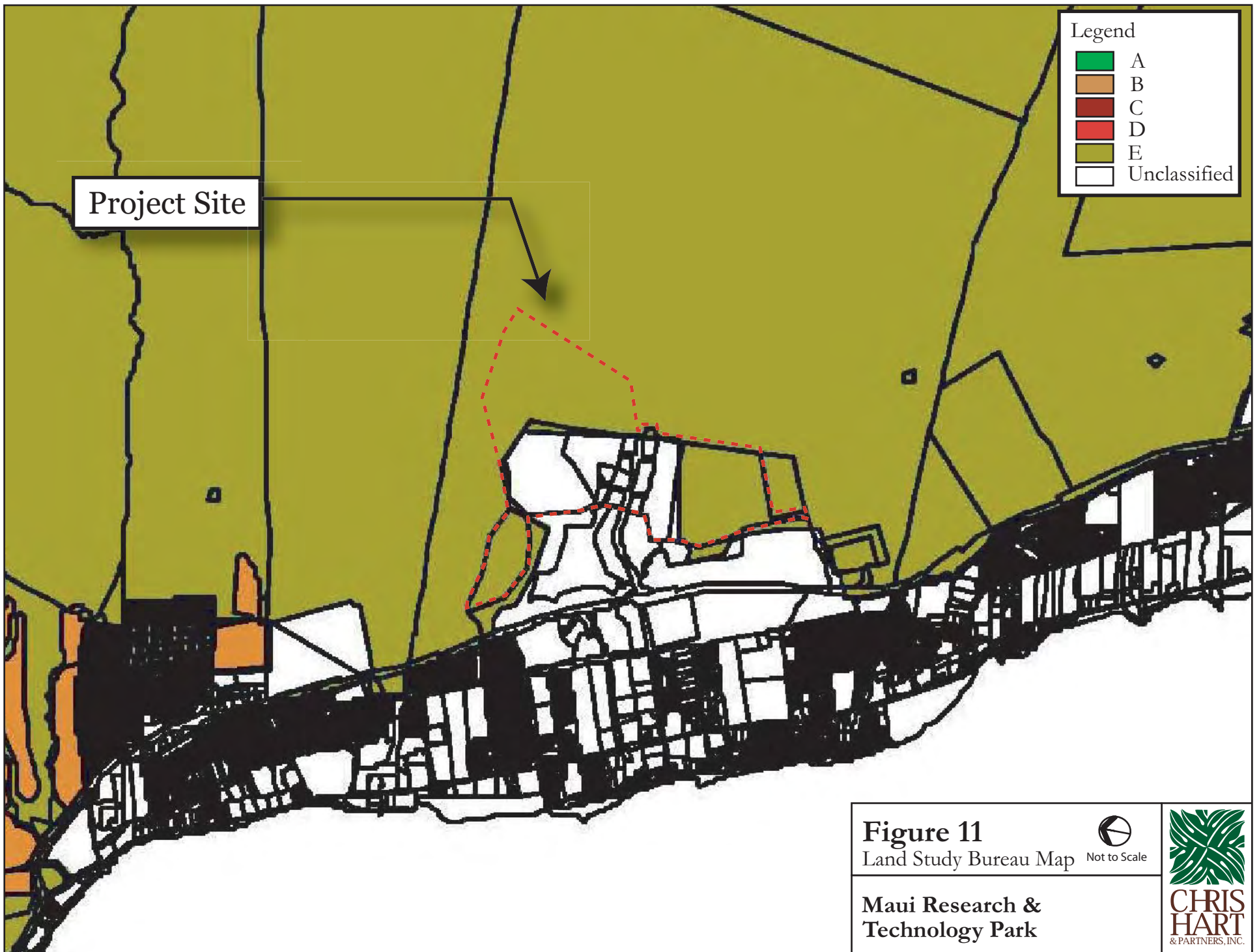
LSB. The University of Hawaii, Land Study Bureau (LSB), developed the Overall Productivity Rating, which classifies soils according to five (5) levels, ranging from “A”, representing the class of highest productivity soils, to “E”, representing the lowest.

The lands underlying the MRTP are largely classified as “E” with some portions “Unclassified”. See: Figure 11, “LSB Map”.

***Potential Impacts and Mitigation Measures.*** The Draft EIS will assess potential impacts to agricultural resources.









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## B. Socio-Economic Environment

### 1. Population

*Existing Conditions.* The resident population in Maui County has experienced rapid growth, doubling in the last 30 years. The resident population expanded from 74,000 in 1981 to 141,902 in 2007 (*Maui County Data Book* 2008). Population growth is expected to continue, with the year 2020 resident population projected to reach 174,450. Visitor counts have increased even more dramatically, with the average daily visitor count increasing from 15,363 in 1980 to 51,222 in 2007. This represents a 215 percent increase in visitors per day. Thus the County's *de facto* population, which includes residents and visitors, grew from 85,803 in 1980 to 184,002 in 2007, representing a 214% percent increase.

Likewise, Kihei-Makena experienced high growth rates as the population grew to 25,609 in 2005, up from 15,365 in 1990, and 7,263 in 1980 (Socio-Economic Forecast, County of Maui, 2006). The anticipated 2030 population of the Kihei-Makena region is projected to reach 38,757. The average daily visitor population of the region in 1990 was 16,079 and is anticipated to reach 33,151 in 2030, a 106% increase over 1990 levels (Socio-Economic Forecast, County of Maui, 2006).

Population projections calculated by the Hawaii State Department of Business, Economic Development and Tourism, Research and Economic Analysis Division estimate that Maui County's resident population will reach 199,550 people in 2030, while the *de facto* population will reach 263,500 (*Maui County Data Book* 2008).

*Potential Impacts and Mitigation Measures.* The long-term implementation of the Master Plan Update may contribute to the increase in population projected for the Kihei-Makena region. This impact will be more



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thoroughly analyzed in the Socio-Economic Impact Analysis Report prepared in support of the Draft EIS.

## **2. Housing**

*Existing Conditions.* For a variety of reasons, there has been a generally high appreciation on real estate prices on Maui since the early 1970s. At the same time, the population has expanded dramatically, leading to high demand for residential units. According to the draft Maui Island Plan, there will be a demand for an additional 34,637 housing units on Maui through 2030. Of these units, approximately 11,154 are expected to be built on lands not currently entitled for urban development.

*Potential Impacts and Mitigation Measures.* The proposed Master Plan Update would allow for residential uses in conjunction with business uses in the MRTP. It is anticipated that the long-term building-out of the Park will generate sufficient employment to warrant the construction of additional housing to satisfy this demand. By locating additional housing within the Park housing is brought closer to jobs reducing commuting time and mitigating traffic congestion. The potential demand for additional housing created by the project will be more thoroughly analyzed in the Socio-Economic and Fiscal Impact Analysis Reports prepared in support of the Draft EIS.

## **3. Economy**

*Existing Conditions.* Tourism is the predominant component of Maui County's economy. In Maui County, the Accommodations and Food Service Industry accounts for the largest proportion of jobs, 29%. The retail trade, also highly dependent upon tourism, ranks second at 13%. This is followed by government at 13%, professional and business services at 9%, and health care and social assistance at 6%. Agriculture generates just 2% of Maui County jobs, but is disproportionately important for its historic and cultural legacy and its contribution to the island's scenic beauty and

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quality of life (Hawai'i County Department of Labor and Industrial Relations, Current Employment Statistics, 2007).

Maui County is much more dependant upon tourism than other Hawaii Counties. Of Maui County's Gross County Product (GCP), 39 percent is attributed to tourism, versus a range of 19 to 29% for the other counties<sup>2</sup>. Contending with Maui's high cost of living, most households support themselves on two or more jobs. Based on a living wage study of Maui County, a family of four (two adults, two children) would have needed an annual income of \$61,650 to support itself in 1995<sup>3</sup>. A corresponding analysis of 2005 jobs and wage data for Maui found that the average wage of 78 occupations – representing 54 percent of all jobs – fell below the \$30,800 living wage standard.

Maui County hosted 2,522,043 visitors in the year 2007 and hotels on Maui Island experienced a 76.5 percent occupancy rate (Maui County Data Book, 2008). However, with the current economic down-turn occupancy rates fell below 60% in January 2009, but have since risen to 67.2% in January 2010 (Maui News, March 27, 2010). With the current economic recession, unemployment in Maui County has risen from 1.7 percent in December 2006 to 8.8 percent in December 2009 (U.S. Bureau of Labor Statistics). In South Maui, economic activity centers on visitor and service industries, with two (2) of the island's three (3) Resort Districts located in South Maui. These Resort Districts--Wailea and Makena--represent substantial economic generators for Maui, but have been especially hard-hit during the current recession.

According to the *Economic Development Issue Paper* (October 2007) prepared for the County of Maui, Department of Planning, in support of the Maui County General Plan 2030 update, diversifying Maui's economy has been a key, longstanding County policy. The current draft of the *Maui Is-*

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<sup>2</sup> Hawai'i Tourism Authority, Maui County Tourism Strategic Plan: 2006-2015, 2006, p. 11, citing DBEDT Long Range Forecast, 2005.

<sup>3</sup> D. Pearce, the Hawai'i Self-Sufficiency Standard, Maui County 2003; updated to 2005 based on increase in the Consumer Price Index, U.S. Bureau of Labor Statistics.

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*land Plan* (Chapter 4, Economic Development) states the following in its analysis of the island's challenges and opportunities:

"The Island of Maui, like the County as a whole, faces two fundamental challenges in economic development: (1) diversification; and (2) increasing the number and proportion of *living wage* jobs. There is a subset of more specific challenges, such as the high cost of housing and the need to strengthen public education".

***Potential Impacts and Mitigation Measures.*** Fuller development of the MRTTP is expected to generate short-term economic benefits in the form of construction-related employment, as well as long-term benefits that include increased permanent employment and tax revenues. Short- and long-term economic benefits will be more thoroughly analyzed in the Socio-Economic Impact Analysis Report prepared in support of the Draft EIS.

## C. Public Services

### 1. Recreational Facilities.

***Existing Conditions.*** Numerous public beach parks are located in the South Maui area, such as the three (3) Kamaole Beach Parks, Charley Young Park, and Kalama Park. Other recreational facilities include the Kihei Aquatic Center and the Kenolio Recreational Complex. The South Maui Community Park, located just across Piilani Highway, is under construction of Phase I improvements which will include soccer and baseball fields.

***Potential Impacts and Mitigation Measures.*** The long-term implementation of the Master Plan Update may contribute to the increase in population projected for the Kihei-Makena region. This impact, and its associated impact to recreational facilities, will be more thoroughly analyzed in



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the Socio-Economic Impact Analysis Report prepared in support of the Draft EIS.

## **2. Medical Facilities**

*Existing Conditions.* Maui Memorial Medical Center, located approximately 10 miles from the MRTP, is in Wailuku and is the island's only acute care hospital. It is an approximately 240 bed hospital. Various private medical offices and facilities are located in the South Maui area.

*Potential Impacts and Mitigation Measures.* The long-term implementation of the Master Plan Update may contribute to the increase in population projected for the Kihei-Makena region. This impact, and its associated impact on the demand for medical facilities, will be more thoroughly analyzed in the Socio-Economic Impact Analysis Report prepared in support of the Draft EIS.

## **3. Police and Fire Protection Services**

*Existing Conditions.* The applicants' properties fall within the Maui Police Department's (MPD) District 6 – Kihei. This police district is served by the Kihei Station, located approximately 2.5 miles from the MRTP at 1881 S. Kihei Road.

The MRTP is serviced by the Wailea Fire Station. The fire station is located at 11 Waimahaihai St, approximately 2 miles from the MRTP.

*Potential Impacts and Mitigation Measures.* The long-term implementation of the Master Plan Update may contribute to the increase in population projected for the Kihei-Makena region. This impact, and its associated impact to police and fire services, will be more thoroughly analyzed in the Socio-Economic Impact Analysis Report prepared in support of the Draft EIS.



## 4. Schools

*Existing Conditions.* Maui schools are organized into two complex-areas. A complex consists of a high school and all of the intermediate/middle and elementary schools that flow into it. Groups of two to four complexes form a "complex area" that is under the supervision of a complex area superintendent.

The MRTP is located within the State Department of Education's (DOE) Maui Complex, within the Baldwin-Kekaulike-Maui Complex-Area. The Maui Complex is composed of the following schools:

### Elementary Schools

- Kahului Elementary
- Kamalii Elementary
- Kihei Elementary
- Lihikai Elementary
- Pomaikai Elementary
- Maui PC Elementary School

### Intermediate Schools

- Lokelani Intermediate
- Maui Waena Intermediate
- Maui PC Intermediate School

### High Schools

- Maui High
- Kihei PC High School

*Potential Impacts and Mitigation Measures.* The long-term implementation of the Master Plan Update may contribute to the increase in population projected for the Kihei-Makena region. This impact, and its associated impact on the demand for school facilities, will be more thoroughly





analyzed in the Socio-Economic Impact Analysis Report prepared in support of the Draft EIS.

In 2007, the Hawaii Legislature enacted Act 245 as Section 302A, HRS, "School Impact Fees". Based upon this legislation, the Department of Education (DOE) will be enacting impact fees for residential developments that occur within indentified school impact districts. The Maui Complex may be designated as a school impact district. Should the area be so designated, the applicant will coordinate with the DOE to determine the appropriate measures to be taken as required by the Section 302A-1603(b), HRS.

## 5. Solid Waste

*Existing Conditions.* Weekly, residential, solid-waste collection in the area is provided by the County of Maui, Department of Environmental Management. The Department's Residential Collection program collects and disposes of residential waste in 3 major districts: Wailuku (including Kahului and South Maui), Makawao (including Kula, Pukalani, Paia, and Haiku) and Lahaina (West Maui).

The Central Maui Landfill, which is located in the Wailuku-Kahului Community Plan region, receives residential solid waste from the area. Green waste is collected by Eko Compost, which is located at the Central Maui Landfill. Construction and demolition (C&D) waste is accepted at the privately operated C&D Landfill in Ma`alaea.

Plastic, glass, metal, cardboard, and newspaper can be recycled when left at various drop-boxes throughout the County. Green waste recycling is provided by several private organizations.

*Potential Impacts and Mitigation Measures.* In the *Public Facilities Assessment Update County of Maui* (2007), R.M. Towill Corporation projected that the Central Maui Landfill will have adequate capacity to accommo-



date residential and commercial waste through the year 2025. This projection was arrived at by multiplying the Maui County's de facto population projections by an estimated number of pounds per person per day of waste generated, and assumes that solid waste generated by commercial and industrial growth will be captured by a corresponding trend in projected population growth. This estimate does not take into account future increases in source reduction and waste diversion. Increases in waste diversion achieved through education, recycling, composting, and reuse programs are expected to decrease demand for landfill space and extend the life of the Central Maui Landfill beyond the currently projected closure date. The County's Department of Environmental Management, Solid Waste Division, anticipates that additional phases of the Central Maui Landfill will be developed as needed to accommodate future waste.

Waste generated by site preparation will primarily consist of vegetation, rocks, and debris from clearing, grubbing, and grading. Very little demolition material is expected, as the site is essentially vacant.

During the short term, construction activities will require the disposal of the existing onsite waste, as well as cleared vegetation and construction-related solid waste. A solid waste management plan will be coordinated with the County's Solid Waste Division for the disposal of onsite and construction-related waste material. The applicants will work with the contractor to minimize the amount of solid waste generated during the construction of the project.

The long-term implementation of the Master Plan Update may contribute to the increase in population projected for the Kihei-Makena region. This impact, and its associated impact on solid waste facilities, will be more thoroughly analyzed in the Socio-Economic Impact Analysis Report prepared in support of the Draft EIS.



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## D. Infrastructure

### 1. Roadways

*Existing Conditions.* The MRTP is accessed via Lipoa Parkway, a two-lane, two-way road that connects to Pi'ilani Highway, the only arterial roadway in South Maui. Traffic is, at present, very light due to the relatively underdeveloped nature of the Park.

*Potential Impacts and Mitigation Measures.* A Traffic Impact Analysis Report (TIAR) will be prepared for the project and included within the Draft EIS. This report will analyze current conditions and project conditions with and without full development based upon the Master Plan Update. It will also make recommendations for any traffic mitigation measures deemed necessary.

### 2. Utilities

*Existing Conditions.* There are existing power, telephone, and cable television transmission facilities along Pi'ilani Highway.

*Potential Impacts and Mitigation Measures.* Proposed electrical, telephone, and cable television distribution systems will be served from the existing facilities along Pi'ilani Highway. Potential impacts to utilities will be more thoroughly analyzed in the Preliminary Engineering Report prepared in support of the Draft EIS.

### 3. Drainage

*Existing Conditions.* A Preliminary Drainage Report will be prepared for the Draft EIS. The report will analyze current conditions, including drainage patterns, existing improvements, and runoff totals.



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***Potential Impacts and Mitigation Measures.*** The Drainage Report will analyze anticipated changes in stormwater runoff and recommend improvements necessary to comply with County drainage requirements.

#### **4. Water**

***Existing Conditions.*** A Preliminary Engineering Report will be prepared for the Draft EIS. The report will analyze current water source and transmission requirements to support the implementation of the Master Plan Update.

***Potential Impacts and Mitigation Measures.*** The Engineering Report will analyze anticipated increases in water demand and propose means of meeting that demand.

#### **5. Wastewater**

***Existing Conditions.*** A Preliminary Engineering Report will be prepared for the Draft EIS. The report will analyze current wastewater system capacity and existing infrastructure to support the project.

***Potential Impacts and Mitigation Measures.*** The Engineering Report will analyze anticipated increases in wastewater flows and propose means of meeting that demand.

### **E. Cumulative and Secondary Impacts**

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.

Secondary impacts are those that have the potential to occur later in time or farther in distance, but which are reasonably foreseeable. They can be



viewed as actions of others that are taken because of the presence of the project. Secondary impacts from highway projects, for example, can occur because they can induce development by removing transportation impediments to growth.

The Draft EIS will discuss potential cumulative and secondary impacts from the proposed Master Plan Update.

## **F. Summary of Unavoidable Impacts on the Environment and Resources**

The Draft EIS will discuss unavoidable impacts on the environment and resources and analyze their significance.



### III. RELATIONSHIP TO GOVERNMENTAL PLANS, POLICIES, AND CONTROLS

#### A. State Land Use

Chapter 205, Hawaii Revised Statutes, relating to the Land Use Commission (LUC), establishes four (4) major land use districts in which all lands in the state are placed. These districts are designated as *Urban*, *Rural*, *Agricultural*, and *Conservation*. The lands of the MRTP lie within the State *Urban* and *Agricultural* districts. Refer to Figure 5, "State Land Use Map".

The proposed Master Plan Update will require a State Land Use District Boundary Amendment in order to bring the entire Park site into the *Urban* district, as outlying portions remain classified as *Agricultural*. The total land area expected to be affected comprises approximately 252.20 acres and is identified by Tax Map Parcels (2) 2-2-024:16 and 17 and a portion of (2) 2-2-002:54 (hereafter "Parcels 16, 17, and 54 por"). Additionally, the proposal would require amendments to the conditions placed upon currently urbanized lands, comprising approximately 141.736 acres.

The Draft EIS will analyze the proposed boundary reclassification's consistency with the following standards of the Urban District, Sec 15-15-18, Hawaii Administrative Rules:

1. It shall include lands characterized by "city-like" concentrations of people, structures, streets, urban and other related land uses; streets, urban level of services and other related land uses.
2. It shall take into consideration the following specific factors:
3. Proximity to centers of trading and employment except where the development would generate new centers of trading and employment;



4. Availability of basic services such as schools, parks, wastewater systems, solid waste disposal, drainage, water, transportation systems, public utilities, and police and fire protection; and
5. Sufficient reserve areas for foreseeable urban growth.
6. It shall include lands with satisfactory topography, drainage, and reasonably free from the danger of any flood, tsunami, unstable soil condition, and other adverse environmental effects.
7. Land contiguous with existing urban areas shall be given more consideration than non-contiguous land, and particularly when indicated for future urban use on state or county general plans.
8. It shall include lands in appropriate locations for new urban concentrations and shall give consideration to areas of urban growth as shown on the state and county general plans;
  - (A) It may include lands which do not conform to the standards in paragraphs (1) to (5):
  - (B) When surrounded by or adjacent to existing urban development; and
  - (C) Only when those lands represent a minor portion of this district;
9. It shall not include lands, the urbanization of which will contribute toward scattered spot urban development, necessitating unreasonable investment in public infrastructure or support services
10. It may include lands with a general slope of twenty per cent or more if the commission finds that those lands are desirable and suitable for urban purposes and that the design and construction controls, as adopted by any federal, state, or county agency, are adequate to protect the public health, welfare and safety, and the public's interests in the aesthetic quality of the landscape.

## **B. Hawaii State Plan**

Chapter 226, HRS, also known as the *Hawaii State Plan*, is a long-range comprehensive plan that serves as a guide for the future long-range development of the State by identifying goals, objectives, policies, and priorities, as well as implementation mechanisms. As stated in Section 226-1:



*The purpose of this chapter is to set forth the Hawaii state plan that shall serve as a guide for the future long-range development of the State; identify the goals, objectives, policies, and priorities for the State; provide a basis for determining priorities and allocating limited resources, such as public funds, services, human resources, land, energy, water, and other resources; improve coordination of federal, state, and county plans, policies, programs, projects, and regulatory activities; and to establish a system for plan formulation and program coordination to provide for an integration of all major state, and county activities.*

The Draft EIS will analyze the Master Plan's consistency with State Plan Objectives and Policies.

### **C. Maui County General Plan**

The General Plan of the County of Maui refers to a hierarchy of planning documents that together set forth future growth and policy direction in the County. The General Plan is comprised of the following documents: 1) County-wide Policy Plan; 2) Maui Island Plan; and 3) nine community plans.

The County-wide Policy Plan was adopted in March 2010 and is a broad policy document that identifies a vision for the future of Maui County. It establishes a set of guiding principles and provides comprehensive goals, objectives, policies and implementing actions that portray the desired direction of the County's future. The County-wide Policy Plan provides the policy framework for the development of the Maui Island Plan and nine Community Plans.

The Maui Island Plan functions as a regional plan and addresses the policies and issues that are not confined to just one community plan area, including regional systems such as transportation, utilities and growth management, for the Island of Maui. Together, the Island and Community Plans develop strategies 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. The





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draft Maui Island Plan was transmitted to the Maui County Council for adoption in October 2009. The County Council has until October 2010 to adopt the Plan.

The Master Plan Update, and request for land use entitlements, must conform to the goals, policies and actions found in the General Plan.

### **County-wide Policy Plan**

The County-wide Policy Plan establishes a list of county-wide goals, objectives, policies, and implementing actions related to the following core themes:

- Protect the Natural Environment
- Preserve Local Cultures and Traditions
- Improve Education
- Strengthen Social and Healthcare Services
- Expand Housing Opportunities for Residents
- Strengthen the Local Economy
- Improve Parks and Public Facilities
- Diversify Transportation Options
- Improve Physical Infrastructure
- Promote Sustainable Land Use and Growth Management
- Strive for Good Governance

*Analysis.* The Draft EIS will provide a comprehensive discussion of the project's conformance to the County-wide Policy Plan's themes and associated goals, policies and actions.

### **Maui Island Plan**

The Maui Island Plan serves as the regional plan for the Island of Maui. The Plan is comprised of the following ten elements: 1) Population; 2) Heritage Resources; 3) Natural Hazards; 4) Economic Development; 5) Housing; 6) Infrastructure and Public Facilities; 7) Land Use; 8) Directed Growth Plan; 9) Long Range Implementation Plan; and 10) Monitoring and Evaluation. Each element contains goals, objectives, policies and implementing actions. The Directed Growth Plan

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identifies the location of future development through 2030. The Directed Growth Plan is intended to guide the location and general character of future urban development and will direct future zoning changes and guide the development of the County's short-term and long-term capital improvement plan budgets.

*Analysis.* The Maui County Council is currently reviewing the draft Maui Island Plan and has until October 2010 to complete its work. The MRTP site is currently within the Plan's Urban Growth Boundary and the draft Plan envisions a mixed-use new town component being incorporated within the Park.

The Draft EIS will analyze the proposed development's consistency with the Maui Island Plan's goals, objectives and strategies.

## **D. Kihei-Makena Community Plan**

Within Maui County, there are nine (9) community plan regions. From a General Plan implementation standpoint, each region is governed by a Community Plan which sets forth desired land use patterns, as well as goals, objectives, policies, and implementing actions for a number of functional areas including infrastructure-related parameters.

The MRTP is located within the Kihei-Makena Community Plan region. The majority of the park is designated Project District 6 (R&T Park) in the Community Plan, with a portion designated *Public/Quasi-public*. Refer to Figure 6.

A Community Plan Amendment will be sought to bring the entire Park site into a community plan designation that better aligns with the vision of the Master Plan Update and amendments to Maui County Code (MCC) Title 19.33.

The Draft EIS will analyze the proposed project's consistency with the *Kihei-Makena Community Plan Objectives and Policies*.



## E. County Zoning

Title 19 of the Maui County Code provides comprehensive zoning for the county. The purpose and intent of this comprehensive zoning is to regulate the utilization of land in a manner encouraging orderly development and to promote and protect the health, safety and welfare of the people of the County.

The Master Plan Update will require a Change in County Zoning in order to bring the entire Park site into the *Kihei Research and Technology Park* District (MCC Title 19.33), whereas portions are currently zoned *Agricultural*. Refer to Figure 7. As above, changes will also be sought to the language of Chapter 19.33, MCC, to allow for a more diversified development that comports with the vision of the Master Plan Update.

## F. Coastal Zone Management

Coastal Zone Management objectives and policies (section 205A-2 HRS) and the Special Management Area Rules for the Maui Planning Commission (Chapter 202) have been developed to preserve, protect, and where possible, to restore the natural resources of the coastal zone of Hawaii. While the subject property is not located within the Special Management Area, the Draft EIS will analyze the project's consistency with Coastal Zone Management Objectives and Policies:

### 1. Recreational Resources

*Objective:* Provide coastal recreational resources 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 require 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 uses of county, state, and federally owned or controlled shoreline lands and waters having 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;
- (viii) Encourage 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, HRS.

2. Historical/Cultural Resources

*Objective:* Protect, preserve and, where desirable, restore those natural and manmade historic and prehistoric resources in the



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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 structures.

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 that are not coastal dependent to locate in inland areas.

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;
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- (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 non-point source water pollution control measures.

5. Economic Use

*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 facilities and energy generating facilities, are located, designed, and constructed to minimize adverse social, visual, and environmental impacts in the coastal zone management area;
- (c) Direct the location and expansion of coastal dependent developments to areas presently designated and used for such development 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 impacts are minimized; and
  - (iii) The development is important to the State's economy.

6. Coastal Hazards

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

*Policies:*



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- (a) Develop and communicate adequate information about storm wave, tsunami, flood, erosion, subsidence, and point and non-point source pollution hazards;
  - (b) Control development in areas subject to storm wave, tsunami, flood, erosion, subsidence, and point and non-point pollution hazards;
  - (c) Ensure that developments comply with requirements of the Federal Flood Insurance Program; and
  - (d) Prevent coastal flooding from inland projects.

## 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 of 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.

## 8. Public Participation

*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.

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.

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 in-





ventory 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. [L 1977, c 188, pt of §3; am L 1993, c 258, §1; am L 1994, c 3, §1; am L 1995, c 104, §5; am L 2001, c 169, §3]



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## IV. FINDINGS AND CONCLUSIONS

According to the Department of Health Rules (11-200-12), an applicant or agency must determine whether an action may have a significant impact on the environment, including all phases of the project, its expected consequences both primary and secondary, its cumulative impact with other projects, and its short and long-term effects. In making the determination, the Rules establish “Significance Criteria” to be used as a basis for identifying whether significant environmental impact will occur. The criteria are:

1. The proposed action will not result in an irrevocable commitment to loss or destruction of natural or cultural resources.
2. The proposed action will not curtail the range of beneficial uses of the environment.
3. The proposed action will not conflict with State or County long-term environmental policies and goals as expressed in Chapter 344, HRS, and those which are more specifically outlined in the Conservation District Rules.
4. The proposed action will not substantially affect the economic or social welfare and cultural activities of the community, county or state.
5. The proposed action will not substantially affect public health.
6. The proposed action will not result in substantial secondary impacts.
7. The proposed action will not involve substantial degradation of environmental quality.
8. The proposed project will not produce cumulative impacts and does not have considerable effect upon the environment or involve a commitment for larger actions.



9. The proposed project will not affect a rare, threatened, or endangered species, or its habitat.
10. The proposed action will not substantially or adversely affect air and water quality or ambient noise levels.
11. The proposed action will not substantially affect or be subject to damage by being located in an environmentally sensitive area, such as flood plain, shoreline, tsunami zone, erosion-prone areas, estuary, fresh waters, geologically hazardous land or coastal waters.
12. The proposed action will not substantially affect scenic vistas or view planes identified in county or state plans or studies.
13. The proposed action will not require substantial energy consumption.

The Draft EIS will analyze the project in relation to these Significance Criteria. A final declaration will be made after the Accepting Authority has considered all agency and public comments on the Draft EIS.



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## V. CONSULTATION AND REVIEW

### A. Early Consultation

Prior to the preparation of this Notice, consultation on the project was undertaken with the following agencies and groups:

February 3, 2009	Department of Planning, Director and Long-Range Division staff
July 21, 2009	Presentation to the Maui Planning Commission regarding <i>Maui Island Plan</i> Urban Growth Boundaries
October 27, 2009	Kihei Community Association Planning Committee to discuss Master Planning Process and Project Objectives
October 27, 2009	Maui Economic Development Board (MEDB) to discuss Master Planning Process and Project Objectives
October 28, 2009	Department of Planning, Director and Long-Range Division staff
October 28, 2009	Haleakala Ranch to discuss plans for the ranch lands to the north and east of the project
Dec 15, 2009	Presentation of Conceptual Project Plans to the Maui Tech Ohana technology industry association
Dec 15, 2009	Presentation of Conceptual Plans to the Department of Planning, Director and Long-Range Division staff
Dec 16, 2009	Presentation of Conceptual Plans to Montessorri Schools and Kihei Charter School



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| Dec 16, 2009 | Presentation of Conceptual Plans to the Kihei Community Association Planning Committee       |
| Dec 16, 2009 | Presentation of Conceptual Plans to Haleakala Ranch  |
| Dec 16, 2009 | Presentation of Conceptual Plans to MEDB stakeholder group including current tenants of MRTP |

Additionally, there has been on-going consultation with the State Department of Education regarding integrating the project with the proposed South Maui High School.

## **B. EIS Preparation Notice Distribution**

This EIS Preparation Notice is being transmitted to the following agencies and organizations for review and comment:

### **Federal Agencies**

Natural Resources Conservation Service  
US Army Engineer Division  
US Fish and Wildlife Service

### **State Agencies**

Department of Agriculture  
Department of Accounting and General Services  
Department of Bus, Econ. Dev. and Tourism  
DBEDT – Energy Division  
DBEDT – Office of Planning  
Department of Education  
Department of Hawaiian Home Lands  
Department of Health  
Department of Human Services  
Department of Labor and Industrial Relations

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Department of Land and Natural Resources  
DLNR – Historic Preservation Division  
Department of Transportation  
Hawaii Housing Financing and Development Corporation  
Office of Hawaiian Affairs  
UH Environmental Center

**County Agencies**

Department of Environmental Management  
Department of Fire and Public Safety  
Department of Housing and Human Concerns  
Department of Parks and Recreation  
Department of Planning  
Department of Public Works  
Department of Transportation  
Department of Water Supply  
Police Department

## **APPENDICES**

**Appendix - A**  
Maui County Code, Chapter 19.33, *Kihei*  
*Research & Technology Park District*



## Chapter 19.33

KIHEI RESEARCH AND TECHNOLOGY PARK  
DISTRICT

## Sections:

19.33.010	Purpose.
19.33.020	Definitions.
19.33.030	Permitted uses.
19.33.040	Area regulations.
19.33.050	Height regulations.
19.33.060	Yard setbacks.
19.33.070	Building coverage.
19.33.080	Performance standards.
19.33.090	Environmental controls.
19.33.100	Research and technology park coordinator.
19.33.110	Technical review committee.
19.33.120	Procedure for subdivision.
19.33.130	Procedure for securing building and site improvement permits.
19.33.140	Improvement district program for the construction of off-site improvements.
19.33.150	Limitation.

**19.33.010 Purpose.**

The intent of this chapter is to provide for the establishment of a research and technology park district pursuant to the findings and recommendations of the general plan and the Kihei-Makena community plan as specified in Chapter 2.80 of this code and Ordinance No. 1490, Bill No. 95 (1984). (Ord. 1541 § 1 (part), 1986)

**19.33.020 Definitions.**

Whenever used in this chapter, unless a different meaning clearly appears from the context:

A. "Application" means a formal request filed by an owner or lessee pursuant to the provisions of this chapter.

B. "Association" means a group of owners of lots in the research and technology park district (other than the association itself in its capacity as owner of the common area) formed for the purposes set forth in protective covenants, conditions and restrictions.

C. "CC&Rs" means a document listing protective covenants, conditions and restrictions, which shall be recorded with the Bureau of Conveyances of the state of Hawaii, and apply to the research and technology park and to each lot within the research and technology park district.

D. "Committee" means the research and technology park technical review committee hereinafter established.

E. "Design guidelines" means those detailed architectural, engineering, landscaping and/or other design related standards to be applied in the development of a research and technology park which shall be consistent with the performance standards specified herein.

F. "Enforcing agency" means the fire chief of the department of fire control of the county of Maui or such other person or agency designated by the mayor of the county of Maui.

G. "Hazardous materials management plan" or "HMMP" means a document prepared and filed in accordance with Sections 19.33.090 and 19.33.130 of this chapter.

H. "Lessee" means a person holding land situate in the county of Maui pursuant to a recorded lease under which the unexpired remaining term is not less than five years at the time of filing of an application hereunder.

I. "Occupant" means a person holding record fee simple or leasehold title to land situate in the county of Maui and who has legal occupancy in the property in the research and technology park district.

J. "Owner" means a person holding record fee simple or leasehold title to land situate in the county of Maui.

K. "Planning commission" means the planning commission of the county of Maui.

L. "Planning director" means the director of the department of planning of the county of Maui; also referred to as the "coordinator" pursuant to the provisions of this chapter.

M. "Public works director" means the director of the department of public works of the county of Maui.

N. "Research and technology park district" or "research and technology park" or "R&T park" means land specifically designated and zoned for the permitted uses set forth hereinafter in Section 19.33.030 of this chapter.

O. "Uncontrolled discharge" or "uncontrolled release" means any leak, spill or dumping of hazardous materials resulting by accident, any malicious action, or any malfunction, breakdown or circumstance that cannot otherwise be reasonably predicted or prevented by human, mechanical or structural means.

P. "Urban design review board" means the agency established under Article II, Special Management Area Rules and Regulations of the planning commission of the county of Maui adopted pursuant to Chapter 205A, Hawaii Revised Statutes. (Ord. 1541 § 1 (part), 1986)

**19.33.030 Permitted uses.**

The following uses shall be permitted within the research and technology park district:

A. Research laboratories and facilities, developmental laboratories and facilities and testing laboratories and facilities;

B. Manufacture, assembly, testing and repair of components, devices, equipment and systems of an electrical, electronic or electromechanical nature;

C. Manufacture, testing, repair and assembly of optical devices, equipment and systems;

D. Manufacture, testing, repair and assembly of testing equipment;

E. Pharmaceutical, biological, medical and agricultural research and production facilities;

F. Administrative offices, distribution and warehouse facilities as may be required to support the permitted uses under this section;

G. Other uses of similar and/or supporting service character may be permitted (e.g., banks, fitness centers, classroom and meeting facilities, restaurants and other support facilities or services catering primarily to the needs of visitors or employees of the R & T park), subject to approval by the planning commission and findings that such uses are consistent with the policies of the Kihei community plan. (Ord. 1541 § 1 (part), 1986)

#### 19.33.040 Area regulations.

Within the R & T park, the minimum lot area shall be two acres and the minimum lot frontage shall be two hundred fifty feet, except for lots fronting on a cul-de-sac where the minimum frontage requirement is equal to one-third the outside circumference of the cul-de-sac bulb. (Ord. 1541 § 1 (part), 1986)

#### 19.33.050 Height regulations.

The maximum height of any building shall be limited to three stories and shall not exceed forty feet. (Ord. 1541 § 1 (part), 1986)

#### 19.33.060 Yard setbacks.

The yard spacing for buildings shall be as follows:

A. Setbacks from parkway, arterial or collector streets: a sixty-foot building setback shall be provided from the right-of-way which includes at least a twenty-five-foot landscaped setback between parking area and a public right-of-way.

B. Front yard setbacks from other than parkway, arterial or collector streets: a forty-foot building setback shall be provided from the right-of-way which includes at least a twenty-foot landscaped setback between parking area and a public right-of-way.

C. Side yard setback: a forty-foot building setback shall be provided from side property lines of which ten feet is to be landscaped, buffering circulation, storage and parking areas from side property lines.

D. Rear yard setback: a forty-foot building setback shall be provided from rear property lines of which ten

feet is to be landscaped buffering circulation, storage and parking areas from rear property lines. (Ord. 1541 § 1 (part), 1986)

#### 19.33.070 Building coverage.

The maximum site area covered by structures shall not exceed thirty-five percent of the total lot area. (Ord. 1541 § 1 (part), 1986)

#### 19.33.080 Performance standards.

All building construction, alterations and site improvements shall be prepared, reviewed and approved in accordance with the design guidelines as approved by the public works director, and in accordance with Section 19.33.120 and the following standards:

A. Building. The general objective of these standards is to encourage quality architectural and landscape architectural design of all facilities to be constructed within the research and technology park.

1. All buildings shall be designed to be an integral part of the overall site design concept as presented in the design guidelines.

2. Building design should address the following: views and vistas; solar orientation and climate control; orientation toward major streets and thoroughfares; the character of neighboring development; and energy conservation.

3. Design features shall include the following: an entrance drive; landscaped visitor parking areas; visitor entrance and entry plazas; pedestrian plazas and walkways; atriums and interior courts; building and roof forms.

B. Landscape Planting. A comprehensive landscape planting and irrigation plan shall be prepared for all developments in the research and technology park district. The plan shall be subject to the approval of the planning director.

Each development shall be buffered by landscaped areas, as follows:

1. From a parkway, arterial or collector street right-of-way, a twenty-five foot wide landscaped area shall be provided between the parking area and the public right-of-way;

2. Along the front yard of a property other than that located on a parkway, arterial or collector street, a twenty foot wide landscaped area shall be provided between the parking area and the public right-of-way;

3. Along the side yard of a property, a ten foot wide landscaped area shall be provided; and

4. Along the rear yard of a property, a ten foot wide landscaped area shall be provided.

The streetscape and project landscape shall be maintained by the project occupant(s) individually or collectively through a landowner's association.

C. **Parking Requirements.** No parking shall be permitted on the internal streets or fronting half streets of the park. Each development shall provide off-street parking facilities in accordance with the requirements of Chapter 19.36, Off-Street Parking and Loading, of the Maui County Code as it relates to industrial or storage uses in the M-1 and M-2 industrial zones, or as may be otherwise provided for in Chapter 19.36. Each development shall incorporate the following:

1. All parking shall be screened from public roads by earthen mounding and/or heavy landscaping.

2. Parking areas shall be integrated with the project's on-site pedestrian circulation system.

3. Parking areas shall not be permitted on the street side of a structure, except for areas designated as visitor, handicapped or preferential parking.

D. **Signage for the park and the individual parcel users therein shall conform to the requirements of Chapter 16.12, Outdoor Signs, except for the following provisions:**

1. General research and technology park identification signs at the entry location shall be coordinated with the master landscape planting plan and appropriately sized and illuminated to clearly denote the project name for the passing motorists entering the project.

2. The name of each business or parcel user in the research and technology park shall be clearly displayed and individually associated with its facilities when viewed from the street. The user's sign shall display the name and/or symbol of the business only.

3. There may be one freestanding parcel user sign for each individual parcel's public street frontage. If the property frontage exceeds three hundred feet, an additional sign shall be allowed.

4. Detached business identification signs shall not exceed thirty-two square feet on each side, and no freestanding sign shall exceed four feet in height unless approved by the urban design review board.

5. Building identification signs shall be limited to displaying the building name or the name of the business occupying the site. Building signs may be mounted to any vertical surface of a building or building-related wall providing such signs appear as an integral part of the architectural concept.

6. A comprehensive signage plan in conformance with the design guidelines shall be submitted to the urban design review board for review and recommendation to the public works director, who shall approve, approve with conditions or disapprove the comprehensive signage plan.

E. **On-site Storage and Loading.**

1. Unless otherwise approved by the public works director, no materials, supplies or equipment, including

trucks and other motor vehicles, shall be stored upon a site except inside a closed building or in an enclosed area.

2. Provisions shall be made on each site for any necessary vehicle loading or unloading.

3. No on-street vehicle loading or unloading shall be permitted.

F. **Screening fences and walls may be permitted by the public works director, in accordance with the approved design guidelines.**

G. **Access and Driveway.**

1. The location and design of access point(s) from public roadways and streets and internal driveways shall conform with requirements of the department of public works.

2. No direct access onto a state highway shall be permitted from individual lots of the research and technology park.

3. Landscaping shall be required at all entrances to the park.

H. **Solid Waste Disposal.** No refuse collection areas shall be permitted between a street and the front of the building.

I. **Roof Equipment.** Equipment pipes and ducts on roof tops shall be screened from view along adjacent public roadways or streets.

J. **Utilities and Communication Devices.**

1. All on-site utilities including, but not limited to, drainage systems, sewers, gas lines, waterlines and wires and conduits associated with street lighting, electrical power, telephone, and communication equipment shall be installed underground.

2. Antennas, towers or devices for transmission or reception of any signals or for energy generation shall be located and designed to be as unobtrusive as possible from neighboring lots and the public streets and shall be subject to approval by the public works director, following review and recommendation by the committee.

3. Lighting shall be required on all internal streets and within all parking lots in the research and technology park.

K. **Grading.**

1. All building pad elevations shall conform to the overall drainage program for the research and technology park project district.

2. Grading and drainage improvements shall be designed and constructed to minimize adverse dust and runoff impacts on adjacent and downslope properties.

L. **Exterior Mechanical Equipment.** All exterior components of electrical, plumbing, heating, cooling and ventilating systems should not be visible from adjoining streets, lots or buildings. (Ord. 1541 § 1 (part), 1986)

**19.33.090 Environmental controls.**

A. Notwithstanding any other provisions contained in this chapter, no use or activity shall be permitted on any lot or portion of a lot within the research and technology park district, unless conducted in such a manner as not to constitute a nuisance to persons or property situate upon any adjoining lots whether the lots are located within the R&T park or outside of the R&T park. Such prohibited uses shall include, but not be limited to, the following:

1. Any use, excluding reasonable construction activity, of a lot or building which emits dust, sweepings, dirt or cinders into the atmosphere, or discharges liquid or solid wastes or other matter into any stream, river, waterway, leaching pond, cesspool, injection well or drainage system which may adversely affect the health, safety, comfort of, or intended use of their property by persons within the area;

2. The discharge of waste or any substance or materials of any kind shall be in compliance with all applicable laws;

3. The escape or discharge of any fumes, odors, spray, mists, gases, vapors, steam, acids or other substance, toxic and nontoxic, into the atmosphere which discharge may be offensive, detrimental to the health, safety or welfare of any person or may interfere with the comfort of persons within the area or which may be harmful to property or vegetation;

4. The radiation or discharge of intense glare or heat, or electromagnetic, microwave, ultrasonic, laser or other radiation. Any operation producing intense glare or heat or such other radiation shall be performed only within an enclosed or screened area and then only in such manner that the glare, heat or radiation emitted will not be discernible from any point exterior to the site or lot upon which the operation is conducted;

5. The presence at any point outside of any lot plane of a sound pressure level of any machine, device or any combination of same, from any individual plant or operation or property, which exceeds a decibel level which causes discomfort or annoyance to adjoining properties or lots, and, in any event, a sound pressure level which exceeds that set forth in the design guidelines;

6. The vibration of ground which is perceptible without instruments at a point exterior to the lot which is the source of such vibration;

7. Excessive emissions of smoke, steam or particulate matter (other than emissions caused by compliance with environmental requirements or due to waste control equipment), and visible (outside any building) emissions of smoke or steam which exceed Ringleman No. 1 on the Ringleman Chart of the United States Bureau of Mines (including those arising from disposal of trash and waste materials);

8. Interference with radio, television or other telecommunication signals.

**B. Enforcement, Control and Monitoring Requirements.**

1. The enforcing agency with technical assistance from the public works director or representative(s) and the committee shall establish such conditions and procedures to control, enforce, limit and monitor any use or activity defined and identified in subsection A of this section and is empowered to promulgate such rules and regulations as shall be necessary to implement the provisions of this chapter. Further, the enforcing agency shall also seek other technical assistance, if appropriate, from federal, state and county agencies as it relates to its duties provided hereinabove.

2. An effluent monitoring system for determining pH and temperature as an indicator of potential hazardous material shall be installed at the point where a park's effluent enters the main sewer line. Such a system will be designed to monitor on a random, periodic basis and not less than daily. Whenever such devices are provided, they shall be connected to attention-getting visual and/or audible alarms. In addition, random sampling of the contents of the sewer line will be made on at least a monthly basis and analyzed by a private licensed laboratory with reports made to the public works director and the enforcing agency.

3. Monitoring wells shall be established to provide baseline water quality information throughout the park with a minimum of three wells per each one hundred acres. These wells are to be monitored on at least a monthly basis with a report summarizing the results submitted to the public works director and the enforcing agency.

C. Hazardous Materials Storage and Handling Guidelines. Guidelines for hazardous materials storage and handling are specified hereinbelow for the research and technology park which will apply to all lots within the district:

**1. Part I—General.**

a. Purpose. The purpose of these guidelines is to protect the groundwater resources of the state by preventing uncontrolled discharges of hazardous materials into the ground at the research and technology park.

b. Applicability. These guidelines apply to all owners, lessees and occupants of the research and technology park (R & T park) who engage in the handling, storage and disposal of hazardous materials at the R & T park.

c. Administration. These guidelines will be implemented and administered by the association of the R & T park. The association will retain a suitably qualified independent engineer, or chemist or other appropriate professional consultant, acceptable to the enforcing agency and in consultation with the committee, with expertise in hazardous materials handling, storage and disposal. The hazardous

materials consultant will administer the procedural requirements of these guidelines and ensure that the substantive requirements of these guidelines are complied with. The hazardous materials consultant will be selected based upon experience, knowledge and expertise in the following areas: (i) federal, state and local regulation of hazardous materials; (ii) evaluation of alternative hazardous materials management and disposal strategies; (iii) health and environmental risk assessments; (iv) soil sampling and groundwater monitoring; (v) groundwater flow and contamination modeling; (vi) development of remedial action alternatives and plans; (vii) supervision or implementation of remedial action plans; (viii) facility inspections; and (ix) environmental audits. The association for good cause may remove the hazardous materials consultant on its own volition and shall remove the consultant at the request of the enforcing agency and in consultation with the committee. The hazardous materials consultant will be reimbursed through fees collected from owners, lessees and occupants engaged in hazardous materials storage, handling and disposal and will report to the association and the enforcing agency or other county agency, as so designated by the mayor of the county. The hazardous materials consultant will also provide technical information and assistance to the enforcing agency in terms of the development of rules and regulations, procedures, methods or programs to implement the provisions of Section 19.33.090, including, but not limited to, the following: recommended methods and criteria for evaluating an HMMP; recommended technical reference information; recommended procedures and methods for recordkeeping, monitoring, inspection, emergency cleanup and repair and handling and disposal of hazardous waste materials; a recommended training program for personnel of the enforcing agency and other county departments responsible for the implementation of this section; and recommended procedures for interagency consultation and/or coordination in the review and enforcement of an HMMP and in the handling of emergencies and conditions of noncompliance with applicable federal, state or county regulations or the provisions of this section.

d. Materials Regulated.

i. Controlled Materials. The materials regulated by these guidelines will consist of all materials listed as hazardous or extremely hazardous by the state, materials listed by the U.S. Department of Transportation, 49 CFR 172.101, as amended, and the Federal Environmental Protection Agency, 40 CFR Part 302; any materials classified by the National Fire Protection Association (NFPA) as either a flammable liquid, a class II combustible liquid, or a class IIIA combustible liquid; and any materials regulated under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA).

ii. Exempt Materials. These regulations do not apply to the following materials:

(A) Retail Products. Hazardous materials when contained solely in consumer products packaged for distribution to, and use by, the general public; or commercial products used at the facility solely for janitorial or minor maintenance purposes;

(B) Insignificant Quantities. Hazardous materials in quantities demonstrated to the satisfaction of the association's hazardous materials consultant and the enforcing agency to not present a significant actual or potential hazard to public health, safety or welfare and in compliance with the requirements of the state, the U.S. Department of Transportation and the Federal Environmental Protection Agency and as specified in subsection Cldi of this section.

2. Part II—Limitations on Operations and Activities.

a. Intent. The intent of this subdivision is to limit the occupancy of the property to nonhigh water users who so not use a significant quantity and/or variety of hazardous materials and who do not discharge the water into the county sewer system.

b. Limitations on Operation. Owners, lessees and occupants who propose to engage in high water usage operations and processes requiring significant quantities and/or variety of hazardous materials according to state or Federal Environmental Protection Agency regulations will not be permitted to locate at the R&T park unless the user provides an acceptable recycling system approved by the county as provided in subdivision 3 of this subsection.

c. Limitations on Quantities of Hazardous Materials. At each manufacturing facility, the quantities of hazardous materials permitted to be present onsite at any given time will be limited to volumes which would not necessitate storage in underground tanks, except as set forth in subdivision 4bvii(B) of this subsection.

3. Part III—Hazardous Materials Management Plan.

a. Intent. The intent of this subdivision is to provide for the regulation of hazardous materials use by requiring the submittal of a hazardous materials management plan (HMMP) which demonstrates the safe storage, handling and disposal of all hazardous materials.

b. Applicability. All owners, lessees or occupants proposing to engage in the handling, storage and disposal of hazardous materials are required to submit an HMMP. This requirement does not apply to exempt materials and quantities as provided in subdivision 1 of this subsection.

c. Contents of an HMMP. Prior to the construction of any buildings, structures or other improvement, owners, lessees and occupants intending to engage in the use of hazardous materials are to submit an HMMP as provided for in Section 19.33.130. The proposed HMMP shall include the following information:

for in Section 19.33.130. The proposed HMMP shall include the following information:

i. **General Facility Site Plan.** The general facility site plan is to consist of a site plan drawn at a scale of one inch to twenty feet which shows the location of all buildings and structures, loading and outside storage areas, parking lots, internal roads, storm and sewer drains and adjacent land uses. Any other relevant information such as the location of wells, surface water bodies, floodplains and earthquake faults should also be shown on the site plan.

ii. **Storage Facility Map.** The storage facility map is to show the location of each hazardous materials storage facility including all interior and exterior storage facilities, access to such storage facilities, emergency equipment related to each storage facility, and the general purpose of the other areas in the manufacturing facility. The storage facility map shall also indicate the chemical abstract service registry numbers for those hazardous materials listed in 40 CFR 302.4.

The map and registry are intended to provide emergency response personnel with a summary of the key information that they may need on the scene in the event of an emergency.

For tanks, the storage facility map and registry are to indicate the hazardous material contained in the tank by general chemical name, and the capacity limit of the tank.

iii. **Hazardous Material Inventory.** The HMMP is to contain information on each hazardous material stored in a facility (aggregated over all such materials stored in one or more storage facilities) where the aggregate quantity throughout the facility is greater than five hundred pounds in weight for solids, greater than fifty-five gallons for liquids, or greater than two hundred cubic feet at standard temperature and pressure (STP) for compressed gases. The HMMP is to contain the aggregate quantity range stored at the facility of each hazardous material. The HMMP shall also include a carcinogen identification form which shall indicate the storage of any quantity of any carcinogen listed in the regulations of federal or state agencies. The enforcing agency shall promulgate rules and regulations to further specify provisions for information, public records, trade secrets, and other appropriate requirements.

iv. **Separation of Materials.** The HMMP is to contain a description of the methods to be utilized to ensure separation and protection of stored hazardous materials from factors which may cause fire or explosion, or the production of flammable, toxic or poisonous gas or the deterioration of the containments.

v. **Monitoring Program.** The HMMP is to contain a description and, where appropriate, a design diagram of the location, type and suitability of monitoring methods

to be used in each storage facility containing hazardous materials.

vi. **Inspections.** The HMMP is to specify the frequency of inspections of storage facilities which will be undertaken by the occupant, as specified in subdivision 5a of this subsection.

vii. **Recordkeeping Forms.** The HMMP is to contain an inspection check sheet or log to be held by the enforcing agency and by the occupant on the premises to be used in conjunction with routine inspections.

viii. **Emergency Equipment and Personnel.** The HMMP is to describe emergency equipment availability, testing and maintenance, and to identify the emergency response manager.

ix. **Disposal.** The HMMP is to include plans for disposal of any solid, liquid or gaseous hazardous material and waste demonstrating that disposal will be in accordance with the applicable laws. To the extent practicable, however, primary emphasis shall be placed on the recycling or reprocessing of any hazardous waste materials to minimize the need for disposal of these materials.

x. **Recycling System.** The HMMP is to include plans and specifications of any recycling system and a written description of the uses of the recycled water and types of materials to be recycled.

xi. **Additional Information.** Additional information may be required for the HMMP where such information is reasonably necessary to ensure against uncontrolled discharges of hazardous materials.

d. **Authority, Amendment and Review.** The enforcing agency shall approve the HMMP and adopt rules and regulations for the review and approval of the HMMP and amendment of an approved HMMP as it relates to any major changes or modifications thereof. An approved HMMP shall be reviewed periodically by the enforcing agency pursuant to its rules and regulations. In any event, the enforcing agency shall not approve an HMMP or a building and site improvement permit shall not be issued for a proposed project in the R & T park that requires more than the minimum quantity of controlled materials, as specified in Section 19.33.090(C) (1) (d), or any quantity of an identified carcinogen, until responsible personnel of the enforcing agency are trained to implement the provisions of this section.

#### 4. Part IV—Storage and Containment Standards.

a. **Intent.** The intent of this subdivision is to specify standards for the proper storage and containment of hazardous materials with the objective of preventing uncontrolled discharges into the ground.

b. **Storage and Containment Requirements.** Primary and secondary levels of containment will be required for

i. **Primary Containment.** This is the first level of containment, i.e., the inside portion of that container which comes into immediate contact on its inner surface with the hazardous materials being contained.

(A) All primary containment must be product-tight, i.e., impervious to the hazardous material which is contained, or is to be contained, so as to prevent seepage of the hazardous material from the primary containment. To be product-tight, the container shall be made of a material that is not subject to physical or chemical deterioration by the hazardous material being contained.

ii. **Secondary Containment.** This is the level of containment external to and separate from the primary containment.

(A) All secondary containments are to be constructed of materials of sufficient thickness, density and composition so as not to be structurally weakened as a result of contact with the discharged hazardous materials and so as to be capable of containing hazardous materials discharged from a primary container for a period of time equal to or longer than the maximum anticipated time sufficient to allow recovery of the discharged hazardous material.

(B) In the case of an installation with one primary container, the secondary containment is to be large enough to contain at least one hundred ten percent of the volume of the primary container.

(C) In the case of a storage facility with multiple primary containers, the secondary container is to be large enough to contain one hundred fifty percent of the volume of the largest primary container placed in it, or ten percent of the aggregate internal volume of all primary containers in the storage facility, whichever is greater.

(D) If the storage facility is open to rainfall, then the secondary containment must be able to additionally accommodate the volume of a twenty-four-hour rainfall as determined by a twenty-five-year storm history.

iii. **Separation of Materials.** Materials that in combination may cause a fire or explosion, or the production of a flammable, toxic or poisonous gas, or the deterioration of a primary or secondary container, shall be separated in both the primary and secondary containment so as to avoid intermixing.

iv. **Overfill Protection.** Means of overfill protection, as determined by the enforcing agency, may be required for any primary container. This may be an overfill prevention device and/or an attention-getting high-level alarm.

v. **Drainage System.** Drainage of precipitation from within a storage facility containing hazardous materials shall be controlled in a manner so as to prevent hazardous materials from being discharged. No drainage system will be approved unless the flow of the drain can be controlled.

vi. **Monitoring Capability.** All storage facilities intended for the storage of hazardous materials are to be designed and constructed with a monitoring system capable of detecting whether the hazardous material stored in the primary containment has entered the secondary containment. Visual inspection of the primary containment is the preferred method; however, other means of monitoring may be required. Whenever monitoring devices are provided, they shall, where applicable, be connected to attention-getting visual and/or audible alarms.

vii. **Underground Storage.**

(A) In order to prevent uncontrolled discharge from underground storage of hazardous materials, underground hazardous material storage tanks will not be permitted at the R&T park.

(B) The general prohibition against underground storage tanks does not apply to gasoline tanks installed in conjunction with gasoline sales establishments. Such underground gasoline tanks are subject to the storage and containment requirements set forth above; the requirements for secondary containment and monitoring require particular emphasis. Since the secondary containment of underground tanks may be subject to intrusion by water, a means for monitoring for such water infiltration is to be provided.

viii. **Screening of Outside Storage Facilities.** Outdoor storage facilities are to be screened from external view and properly secured from unauthorized entry in the manner prescribed by performance standards and other design guidelines for the R & T park.

#### 5. Part V—Inspection and Repair.

a. **Inspections by Occupant.** Every occupant subject to these guidelines is to provide testing, monitoring and inspections in compliance with the hazardous materials management plan and to maintain records adequate to demonstrate compliance therewith. Such inspections shall be undertaken by a qualified independent engineer, or chemist or appropriate professional consultant acceptable to the association and the enforcing agency. Such inspector may not also be the consultant retained by the association for the purpose of administering these guidelines.

b. **Inspections by the Association.** The association may conduct inspections, at its discretion, for the purpose of ascertaining compliance with these guidelines. Upon the discovery of any noncompliance, the association shall notify the enforcing agency which shall cause to be corrected any conditions which would constitute any violation of these guidelines or of any other statute, code, rule or regulation affecting the storage of hazardous materials.

c. **Inspections by the Enforcing Agency.** The enforcing agency shall conduct inspections for the purpose of ascertaining compliance with these guidelines on at least an

annual basis or more frequently, if determined to be necessary.

d. **Right-of-Entry.** Whenever necessary for the purpose of investigating or enforcing the provisions of these guidelines, or whenever any duly authorized enforcement officer of a federal, state or county agency has reasonable cause to believe that there exists in any structure or upon any premises any conditions which constitute a violation of these guidelines, the officer may enter such structure or premises at all reasonable times to inspect the same.

e. **Remedial Action.** Whenever the enforcement officer finds an instance of noncompliance with the approved HMMP or with these guidelines, the occupant responsible will have ten days to remedy the noncompliance, make any modifications or repairs as required by the enforcement officer and implement appropriate cleanup actions of hazardous materials at the sole expense of the occupant. In addition, an enforcement officer may require an occupant to immediately cease any part of an operation, if determined to be necessary.

The owner's sale/purchase agreement or occupant's lease agreement for the R&T park shall contain specific provisions requiring the owner or occupant to comply with all laws relating to the storage and disposal of hazardous materials, including the provision of this subsection. The agreement shall specify the responsibility for fees and costs arising out of or in connection with the removal or cleanup of hazardous materials or repair, removal or replacement of equipment and storage facilities, in the case of noncompliance with the approved HMMP.

f. **Routine Maintenance, Repair or Replacement.**

i. The occupant will perform routine maintenance, upkeep and minor repairs in a careful and safe manner. No approvals by the association or the county will be required for such routine maintenance and upkeep.

ii. Any substantial modification or repair of a storage facility other than minor repairs or emergency repairs will require submittal and approval of an amended HMMP which shows such modifications in accordance with subdivision 3 of this subsection prior to the initiation of such work.

iii. The occupant may make emergency repairs to a storage facility in advance to seeking an additional approval whenever an immediate repair is required to prevent or contain an uncontrolled release or to protect the integrity of the containment. However, within five working days after such emergency repairs have been started, the occupant shall seek approval pursuant to subdivision 3 of this subsection by submitting drawings or other information adequate to describe the repairs to the coordinator.

6. **Part VI—Emergencies.**

a. **Uncontrolled Discharge of Hazardous Materials.** As soon as any person in charge of a storage facility or

responsible for emergency response for a facility has knowledge of any confirmed or unconfirmed uncontrolled discharge of a hazardous material, such person shall take all necessary steps to ensure the discovery and containment and cleanup of such discharge and shall notify the association and the enforcing agency of the occurrence.

b. **Cleanup Responsibility.** Any occupant responsible for storing the hazardous material shall institute and complete all actions necessary to remedy the effects of any uncontrolled discharge, whether sudden or gradual and shall bear all such costs that are incurred thereof. The enforcing agency may undertake actions to remedy the effects of such uncontrolled discharge itself, if it is determined that it is reasonably necessary under the circumstances to do so. The responsible party shall be liable to reimburse the enforcing agency for all costs incurred in remedying the effects of such uncontrolled release.

c. **Recording.** The occurrence of each uncontrolled discharge of hazardous materials and response thereto shall be recorded in the monitoring records of the occupant.

d. **Indemnification.** The occupant shall indemnify, hold harmless and defend the association and/or the county against any claim, cause of action, disability, loss, liability, damage, cost of expense, howsoever arising, which occurs by reason of an uncontrolled discharge of hazardous material in connection with the occupant's operations.

e. **Emergency Equipment.** Emergency equipment shall be provided by the occupant which is reasonable and appropriate for potential emergencies presented by the stored hazardous materials. Such equipment shall be regularly tested and adequately maintained.

f. **Posting of Emergency Procedures.** Simplified emergency procedures shall be posted conspicuously in locations where hazardous materials are stored.

7. **Part VII—Miscellaneous.**

a. **Handling Hazardous Materials.**

i. Dispensing and mixing of hazardous materials must not be done in such a manner as to risk an uncontrolled discharge.

ii. When hazardous materials are moved into or out of a storage facility, they shall remain in the travel path only for the time reasonably necessary to transport the hazardous material and such movement shall be in a manner which will preclude an uncontrolled discharge.

b. **Disposal of Hazardous Waste Materials.** All hazardous solid, liquid or gaseous waste materials shall be disposed of in a safe manner to preclude uncontrolled discharge and be stored in properly secured containers within onsite or off-site facilities, subject to approval by the enforcing agency and as specified in the approved HMMP.

c. **Secured Facilities.** Access to the storage facilities shall be secured by means of fences and/or locks. The



access to the storage facilities shall be kept securely locked when unattended.

d. Out-of-Service Storage Facilities.

- i. No storage facility shall be abandoned.
- ii. Storage facilities which are temporarily out of service, and are intended to be returned to use, must continue to be monitored and inspected.

iii. Any storage facility which is not being monitored and inspected in accordance with these guidelines must be closed and/or removed by the occupant in a manner approved by the association.

8. Part VIII--Technical Assistance. The public works director or representative(s) and the committee shall provide technical assistance to the enforcing agency on all matters relating to this subsection. Further, the enforcing agency shall also seek other technical assistance, if appropriate, from federal, state and county agencies as it relates to the duties provided hereinabove. (Ord. 1541 § 1 (part), 1986)

**19.33.100 Research and technology park coordinator.**

The planning director shall coordinate the submittal and review of all applications relative to development of lands within the research and technology park district, including, but not limited to, zoning, subdivision, construction of improvements and building and site development. The planning director shall be responsible to facilitate the review process, and may establish time limitations and procedures for review not inconsistent with the provisions of this chapter. (Ord. 1541 § 1 (part), 1986)

**19.33.110 Technical review committee.**

The committee shall consist of the managing director, director of planning, director of public works, director of water supply, fire chief, and any other representatives of county, state or federal agencies as designated from time to time by the coordinator. The committee shall be responsible for carrying out the duties enumerated in this chapter, as well as other duties which may be assigned by the coordinator. (Ord. 1541 § 1 (part), 1986)

**19.33.120 Procedure for subdivision.**

The owner or duly authorized agent of a parcel of land within the research and technology park district desiring to subdivide the parcel shall file an application in accordance with the following procedures:

A. Preliminary Subdivision Approval.

1. Application for preliminary subdivision approval shall be filed with the coordinator, and include the following information:

- a. A site plan showing vehicular traffic circulation and utility service systems;

- b. A preliminary subdivision plat map;
- c. A topographic map;
- d. A conceptual grading and drainage and erosion control plan;
- e. Design guidelines and CC&Rs, in accordance with Section 19.33.080;
- f. Filing fee, in accordance with the Maui County Code;
- g. Other information, as may be required by the planning director.

2. The planning director shall review the application and determine whether it is complete. Within seven calendar days from the date of receipt of the application, the planning director shall refer the application to the committee and other appropriate government agencies for review and comment; or if the application is incomplete, shall return it to the applicant and specify the additional information required.

3. Within twenty calendar days from the receipt of a complete application, the coordinator shall forward the application, together with the recommendation of the committee for approval, approval with conditions, or disapproval, to the director of public works.

4. Within fifteen calendar days from the receipt of the application, the director of public works shall approve, approve with conditions, or disapprove the application for preliminary subdivision approval.

5. Unless otherwise specifically provided for by law, the general provisions of Title 18 of this code relating to subdivisions, shall apply, consistent with the time requirements provided herein.

B. Construction Plan Approval. Any application for approval of construction plans in conjunction with a subdivision having received preliminary approval as provided for in subsection A of this section, shall be submitted to the coordinator in accordance with Section 19.33.130.

C. Final Subdivision Approval. All applications for final subdivision approval shall be submitted to the coordinator for review and processing. Within fifteen calendar days, the coordinator shall forward the application to the public works director, together with a recommendation for approval or disapproval. The public works director shall approve or disapprove the request for final subdivision approval within ten calendar days from the receipt of the application. (Ord. 1541 § 1 (part), 1986)

**19.33.130 Procedure for securing building and site improvement permits.**

The owner or lessee of a lot within the research and technology park district, desiring to construct any improvements, or to build, replace, enlarge or modify new or existing structures, where such construction, building,

replacement enlargement or modification requires a building, plumbing, electrical or any other type of a permit or approval, shall file an application for such permit or approval with the coordinator.

A. Application Requirements. The application shall contain the following information:

1. A final subdivision plat map, if applicable;
2. A specific development plan, which incorporates the approved design guidelines and also includes, where applicable and required by the coordinator, the following information:
  - a. A detailed drainage, grading and soil erosion report and plans,
  - b. Landscape planting plan,
  - c. Signage plan,
  - d. Building plans and specifications,
  - e. Solid and liquid waste disposal plan,
  - f. Parking and circulation plans,
  - g. If applicable, a hazardous materials management plan, as specified in Section 19.33.090C,
  - h. If applicable, technical plans, specifications, monitoring procedures and other information for the effluent monitoring system and monitoring wells, as specified in Section 19.33.090B,
  - i. Other pertinent information necessary for permit approval;
3. If required, permit fees, in accordance with this code.

B. Procedure.

1. The coordinator shall review the application and determine whether it is complete. Within seven calendar days from the date of receipt of the application, the coordinator shall refer the application to the committee and, if appropriate, the urban design review board and other government agencies for review and comment; or if the application is incomplete, shall return it to the applicant and specify the additional information required.

2. Upon acceptance of an application for a proposed project within the R&T park requiring an HMMP, in accordance with Section 19.33.090C, the coordinator shall immediately publish notice in a newspaper with state-wide or Maui Island circulation to inform the public that such application has been received by the coordinator for processing.

3. Within twenty calendar days from the receipt of a complete application, the coordinator shall forward the application, together with the recommendation of the committee and other appropriate government agencies to the director of public works.

4. Within fifteen calendar days from the receipt of the application, the director of public works shall approve, approve with conditions, or disapprove the application for

building or site improvement permit. (Ord. 1541 § 1 (part), 1986)

#### 19.33.140 Improvement district program for the construction of off-site improvements.

The construction of off-site improvements for a research and technology park may be financed by improvement district bonds, based on a tax increment funding program or other instrument, in accordance with Title 14 Article 3, Improvement Districts, of this code. (Ord. 1541 § 1 (part), 1986)

#### 19.33.150 Limitation.

If the county of Maui adopts an ordinance for county-wide application dealing with hazardous materials storage and handling guidelines, then upon the effective date of such ordinance, part or all of Section 19.33.090C of this chapter may be rescinded; provided, however, that the county wide ordinance is not less restrictive than the provisions in this chapter. (Ord. 1541 § 1 (part), 1986)

**Appendix - B**  
Environmental Site Assessment

# MEV, LLC

MALAMA ENVIRONMENTAL

## Environmental Site Assessment: Phase I Investigation

**Property:** 370 ACRES - UNDEVELOPED LAND  
(MAUI RESEARCH & TECHNOLOGY PARK)  
KIHEI, MAUI, HAWAII, 96753  
T.M.K. (2) 2-2-24:4, 8, 9, 14, 15, 16, 17 & 18  
&  
T.M.K. (2) 2-2-2: 54 (PORTION)

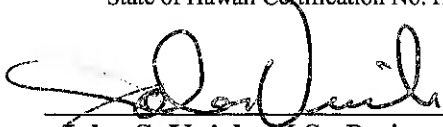
**Prepared for:** PACIFIC RIM LAND, INC.  
381 HUKU LI'I PLACE  
SUITE #202  
KIHEI, HI 96753  
ATTN: MR. JOHN MALONEY

We declare that, to the best of our professional knowledge and belief, we meet the definition of *Environmental professional* as defined in 312.10 of 40 CFR 312 and we have the specific qualifications based on education, training, and experience to assess a *property* of the nature, history, and setting of the *subject property*. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR part 312.

  
Jeffrey E. Kermode, Site Investigator

- Registered Environmental Assessor  
Registration No. 08202 (State of California)
- Lead-Based Paint Risk Assessor  
EPA Certification No. HI-R-6127-1
- Asbestos Building Inspector (AHERA Accredited Course)  
State of Hawaii Certification No. HIASB-0351

5/16/07  
Date

  
John S. Vuich, M.S., Project Supervisor

- Registered Environmental Assessor  
Registration No. 1433 (State of California)

5/16/07  
Date

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## Disclosure

This document contains the results of services performed on this Project by **Malama Environmental (MEV, LLC)** pursuant to Agreement. The results represent the application of a variety of scientific and analytical disciplines that have been rendered using the standard of care, skill, and diligence normally provided by professionals in the performance of similar services under similar circumstances.

**MEV** assessments are intended to reduce, but not eliminate, uncertainty regarding recognized environmental conditions in connection with the Subject Site, as conducted within reasonable limits of time and cost. A general consensus of EPA's guidance on landowner liability is that *no environmental site assessment can wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a property.*

The use of this document and the results reported are limited to the services performed and areas examined as described in this document and no inferences are intended with respect to anything not described herein.

**MEV** is not responsible for conditions or consequences arising from relevant data, facts, and information that were concealed, missing, withheld, not fully disclosed, or not reasonably available at the time these services were performed. **MEV** is not responsible for any indirect, incidental, or consequential damages of any nature arising from any cause.

**MEV** has no beneficial economic interest in the Project other than as an independent professional organization performing the agreed services. **MEV's** warranties are as described above and there are no other warranties of any kind, expressed or implied, regarding the services.

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# Executive Summary

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## Introduction

This Phase I Environmental Site Assessment (ESA) has been prepared for Mr. John Maloney of Pacific Rim Land, Inc. and was conducted pursuant to Malama Environmental's (MEV's) written proposal and contract accepted by Mr. Maloney on March 15, 2007. This investigation and report format follows the guidelines of the American Society of Testing and Materials (ASTM) Publication E1527-05, which is recognized by 40 CFR Part 312 as an acceptable guidance document for satisfying the EPA's final "All Appropriate Inquiries" rule.

## Site Description

The subject site is located in the community of Kihei, Maui, Hawaii. The land parcels are part of the Maui Research and Technology Park. The site consists of nine (9) parcels of land, irregular in shape, measuring approximately 370 acres in total area. The site is further described on the Tax Maps of the State of Hawaii as Division 2, Zone 2, Section 2, Plat 24, Parcels 4, 8, 9, 14, 15, 16 portion, 17 portion, 18 and Division 2, Zone 2, Section 2, Plat 2, Parcels 54 portion. The land parcels consist of undeveloped, grazing land and a roadway (Lipoa Parkway).

## Records Review

The purpose of a records review is to obtain and review records that will help identify *recognized environmental conditions* in connection with the subject property. The services of Environmental Data Resources, Inc. were utilized to compile the database listings.

Our records review did not discover any current investigation of the subject site under any programs conducted by a federal, state, or local environmental agency.

One (1) risk site was identified in the vicinity of the subject property, however, MEV does not expect this site to negatively impact the environmental condition of the subject property.

## Site Reconnaissance

A site investigation focuses on obtaining information indicating the likelihood of identifying physical *recognized environmental conditions* in connection with the property and assessing the subject property in relation to surrounding land uses and natural surface features. It includes a physical inspection of the real property and any on-site facilities.

On May 3 and May 4, 2007, MEV personnel, Mr. Jeffrey Kermode, conducted an overall site inspection of the subject site. Accessible areas of the property were visually and physically inspected.

### The following are significant observations of field conditions:

- The land parcels predominantly consist of undeveloped grazing lands with no permanent building structures;
- Two (2) construction baseyards are located on-site;
- Approximately 2 gallons of waste oil was noted in an oil pan that requires management. Limited soil staining was related to this oil pan.
- A limited amount of solid waste dumping was evident including Special Waste that requires proper management;
- One (1) groundwater well is located on-site;
- One (1) small-scale sewer pump station is located on-site;
- The bulk storage/use of hazardous/regulated substances was not noted on-site.

## Conclusions

*Recognized environmental conditions*, as defined by ASTM Standard E1527-05, are the presence or likely presence of any hazardous substance or petroleum products on a property under conditions that indicate an



existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property, or into the ground, ground water, or surface water of the property. **Recognized environmental conditions** are described with regard to (1) the nature and extent of the environmental condition, (2) potential or actual environmental threat, (3) potential for transport (migration) of any environmental conditions, and (4) consideration for further investigation. The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

MEV has performed this Phase I Environmental Site Assessment in conformance with the scope and limitations of the ASTM Practice E 1527-05 for the subject property, located within and surrounding the Maui Research and Technology Park, [TMK (2)-2-2-24:4, 8, 9, 14, 15, 16 portion, 17 portion, 18 & (2)-2-2-2:54 portion] in the community of Kihei, Maui, defined as the subject property. Any exceptions to or deletions from this practice are described in Section 1.4, Limitations and Exceptions, of this report.

**This assessment has revealed no evidence of *recognized environmental conditions* in connection with the property.**

- ***Database Listings***

The subject site is not listed. The listed, nearby risk site unlikely poses a significant concern to the subject property.

- ***Storage and Use of Hazardous and Regulated Substances***

There is no evidence of any historic or current significant misuse or spills of hazardous or regulated substances on the subject property.

*The concerns listed below may not be considered **recognized environmental conditions** by ASTM definition, however, they may be considered regulated under other environmental laws and ordinances and may present a potential liability to the property owner.*

- ***Ineffective Storage of Regulated Waste and Limited Surface Soil Staining***

A very limited amount of waste oil is being ineffectively stored beneath an office trailer (not in use) located on-site. This waste oil and any related surface soil staining should be properly managed. See Section 5.3.2 and 5.5.2.

- ***Solid Waste Management***

A limited amount of solid waste dumping activity was evident on the subject property. Regulated items requiring special management were noted.

- ***Surface Waters and Area Aquifer Protection***

For any future development activities planned for the subject property, the owner should be aware of the potential for contaminants to migrate into any nearby drainageways. Products of concern relating to any future development project or land-clearing activity would be earthen material (silt), paints, oils, antifreezes and other fluids from automobile or on-site machinery, or leaks from on-site stocked items.

- ***Groundwater Well***

One (1) groundwater well is located on the subject property. Department of Lands and Natural Resources' permitting requirements for Well No. 4426-03 were completed.

**The conclusions stated above should not be construed to mean that any regulatory agency would have the same opinion as this author, nor is any implication proposed therefrom.**

**The results of this environmental assessment are intended for general reference purposes only and are not intended as legal advice. The advice of legal counsel should be sought in regard to individual facts, circumstances and interpretation of environmental liability.**

# Environmental Site Assessment

## Phase I Investigation

### 1.0 INTRODUCTION

A Phase I Environmental Site Assessment (ESA) is conducted to determine if a site may be contaminated with hazardous or toxic substances or wastes resulting from current or past site activities, unauthorized dumping or disposal, or migration of contaminants from adjacent or nearby properties. Its goal is to identify *recognized environmental conditions* on a property that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products. These release conditions apply to structures on the property as well as the soil, groundwater, or surface water of the property. The American Society of Testing and Materials (ASTM) Standard 1527-05, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, is used to "...define good commercial and customary practices for conducting an environmental site assessment of a parcel of commercial real estate".

#### 1.1 Purpose

The study objectives are to characterize the environmental setting of the subject property, to identify any obvious activity of environmental concern that may have occurred at or near the site, and to evaluate potential migration pathways for any identified contaminants. It may also address any activities that affect future considerations for potential environmental impairment to the property.

Another function of this Phase I ESA is to conduct an *all appropriate environmental inquiry* in response to the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, the EPA's final rule (40 CFR Part 312), and similar state and local regulations. An ESA "all appropriate inquiry" may provide the buyer, receiver, or lender making a loan secured by the subject real property with a basis to qualify for the *innocent landowner, contiguous property owner, or bona fide prospective purchaser defense* should any legal action be initiated for environmental impairment to the property.

ASTM Publication E1527-05 is recognized by 40 CFR Part 312 as an acceptable guidance document for satisfying the EPA's final "*All Appropriate Inquiries*" rule.

#### 1.2 Detailed Scope of Services

This Phase I Environmental Site Assessment (ESA) has been prepared for Mr. John Maloney of Pacific Rim Land, Inc. and was conducted pursuant to Malama Environmental's (MEV's) written proposal and contract accepted by Mr. Maloney on March 15, 2007.

There were no other additional services requested of MEV by the Client.

#### 1.3 Significant Assumptions

The assessment of *recognized environmental conditions* relies on: 1) sources of actual knowledge, 2) thorough appropriate inquiry, 3) reviewing reasonably ascertainable documents and records, and 4) conducting a visual and olfactory reconnaissance. In conducting this ESA, MEV has relied on the truthfulness of its inquiry sources and the validity of reviewed records. If obvious indications or MEV actual knowledge contradicted the reported/reviewed information sources, it has been so stated in the appropriate sections of this report.

#### 1.4 Limitations and Exceptions

The investigation performed for this report includes the components of an *all appropriate inquiry* regarding the potential for contamination to exist or have occurred at this site. This investigation is also the basis of an *all appropriate inquiry* into the presence or likely presence, release or threatened release, of hazardous

substances and petroleum products at this real property. This Phase I Environmental Site Assessment was prepared according to guidelines presented in the American Society of Testing and Materials Document entitled *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E-1527-05).

Since no ESA can eliminate uncertainty regarding the potential for *recognized environmental conditions* in connection with a property, the limiting intent of this investigation is to reduce the uncertainty to an appropriate level. Minimal requirements for the Phase I ESA include a review of historical records, a review of files and databases compiled by regulatory agencies, interviews with current owners and/or occupants of the property, and a field reconnaissance of the subject site and adjacent areas.

This ESA also takes into consideration the evaluation of other substances and products that are or may be interpreted as excluded under CERCLA. Commonly, these substances are of concern in commercial real estate transactions under current custom and usage and may include, but are not limited to, Radon, Lead-in-Drinking Water, and Special Environmental Resources. Where appropriate, MEV has considered environmental concerns of other federal, state, and local regulations.

Some database resources developed for Maui County are in their infancy or are not cross-referenced in a manner as to be readily discernible. The Maui County Fire Department maintains an electronic database that dates back to January 2000. Information and records prior to 2000 exist on file, as hardcopies, at the Department of Fire and Public Safety Office.

Databases and records utilized for this investigation were limited to those that are reasonably ascertainable; that is, they had to be publicly available, obtainable from its source within reasonable time and cost constraints, and practically reviewable with regard to volume, sorting, and organization. Additionally, the services of *Environmental Data Resources, Inc.* (EDR) were utilized to compile the environmental database listings. See Appendix B.

### 1.5 Data Gaps

MEV did not encounter any significant *data gaps* during the course of this Phase I ESA Investigation that would affect the ability of the *Environmental Professional* to identify *recognized environmental conditions* pertaining to the subject property. MEV did not receive requested historical/environmental information from one of the current landowners, Maui R & T Partners. See request letter, Appendix B.

### 1.6 Special Terms and Conditions

As a standard practice, a confidential client privilege was initiated by MEV for the work performed and contents of this report. MEV shall ensure that its officers, employees, agents, and independent contractors do not disclose this report or any information contained therein to any person without the proper knowledge and written consent from the Client (or as otherwise required by law). MEV shall ensure that each of its officers, employees, agents, and independent contractors understand and obey these requirements.

The information and opinions provided herein are intended as background data and planning guidance to interested parties. This should not be construed to mean that any regulatory agency would have the same opinion as MEV, nor is any implication proposed.

MEV has performed this study in a competent and professional manner. Since there may be hidden or unknown conditions that may be missed during this inspection, MEV cannot warrant the actual site conditions described in this report.

End of Section

## 2.0 SITE AND REGIONAL DESCRIPTION

Refer to Figure 1, Regional Setting Map, in Appendix A, for a depiction of the general setting of the subject site in relation to topographic features. Also depicted are the projected groundwater flows, regional surface water flows, and locations of other significant physical features or structures.

### 2.1 Location and Legal Description

The subject site is located within and adjacent to the Maui Research & Technology Park located off Lipoa Parkway in the community of Kihei, Maui, Hawaii. The site is further described on the Tax Maps of the State of Hawaii as Division 2, Zone 2, Section 2, Plat 24, Parcels 4, 8, 9, 14, 15, 16 portion, 17 portion, 18 and Division 2, Zone 2, Section 2, Plat 2, Parcels 54 portion. See Figure 3a/3b, Tax Maps, Appendix A.

### 2.2 Site and Vicinity General Characteristics

The site consists of nine (9) parcels of land, irregular in shape, measuring approximately 370 acres in total area. The site predominantly consists of undeveloped, grazing land and a roadway (Lipoa Parkway).

The coastal community of Kihei is situated on the western slopes of East Maui (Haleakala). The subject property is located above (mauka of) the Piilani Highway. See Figure 1, Appendix A.

Surrounding land use consists of undeveloped grazing lands, a golf course and commercial office buildings. See Figure 2, Appendix A.

### 2.3 Description of Structures, Roads, Other Improvements

The subject property consists predominantly of undeveloped grazing land. A limited network of unpaved and paved (poor condition) access roads exists on-site. MEV also noted rock walls that were likely related to historic livestock activities and boundary markers. Limited amounts of metal/wood fence enclosures were also noted on the grazing land.

Parcel 9 & 18 consist of Lipoa Parkway that provides access to the Maui Research and Technology Park from Piilani Highway. No substantial permanent structures are located on-site. A small shed is located on Parcel 16. A groundwater well and small-scale sewer pump station are located on Parcel 16. See Figure 2, Appendix A.

### 2.4 Current Use of the Property

As noted above, the subject property predominantly consists of undeveloped grazing land. A construction baseyard (office trailers and limited material storage) is located on Parcel 4 and is operated by Goodfellow Bros., Inc.. A temporary construction baseyard is also located on Parcel 8 and is related to the construction activities taking place on the adjoining properties.

As noted in Section 2.3 above, Parcel 9 & 18 consist of Lipoa Parkway that provides access to the Maui Research and Technology Park from Piilani Highway.

Located along the western boundary of Parcel 16 is a groundwater well; water storage tank; and small-scale sewer pump station. The well supplies irrigation water to the Maui Research and Technology Park. The sewer pump station services the businesses in the Maui Research and Technology Park, pumping sewage to the Kihei Wastewater Treatment Plant.

## 2.5 Current Uses of the Adjoining Properties

The current uses of the adjoining properties as observed by the investigator during the site reconnaissance are as follows (see also Figure 2, Site Plan, in Appendix A):

▪ <i>Northern Adjoining Property:</i>	Undeveloped gulch and grazing land beyond.
▪ <i>Eastern Adjoining Property:</i>	Undeveloped grazing land and U.S. Air Force's Remote Maui Experiment (RME) facility. (U.S. military research).
▪ <i>Southern Adjoining Property:</i>	Undeveloped grazing land.
▪ <i>Western Adjoining Property:</i>	Undeveloped land, golf course and initial land development activities.
▪ <i>Centrally-situated Adjoining Properties</i>	Commercial office buildings of the Maui Research and Technology Park.

End of Section

### 3.0 USER PROVIDED INFORMATION

As a standard of practice, the following information was requested from the Client during the preliminary phases of this investigation:

- Title records and knowledge of environmental liens or activity and land use limitations (AULs);
- Personal, specialized knowledge or experience in regard to *recognized environmental conditions* concerning the property; and
- If applicable, actual knowledge of a significant, low purchase price for the property, and explanation for the lower price.

The purpose of this information is to help identify the possibility of *recognized environmental conditions* in connection with the property. These tasks do not require the technical expertise of an environmental professional and are generally not performed by environmental professionals performing the Phase I ESA. MEV submits a Preliminary Environmental Investigation questionnaire to the Client for this information. The completed questionnaire is attached in Appendix B.

According to information provided by the Client in the Preliminary Environmental Investigation, the Client is not aware of any environmental liens, proceedings, or investigations against the subject property as of the date of this ESA.

End of Section

## 4.0 RECORDS REVIEW

The purpose of a record review is to obtain and review records that will help identify *recognized environmental conditions* in connection with the subject property. The service of Environmental Data Resources, Inc. (EDR) was utilized to compile the database listings.

### 4.1 Standard Environmental Record Sources

The subject property and properties within the minimum search distances were reviewed from the following record sources (see below). Risk sites, if any, that may be located on or adjacent to the subject property, or are within close proximity to the subject site are described. Refer to Appendix B, EDR Radius Map Report, for a complete listing and description of all sites located within the designated search distances, details, and government agency database release dates.

The EDR Report bases the location of the listed risk sites on longitude/latitude information provided by the respective government agency. MEV confirms the locations of risk sites within close proximity to the subject site during the site visit. When the MEV site visit contradicts the EDR Report, it has been so stated.

**THE SUBJECT SITE IS NOT LISTED ON ANY OF THE FOLLOWING FEDERAL OR STATE DATABASE LISTINGS OF THE EDR REPORT.**

#### *Federal Database Listings*

- ▼ **National Priorities List (NPL or Superfund) and Proposed NPL, EPA.** The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program.
  - *The EDR database report indicates no listings within the one-mile search radius of the subject site.*
- ▼ **Comprehensive Environmental Response, Compensation and Liability Information System List (CERCLIS), EPA.** The CERCLIS list contains data on potentially hazardous waste sites that have been reported to EPA by states, municipalities, private companies and private persons, pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites that are either proposed to or on the NPL and sites, which are in the screening and assessment phase for possible inclusion on the NPL.
  - *The EDR Report indicates no listing within the 1/2-mile search radius of the subject site.*
- ▼ **CERCLIS – No Further Remedial Action Planned (NFRAP), EPA.** NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration.
  - *The EDR Report indicates no listing within the 1/2-mile search radius of the subject site.*
- ▼ **Corrective Action Report (CORRACTS), EPA.** The CORRACTS report lists hazardous waste handlers with RCRA corrective action activity.
  - *The EDR Report indicates no listings within the one-mile search radius of the subject site.*
- ▼ **Resource Conservation and Recovery Information System (RCRIS), EPA/NTIS.** RCRIS includes selective information on sites that generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA).
  - *The EDR Report indicates no listings within the 1/2-mile search radius of the subject site, which treat, store, and/or dispose of hazardous waste (TSD).*



- The EDR Report indicates no listings within the ¼-mile search radius of the subject site, which generate at least 1,000 kg/month of non-acutely hazardous waste or 1.0 kg/month of acutely hazardous waste (Lg. Quan. Gen. - LQG).
- The EDR Report indicates one (1) listing within the ¼-mile search radius of the subject site, which generates less than 1,000 kg/month of non-acutely hazardous waste (Sm. Quan. Gen. - SQG).

Due to the listing's current status with the E.P.A. and due to the positioning relative to the subject site, this site is not anticipated to negatively impact the environmental condition of the subject property.

▼ **Emergency Response Notification System (ERNS), EPA/NTIS.** Records and stores information on reported releases of oil and hazardous substances.

- The subject site is not listed.

#### **State of Hawaii Database Listings**

▼ **Sites List (SHWS), DOH.** A list of facilities, sites, or areas in which the Office of Hazard Evaluation and Emergency Response (HEER) has an interest, has investigated or may investigate under HRS 128D (includes CERCLIS sites).

- The subject site is not listed.
- The EDR Report indicates no listing within the ½-mile search radius of the subject site.

▼ **Permitted Landfills in the State of Hawaii (SWF/LF), DOH.** An inventory of solid waste disposal facilities or landfills in the State of Hawaii. These may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

- The EDR Report indicates no listings within the ½-mile search radius of the subject site. See Site List (SHWS) above.

▼ **Leaking Underground Storage Tank (LUST) database, DOH.** An inventory of reported leaking underground storage tank incidents.

- The subject site is not listed.
- The EDR Report indicates no listing within the ½-mile search radius of the subject site.

▼ **Underground Storage Tank (UST) database, DOH.** USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with DOH.

- The subject site is not listed.
- The EDR Report indicates no listing within a 1/4-mile radius of the subject site.

The Elleair Golf Club (formerly the Silversword Golf Course) is located within a ¼ -mile from the western edge of the property. This site is listed on the State UST database. Three (3) tanks are listed as "permanently out of use" and are not listed on the LUST database. Due to the listing's current status with the State DOH and due to the positioning and distance relative to the subject site, this site is not anticipated to have negatively impacted the environmental condition of the subject property.

#### **4.2 Additional Environmental Record Sources**

The subject property and properties within the minimum search distances were reviewed from the following record sources. Refer to Appendix B, EDR Radius Map Report, for a complete listing and description of all sites located within the designated search distances, details, and database release dates.

## ***Federal Database Listings***

- ▼ **Superfund (CERCLA) Consent Decrees (CONSENT), EPA Regional Offices.** Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites.
  - *The subject site is not listed.*
  - *The EDR Report indicates no listings within the one-mile search radius of the subject site.*
- ▼ **Records of Decisions (ROD), EPA.** ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.
  - *The subject site is not listed.*
  - *The EDR Report indicates no listings within the one-mile search radius of the subject site.*
- ▼ **National Priority List Deletions (De-listed NPL), EPA.** A list of sites that have been deleted from the NPL where no further response is appropriate.
  - *The subject site is not listed.*
  - *The EDR Report indicates no listings within the one-mile search radius of the subject site.*
- ▼ **Facility Index System/Facility Identification Initiative Program Summary Report (FINDS), EPA.** Contains both facility information and 'pointers' to other sources that contain more detail.
  - *The subject site is not listed.*
- ▼ **Hazardous Materials Information Reporting System (HMIRS) DOT.** A list of hazardous material spill incidents reported to DOT.
  - *The subject site is not listed.*
- ▼ **Material Licensing Tracking System (MLTS), Nuclear Regulatory Commission (NRC).** A list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements.
  - *The subject site is not listed.*
- ▼ **Mines Master Index File (MINES), Department of Labor, Mine Safety and Health Administration.** Contains both facility information and 'pointers' to other sources that contain more detail.
  - *The subject site is not listed.*
  - *The EDR Report indicates no listings within the ¼-mile search radius of the subject site.*
- ▼ **Federal Superfund Liens (NPL Liens), EPA.** A list of properties whereby the EPA has filed liens against real property in order to recover remedial action expenditures or when the property owner receives notification of potential liability.
  - *The subject site is not listed.*
- ▼ **PCB Activity Database System (PADS).** Identifies generators, transporters, commercial storers and/or brokers and disposers of PCBs who are required to notify EPA of such activities.
  - *The subject site is not listed.*
- ▼ **RCRA Administrative Action Tracking System (RAATS), EPA.** A historical archived database containing records on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by EPA. The database was discontinued on September 30, 1995.
  - *The subject site is not listed.*

- ▼ **Toxic Chemical Release Inventory System (TRIS), EPA.** A list of facilities which release toxic chemicals to the air, water, and land in reportable quantities under SARA Title III, Section 313.
  - *The subject site is not listed.*
- ▼ **Toxic Substances Control Act (TSCA), EPA.** Identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list.
  - *The subject site is not listed.*
- ▼ **Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA)/TSCA Tracking System (FTTS INSP and FTTS), EPA – Office of Prevention, Pesticides and Toxic Substances.** FTTS tracks administrative cases, pesticide enforcement actions, and compliance activities related to FIFRA, TSCA, and Emergency Planning and Community Right-to-Know Act (EPCRA).
  - *The subject site is not listed.*

#### ***State of Hawaii Database Listings***

- ▼ **Release Notifications (SPILLS), DOH.** Releases of hazardous substances to the environment reported to the HEER Office. The following databases are included in the HEER Spill List:

Release Notification Report: a compilation of releases reported to HEER.

Hawaii Emergency Planning and Community Right-to-Know Act (HEPCRA): a list of facilities that have submitted Tier II and Form Rs as a reporting requirement.

- *The subject site is not listed.*

- ▼ **Registered Wells and Dry Wells, DLNR.** (See Section 5.5.6) There is one (1) registered well listed for the subject property. (*DLNR data*). State Well No. 4426-03 was constructed by David Pico on TMK (2) 2-2-24:16 in 1990. The well owner is listed as Maui R & T Partnership. Currently the well is used for irrigation purposes. Nearby listed wells are used for irrigation or observation purposes or are unused at this time. See Figure 1, Appendix A for nearest well locations.

- ▼ **Air Quality Permit, DOH.** Current activities conducted on-site do not require an air quality permit.

- ▼ **Storm Water Discharge (NPDES) Permit, DOH.** Current activities conducted on-site do not require a NPDES permit.

#### ***County and Other Database Listings***

Other local records of environmental interest that were reviewed or considered for review by MEV included:

- ▼ **Fire Department, County of Maui.** The Maui County Fire Department (MCFD) maintains file material that is not on a database. MCFD was contacted for an inquiry on the subject property. No incidents were reported to MEV on the subject site.
- ▼ **Former Manufactured Gas (Coal Gas) Sites.** EDR provides exclusive information regarding the existence and location of Coal Gas sites.
  - *The EDR Report indicates no listings within the one-mile search radius.*
- ▼ **Grading/Grubbing Permit, County of Maui.** Grading permits are currently open for the subject property (Parcels 9 & 54) with the County of Maui. The permit uses are listed as Lipoa Parkway improvements and GBI baseyard.
- ▼ **Hazardous Waste Disposal Documents.** MEV was not supplied with any hazardous waste disposal documents.

- ▼ **Maui Electric Company.** Maintains records on county power transformers regarding PCB-containing equipment and equipment maintenance. Three (3) pad-mounted electrical transformers (non-PCB) were observed on the subject property on Lipoa Parkway. See Section 5.3.7.
- ▼ **Other Environmental Reports.** No environmental reports for the subject property were made available to MEV.
- ▼ **Planning & Zoning, County of Maui.** According to the Maui County Department of Planning, the majority of the subject site's zoning is AG, "Agricultural" and is **not** within the boundaries of the Special Management Area (SMA). As of the completion of this report, the County of Maui Zoning Division had not responded to MEV's numerous attempts to obtain the current zoning of all of the subject property's parcels.
- ▼ **Property Tax Office, County of Maui.** The Maui County Property Tax Office maintains records of past ownership, maps, sketches and other information as it pertains to the subject property. (See also Section 8.0). According to Maui County Tax Office, the current property owners are listed as Haleakala Ranch Co. and Maui R & T Park Partners.
- ▼ **Wastewater Discharge Permit, County of Maui.** MEV did not identify any wastewater discharge permits registered to the subject property. According to the State Department of Health, the small-scale sewer pump station located on-site does not require a permit.

#### 4.3 Physical Setting Source(s)

The following sources were reviewed for physical setting information (refer to Section 7.0 for a complete listing):

- Atlas of Hawaii;
- Civil Defense Tsunami Evacuation Map;
- Geologic and Topographic Map (Hawaii Atlas & Gazetteer);
- Groundwater Map and Water Quality Plan for State of Hawaii;
- U.S. Department of Agriculture, Soil Conservation Service, Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai, and Lanai, HI;
- U.S. Geological Survey, 7.5 Minute Topographic Map, Puu O Kali, HI, 1983 & 1992.

These data sources were used to provide information regarding physical characteristics of the subject site and surrounding area. This information is typically used in analysis of potential geological trends, which might impact environmental conditions of the subject site. Note that this investigation is not intended to identify geologic hazards associated with the subject property.

#### 4.4 Historical Use Information Regarding the Property and Adjoining Properties

The following historical data sources were reviewed for this report (refer to Section 7.0 for a complete listing):

- Aerial Photographs;
- Department of Planning and Zoning, County of Maui;
- Maui County Fire Department (Fire Prevention Bureau / Hazardous Materials Division);
- Maui County Real Property Tax Records;
- Personal Interviews;
- Sanborn Maps (not available for this location);
- State of Hawaii, Department of Health, Environmental Management Division;
- Environmental Data Resources (EDR).

### Historic Aerial Photographs

A series of aerial photographs with coverage of the subject property and surrounding area were examined. See Figure 2, Appendix A, for clarification of specific location.

Table 1.0. Historical Aerial Photograph Analysis.		
Date	Aerial Photo Analysis	
2/28/50	SS: N, E, S, W: RG:	Undeveloped, vegetated pasture land. Undeveloped, vegetated pasture land. Limited unpaved road network noted on the eastern property. Very limited residential and agricultural development further to the west.
1965	SS: N, E, S, W: RG:	No significant changes noted. No significant changes noted. No significant changes noted.
3/16/67	SS: N, S: E: W: RG:	No significant changes noted. Only the western portion of the property is visible in the photo. No significant changes noted. Only the western portion of the north and southern adjoining properties are visible in the photo. Not visible in the photo. No significant changes noted. Unpaved access road noted. No significant changes noted.
10/25/82	SS: N, E, S: W: RG:	No significant changes noted. No significant changes noted. No significant changes noted, except for the construction of the Piilani Highway. Significant residential growth on the west side of the Piilani Highway (coastal development). The Kihei Wastewater Treatment Plant is visible further to the southwest.
7/16/87	SS: N,E: S: W: RG:	No significant changes noted. Unpaved road noted along the southwestern boundary. Only the very southern portion of the property is visible in the photo. Not visible in photo. No significant changes noted. Undeveloped land and Silversword (Elleair) Golf Course and related buildings noted. Increased residential/commercial development on the west side of Piilani Highway.
10/27/90	SS: N: E, S: W: RG:	Only the northwestern and most western portions of the property are visible in the photo. Lipoa Parkway has been constructed and leads to the Maui R&T Park. A livestock corral is visible in the northwest corner of the property. No significant changes noted. Not visible in photo. No significant changes noted. No significant changes noted.
9/27/96	SS: N: E, S: W: RG:	Only the northwestern and most western portions of the property are visible in the photo. The livestock corral previously noted is still visible in the northwest corner of the property. A road (appears unpaved) is visible on Parcel 17 leading toward the present-day retention basin located on Lot 3-C-2. No significant changes noted. Not visible in photo. No significant changes noted. Increase in commercial development further to the northwest.
<b>Notes:</b>		
SS	Subject Site	S Southern Adjoining Property
N	Northern Adjoining Property	W Western Adjoining Property
E	Eastern Adjoining Property	RG Regional Area

MEV did not observe any features on aerial photographs examined that would suggest the presence of significant vegetative stress, soil staining, or bulk storage of chemicals such as drums or tanks.

End of Section

## 5.0 SITE RECONNAISSANCE

Information regarding the storm water flow, property layout, physical characteristics, and adjoining property conditions are presented in Figure 2, Site Plan, and site photographs located in Appendix A.

### 5.1 Methodology and Limiting Conditions

A site investigation focuses on obtaining information indicating the likelihood of identifying *recognized environmental conditions* in connection with the property and assessing the subject property in relation to surrounding land uses and natural surface features. It includes a physical inspection of the real property and any on-site building structures.

On May 3 and May 4, 2007, MEV personnel, Mr. Jeffrey Kermode, conducted an overall site inspection of the subject site. The method used to observe the subject property included: (1) walking the approximate perimeter of the subject property and along any on-site roads, (2) thoroughly inspecting any on-site baseyards and areas of limited dumping noted (3) conducting random and non-random traverses of the subject property. The property perimeter boundaries were not effectively defined. MEV made boundary estimates based on a Maui County Real Property Tax map and a property map supplied by the Client.

Certain physical obstructions limited the investigators from total property observations of native surface soils. Areas of dense vegetation and the presence of a limited number of portable storage containers/office trailers obscured the underlying surface soils. Exposed soils that were observable did not exhibit any evidence of gross surface contamination. Limited soil staining was observed.

Any environmental conditions reported here are not intended to include minimal conditions that 1) generally do not present a material risk of harm to public health or the environment and 2) generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

### 5.2 General Site Setting

#### 5.2.1 Current and Past Use(s) of the Property

##### *Current Uses*

The current owners of the subject property are Haleakala Ranch Co. and Maui R & T Park Partners.

The property consists of nine (9) land parcels, TMK (2)-2-2-24:4, 8, 9, 14, 15, 16 portion, 17 portion, 18 & (2)-2-2-2:54 portion.

The property is essentially undeveloped, grazing land. Two (2) small areas of the property are used as construction baseyards. The baseyards are located on Parcels 4 & 8. A well, sewer pump station and water holding tank are located along the western boundary of Parcel 16.

Information presented here represents those items visually or physically observed or identified in the interviews or records review.

##### *Past Uses*

The majority of the subject property was previously owned by Haleakala Ranch Co. for several decades and was used for cattle grazing purposes.

The knowledge of past uses of the property was primarily obtained from aerial photographs, client supplied information, interviews and property tax records. Topographic maps and the Hawaii Atlas provided limited regional information.

### 5.2.2 Current and Past Uses(s) of the Adjoining Properties and Surrounding Area

MEV has researched current uses of adjoining properties and at its discretion, past uses of the adjoining properties and the surrounding areas. Information presented here represents those items visually or physically observed or identified in the interviews or records review. The information is described herein as items that may indicate *recognized environmental conditions* with adjoining properties and those conditions that may indicate a high probability of migration of hazardous substances or petroleum products to the subject property.

Adjoining Property	Period	Land/Property Use	Concerns	Comments
North of Subject Site	Past	Grazing land.	None.	None.
	Present	Grazing land.	As above.	As above.
East of subject site	Past	Grazing land.	None.	None.
	Present	Grazing land; water storage tank; US Air Force RME facility.	None.	Limited chlorine storage for the water holding tank.  The operations conducted at the RME facility are classified, however, MEV's knowledge of the facility does not lead them to believe this site poses an environmental concern.
South of subject site	Past	Grazing land.	None.	None.
	Present	Grazing land.	As above.	As above.
West of subject site	Past	Grazing land.	None.	None.
	Present	Golf course and grazing land.	None.	The golf course previously maintained underground fuel storage tanks, however, these tanks were removed and are not considered a concern.

The development of past uses of the adjoining properties was primarily made from interviews, MEV site reconnaissance, and aerial photographs. Topographic maps and the Hawaii Atlas provided limited regional information.

### 5.2.3 Topography

The subject property is situated east of (mauka of) Piilani Highway in Kihei, Maui on the north and south side of Lipoa Parkway. The property lies on the western slopes of East Maui (Haleakala). The physiographic type feature of the area is described as Kula, Slightly Dissected Upland.

The site elevation ranges from approximately 60 feet (Lipoa & Piilani Highway intersection) to 280 feet (northeast boundary of Parcel 54) above mean sea level. Regional topography is characterized by westerly trending slopes of approximately 3 to 4 percent. On-site relief for the property is estimated to be approximately 220 feet, descending from a high point along the eastern lot boundary to a low point along the western lot boundary.

The nearest prominent natural feature is Waipuilani Gulch, located along the northern property boundary. See Figure 1, Appendix A.

#### 5.2.4 Geology and Soils

The Haleakala Volcanics have been divided into three series. The oldest are the Honomanu Volcanic Series, which is the primitive shield composed of Pahoehoe and aa flows of tholeiite, tholeiitic olivine basalt, and oceanite. Above sea level, later lavas have almost entirely buried this volcanic series. The Kula Volcanic Series overlies the Honomanu Volcanics and is composed predominantly of hawaiite with lesser amounts of alkalic olivine basalt and ankaramite. Near the summit of Haleakala Volcano, the Kula Series is at least 750 meters thick and near the shore only 15 to 60 meters thick. After a long period of erosion, subsequent renewal activity included the flows and cones of the Hana Volcanic Series, which are composed of the same rock type as of the Kula Series, but alkalic olivine basalts and basaltic hawaiites are predominant over the more siliceous types.

According to the U.S. Department of Agriculture, the following soil series underlies the subject site:

- Waiakoa extremely stony silty clay loam, 3 to 25 percent slopes, eroded (WID2). Waiakoa Series soil consists of well-drained soils on uplands on the island of Maui. These soils developed in material weathered from basic igneous rock. Permeability is considered low and the surface runoff is moderate. The erosion hazard is severe. This soil is used for pasture and wildlife habitat.

Other common, surface geologic phenomena investigated in an environmental site assessment are faults, landslides, rock falls, earthquake zones and volcanic eruptions. In 1992, the USGS reevaluated the seismic hazards for the State of Hawaii, and Maui County was classified as Zone 2B. This indicates that in any given year within a 50-year period (average building life span) there is a 10% chance that 1/5 the force of gravity (ground acceleration) during an earthquake will be exceeded.

#### 5.2.5 Hydrology

The subject site area has an annual average rainfall of approximately 10 to 15 inches. The average temperature range from the annual high to the annual low is 85 degrees and 65 degrees Fahrenheit, respectively. The pre-development vegetation zone within this temperature and rainfall range is characterized as Kiawe and lowland shrubs. Characteristic plants consist of kiawe, koa haloe, finger grass and pili grass.

On-site drainage follows the natural slope of the land and is generally directed from the higher property elevations along the eastern boundary to the lower elevations of the western boundary. See Figure 2, Appendix A. A stormwater retention basin is located on an adjoining property, Lot 3-C-2. This basin is located upgradient of Parcel 17 (portion). Parcel 17 acts as a possible spillway for this basin. See Photo 2, Appendix A.

The pertinent Federal Insurance Rate Map (FEMA FIRM MAP #150003 0265C dated September 6, 1989) depicts the area as minimal flooding (Zone C).

The Civil Defense Tsunami Evacuation Maps indicate the subject property is **not** within the Tsunami reach-zone. The Pacific Ocean is located approximately 0.75 miles west of the subject site western boundary (Lipoa Parkway and Piilani Highway intersection).

#### 5.2.6 Hydrogeology

As with all islands of the United States, Maui is regulated by the Coastal Zone Management Act of the Clean Water Act. These two designations require protective comprehensive plans for groundwater management and limit the extent of certain types of development and land use. One important management criterion is the disposal of wastewater. The Water Resources Research Center has designated the groundwater management area as the *Kamaole Aquifer System* within the *Central Aquifer Sector*. The groundwater underlying the subject site is defined as follows:



Aquifer	Aquifer Type: Hydrology & Geology	Status of Groundwater				
		Development Stage	Utility	Salinity (mg/l Cl)	Uniqueness	Vulnerability to Contamination
Upper	Unconfined, perched, high-level aquifer (fresh water not in contact with seawater).	Potential Use	Useful as a Drinking Water Source.	Fresh	Replaceable	High
Lower	Unconfined basal aquifer occurring in horizontally extensive lavas (Flank)	Currently Used	Drinking Water Source.	Low	Irreplaceable	Moderate

The following are descriptions of the aquifer classification codes, according to Water Quality Plan: *basal* – freshwater in contact with seawater; *high level* – freshwater not in contact with seawater; *unconfined* – water table is the upper surface of the saturated aquifer; *confined* – aquifer is bounded by impermeable or poorly permeable formations; and *confined or unconfined* – the actual condition is uncertain.

*Aquifer Type Geology*: flank, dike, flank/dike, perched, dike/perched, and sedimentary.

*Development Stage* – *currently used, potential use, no potential use*: Aquifers are differentiated according to those already being used (currently used), those with potential utility (potential use), and those having no potential developability.

*Utility* – *drinking, ecologically important, neither*: Identifies aquifers by use.

*Salinity* – *fresh, low, moderate, high, and seawater*: The gradation of groundwater from fresh to seawater is a feature of all basal aquifers in Hawaii. The upper limit of the standard for drinking water is 250 mg/l Chlorine (Cl) (fresh) and true seawater has a chloride content of 18,980 mg/l.

*Uniqueness* – *irreplaceable and replaceable*: The classes irreplaceable and replaceable are direct EPA derivatives. Virtually all potable water in the state of Hawaii should be considered irreplaceable over the long term.

*Vulnerability to Contamination* – *high, moderate, low, none*: Because of the geographical limits of resources, interconnection among groundwater sources and the relatively rapid time of groundwater travel, aquifers can be described as being either vulnerable or not vulnerable to contamination.

At the location of the on-site groundwater well, the depth to the basal groundwater is approximately 120 feet below the surface. The flow direction is expected to be in a westerly direction. Depths to the basal groundwater layer will vary depending on the positioning on the site. However, in localized areas, confining layers and/or dike compartments may maintain a high water table.

The majority of the subject site is located below (makai of) the Underground Injection Control (UIC) line. Parcel 54 is located above (mauka of) the UIC line. The UIC line is the designated boundary that divides protected inland areas situated over drinking water sources from seaward areas located over non-potable water sources. Sites makai of the UIC line are not considered drinking water sources and permit limitations are imposed by Maui County, Clean Water Branch (CWB). Sites mauka of the UIC line are considered drinking water sources and permit limitations are imposed and requirements are more stringent by the State Department of Health, Clean Water Branch (CWB).

### 5.2.7 Potable Water Supply and Sewage Disposal System

Currently, this property remains essentially undeveloped and, therefore, no sewage is generated or potable water supplied. A groundwater well has been developed on-site for irrigation use at the Maui Research & Technology Park. A small-scale sewer pump station is located on Parcel 16 that services the businesses in the Maui Research and Technology Park, pumping sewage to the Kihei Wastewater Treatment Plant.

## 5.3 Interior and Exterior Observations

### 5.3.1 Hazardous/Regulated Substances and Petroleum Products in Connection with Identified Uses.

MEV did not identify any hazardous substances and/or petroleum products that are in connection with identified current uses as visually and physically observed on the property at the time of the site visit except for the following:

- Small quantities of fuel, paints and adhesives are stored at the temporary construction baseyard located on Parcel 8. Regulated items identified by MEV were effectively stored in appropriate containers. See Photos 14 & 15 and Figure 2, Appendix A.

### 5.3.2 Hazardous/Regulated Substances and Petroleum Products/Containers (not in connection with identified current uses).

MEV did not identify any hazardous/regulated substances and/or petroleum products that are not in connection with identified current uses as visually and physically observed on the property at the time of the site visit except for the following:

- One (1) drip pan, containing an oil filter and a deteriorating plastic container of waste oil, is located under a stored office trailer (not in use) situated near the northern portion of Parcel 9. See Photos 16 & 17 and Figure 2, Appendix A. Limited soil staining is associated with these items.

There is no evidence of any historic significant misuse of hazardous or regulated substances on the subject property.

### 5.3.3 Unidentified Substance Containers

MEV did not observe any unidentified substances suspected of being possible hazardous/regulated substances or petroleum products as visually and physically observed on the property at the time of the site reconnaissance.

### 5.3.4 Storage Tanks

No indications regarding the current presence or historic use of underground storage tanks (USTs) on the subject site were obtained through our review of regulatory databases, interviews, or through MEV's site reconnaissance.

One (1) poly tank (empty) and one (1) steel above-ground storage tank are located on Parcel 16. These tanks are used to store water for livestock and irrigation purposes. See Photo 12 and Figure 2, Appendix A.

### 5.3.5 Odors

MEV identified no suspect odors on the subject property except in the area of limited soil staining and waste oil storage noted in Section 5.3.2 above..

### 5.3.6 Pools of Liquid

MEV did not observe any pools or sumps of liquids likely to be hazardous substances or petroleum products to the extent visually and/or physically observed on the subject property at the time of the site visit or from interviews or records review.

### 5.3.7 Indications of PCBs

Pole or pad-mounted transformers numbered 7777 or above are considered non-PCB containing by the Maui Electric Company. Pad-mounted electrical transformers (non-PCB) were observed on the subject property along Lipoa Parkway. The transformers appeared to be in good condition with no sign of leakage.

### *Background Information:*

Polychlorinated biphenyls (PCBs) are groups of manufactured organic chemicals that contain 209 individual chlorinated chemicals (known as congeners) and were introduced in 1929. PCBs have been used widely as coolants and lubricants in transformers, capacitors, and other electrical equipment. Products containing PCBs are old fluorescent lighting fixtures, electrical appliances containing PCB capacitors, old microscope oil, and hydraulic fluids.

The manufacture of PCBs stopped in the United States in 1977 because of evidence that they build up in the environment and cause harmful effects. The distribution in commerce of PCB containing items was banned in 1979 (40 CFR 761.20). The EPA aggressively enforces regulations concerning PCB manufacturing, use, distribution, release and disposal under the Toxic Substance Control Act (TSCA). This federal agency extensively regulates the use, servicing, and disposal of PCBs in electrical equipment by enforcing marking, notification, inspection, and record keeping requirements.

## **5.4 Interior Observations**

The subject property is undeveloped with no significant, permanent building structures. This section does not apply.

## **5.5 Exterior Observations**

### **5.5.1 Pits, Ponds, and Lagoons**

There were no areas identified as any man-made or natural depressions that are, or would have been, likely to hold waste liquids or sludge from industrial operations or other activities.

### **5.5.2 Stained Soil or Pavement**

One area of limited soil staining was noted by MEV at the northern portion of Parcel 9 and was related to the ineffective storage of a drip pan containing waste oil. The staining appeared to be limited in both horizontal and vertical extent. See Photos 16 & 17 and Figure 2, Appendix A.

### **5.5.3 Stressed Vegetation**

There were no areas of stressed vegetation identified on the subject property at the time of the site visit that are, or would have been, likely caused from something other than insufficient water (or flooding).

### **5.5.4 Solid Waste**

There were no indications of significant solid waste dumping or suspect fill materials, mounds, depressions or excavations observed on this property during the site reconnaissance, nor on historic aerial photographs.

One (1) solid waste bin was noted by MEV on the GBI baseyard. See Photo 19, Appendix A.

Improperly disposed (abandoned) solid waste items that were identified by MEV on the subject site at the time of the site reconnaissance consisted of the following:

- Limited amounts of miscellaneous debris dumping including household waste and construction debris. See Figure Photo 22, Appendix A.
- Regulated items (1 derelict vehicle, 3 vehicle batteries, tires, vehicle parts and a white good). See Photos 20, 21, 23 & 24 and Figure 2, Appendix A.

No solid waste dumping was noted by the archaeologist that conducted a survey of the area.

### **5.5.5 Wastewater or Storm Water – Discharge Drains, Dry Wells, Drainage Ways, and Retention Basins**

MEV did not note any wastewater discharge drains, dry wells, or retention basins located on-site. A retention basin is located adjacent to the subject property. See Figure 2, Appendix A.

### **5.5.6 Wells**

One (1) groundwater well (State Well No. 4426-03) is located near the western boundary of Parcel 16. See Photo 12 and Figure 2, Appendix A. This well was constructed in 1990 and is used for irrigation purpose by Maui R&T Partnership. A permit to construct this well was obtained from the State.

Wells located near the subject property are used for observation or irrigation purposes or are unused at this time. See Figure 1, Appendix A for the nearest well locations.

### **5.5.7 Septic and Cesspool Systems**

The subject property has no operational cesspool or septic system located on-site.

## **5.6 Non-Scope Considerations**

The concerns listed below are not normally considered relevant under CERCLA, however, they may be considered regulated under other environmental laws and ordinances and may present a potential liability to the property owner.

### **5.6.1 Asbestos-Containing Materials (ACM)**

The subject property did not have any permanent on-site building structures that would consist of asbestos-containing materials. No suspect asbestos-containing debris was noted.

### **5.6.2 Lead-Based Paint**

The subject property did not have any permanent on-site building structures that would consist of lead-based paint. No suspect lead-based paint debris was noted.

### **5.6.3 Arsenic-Containing Substances**

MEV did not observe any suspect arsenic-containing building materials or waste materials at the time of the site visit.

### **5.6.4 Radon**

MEV did not identify any man-made products on the subject property that are known or suspected to emit radioactive decay elements.

#### *Background Information:*

Radon is a colorless and odorless radioactive gas that can produce health effects such as cellular injury. Radon gas can occur in the natural environment as concentrations from certain rocks and geologic conditions have a high radon-emanation potential.

These surface rock types are not known to occur in Hawaii. It is possible that increased concentrations of Radon could occur in regions where geologic fault and volcanic rift zones may release gases from deeper earth sources. However, the State of Hawaii, Department of Health (DOH) has not addressed concerns for any significant levels of gas to occur anywhere in Hawaii. This was based on the 1992 and 1996 DOH investigations conducted in elementary schools throughout the State.

### **5.6.5 Lead in Drinking Water**

The subject property is undeveloped. This section does not apply.

### **5.6.6 Ecological Resources, Endangered Species, Cultural and Historic Resources, and Wetlands**

There are no known critical habitats or threatened and/or endangered species on the project site. The subject site is not located within the County of Maui's Special Management Area (SMA).

According to Mr. Dega of SCS Archaeology, a cultural survey has been completed for this site. Any significant findings in this survey relating to the subject property should be thoroughly addressed.

### **5.6.7 Indoor Air Quality**

The subject property is undeveloped. This section does not apply.

### **5.6.8 High Voltage Transmission Lines**

MEV did identify transmission lines on the subject site (Parcel 15 & 16). These lines are not expected to have a significant impact on the subject site in its present form, however, should be addressed if the areas are developed, especially for residential purposes.

End of Section

## 6.0 INTERVIEWS

MEV conducts interviews with persons that may have specific knowledge on the subject property and any land use activities that may have operated on-site in the past or continue to currently operate on the subject property. Interviews are also an effective tool to better understand the overall historical regional and local setting of the subject site. Whenever possible, MEV attempts to interview the present and past owner(s), site manager, occupants, local government officials and other relevant contacts. See also Section 8.3.

### 6.1 Interview with Client Representative

Client representative, Mr. John Maloney, provided MEV with limited information on the subject property's history, ownership and current operations located on-site.

### 6.2 Interview with Property Owner Representative

Mr. Scott Meidell of Haleakala Ranch informed MEV that the ranch used and continues to use the majority of the subject property for grazing activities only. Mr. Meidell was not aware of any *Recognized Environmental Conditions* or historic solid waste dumping activities related to the subject property.

### 6.3 Other Persons Interviewed

A list of any additional persons interviewed during the course of this investigation is located in Section 8.3. None of these persons interviewed had any specialized knowledge of the site relating to *Recognized Environmental Conditions* on the subject site.

End of Section

## 7.0 FINDINGS, OPINIONS, AND CONCLUSIONS

### 7.1 Recognized Environmental Conditions

**Recognized environmental conditions**, as defined by ASTM Standard E1527-05, are the presence or likely presence of any hazardous substance or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property. **Recognized environmental conditions** are described with regard to (1) the nature and extent of the environmental condition, (2) potential or actual environmental threat, (3) potential for transport (migration) of any environmental conditions, and (4) consideration for further investigation. The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

MEV has performed this Phase I Environmental Site Assessment in conformance with the scope and limitations of the ASTM Practice E 1527-05 for the subject property, located within and surrounding the Maui Research and Technology Park, [TMK (2)-2-2-24:4, 8, 9, 14, 15, 16 portion, 17 portion, 18 & (2)-2-2-2:54 portion] in the community of Kihei, Maui, defined as the subject property.

Any exceptions to or deletions from this practice are described in Section 1.4, Limitations and Exceptions, of this report.

**This assessment has revealed no evidence of *recognized environmental conditions* in connection with the property.**

#### 7.1.1 Database Listings (See Section 4.0 & EDR Report, Appendix B)

##### Findings:

The subject site is not listed. The listed, nearby risk site unlikely poses a significant concern to the subject property.

#### 7.1.2 Current and Historic Use or Storage of Hazardous and Regulated Substances (See Sections 5.3.1 & 5.3.2)

##### Findings:

There is no evidence of any historic or current significant misuse of hazardous or regulated substances on the subject property. See Section 7.2.1 below.

### 7.2 Other Environmental Concerns

The concerns listed below may not be considered **recognized environmental conditions** by ASTM definition. However, they may be considered regulated under other environmental laws and ordinances and may present a potential liability to the property owner.

#### 7.2.1 Ineffective Storage of Regulated Waste and Limited Soil Staining (See Section 5.3.2 & 5.5.2)

##### Findings/Concerns:

A limited amount of waste oil is being ineffectively stored beneath an office trailer (not in use) located on-site. A limited amount of surface soil staining is associated with this waste oil.

##### Opinions and Conclusions:

This waste oil and any related surface soil staining should be properly managed. Though not anticipated, if the stained soils extend beyond the immediate surface soils (indicating possible gross contamination), the underlying soils should be tested to confirm all contamination has been effectively removed.

## **7.2.2 Solid Waste Management (See Section 5.5.4)**

### Findings/Concerns:

A limited amount of dumping activity was evident on the subject property, including regulated waste items, at the time of the MEV's site reconnaissance.

### Opinions and Conclusions:

Any waste disposal should be in a permitted solid waste landfill or recycled in a manner that complies with all local, state, and federal regulations as applicable to the specific waste type with special attention given to regulated items (derelict vehicle, batteries, tires, waste oil, etc.).

Due to presence of heavily vegetated areas and storage containers, the entire subject site and underlying soils were not visibly inspected. It is important to ensure that if clearing of the property commences and large amounts of construction debris or unidentifiable substances (containers) are discovered, proper waste identification, testing and applicable waste handling/disposal procedures are followed.

## **7.2.3 Surface Waters and Area Aquifer Protection**

### Findings/Concerns:

If future land use includes developing the land for residential or commercial use, the developer and property owner should be aware of the potential for contaminants to run off-site and into nearby water courses and storm water drains. Products of concern relating to any future development project or land-clearing activity would be earthen material (silt), paints, oils, antifreezes and other fluids from automobile or on-site machinery, or leaks from on-site stocked items.

### Opinions and Conclusions:

In order to minimize the regulatory profiling of the subject site as a potential responsible party for any newly discovered groundwater or surface water contamination, future developers should consider implementing conservative, proactive environmental policies during the development planning phase.

Construction managers and developers of any future, on-site development activities should consider implementing aggressive, proactive environmental policies during the development-planning phase. Incorporating best management practices including the use of silt fencing and dust control, secondary containment of all petroleum products, etc. will reduce the possibility of negatively impacting the surface soils, surface waters and/or groundwater resources in the region.

Future land clearing of greater than one (1) acre will likely require both a County of Maui grading/grubbing permit and a National Pollution Discharge Elimination System (NPDES) General Permit (State of Hawaii, Department of Health).

## **7.2.4 Groundwater Well (See Section 5.5.6)**

### Findings/Concerns:

One (1) groundwater well is located on the subject property. Department of Lands and Natural Resources' permitting requirements for Well No. 4426-03 were completed.

### Opinions and Conclusions:

In order to remain in compliance with the State, this well should be operated and maintained in accordance with applicable federal and state regulations.

The conclusions stated above should not be construed to mean that any regulatory agency would have the same opinion as this author, nor is any implication proposed therefrom.

The results of this environmental assessment are intended for general reference purposes only and are not intended as legal advice. The advice of legal counsel should be sought in regard to individual facts, circumstances and interpretation of environmental liability.



## 8.0 REFERENCES

### 8.1 Published References

1. American Standard of Testing and Materials, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, E1527-05, 2005.
2. "Atlas of Hawaii", 2<sup>nd</sup> Edition, Department of Geography, University of Hawaii at Hilo, 1983, University of Hawaii Press.
3. "Atlas of Hawaii", 3<sup>rd</sup> Edition, Department of Geography, University of Hawaii at Hilo, 1998, University of Hawaii Press.
4. County of Maui, Real Property Tax Division, Historical Records for TMK Number (2)-2-2-24:4, 8, 9, 14, 15, 16 portion, 17 portion, 18 & (2)-2-2-2:54 portion.
5. Hawaii Administrative Rules, Title 11, Department of Health, Chapter 58.1, Solid Waste Management Control.
6. State of Hawaii, Department of Health, Solid and Hazardous Waste Branch, Underground Storage Tank Section, List of Leaking Underground Storage Tank Release Sites, January 2007.
7. State of Hawaii, Department of Health, Solid and Hazardous Waste Branch, Underground Storage Tank Section, List of Underground Storage Tank Facilities, January 2007.
8. State of Hawaii, Department of Health, Voluntary Response Program (VRP), List of Voluntary Response Program Sites, July 2006.
9. State of Hawaii, Department of Health, Office of Hazard Evaluation and Emergency Response, List of Release Notifications, July 2006.
10. State of Hawaii, Department of Health, Office of Hazard Evaluation and Emergency Response, List of Sites List, July 2006.
11. State of Hawaii, Department of Land and Natural Resources, Registered Wells and Dry Wells.
12. State of Hawaii, Department of Land and Natural Resources, "State of Hawaii Water Quality Plan and Groundwater Map", June 1990, Revised December 1991.
13. U.S. Department of Agriculture, Soil Conservation Service, "Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii", 1972.
14. U.S. Environmental Protection Agency, Office of Air and Radiation et al., Indoor Air Facts No. 4 (revised) Sick Building Syndrome, April 1991.
15. U.S. Environmental Protection Agency, Building Air Quality: A Guide for Building Owners and Facility Managers, 1991.

## 8.2 Map and Other References

1. Environmental Data Resources, Inc., "The EDR Field Check Report", May 17, 2007.
2. Federal Emergency Management Agency, "Flood Insurance Rate Map", Number 150003 0265C dated September 6, 1989.
3. R.M. Towill Corporation, Aerial Photographs, Honolulu, Hawaii.
4. Air Survey Hawaii, Aerial Photographs, Honolulu, Hawaii.
5. Sanborn Maps (no coverage)
6. U.S. Geological Survey, 7.5 Minute Topographic Map, Puu O Kali, Hawaii 1983 & 1992.

## 8.3 Record of Personal Communications

Table 3.0. List of personal Interviews conducted by MEV.

Date	Interviewee	Title & Organization	Address	Phone Number
3/20/07	Mr. John Maloney	Pacific Rim Land, Inc	381 Hukul L'I Place Suite 202 Kihei, HI 96753	(808) 874-5263
5/4/07	Mr. Scott Meidel	Land Manager Haleakala Ranch Co.	529 Kealaloa Aveue Makawao, HI 96768	(808) 572-1500
5/4/07	Mr. Todd MacFarlane	Project Manager, Goodfellow Brothers, Inc	500 Welakahao Rd Kihei, HI 96753	(808) 879-8868
5/11/07	Mr. Paul Dega	SCS Archaeology	711 Kapiolani Blvd Suite 975 Honolulu, HI	(808) 579-1182





End of Section

# Appendix A:

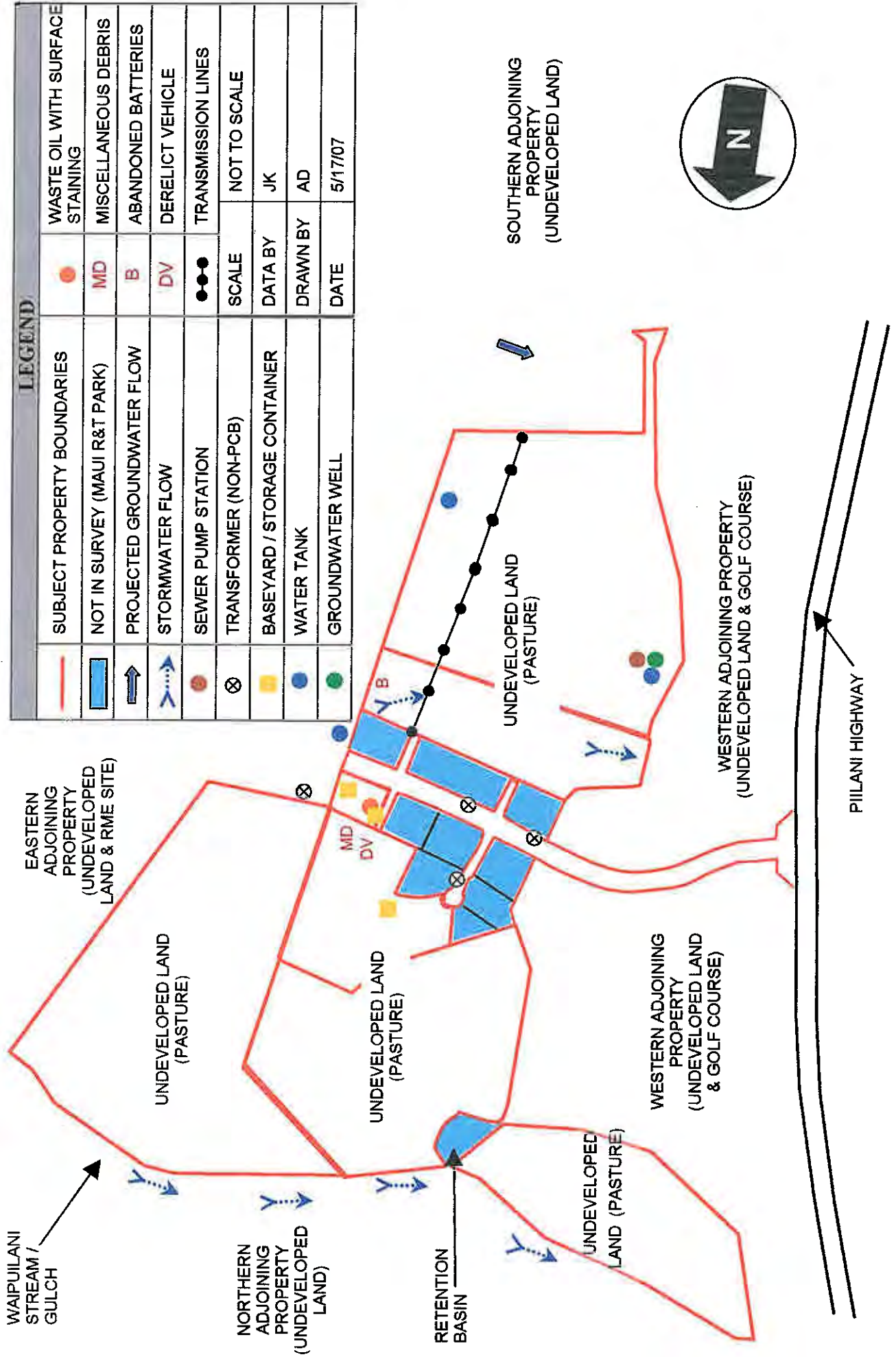
## Maps, Plans, and Photographs

# FIGURE 1: REGIONAL SETTING MAP

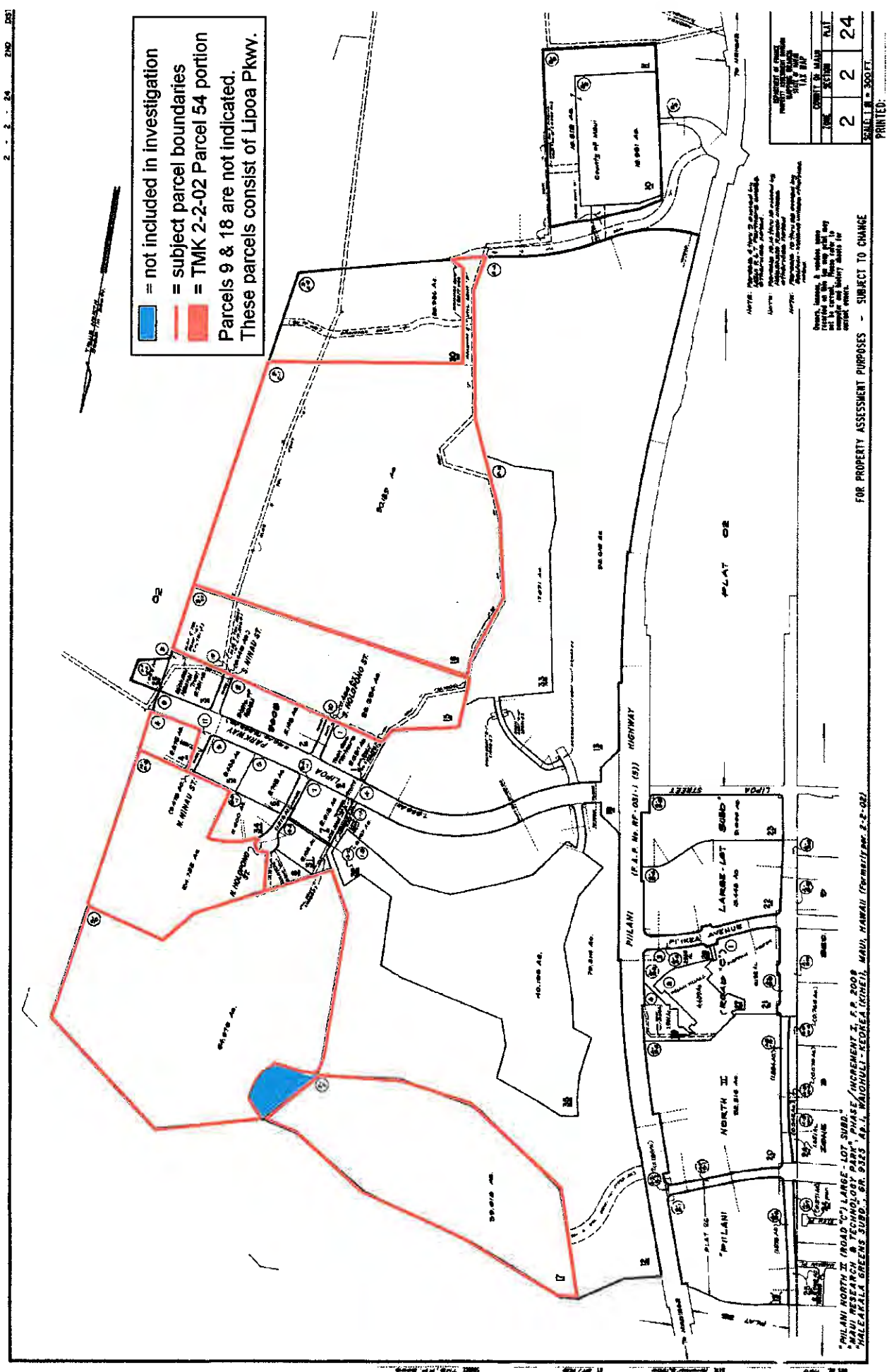


-  Subject Property (not to scale)
-  Projected Groundwater Flow
-  Regional Surface Water Flow
-  USGS Water Wells (2003)

# FIGURE 2: SITE PLAN



# FIGURE 3a: TAX MAP KEY



= not included in investigation  
 = subject parcel boundaries  
 = TMK 2-2-02 Parcel 54 portion  
 Parcels 9 & 18 are not indicated.  
 These parcels consist of Lipoa Pkwy.

NOTES: Parcels 9 & 18 are not shown by this map.  
 Parcels 9 & 18 are not shown by this map.  
 Parcels 9 & 18 are not shown by this map.  
 Parcels 9 & 18 are not shown by this map.  
 Parcels 9 & 18 are not shown by this map.  
 Parcels 9 & 18 are not shown by this map.

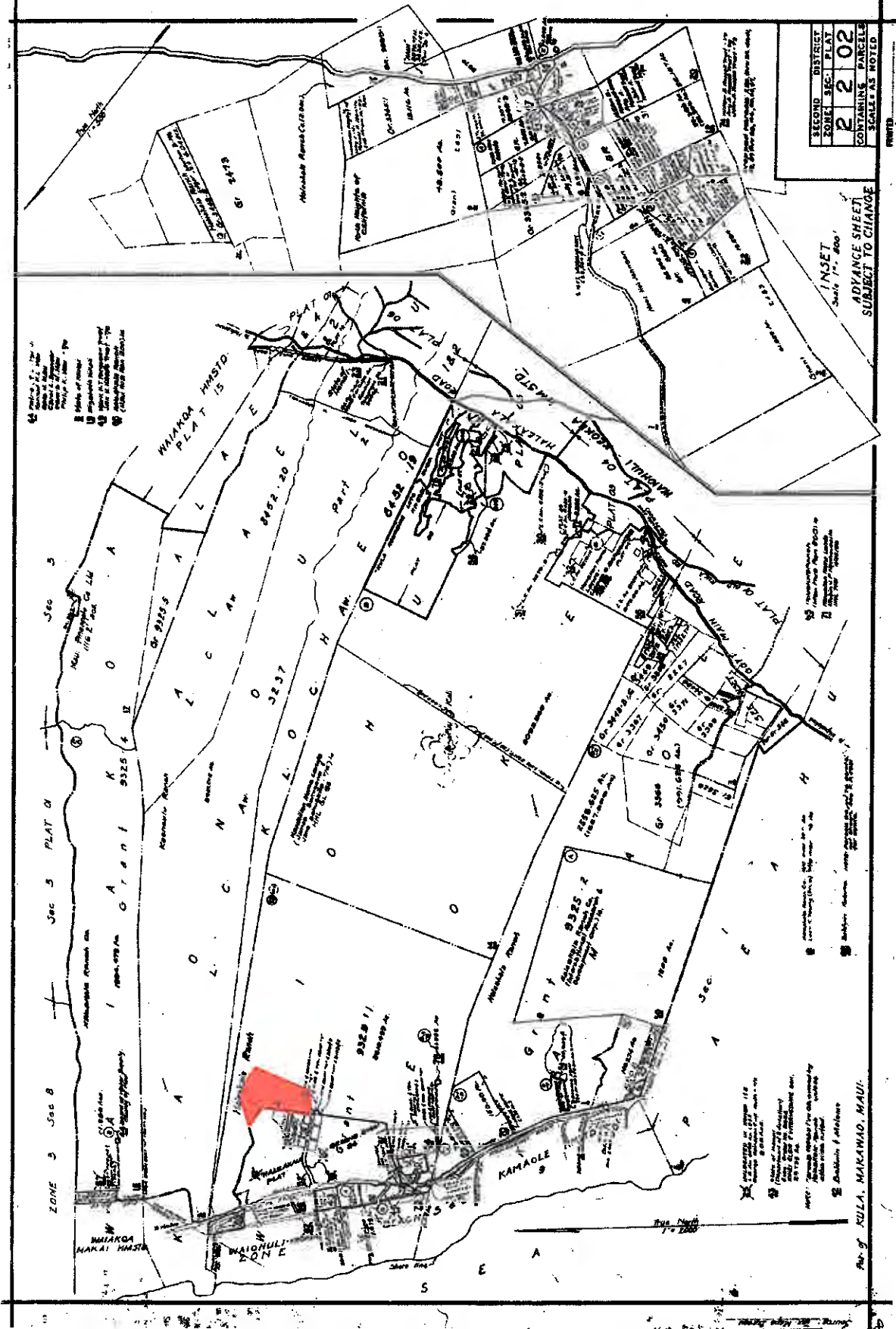
COUNTY OF MAUI	PLAT	24
TAX MAP SECTION		2
TAX MAP		2

SCALE: 1" = 300 FT.

FOR PROPERTY ASSESSMENT PURPOSES - SUBJECT TO CHANGE

"PILANI NORTH II (ROAD 'C') LARGE - LOT SUBD."  
 "MAUI RESEARCH & TECHNOLOGY PARK" PHASE / INCREMENT I, F.P. 2008  
 "HALEKALUA GREENS SUBD.", BR. 9325, AP. 4, WAIOHOLI - KEOREA (KURE), MAUI, HAWAII (FORMERLY MAPS 2-2-02)

**FIGURE 3b: TAX MAP KEY**



**FIGURE 4 – AERIAL PHOTO OF LAND PARCELS**

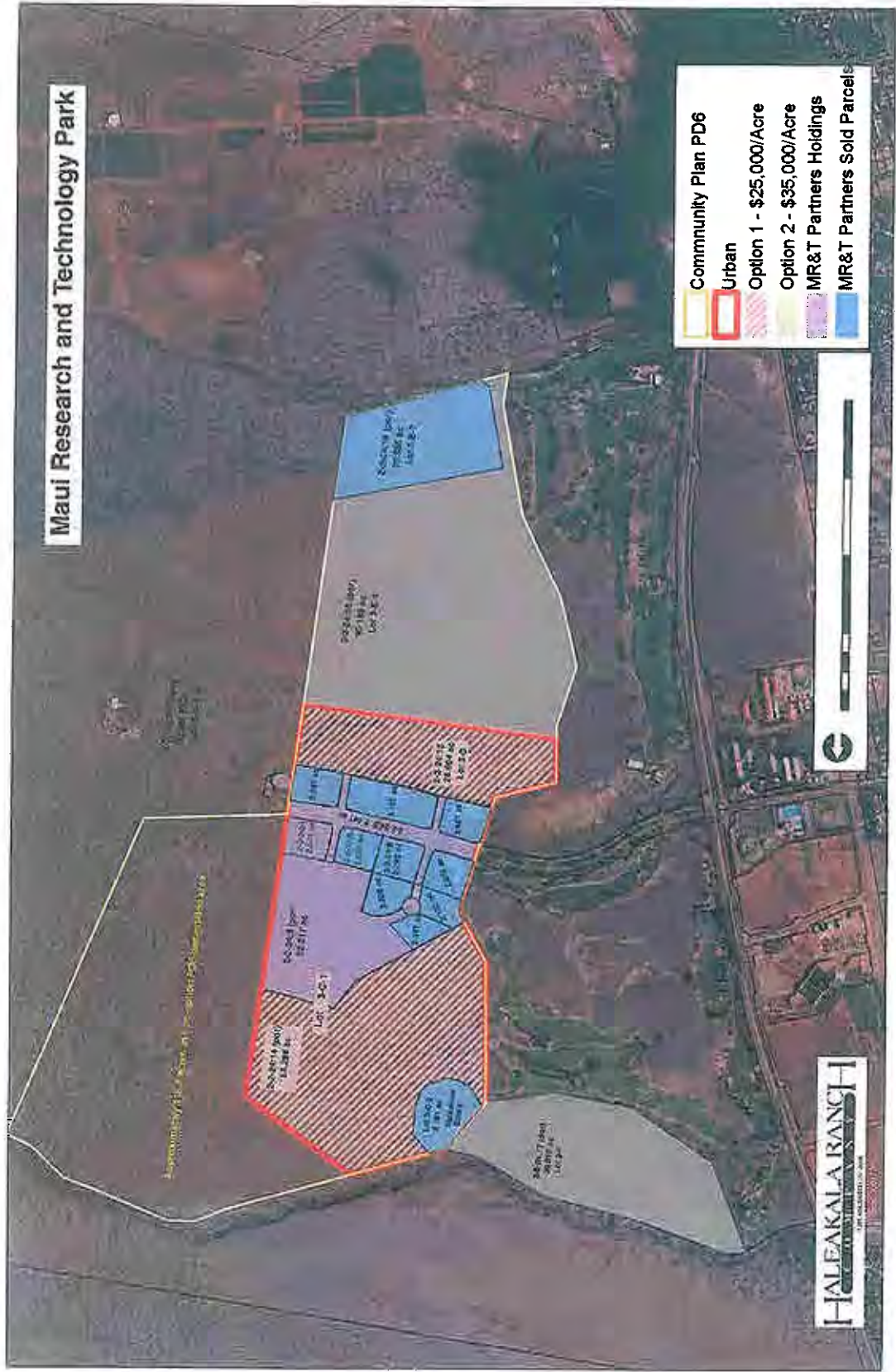


PHOTO SUPPLIED BY PACIFIC RIM LAND, INC.      BLUE AREAS NOT INCLUDED IN PHASE I ESA SURVEY





**PHOTO 1**

Northeasterly view, across Piilani Highway, of the subject property's entrance. Lipoa Parkway leads to the remaining land parcels of the subject property.



**PHOTO 2**

Easterly view from Parcel 17 towards the retention basin located on Lot 3-C-2. The basin is not part of the subject property.



**PHOTO 3**

Westerly view along the subject property's northern boundary (Parcel 54).

**PHOTO 4**

Northerly view along an access road dividing Parcel 8 and Parcel 54.

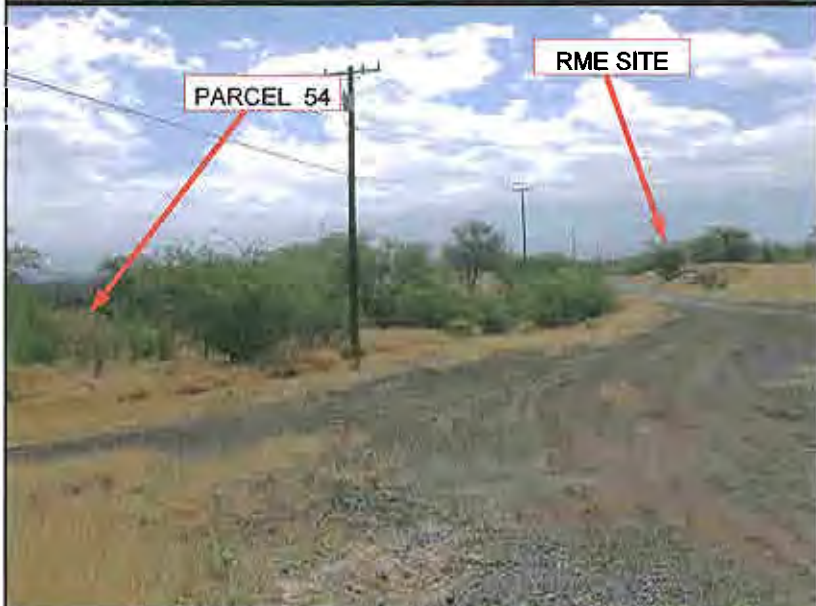


**PHOTO 5**

Easterly view along the southern boundary of Parcel 54 (portion).

The unpaved road on the right side of the photo leads to the military's RME facility.

The photo is taken from the top end of Lipoa Parkway.



**PHOTO 6**

Southerly view along the eastern boundaries of Parcel 15 and 16.





**PHOTO 7**

Northerly view along the subject property's western boundary.



**PHOTO 8**

Southerly view along the western boundary of Parcel 8. The adjoining property consists of commercial office space.



**PHOTO 9**

Westerly view along the eastern portion of Lipoa Parkway. The Goodfellow Bros. Inc. (GBI) baseyard is located in this area.



**PHOTO 10**

Body shot of the typical terrain and vegetation located on the subject property. View is westerly.



**PHOTO 11**

GBI's baseyard, including office trailers and limited material stockpiling, is located on Parcel 4 located at the east end of Lipoa Parkway.

The storage/use of hazardous/regulated substances was not noted by MEV in this area.



**PHOTO 12**

Located along the western boundary of Parcel 16 is a groundwater well; water storage tank; sewer pump station (P.S.); pad-mounted transformer; and a small storage shed.

The well supplies irrigation water that is temporarily stored in the water tank. The sewer pump station services the businesses in the Maui Research and Technology Park, pumping sewage to the County's wastewater treatment plant.



**PHOTO 13**

Baseyard activities are located on a portion of the subject property (Parcel 8). The baseyard is used for construction activities located on the adjoining property. See Photo 14.



**PHOTO 14**

Storage containers are located on a portion of the subject property (Parcel 8). Limited quantities of hazardous/regulated substances were noted in this area. See Photo 15.



**PHOTO 15**

This specialized cabinet, located on the back of a storage container (see Photo 14) is used to store flammables. Only limited quantities of flammables were noted by MEV.



**PHOTO 16**

This storage container is located on the northern portion of Parcel 9. A drip pan and deteriorating poly container containing waste oil are located at this location. These items should be properly managed. See Photo 17.



**PHOTO 17**

A drip pan containing an oil filter and deteriorated container of waste oil are located under a storage container on-site. See Photo 16 above. The waste oil and containers should be properly managed.

Limited soil staining was evident under and adjacent to the drip pan. The stained soils should be removed and properly disposed of. If the stained soils extend beyond the immediate surface soils, the underlying soils should be tested to confirm all contamination has been effectively removed.



**PHOTO 18**

Spillage noted at the construction baseyard located on Parcel 8 consisted of concrete only.



**PHOTO 19**

One (1) waste container is located in the GBI construction baseyard area. The improper disposal of regulated items into the container was not noted by MEV.



**PHOTO 20**

One (1) derelict vehicle was located on-site (Parcel 8).



**PHOTO 21**

A limited amount of solid waste dumping was noted by MEV on Parcel 8. Some of these materials included regulated waste items (vehicle tires and parts, white good).



**PHOTO 22**

A limited amount of solid waste dumping was noted by MEV on Parcel 8. Most of these items consisted of construction debris and household waste.



**PHOTO 23**

A limited amount of solid waste dumping was noted by MEV on Parcel 8. Some of these materials included regulated waste items (vehicle parts).



**PHOTO 24**

Three (3) vehicle batteries were abandoned on-site along the eastern boundary of Parcel 16. These batteries should be properly managed (recycled).



# **Appendix B:**

## **Regulatory Records Documentation Site Specific Documentation**

# EDR FieldCheck® Report



**EDR®** Environmental  
Data Resources Inc

**Maui Research & Technology Park - Undeveloped Lots  
Lipoa Parkway  
Kihei, HI 96753**

**Inquiry Number: 1930257.1s**

**May 17, 2007**

**The Standard in  
Environmental Risk  
Information**

440 Wheelers Farms Road  
Milford, Connecticut 06461

**Nationwide Customer Service**

Telephone: 1-800-352-0050  
Fax: 1-800-231-6802  
Internet: [www.edrnet.com](http://www.edrnet.com)

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Overview Map .....	2
Detail Map .....	3
Map Findings Summary .....	4
Map Findings .....	6
Orphan Summary .....	7
Government Records Searched/Data Currency Tracking .....	GR-1

### GEOCHECK ADDENDUM

GeoCheck - Not Requested

*Thank you for your business.*  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

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This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

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## EXECUTIVE SUMMARY

A search of the environmental records was conducted by Environmental Data Resources, Inc. (EDR). MEV, LLC used the EDR FieldCheck System to review and/or revise the results of this search, based on independent data verification by MEV, LLC. The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

### TARGET PROPERTY INFORMATION

#### ADDRESS

LIPOA PARKWAY  
KIHEI, HI 96753

#### COORDINATES

Latitude (North): 20.750400 - 20° 45' 1.4"  
Longitude (West): 156.435100 - 156° 26' 6.4"  
Universal Transverse Mercator: Zone 4  
UTM X (Meters): 767079.1  
UTM Y (Meters): 2296507.5  
Elevation: 220 ft. above sea level

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 20156-G4 WAILUKU, HI  
Most Recent Revision: Not reported

Southwest Map: 20156-F4 MAALAEA, HI  
Most Recent Revision: Not reported

### TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

### DATABASES WITH NO MAPPED SITES

No sites were identified in following databases.

### FEDERAL RECORDS

**NPL**..... National Priority List  
**Proposed NPL**..... Proposed National Priority List Sites  
**Delisted NPL**..... National Priority List Deletions  
**NPL LIENS**..... Federal Superfund Liens  
**CERCLIS**..... Comprehensive Environmental Response, Compensation, and Liability Information System  
**CERC-NFRAP**..... CERCLIS No Further Remedial Action Planned  
**CORRACTS**..... Corrective Action Report

## EXECUTIVE SUMMARY

<b>RCRA-TSDF</b>	Resource Conservation and Recovery Act Information
<b>RCRA-LQG</b>	Resource Conservation and Recovery Act Information
<b>ERNS</b>	Emergency Response Notification System
<b>HMIRS</b>	Hazardous Materials Information Reporting System
<b>US ENG CONTROLS</b>	Engineering Controls Sites List
<b>US INST CONTROL</b>	Sites with Institutional Controls
<b>DOD</b>	Department of Defense Sites
<b>FUDS</b>	Formerly Used Defense Sites
<b>US BROWNFIELDS</b>	A Listing of Brownfields Sites
<b>CONSENT</b>	Superfund (CERCLA) Consent Decrees
<b>ROD</b>	Records Of Decision
<b>UMTRA</b>	Uranium Mill Tailings Sites
<b>ODI</b>	Open Dump Inventory
<b>TRIS</b>	Toxic Chemical Release Inventory System
<b>TSCA</b>	Toxic Substances Control Act
<b>FTTS</b>	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
<b>SSTS</b>	Section 7 Tracking Systems
<b>US CDL</b>	Clandestine Drug Labs
<b>DOT OPS</b>	Incident and Accident Data
<b>RADINFO</b>	Radiation Information Database
<b>HIST FTTS</b>	FIFRA/TSCA Tracking System Administrative Case Listing
<b>LUCIS</b>	Land Use Control Information System
<b>LIENS 2</b>	CERCLA Lien Information
<b>ICIS</b>	Integrated Compliance Information System
<b>PADS</b>	PCB Activity Database System
<b>MLTS</b>	Material Licensing Tracking System
<b>MINES</b>	Mines Master Index File
<b>FINDS</b>	Facility Index System/Facility Registry System
<b>RAATS</b>	RCRA Administrative Action Tracking System

### STATE AND LOCAL RECORDS

<b>SHWS</b>	Sites List
<b>SWF/LF</b>	Permitted Landfills in the State of Hawaii
<b>LUST</b>	Leaking Underground Storage Tank Database
<b>UST</b>	Underground Storage Tank Database
<b>SPILLS</b>	Release Notifications
<b>INST CONTROL</b>	Sites with Institutional Controls
<b>VCP</b>	Voluntary Response Program Sites
<b>DRYCLEANERS</b>	Permitted Drycleaner Facility Listing
<b>BROWNFIELDS</b>	Brownfields Sites
<b>AIRS</b>	List of Permitted Facilities

### TRIBAL RECORDS

<b>INDIAN RESERV</b>	Indian Reservations
<b>INDIAN LUST</b>	Leaking Underground Storage Tanks on Indian Land
<b>INDIAN UST</b>	Underground Storage Tanks on Indian Land

### EDR PROPRIETARY RECORDS

<b>Manufactured Gas Plants</b>	EDR Proprietary Manufactured Gas Plants
--------------------------------	---

## EXECUTIVE SUMMARY

### SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property. Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

### FEDERAL RECORDS

**RCRAInfo:** RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act ( RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System(RCRIS). The database includes selective information on sites which generate, transport, store , treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month Large quantity generators generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

An online review and analysis by MEV, LLC of the RCRA-SQG list, as provided by EDR, and dated 06/13/2006 has revealed that there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
TREX HAWAII LLC	590 LIPOA PARKWAY	1/8 - 1/4 WSW 1		6

## EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped:

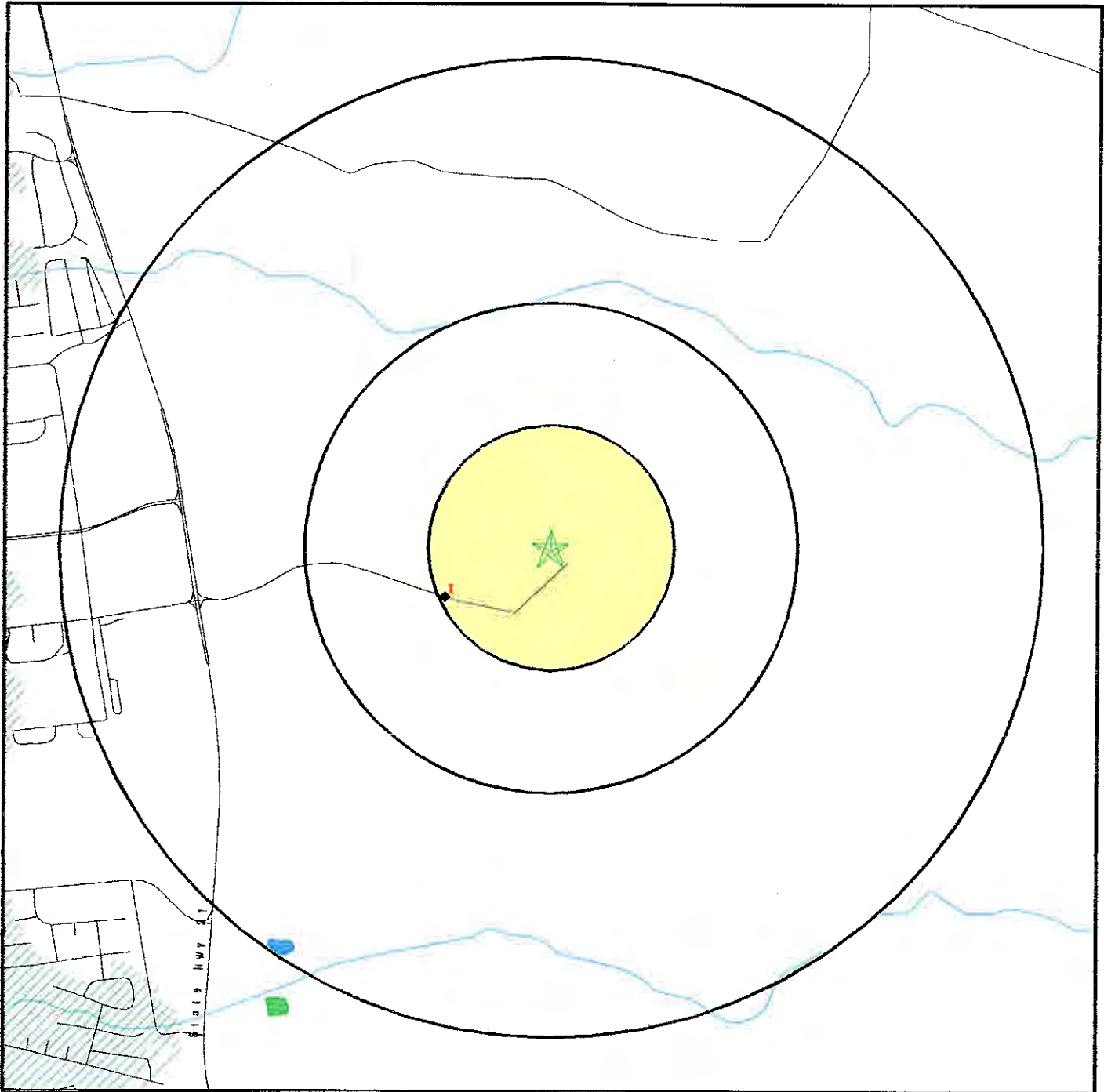
Site Name







KAHOOLAWE ISLAND  
MAUI OCEAN CENTER  
MAUI ECONOMIC DEVELOPMENT BRD  
MAUI NUI PARK  
100 YARDS OFF SHORE OF KIHEI MAUI  
MAUI ELEC-MAALAEA GEN STATION






Database(s)

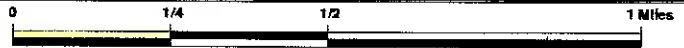
CERCLIS  
FINDS  
FINDS  
FINDS  
SPILLS  
HAZNET, HAZNET

# OVERVIEW MAP - 1930257.1s



-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  National Priority List Sites
-  Dept. Defense Sites

-  Indian Reservations BIA
-  Oil & Gas pipelines
-  100-year flood zone
-  500-year flood zone
-  National Wetland Inventory

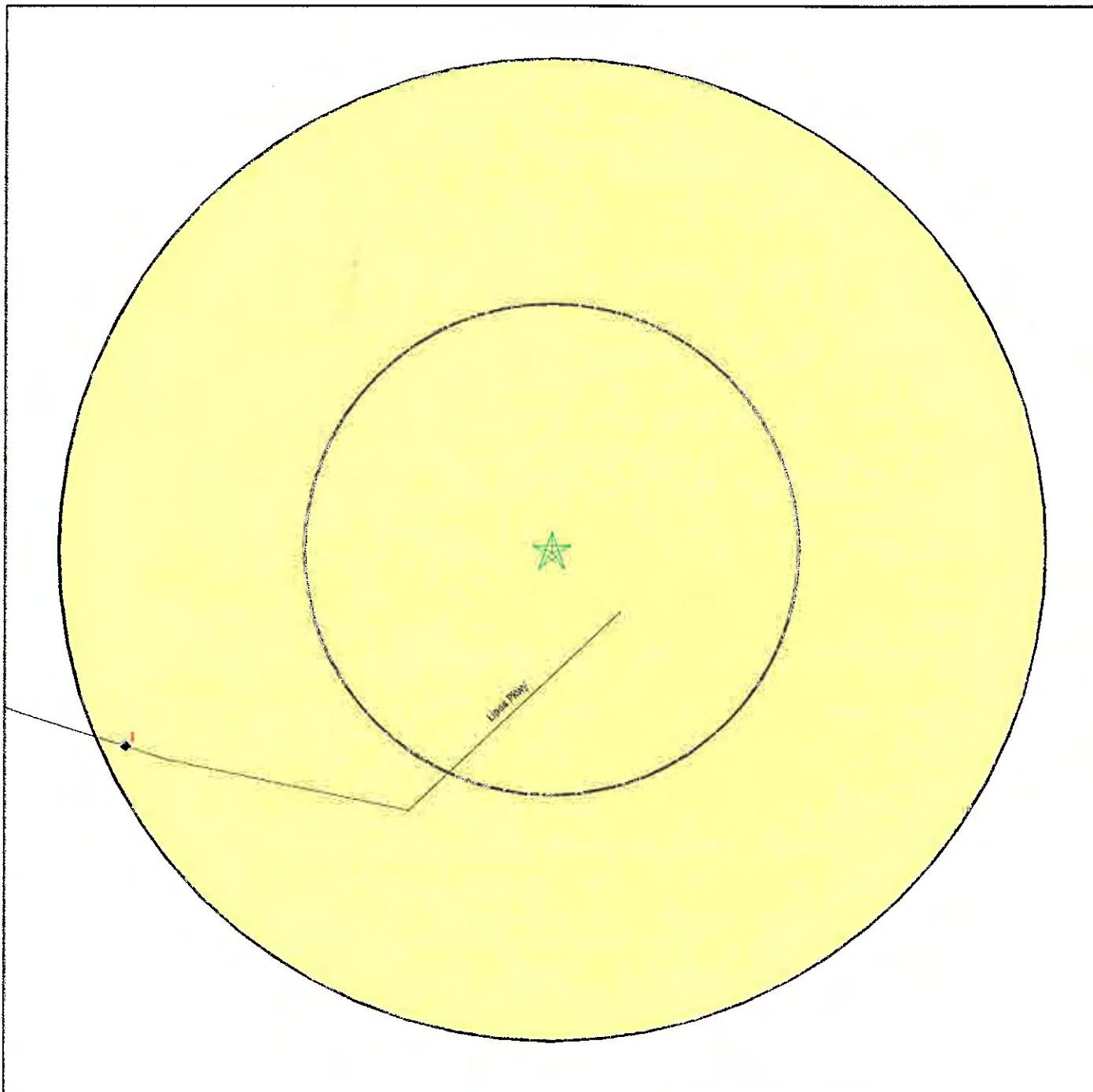







**SITE NAME:** Maui Research & Technology Park - Undeveloped Lots  
**ADDRESS:** Lipoa Parkway  
 Kihel HI 96753  
**LAT/LONG:** 20.7504 / 156.4351





**CLIENT:** MEV, LLC  
**CONTACT:** J. Kermode  
**INQUIRY #:** 1930257.1s  
**DATE:** May 17, 2007 11:41 am

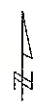


# DETAIL MAP - 1930257.1s



-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  Sensitive Receptors
-  National Priority List Sites
-  Dept. Defense Sites

-  Indian Reservations BIA
-  Oil & Gas pipelines
-  100-year flood zone
-  500-year flood zone



**SITE NAME:** Maui Research & Technology Park - Undeveloped Lots  
**ADDRESS:** Lipoa Parkway  
 Kihel HI 96753  
**LAT/LONG:** 20.7504 / 156.4351

**CLIENT:** MEV, LLC  
**CONTACT:** J. Kermode  
**INQUIRY #:** 1930257.1s  
**DATE:** May 17, 2007 11:41 am

## MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<b><u>FEDERAL RECORDS</u></b>								
NPL		1.000	0	0	0	0	NR	0
Proposed NPL		1.000	0	0	0	0	NR	0
Delisted NPL		1.000	0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
CERCLIS		0.500	0	0	0	NR	NR	0
CERC-NFRAP		0.500	0	0	0	NR	NR	0
CORRACTS		1.000	0	0	0	0	NR	0
RCRA TSD		0.500	0	0	0	NR	NR	0
RCRA Lg. Quan. Gen.		0.250	0	0	NR	NR	NR	0
RCRA Sm. Quan. Gen.		0.250	0	1	NR	NR	NR	1
ERNS	TP		NR	NR	NR	NR	NR	0
HMIRS	TP		NR	NR	NR	NR	NR	0
US ENG CONTROLS		0.500	0	0	0	NR	NR	0
US INST CONTROL		0.500	0	0	0	NR	NR	0
DOD		1.000	0	0	0	0	NR	0
FUDS		1.000	0	0	0	0	NR	0
US BROWNFIELDS		0.500	0	0	0	NR	NR	0
CONSENT		1.000	0	0	0	0	NR	0
ROD		1.000	0	0	0	0	NR	0
UMTRA		0.500	0	0	0	NR	NR	0
ODI		0.500	0	0	0	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
LUCIS		0.500	0	0	0	NR	NR	0
LIENS 2	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
MINES		0.250	0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
<b><u>STATE AND LOCAL RECORDS</u></b>								
SHWS		1.000	0	0	0	0	NR	0
State Landfill		0.500	0	0	0	NR	NR	0
LUST		0.500	0	0	0	NR	NR	0
UST		0.250	0	0	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
INST CONTROL		0.500	0	0	0	NR	NR	0
VCP		0.500	0	0	0	NR	NR	0
DRYCLEANERS		0.250	0	0	NR	NR	NR	0

## MAP FINDINGS SUMMARY

<u>Database</u>	<u>Target Property</u>	<u>Search Distance (Miles)</u>	<u>&lt; 1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>&gt; 1</u>	<u>Total Plotted</u>
BROWNFIELDS		0.500	0	0	0	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
<b><u>TRIBAL RECORDS</u></b>								
INDIAN RESERV		1.000	0	0	0	0	NR	0
INDIAN LUST		0.500	0	0	0	NR	NR	0
INDIAN UST		0.250	0	0	NR	NR	NR	0
<b><u>EDR PROPRIETARY RECORDS</u></b>								
Manufactured Gas Plants		1.000	0	0	0	0	NR	0

**NOTES:**

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation

Site

Database(s)    EDR ID Number  
EPA ID Number

**1**            **TREX HAWAII LLC**  
**WSW**        **590 LIPOA PARKWAY**  
**1/8-1/4**      **KIHEI, HI 96753**  
**1254 ft.**

**RCRA-SQG**    **1007989525**  
**HIR000136333**

**Relative:**  
**Lower**

RCRAInfo:  
Owner:        TREX HAWAII LLC  
EPA ID:       HIR000136333

**Actual:**  
**196 ft.**

Contact:      MICHAEL ABRAHAM  
808-442-7015

Classification: Small Quantity Generator  
TSD Activities: Not reported

Violation Status: No violations found

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
KIHEI	S108008651	100 YARDS OFF SHORE OF KIHEI MAUI	KIHEI ROAD	96753	SPILLS
KIHEI	1000486449	KAHOOLAWE ISLAND	LAT 20 32' 30", LONG 156 37' 30"	96753	CERCLIS
KIHEI	1005505462	MAUI OCEAN CENTER	MAALAEA HARBOR	96753	FINDS
KIHEI	S106084485	MAUI ELEC-MAALAEA GEN STATION	3 MI NW KIHEI HWT 30	96753	HAZNET, HAZNET
KIHEI	1008170106	MAUI ECONOMIC DEVELOPMENT BRD	1151 PUNCHBOWL ST, ROOM 431	96753	FINDS
KIHEI, MAUI	1008170126	MAUI NUI PARK	KAMEHAMEHA HWY	96753	FINDS

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

**Number of Days to Update:** Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

## FEDERAL RECORDS

### **NPL: National Priority List**

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 01/25/2007	Source: EPA
Date Data Arrived at EDR: 01/31/2007	Telephone: N/A
Date Made Active in Reports: 03/12/2007	Last EDR Contact: 05/03/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 07/30/2007
	Data Release Frequency: Quarterly

### **NPL Site Boundaries**

#### Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)  
Telephone: 202-564-7333

EPA Region 1  
Telephone 617-918-1143

EPA Region 6  
Telephone: 214-655-6659

EPA Region 3  
Telephone 215-814-5418

EPA Region 7  
Telephone: 913-551-7247

EPA Region 4  
Telephone 404-562-8033

EPA Region 8  
Telephone: 303-312-6774

EPA Region 5  
Telephone 312-886-6686

EPA Region 9  
Telephone: 415-947-4246

EPA Region 10  
Telephone 206-553-8665

### **Proposed NPL: Proposed National Priority List Sites**

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 09/27/2006	Source: EPA
Date Data Arrived at EDR: 11/01/2006	Telephone: N/A
Date Made Active in Reports: 11/22/2006	Last EDR Contact: 05/03/2007
Number of Days to Update: 21	Next Scheduled EDR Contact: 07/30/2007
	Data Release Frequency: Quarterly

### **DELISTED NPL: National Priority List Deletions**

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 12/28/2006	Source: EPA
Date Data Arrived at EDR: 01/31/2007	Telephone: N/A
Date Made Active in Reports: 03/12/2007	Last EDR Contact: 05/03/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 07/30/2007
	Data Release Frequency: Quarterly

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### **NPL LIENS:** Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991	Source: EPA
Date Data Arrived at EDR: 02/02/1994	Telephone: 202-564-4267
Date Made Active in Reports: 03/30/1994	Last EDR Contact: 03/26/2007
Number of Days to Update: 56	Next Scheduled EDR Contact: 05/21/2007
	Data Release Frequency: No Update Planned

### **CERCLIS:** Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 02/27/2007	Source: EPA
Date Data Arrived at EDR: 03/21/2007	Telephone: 703-603-8960
Date Made Active in Reports: 04/27/2007	Last EDR Contact: 03/21/2007
Number of Days to Update: 37	Next Scheduled EDR Contact: 06/18/2007
	Data Release Frequency: Quarterly

### **CERCLIS-NFRAP:** CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 12/20/2006	Source: EPA
Date Data Arrived at EDR: 01/29/2007	Telephone: 703-603-8960
Date Made Active in Reports: 02/27/2007	Last EDR Contact: 03/19/2007
Number of Days to Update: 29	Next Scheduled EDR Contact: 06/18/2007
	Data Release Frequency: Quarterly

### **CORRACTS:** Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/14/2007	Source: EPA
Date Data Arrived at EDR: 03/20/2007	Telephone: 800-424-9346
Date Made Active in Reports: 04/27/2007	Last EDR Contact: 03/05/2007
Number of Days to Update: 38	Next Scheduled EDR Contact: 06/04/2007
	Data Release Frequency: Quarterly

### **RCRA:** Resource Conservation and Recovery Act Information

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS). The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month. Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator off-site to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 06/13/2006	Source: EPA
Date Data Arrived at EDR: 06/28/2006	Telephone: (415) 495-8895
Date Made Active in Reports: 08/23/2006	Last EDR Contact: 05/16/2007
Number of Days to Update: 56	Next Scheduled EDR Contact: 07/16/2007
	Data Release Frequency: Quarterly

### **ERNS:** Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/2006	Source: National Response Center, United States Coast Guard
Date Data Arrived at EDR: 01/24/2007	Telephone: 202-267-2180
Date Made Active in Reports: 03/12/2007	Last EDR Contact: 04/24/2007
Number of Days to Update: 47	Next Scheduled EDR Contact: 07/23/2007
	Data Release Frequency: Annually

### **HMIRS:** Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/31/2005	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 04/17/2007	Telephone: 202-366-4555
Date Made Active in Reports: 05/14/2007	Last EDR Contact: 04/17/2007
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/16/2007
	Data Release Frequency: Annually

### **US ENG CONTROLS:** Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 01/24/2007	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/31/2007	Telephone: 703-603-8905
Date Made Active in Reports: 04/04/2007	Last EDR Contact: 04/02/2007
Number of Days to Update: 63	Next Scheduled EDR Contact: 07/02/2007
	Data Release Frequency: Varies

### **US INST CONTROL:** Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 01/24/2007	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/31/2007	Telephone: 703-603-8905
Date Made Active in Reports: 02/27/2007	Last EDR Contact: 04/02/2007
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/02/2007
	Data Release Frequency: Varies



## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### **DOD:** Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005	Source: USGS
Date Data Arrived at EDR: 11/10/2006	Telephone: 703-692-8801
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 05/11/2007
Number of Days to Update: 62	Next Scheduled EDR Contact: 08/06/2007
	Data Release Frequency: Semi-Annually

### **FUDS:** Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2005	Source: U.S. Army Corps of Engineers
Date Data Arrived at EDR: 09/20/2006	Telephone: 202-528-4285
Date Made Active in Reports: 11/22/2006	Last EDR Contact: 04/02/2007
Number of Days to Update: 63	Next Scheduled EDR Contact: 07/02/2007
	Data Release Frequency: Varies

### **US BROWNFIELDS:** A Listing of Brownfields Sites

Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become Brownfields Cleanup Revolving Loan Fund (BCRLF) cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: 01/29/2007	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/31/2007	Telephone: 202-566-2777
Date Made Active in Reports: 04/04/2007	Last EDR Contact: 03/12/2007
Number of Days to Update: 63	Next Scheduled EDR Contact: 06/11/2007
	Data Release Frequency: Semi-Annually

### **CONSENT:** Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 08/23/2006	Source: Department of Justice, Consent Decree Library
Date Data Arrived at EDR: 03/06/2007	Telephone: Varies
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 04/23/2007
Number of Days to Update: 35	Next Scheduled EDR Contact: 07/23/2007
	Data Release Frequency: Varies

### **ROD:** Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 03/27/2007	Source: EPA
Date Data Arrived at EDR: 03/27/2007	Telephone: 703-416-0223
Date Made Active in Reports: 04/27/2007	Last EDR Contact: 03/27/2007
Number of Days to Update: 31	Next Scheduled EDR Contact: 07/02/2007
	Data Release Frequency: Annually

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### **UMTRA: Uranium Mill Tailings Sites**

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 12/31/2005	Source: Department of Energy
Date Data Arrived at EDR: 11/08/2006	Telephone: 505-845-0011
Date Made Active in Reports: 01/29/2007	Last EDR Contact: 05/17/2007
Number of Days to Update: 82	Next Scheduled EDR Contact: 06/18/2007
	Data Release Frequency: Varies

### **ODI: Open Dump Inventory**

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/09/2004	Telephone: 800-424-9346
Date Made Active in Reports: 09/17/2004	Last EDR Contact: 06/09/2004
Number of Days to Update: 39	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

### **TRIS: Toxic Chemical Release Inventory System**

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2004	Source: EPA
Date Data Arrived at EDR: 06/22/2006	Telephone: 202-566-0250
Date Made Active in Reports: 08/23/2006	Last EDR Contact: 04/27/2007
Number of Days to Update: 62	Next Scheduled EDR Contact: 06/18/2007
	Data Release Frequency: Annually

### **TSCA: Toxic Substances Control Act**

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2002	Source: EPA
Date Data Arrived at EDR: 04/14/2006	Telephone: 202-260-5521
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 04/16/2007
Number of Days to Update: 46	Next Scheduled EDR Contact: 07/16/2007
	Data Release Frequency: Every 4 Years

### **FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)**

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 02/26/2007	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-566-1667
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 03/19/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 06/18/2007
	Data Release Frequency: Quarterly

### **FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)** A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 02/26/2007	Source: EPA
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-566-1667
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 03/19/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 06/18/2007
	Data Release Frequency: Quarterly

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### **SSTS: Section 7 Tracking Systems**

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2005	Source: EPA
Date Data Arrived at EDR: 03/13/2007	Telephone: 202-564-4203
Date Made Active in Reports: 04/27/2007	Last EDR Contact: 04/12/2007
Number of Days to Update: 45	Next Scheduled EDR Contact: 07/16/2007
	Data Release Frequency: Annually

### **LIENS 2: CERCLA Lien Information**

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 03/08/2007	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/12/2007	Telephone: 202-564-6023
Date Made Active in Reports: 05/14/2007	Last EDR Contact: 02/20/2007
Number of Days to Update: 32	Next Scheduled EDR Contact: 05/21/2007
	Data Release Frequency: Varies

### **RADINFO: Radiation Information Database**

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 01/30/2007	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/31/2007	Telephone: 202-343-9775
Date Made Active in Reports: 02/27/2007	Last EDR Contact: 05/03/2007
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/30/2007
	Data Release Frequency: Quarterly

### **CDL: Clandestine Drug Labs**

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 12/01/2006	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 01/08/2007	Telephone: 202-307-1000
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 05/11/2007
Number of Days to Update: 3	Next Scheduled EDR Contact: 06/25/2007
	Data Release Frequency: Quarterly

### **HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing**

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 03/19/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 06/18/2007
	Data Release Frequency: No Update Planned

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### **ICIS:** Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 02/21/2007	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/03/2007	Telephone: 202-564-5088
Date Made Active in Reports: 05/14/2007	Last EDR Contact: 04/16/2007
Number of Days to Update: 41	Next Scheduled EDR Contact: 07/16/2007
	Data Release Frequency: Quarterly

### **LUCIS:** Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/09/2005	Source: Department of the Navy
Date Data Arrived at EDR: 12/11/2006	Telephone: 843-820-7326
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 03/26/2007
Number of Days to Update: 31	Next Scheduled EDR Contact: 06/11/2007
	Data Release Frequency: Varies

### **DOT OPS:** Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 02/14/2007	Source: Department of Transportation, Office of Pipeline Safety
Date Data Arrived at EDR: 02/28/2007	Telephone: 202-366-4595
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 02/28/2007
Number of Days to Update: 41	Next Scheduled EDR Contact: 05/28/2007
	Data Release Frequency: Varies

### **PADS:** PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 10/17/2006	Source: EPA
Date Data Arrived at EDR: 11/29/2006	Telephone: 202-566-0500
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 05/11/2007
Number of Days to Update: 43	Next Scheduled EDR Contact: 08/06/2007
	Data Release Frequency: Annually

### **MLTS:** Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 01/11/2007	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 01/26/2007	Telephone: 301-415-7169
Date Made Active in Reports: 02/27/2007	Last EDR Contact: 04/02/2007
Number of Days to Update: 32	Next Scheduled EDR Contact: 07/02/2007
	Data Release Frequency: Quarterly

### **MINES:** Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/06/2007	Source: Department of Labor, Mine Safety and Health Administration
Date Data Arrived at EDR: 03/28/2007	Telephone: 303-231-5959
Date Made Active in Reports: 05/14/2007	Last EDR Contact: 03/28/2007
Number of Days to Update: 47	Next Scheduled EDR Contact: 06/25/2007
	Data Release Frequency: Semi-Annually

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### **FINDS:** Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 01/18/2007	Source: EPA
Date Data Arrived at EDR: 01/23/2007	Telephone: (415) 947-8000
Date Made Active in Reports: 02/27/2007	Last EDR Contact: 05/14/2007
Number of Days to Update: 35	Next Scheduled EDR Contact: 07/02/2007
	Data Release Frequency: Quarterly

### **RAATS:** RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995	Source: EPA
Date Data Arrived at EDR: 07/03/1995	Telephone: 202-564-4104
Date Made Active in Reports: 08/07/1995	Last EDR Contact: 03/05/2007
Number of Days to Update: 35	Next Scheduled EDR Contact: 06/04/2007
	Data Release Frequency: No Update Planned

### **BRS:** Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2005	Source: EPA/NTIS
Date Data Arrived at EDR: 03/06/2007	Telephone: 800-424-9346
Date Made Active in Reports: 04/13/2007	Last EDR Contact: 03/06/2007
Number of Days to Update: 38	Next Scheduled EDR Contact: 06/11/2007
	Data Release Frequency: Biennially

### **STATE AND LOCAL RECORDS**

#### **SHWS:** Sites List

Facilities, sites or areas in which the Office of Hazard Evaluation and Emergency Response has an interest, has investigated or may investigate under HRS 128D (includes CERCLIS sites).

Date of Government Version: 07/24/2006	Source: Department of Health
Date Data Arrived at EDR: 07/27/2006	Telephone: 808-586-4249
Date Made Active in Reports: 08/30/2006	Last EDR Contact: 04/18/2007
Number of Days to Update: 34	Next Scheduled EDR Contact: 06/18/2007
	Data Release Frequency: Semi-Annually

#### **SWF/LF:** Permitted Landfills in the State of Hawaii

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 05/19/2004	Source: Department of Health
Date Data Arrived at EDR: 05/20/2004	Telephone: 808-586-4245
Date Made Active in Reports: 06/22/2004	Last EDR Contact: 04/25/2007
Number of Days to Update: 33	Next Scheduled EDR Contact: 07/23/2007
	Data Release Frequency: Varies

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### **LUST:** Leaking Underground Storage Tank Database

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 01/30/2007	Source: Department of Health
Date Data Arrived at EDR: 02/13/2007	Telephone: 808-586-4228
Date Made Active in Reports: 03/12/2007	Last EDR Contact: 03/30/2007
Number of Days to Update: 27	Next Scheduled EDR Contact: 06/25/2007
	Data Release Frequency: Semi-Annually

### **UST:** Underground Storage Tank Database

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 01/30/2007	Source: Department of Health
Date Data Arrived at EDR: 02/13/2007	Telephone: 808-586-4228
Date Made Active in Reports: 03/21/2007	Last EDR Contact: 03/30/2007
Number of Days to Update: 36	Next Scheduled EDR Contact: 06/25/2007
	Data Release Frequency: Semi-Annually

### **SPILLS:** Release Notifications

Releases of hazardous substances to the environment reported to the Office of Hazard Evaluation and Emergency Response since 1988.

Date of Government Version: 07/24/2006	Source: Department of Health
Date Data Arrived at EDR: 07/27/2006	Telephone: 808-586-4249
Date Made Active in Reports: 08/30/2006	Last EDR Contact: 04/18/2007
Number of Days to Update: 34	Next Scheduled EDR Contact: 06/18/2007
	Data Release Frequency: Varies

### **INST CONTROL:** Sites with Institutional Controls

Voluntary Remediation Program and Brownfields sites with institutional controls in place.

Date of Government Version: 07/24/2006	Source: Department of Health
Date Data Arrived at EDR: 07/27/2006	Telephone: 808-586-4249
Date Made Active in Reports: 08/30/2006	Last EDR Contact: 04/18/2007
Number of Days to Update: 34	Next Scheduled EDR Contact: 06/18/2007
	Data Release Frequency: Varies

### **VCP:** Voluntary Response Program Sites

Sites participating in the Voluntary Response Program. The purpose of the VRP is to streamline the cleanup process in a way that will encourage prospective developers, lenders, and purchasers to voluntarily cleanup properties.

Date of Government Version: 07/24/2006	Source: Department of Health
Date Data Arrived at EDR: 07/27/2006	Telephone: 808-586-4249
Date Made Active in Reports: 08/30/2006	Last EDR Contact: 04/18/2007
Number of Days to Update: 34	Next Scheduled EDR Contact: 06/18/2007
	Data Release Frequency: Varies

### **DRYCLEANERS:** Permitted Drycleaner Facility Listing

A listing of permitted drycleaner facilities in the state.

Date of Government Version: 02/14/2007	Source: Department of Health
Date Data Arrived at EDR: 02/15/2007	Telephone: 808-586-4200
Date Made Active in Reports: 03/12/2007	Last EDR Contact: 04/30/2007
Number of Days to Update: 25	Next Scheduled EDR Contact: 07/30/2007
	Data Release Frequency: Varies

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### **BROWNFIELDS:** Brownfields Sites

With certain legal exclusions and additions, the term 'brownfield site' means real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.

Date of Government Version: 07/24/2006	Source: Department of Health
Date Data Arrived at EDR: 07/27/2006	Telephone: 808-586-4249
Date Made Active in Reports: 08/30/2006	Last EDR Contact: 04/18/2007
Number of Days to Update: 34	Next Scheduled EDR Contact: 06/18/2007
	Data Release Frequency: Varies

### **AIRS:** List of Permitted Facilities

A listing of permitted facilities in the state.

Date of Government Version: 09/07/2006	Source: Department of Health
Date Data Arrived at EDR: 09/08/2006	Telephone: 808-586-4200
Date Made Active in Reports: 10/13/2006	Last EDR Contact: 04/30/2007
Number of Days to Update: 35	Next Scheduled EDR Contact: 07/30/2007
	Data Release Frequency: Varies

### **TRIBAL RECORDS**

#### **INDIAN RESERV:** Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005	Source: USGS
Date Data Arrived at EDR: 02/06/2006	Telephone: 202-208-3710
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 05/11/2007
Number of Days to Update: 339	Next Scheduled EDR Contact: 08/06/2007
	Data Release Frequency: Semi-Annually

#### **INDIAN LUST R7:** Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 09/06/2006	Source: EPA Region 7
Date Data Arrived at EDR: 10/04/2006	Telephone: 913-551-7003
Date Made Active in Reports: 11/08/2006	Last EDR Contact: 02/19/2007
Number of Days to Update: 35	Next Scheduled EDR Contact: 05/21/2007
	Data Release Frequency: Varies

#### **INDIAN LUST R8:** Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 02/19/2007	Source: EPA Region 8
Date Data Arrived at EDR: 02/27/2007	Telephone: 303-312-6271
Date Made Active in Reports: 04/04/2007	Last EDR Contact: 02/19/2007
Number of Days to Update: 36	Next Scheduled EDR Contact: 05/21/2007
	Data Release Frequency: Quarterly

#### **INDIAN LUST R6:** Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 01/04/2005	Source: EPA Region 6
Date Data Arrived at EDR: 01/21/2005	Telephone: 214-665-6597
Date Made Active in Reports: 02/28/2005	Last EDR Contact: 02/19/2007
Number of Days to Update: 38	Next Scheduled EDR Contact: 05/21/2007
	Data Release Frequency: Varies

#### **INDIAN LUST R4:** Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Minnesota, Mississippi and North Carolina.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/20/2007  
Date Data Arrived at EDR: 04/16/2007  
Date Made Active in Reports: 05/14/2007  
Number of Days to Update: 28

Source: EPA Region 4  
Telephone: 404-562-8677  
Last EDR Contact: 02/19/2007  
Next Scheduled EDR Contact: 05/21/2007  
Data Release Frequency: Semi-Annually

**INDIAN LUST R1:** Leaking Underground Storage Tanks on Indian Land  
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 12/01/2006  
Date Data Arrived at EDR: 12/01/2006  
Date Made Active in Reports: 01/29/2007  
Number of Days to Update: 59

Source: EPA Region 1  
Telephone: 617-918-1313  
Last EDR Contact: 02/19/2007  
Next Scheduled EDR Contact: 05/21/2007  
Data Release Frequency: Varies

**INDIAN LUST R10:** Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 03/01/2007  
Date Data Arrived at EDR: 03/01/2007  
Date Made Active in Reports: 04/04/2007  
Number of Days to Update: 34

Source: EPA Region 10  
Telephone: 206-553-2857  
Last EDR Contact: 02/19/2007  
Next Scheduled EDR Contact: 02/21/2007  
Data Release Frequency: Quarterly

**INDIAN LUST R9:** Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 03/30/2007  
Date Data Arrived at EDR: 03/30/2007  
Date Made Active in Reports: 04/27/2007  
Number of Days to Update: 28

Source: Environmental Protection Agency  
Telephone: 415-972-3372  
Last EDR Contact: 02/19/2007  
Next Scheduled EDR Contact: 05/21/2007  
Data Release Frequency: Quarterly

**INDIAN UST R8:** Underground Storage Tanks on Indian Land

Date of Government Version: 02/19/2007  
Date Data Arrived at EDR: 02/27/2007  
Date Made Active in Reports: 04/04/2007  
Number of Days to Update: 36

Source: EPA Region 8  
Telephone: 303-312-6137  
Last EDR Contact: 02/19/2007  
Next Scheduled EDR Contact: 05/21/2007  
Data Release Frequency: Quarterly

**INDIAN UST R4:** Underground Storage Tanks on Indian Land

Date of Government Version: 03/20/2007  
Date Data Arrived at EDR: 04/16/2007  
Date Made Active in Reports: 05/14/2007  
Number of Days to Update: 28

Source: EPA Region 4  
Telephone: 404-562-9424  
Last EDR Contact: 02/19/2007  
Next Scheduled EDR Contact: 05/21/2007  
Data Release Frequency: Semi-Annually

**INDIAN UST R7:** Underground Storage Tanks on Indian Land

Date of Government Version: 09/06/2006  
Date Data Arrived at EDR: 10/04/2006  
Date Made Active in Reports: 11/08/2006  
Number of Days to Update: 35

Source: EPA Region 7  
Telephone: 913-551-7003  
Last EDR Contact: 02/19/2007  
Next Scheduled EDR Contact: 05/21/2007  
Data Release Frequency: Varies

**INDIAN UST R6:** Underground Storage Tanks on Indian Land

Date of Government Version: 01/11/2007  
Date Data Arrived at EDR: 01/12/2007  
Date Made Active in Reports: 01/29/2007  
Number of Days to Update: 17

Source: EPA Region 6  
Telephone: 214-665-7591  
Last EDR Contact: 02/19/2007  
Next Scheduled EDR Contact: 05/21/2007  
Data Release Frequency: Semi-Annually



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## INDIAN UST R5: Underground Storage Tanks on Indian Land

Date of Government Version: 12/02/2004	Source: EPA Region 5
Date Data Arrived at EDR: 12/29/2004	Telephone: 312-886-6136
Date Made Active in Reports: 02/04/2005	Last EDR Contact: 02/19/2007
Number of Days to Update: 37	Next Scheduled EDR Contact: 05/21/2007
	Data Release Frequency: Varies

## INDIAN UST R10: Underground Storage Tanks on Indian Land

Date of Government Version: 03/01/2007	Source: EPA Region 10
Date Data Arrived at EDR: 03/01/2007	Telephone: 206-553-2857
Date Made Active in Reports: 04/04/2007	Last EDR Contact: 02/19/2007
Number of Days to Update: 34	Next Scheduled EDR Contact: 05/21/2007
	Data Release Frequency: Quarterly

## INDIAN UST R9: Underground Storage Tanks on Indian Land

Date of Government Version: 03/26/2007	Source: EPA Region 9
Date Data Arrived at EDR: 03/27/2007	Telephone: 415-972-3368
Date Made Active in Reports: 04/27/2007	Last EDR Contact: 02/19/2007
Number of Days to Update: 31	Next Scheduled EDR Contact: 05/21/2007
	Data Release Frequency: Quarterly

## INDIAN UST R1: Underground Storage Tanks on Indian Land

A listing of underground storage tank locations on Indian Land.

Date of Government Version: 12/01/2006	Source: EPA, Region 1
Date Data Arrived at EDR: 12/01/2006	Telephone: 617-918-1313
Date Made Active in Reports: 01/29/2007	Last EDR Contact: 02/19/2007
Number of Days to Update: 59	Next Scheduled EDR Contact: 05/21/2007
	Data Release Frequency: Varies

## EDR PROPRIETARY RECORDS

### Manufactured Gas Plants: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A	Source: EDR, Inc.
Date Data Arrived at EDR: N/A	Telephone: N/A
Date Made Active in Reports: N/A	Last EDR Contact: N/A
Number of Days to Update: N/A	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

**Oil/Gas Pipelines:** This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

### **Electric Power Transmission Line Data**

Source: PennWell Corporation  
Telephone: (800) 823-6277

This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

**Sensitive Receptors:** There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

### **AHA Hospitals:**

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

### **Medical Centers: Provider of Services Listing**

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

### **Nursing Homes**

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

### **Public Schools**

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

### **Private Schools**

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

**Flood Zone Data:** This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

### **STREET AND ADDRESS INFORMATION**

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MEV, LLC  
MAIAMA ENVIRONMENTAL

**PRELIMINARY INFORMATION  
FOR ENVIRONMENTAL INVESTIGATION**

According to ASTM Standard 1527-05, the user's (or client's) responsibility in this investigation is to help identify the possibility of recognized environmental conditions in connection with the property. In order to qualify for one of the Land Owner Liability Protections (LLPs) offered by the small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "Brownfields Amendments"), the user must provide the following information (if available) to the environmental professional. Failure to provide this information could result in a determination that "all appropriate inquiry" is not complete. Please assist us by responding to the following request for ASTM required data and other MEV requested information you may have, or of which you may have some specialized knowledge. This questionnaire will be included in the Appendices of the final report as an indication of user assistance.

Project Name: Mauji R & T Park - Kihai, 370 Acres

MEV Project No: 0703-0047

Please supply as many of the following documents as possible:

- A.  Tax Map Key Number/Tax Code Number 2-2-24: 04, 08, 09, 14, 15, 16, 17, 18, Par 54
- B.  Title Information (Current, and any previous ownership.)
- C.  Property Legal Description (If Title Information is not available)
- D.  Tax Map and/or Site Development Drawing/Plat
- E.  Special Property Information (Well development data, endangered species listings, historical registration or environmental deed restrictions.)
- F.  Real Estate Appraisal Report
- G.  Special Management Area Permit Report (SMA) NA

Please provide the following information to the best of your ability:

1. Environmental clean-up liens that are filed or recorded against the site (40 CFR 312.25)  
Are you aware of any environmental clean up liens against the property that are filed or recorded under federal, tribal, state or local law?  
NONE

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2. Activity and land use limitations (AULs) that are in place on the site or that have been filed or recorded in a registry (40 CFR 312.26).  
Are you aware of any AULs, such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state, or local law?  
NONE KNOWN

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3. Specialized knowledge or experience of the person seeking to qualify for the LLP (40 CFR 312.28).  
As the user of this ESA, do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?  
NA - PASTURE LAND  
AGRICULTURAL

# MEV, LLC

MALAMA ENVIRONMENTAL

4. Relationship of the purchase price to the fair market value of the property if it were not contaminated (40 CFR 312.29).

Does the purchase price being paid for this property reasonably reflect the fair market value of the property? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property?

YES.

5. Commonly known or reasonably ascertainable information about the property if it were not contaminated (40 CFR 312.30).

Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example, as user,

- a) Do you know the past uses of the property? CATTLE GRAZING
- b) Do you know of specific chemicals that are present or once were present at the property? NO
- c) Do you know of spills or other chemical releases that have taken place at the property? NO
- d) Do you know of any environmental cleanups that have taken place at the property? NOT TO MY KNOWLEDGE

6. The degree of obvlouansess of the presence or likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation (40 CFR 312.31).

As the user of this ESA, based on your knowledge and experience related to the property, are there any obvious indicators that point to the presence or likely presence of contamination at the property?

NO

**Additional Information Request:**

1. Name of Current Owner: MAUI R & T PARK PARTNERS & HALEAKALA BANK

2. Name of Former Owner: PARTIAL - HALEAKALA BANK

3. Environmental Site Assessments (ESA): Are you aware of any previous assessments: Phase I/II ESAs Cleanup Closure Reports, Permit Characterization Reports, etc. conducted on the subject site or within the immediate area? If yes, please supply details. NOT TO MY KNOWLEDGE

4. Local-State-Federal Inspections: Are you aware of any environmental inspections conducted by any regulatory agency, i.e., Hawaii Dept. of Health (Environmental Health Services), OSHA, U.S. Army Corps of Engineers, Department of Land & Natural Resources, Fish & Wildlife Services, HUD, EPA, or County Wastewater or Solid Waste Division of the Public Works/Waste Management Department etc.? If yes, please supply details.

NO

5. Structures/Buildings: Are there any as-built or other construction drawings available for review? Contact Name and Telephone Number: EXISTING MARTP BLDG - JOHN MALONEY 879-5263

6. Site improvements? (Renovation Date & Extent) LI

7. Proceedings Against the Property: Are you aware of any administrative or legal proceedings against the property for environmental concerns i.e., Compliance Orders, Notices of Violation? If yes, please supply details. NO

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8. Specialized Historic Information: Are you aware of any previous owner, neighbor, business affiliate or other individual who might have knowledge of any special or unusual historic use of, and/or previous operations conducted on the subject property? Contact Name and Telephone Number: ARCH SURVEY COMPANY  
SCS ARCHAEOLOGISTS - MIKE DEGA - 808-597-1182
9. Manufacturing or Processing: If there are manufacturing or processing activities conducted on-site, is there an operation flow chart, diagram or procedures manual available for review? Contact Name and Telephone Number: None on site

This Phase I ESA Report is being prepared for: (Please Print)


Attention: John Maloney  
 Organization: PACIFIC RIM LAND, INC.  
 Address: 381 HUKULI'I PLACE, SUITE 202, KIHU, HI. 96753  
 Phone no.: 808-879-5263 Fax no.: 808-879-2557

Please List Other Organizations (Lenders) Who Will Require a Listing as "Also Prepared For:" on the Phase I ESA report cover and signature page.

- (1) Attention: \_\_\_\_\_  
 Organization: \_\_\_\_\_  
 Address: \_\_\_\_\_
- (2) Attention: \_\_\_\_\_  
 Organization: \_\_\_\_\_  
 Address: \_\_\_\_\_

We will submit 2 signed reports for each project. If additional copies are required, an additional fee will be charged for processing.

Who Prepared This Starter Package Information?

Print Name	<u>JOHN MALONEY</u>	Title	<u>DEVELOPMENT MANAGER</u>
Company	<u>PACIFIC RIM LAND, INC.</u>		
Address	<u>381 HUKULI'I PLACE, SUITE 202, KIHU, HI. 96753</u>		
Tel. No.	<u>808-879-5263</u>	Fax No.	<u>808-879-2557</u>
Signature		Date	<u>3-29-2007</u>

# HALEAKALA RANCH C O M P A N Y

ESTABLISHED IN 1888

April 25, 2007

Mr. Jeff Kermode  
Malama Environmental, LLC  
P.O. Box 880487  
Pukalani, HI 96788-0487

**Subject: TMK parcels (2)2-2-24: 4, 8, 9, 14, 15, 16, 17, 18 and (2)2-2-2: por. 54**

Dear Mr. Kermode:

I am responding to your letter dated April 16, 2007. Haleakala Ranch Company has no knowledge of any of the activities, conditions or events cited in your inquiry related to the noted parcels. Please feel free to contact me if I can be of further assistance.

Sincerely,

  
J. Scott Meidell  
VP/Land and Resource Manager

LINDA LINGLE  
GOVERNOR OF HAWAII



CHIYOME L. FUKINO, M.D.  
DIRECTOR OF HEALTH

STATE OF HAWAII  
DEPARTMENT OF HEALTH

P.O. BOX 3378  
HONOLULU, HAWAII 96801-3378

In reply, please refer to:  
EMD/SDWB

April 27, 2007

Mr. Jeffrey Kermode  
MEV, LLC  
Malama Environmental  
P.O. Box 880487  
Fukalani, Hawai'i 96788-0487

Dear Mr. Kermode:

SUBJECT: UNDERGROUND INJECTION CONTROL (UIC);  
REPLY TO YOUR INFORMATION REQUEST FOR  
[REDACTED]

2. TMK: (2) 2-2-24: 04, 08, 09, 14, 15, 16 (PORTION),  
17 (PORTION), 18, AND (2) 2-2-02: 54 (PORTION)  
MAUI RESEARCH AND TECHNOLOGY PARK  
(OFF LIPOA PARKWAY), KIHEI, MAUI, HI

Based on your submitted information, there are no UIC permits associated with the subject properties.

If a well is found at any property, please contact us so that we can determine if the injection well regulations are applicable.

If you have any questions about this subject, please call Chauncey Hew at (808) 586-4258 (Honolulu) or call direct toll free from Maui at 984-2400, ext. 64258.

Sincerely,

A handwritten signature in cursive script, appearing to read "Stuart Yamada".

STUART YAMADA, P.E., CHIEF  
Safe Drinking Water Branch  
Environmental Management Division

CH:cb

LINDA LINGLE  
GOVERNOR OF HAWAII



CHIYOME LEINAALA FUKINO, M.D.  
DIRECTOR OF HEALTH

**STATE OF HAWAII  
DEPARTMENT OF HEALTH**

P.O. BOX 3378  
HONOLULU, HAWAII 96801

In reply, please refer to:  
EMD / WB

RFI-MEV6.wpd

April 27, 2007

Mr. Jeffrey Kermode  
MEV, LLC  
Malama Environmental  
P.O. Box 880487  
Pukalani, Hawaii 96788-0487

Dear Mr. Kermode:

Subject: Your Request for Public Records  
TMK: (2) 2-2-024: 004, 008, 009, 014, 015, 016, 017, 018, &  
(2) 2-2-002: 054

In response to your request, our Wastewater Branch does not have any records of pending environmental permits, licenses, citations, releases, or other information for the subject properties.

Should you have any questions, please call Marshall Lum at direct toll-free 984-2400, ext. 64294.

Sincerely,

A handwritten signature in cursive script, appearing to read "Harold K. Yee".

HAROLD K. YEE, CHIEF  
Wastewater Branch

ML/mt



### Notice to Requester

DATE: 4/30/07  
 TO: Jeffrey Kamada, MENV, LLC FAX: (808) 573 0210  
Solid and Hazardous Waste Branch  
 FROM: 919 Ala Moana Boulevard, Room 212 PHONE: (808) 586-4226 FAX: (808) 586-7509

#### ACCESS TO THE GOVERNMENT RECORD YOU REQUESTED (copy of request attached or brief description below)

1. Maui Research and Technology Park
2. (various TUK's)
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

will be granted in its entirety.  
 cannot be granted because  
 agency does not maintain the requested record.  
 agency needs a further description or clarification of the requested record. Please contact the agency within \_\_\_\_\_ days or your request will be considered abandoned.  
 the request would require the agency to create a summary or compilation from records that are not readily retrievable.  
 \_\_\_\_\_ is denied in its entirety or will be granted only to certain part(s) of this government record. Denial of access to this or portions of this government record is denied based upon the following subsections of section 92F-13, Hawaii Revised Statutes, or other laws as cited below. The portions of the record that the agency will not disclose are described in general terms.

STATUTE

RECORD OR PORTIONS WITHHELD

#### METHOD AND DATE OF DISCLOSURE:

\_\_\_\_\_ Inspection at the following location: 919 Ala Moana Boulevard Rm. 212 On (date/time): 7:45 am-4:30pm (Mon-Fri)  
 \_\_\_\_\_ Copy provided to you:  
 \_\_\_\_\_ available for pick-up at the agency on (date/time): \_\_\_\_\_  
 \_\_\_\_\_ to be mailed  
 \_\_\_\_\_ transmitted by other means as requested  
 \_\_\_\_\_ Incremental Disclosure: The record will be disclosed incrementally. (The agency must attach a description of extenuating circumstances that support its intention to disclose incrementally. See section 2-71-16H.A.R.)  
 The first increment will be available on \_\_\_\_\_.

Should you have question about the agency's responses you may contact the department named above. If you are not satisfied with the agency's response, you may call the Office of Information Practices at (808) 586-1400

**AGENCY WILL CONTACT REQUESTER WHEN RECORDS ARE AVAILABLE FOR REVIEW**

# MALAMA ENVIRONMENTAL (MEV, LLC)

P.O. Box 880487, Pukalani, Maui, Hawaii 96788-0487

April 16, 2007

Mr. Scott Meidell  
Haleakala Ranch Co.  
529 Kealaloa Avenue  
Makawao, Hawaii 96768

Dear Mr. Meidell,

As requested by our client, Pacific Rim Land, Inc., Malama Environmental (MEV, LLC) is conducting a Phase I Environmental Site Assessment (ESA) on the following parcels of land, TMK (2) 2-2-24: 4, 8, 9, 14, 15, 16, 17, 18 and (2) 2-2-2: portion of 54. . Tax records indicate that Haleakala Ranch Co. was a previous owner and current owner of these parcels. See attached TMK maps.

If it applies to these land parcels, could you please let us know if you have any knowledge of the following site specific information?

- knowledge of past/present on-site equipment maintenance locations or construction baseyards;
- presence of former or current underground or above-ground fuel storage tanks;
- location of bulk fertilizer/pesticide storage and/or mixing areas;
- list (inventory) of any pesticides historically/currently used on these land parcels;
- knowledge of any significant spills (petroleum or pesticides);
- location of historic/current on-site landfills (waste dumps), cesspools and/or septic tanks;
- location of any on-site groundwater wells.

Mahalo for your time and assistance. Please call me if you have any questions.



Jeff Kermode

Site Investigator

# MALAMA ENVIRONMENTAL (MEV, LLC)

P.O. Box 880487, Pukalani, Maui, Hawaii 96788-0487

April 30, 2007

Administration Manager  
Maui R&T Partners  
360 Hoohana Street, Suite 209  
Kahului, Hawaii 96732

Dear Sir / Madam,

As requested by our client, Pacific Rim Land, Inc., Malama Environmental (MEV, LLC) is conducting a Phase I Environmental Site Assessment (ESA) on the following parcels of land, TMK (2) 2-2-24: 4, 8, 9, 14, 15, 16, 17, 18 and (2) 2-2-2: portion of 54. Tax records indicate that Maui R&T Partners is a current owner of some of these parcels. See attached TMK maps.

If it applies to these land parcels, could you please let us know if you have any knowledge of the following site specific information?

- knowledge of past/present on-site equipment maintenance locations or construction baseyards;
- presence of former or current underground or above-ground fuel storage tanks;
- location of bulk fertilizer/pesticide storage and/or mixing areas;
- list (inventory) of any pesticides historically/currently used on these land parcels;
- knowledge of any significant spills (petroleum or pesticides);
- location of historic/current on-site landfills (waste dumps), cesspools and/or septic tanks;
- location of any on-site groundwater wells.

Mahalo for your time and assistance. Please call me if you have any questions.



Jeff Kermod  
Site Investigator

# MEV, LLC

MALAMA ENVIRONMENTAL

April 10, 2007

Maui County Fire Department  
Hazardous Materials Division  
200 Dairy Road  
Kahului, Hawaii 96732

Attn: Mr. Jeffrey M. Kihune

## RE: Request for Public Records

Dear Mr. Kihune:

We are requesting a search for any past or pending environmental permits, licenses, citations, releases, fires or other information pertaining to the site(s) described below.

### SITE INFORMATION:

Project Number: 0703-0047

Tax Map Key No.: (2) 2-2-24: 04, 08, 09, 14, 15, 16 (portion), 17 (portion), 18, + (2) 2-2-02: 54 (portion).

Address: Maui Research and Technology Park  
(Off Lipoa Parkway)  
Kihei, Maui HI

Current Owner: Maui R & T Park Partners &  
Haleakala Ranch

Former Owner: Partial - Haleakala Ranch

Current Occupant: Predominantly Undeveloped Land and Roadway

Type of Business: Grazing land and roadway access for Maui Research and  
Technology Park.

Tax Map Key is enclosed.

Truly yours,

  
Jeff Kermode

# MEV, LLC

MALAMA ENVIRONMENTAL

April 10, 2007

State of Hawaii Department of Health  
Environmental Management Division  
919 Ala Moana Boulevard, Room 206  
Honolulu, HI 96814  
Phone: (808) 586-4249  
Via Fax: (808) 586-7537  
Attn: Office of Hazard Evaluation  
& Emergency Response (HEER)

Subject: REQUEST FOR PUBLIC RECORDS

Dear Sir/Madam:

We are requesting a search for any past or pending environmental permits, licenses, citations, releases, or other information pertaining to the site(s) described below.

## SITE INFORMATION:

Project Number: 0703-0047

Tax Map Key No.: (2) 2-2-24: 04, 08, 09, 14, 15, 16 (portion), 17 (portion), 18, + (2) 2-2-02: 54 (portion).

Address: Maui Research and Technology Park  
(Off Lipoa Parkway)  
Kihei, Maui HI

Current Owner: Maui R & T Park Partners &  
Haleakala Ranch

Former Owner: Partial - Haleakala Ranch

Current Occupant: Predominantly Undeveloped Land and Roadway

Type of Business: Grazing land and roadway access for Maui Research and  
Technology Park.

Tax Map Key is enclosed.

Truly yours,



Jeffrey Kermod

\_\_\_\_\_  
Project Manager

\_\_\_\_\_  
Date

# MEV, LLC

MALAMA ENVIRONMENTAL

April 10, 2007

State of Hawaii Department of Health  
Environmental Management Division  
919 Ala Moana Boulevard, Room 212  
Honolulu, HI 96814  
Phone: (808) 586-4226

*Attn: Solid & Hazardous Waste Branch*

Subject: REQUEST FOR PUBLIC RECORDS

Dear Sir/Madam:

We are requesting a search for any past or pending environmental permits, licenses, citations, releases, or other information pertaining to the site(s) described below.

## SITE INFORMATION:

Project Number: 0703-0047

Tax Map Key No.: (2) 2-2-24: 04, 08, 09, 14, 15, 16 (portion), 17 (portion), 18, + (2) 2-2-02: 54 (portion).

Address: Maui Research and Technology Park  
(Off Lipoa Parkway)  
Kihei, Maui HI

Current Owner: Maui R & T Park Partners &  
Haleakala Ranch

Former Owner: Partial - Haleakala Ranch

Current Occupant: Predominantly Undeveloped Land and Roadway

Type of Business: Grazing land and roadway access for Maui Research and  
Technology Park.

Tax Map Key is enclosed.

Truly yours,



Jeffrey Kermode

# MEV, LLC

MALAMA ENVIRONMENTAL

April 10, 2007

State of Hawaii Department of Health  
Environmental Management Division  
919 Ala Moana Boulevard, Room 301  
Honolulu, HI 96814  
Phone: (808) 586-4309  
*Attn: Clean Water Branch*

VERBAL RESPONSE RECEIVED

• NO RECORD

• DATE: 5/9/07

• BY: [Signature]

Subject: REQUEST FOR PUBLIC RECORDS

Dear Sir/Madam:

We are requesting a search for any past or pending environmental permits, licenses, citations, releases, or other information pertaining to the site(s) described below.

## SITE INFORMATION:

Project Number: 0703-0047

Tax Map Key No.: (2) 2-2-24: 04, 08, 09, 14, 15, 16 (portion), 17 (portion), 18, (2) 2-2-02: 54 (portion).

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(Off Lipoa Parkway)  
Kihei, Maui HI

Current Owner: Maui R & T Park Partners &  
Haleakala Ranch

Former Owner: Partial - Haleakala Ranch

Current Occupant: Predominantly Undeveloped Land and Roadway

Type of Business: Grazing land and roadway access for Maui Research and  
Technology Park.

Tax Map Key is enclosed.

Truly yours,

  
Jeffrey Kermode

# MEV, LLC

MALAMA ENVIRONMENTAL

April 10, 2007

State of Hawaii Department of Health  
Environmental Management Division  
919 Ala Moana Boulevard, Room 308  
Honolulu, HI 96814

Phone: (808) 586-4258

Fax: (808) 586-4370

*Attn: Safe Drinking Water Branch*

Subject: REQUEST FOR PUBLIC RECORDS

Dear Sir/Madam:

We are requesting a search for any past or pending environmental permits, licenses, citations, releases, or other information pertaining to the site(s) described below.

## SITE INFORMATION:

Project Number: 0703-0047

Tax Map Key No.: (2) 2-2-24: 04, 08, 09, 14, 15, 16 (portion), 17 (portion), 18, +(2) 2-2-02: 54 (portion).

Address: Maui Research and Technology Park  
(Off Lipoa Parkway)  
Kihei, Maui HI

Current Owner: Maui R & T Park Partners &  
Haleakala Ranch

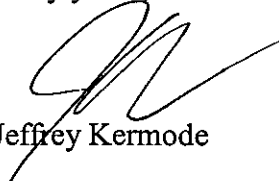
Former Owner: Partial - Haleakala Ranch

Current Occupant: Predominantly Undeveloped Land and Roadway

Type of Business: Grazing land and roadway access for Maui Research and  
Technology Park.

Tax Map Key is enclosed.

Truly yours,



Jeffrey Kermode



# MEV, LLC

MALAMA ENVIRONMENTAL

April 10, 2007

Hawaii State Department of Health  
919 Ala Moana Blvd., Room 203  
Honolulu, HI 96814  
**Attn: Wastewater Branch**

Subject: REQUEST FOR PUBLIC RECORDS

Dear Sir:

We are requesting a search for any past or pending environmental permits, licenses, citations, releases, or other information pertaining to the site(s) described below.

## SITE INFORMATION:

Project Number: 0703-0047

Tax Map Key No.: (2) 2-2-24: 04, 08, 09, 14, 15, 16 (portion), 17 (portion), 18, & (2) 2-2-02:54 (portion).

Address: Maui Research and Technology Park  
(Off Lipoa Parkway)  
Kihei, Maui HI

Current Owner: Maui R & T Park Partners &  
Haleakala Ranch

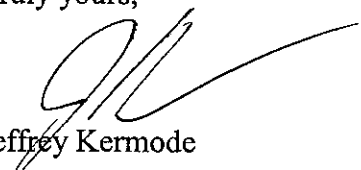
Former Owner: Partial - Haleakala Ranch

Current Occupant: Predominantly Undeveloped Land and Roadway

Type of Business: Grazing land and roadway access for Maui Research and  
Technology Park.

Tax Map Key is enclosed.

Truly yours,

  
Jeffrey Kermode

# Appendix C:

## Qualifications of Environmental Professionals

# MEV, LLC

## Malama Environmental

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### STATEMENT OF QUALIFICATIONS

for

*Jeffrey E. Kermode, Environmental Projects' Manager*

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**Company Position**

Environmental Projects Manager

**Responsibilities  
and Duties:**

- Phase I & II Environmental Site Assessments/Investigations
- Phase III Remediation Projects
- Underground Storage Tank (UST) Closures
- Asbestos Inspections, Air Monitoring and Supervision of Removal
- Lead-Based Paint Inspections, Risk Assessments and Supervision of Removal
- Indoor Air Quality Investigations and Mold Remediation Project Management
- Erosion Control Plan (BMP) Development
- Site Safety Officer for Sampling/Remediation Projects

**Experience:**

- Soil and Groundwater Investigations/Remediation
- UST Removal and Closure
- Hazardous Materials Management
- Asbestos and Lead-Based Paint Projects (Inspections, Monitoring, Removal)
- Air Quality Sampling for Particulate and Microbiological Contaminants
- Wetland Delineation
- Erosion Control and Pollution Prevention Planning and Implementation for Large Scale Construction Projects
- Underground Injection Control (UIC) Permitting
- Environmental Report Writing and Compilation
- Conducted On-Site Oil Spill Response Training Courses, Assessed Clients' Response Preparedness, and Assisted in the Development of Oil Spill Contingency Plans
- Oil Spill Clean-Up Operations
- Pelagic and Coastal Fisheries Research as a Scientific Observer

**Training &  
Education**

- Registered Environmental Assessor I, State of California
- Bachelor of Technology Program, Environmental Engineering, B.C.I.T. Burnaby, B.C., 1997-1999.
- Bachelor of Arts, Geography, University of B.C., Vancouver, Canada, 1989
- AHERA (Asbestos Hazard Emergency Response Act) Inspector for Asbestos, US EPA Certified
- OSHA HAZWOPER Certification (40 Hr)
- Lead-Based Paint Risk Assessor, US EPA Certified
- Lead-Based Paint Contractor Supervisor, US EPA Certified

# MEV, LLC

Malama Environmental

**JOHN S. VUICH**  
President & CEO

**STATEMENT OF QUALIFICATIONS:**

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*M. S. Geological Engineering, University of Arizona*  
*B. S. Geological Engineering, University of Arizona*  
*Registered Geologist (California)*  
*Registered Environmental Assessor (California)*  
*Certified Environmental Manager (Nevada)*

**AREAS OF EXPERTISE**

**ENVIRONMENTAL**

- ▼ Site Assessments, Phase I, II, III Investigations
- ▼ Underground Storage Tank Closure
- ▼ Asbestos Inspection and Monitoring, Management Planning, and Abatement Project Design and Removal
- ▼ Lead-Containing Paint Surveys and Inspections, and Disturbance Design and Removal
- ▼ Site Characterization for Remedial Investigations
- ▼ Facility Operation Compliance Audits-ISO 14000 Audits
- ▼ Soils/Groundwater Remediation
- ▼ Hazardous Waste Management
- ▼ Risk Assessment Investigations
- ▼ RCRA Compliance and Closure Projects
- ▼ Expert Witness/Litigation Support
- ▼ Industrial Hygiene Qualified/Competent Person
- ▼ Mold/Fungi Sampling, Remediation and Abatement Design and Removal

**GEOLOGICAL**

- ▼ Hydrogeology
- ▼ Geologic Hazards Analysis
- ▼ Subsurface Excavations and Drilling Investigations and Sampling

**RELEVANT EXPERIENCE**

**Owner-President • MEV, LLC.**

**Maui, HI • (June 2006 - Present)**

Consulting services and project management for remediation projects, property transfers, sampling and site characterization plans, hazardous and toxic waste management, underground storage tanks, regulatory compliance, permit applications and litigation support.

**Owner-President • Vuich Environmental Consultants, Inc.**

**Maui, and Honolulu, Oahu • (March, 1994 - Present)**

Licensed contractor for asbestos, mold and lead-based paint abatement, general demolition and construction cleanup.

**Project Manager • Various Environmental and Geological Companies**

**Southwest U.S.A • (1972-1994)**

Hazardous materials' and environmental assessment. Site characterization and remediation.

**OTHER CERTIFICATIONS AND TRAINING**

- ▼ Asbestos & Demolition Contractor (C-19, C-24) **HI LIC #21212**
- ▼ Accredited Asbestos Contractor/Supervisor
- ▼ Continuing Education in Hazardous Materials Management, Environmental Studies and Environmental Regulations.

# **Appendix D:**

## **Acronyms and Abbreviations**

Abbreviation	Definition
AST	Aboveground Storage Tank
AHERA	(Federal) Asbestos Hazard Emergency Response Act
ASTM	American Society for Testing and Materials
BACT	Best Available Control Technology
BLM	Bureau of Land Management
BTEX	Benzene, Toluene, Ethylbenzene, and Xylenes
CAA	Clean Air Act: Regulates Air Quality
CAMU	Corrective Action management Unit
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act: Federal Superfund for Cleanup of Environmental Contamination (1980, 1986)
CERCLIS	CERCLA Information System (data base)
CESQG	Conditionally Exempt SQG: Hazardous Waste Generator less than 100 kg/mo.
C.F.R.	Code of Federal Regulations: National Standard Regulations
COLIWASA	Composite Liquid Waste Sampler
CRC	Chlorofluorocarbon
CMU	Concrete Masonry Unit
CWA	Clean Water Act: Regulates Water Quality (1972, 1987)
CZMA	Coastal Zone Management Act
DLNR	Department of Land and Natural Resources
DOT	Department of Transportation: Administers hazardous Waste Containers-Marking-Labeling-Placarding and Transportation Procedures.
DOH	Department Of Health (State Of Hawaii)
DRASTIC	EPA Standardized System for Evaluating Groundwater Pollution Potential Using Hydrogeologic Settings.
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency: Administers CERCLA, RCRA and SARA
FID	Flame Ionization Detector
FIFRA	Federal Insecticide, Fungicide and Rodenticide Act: Regulates Pesticides (1972, 1988)
FSP	Field Sampling Plan
FWPCA	Federal Water Pollution Control Act
HAP	Hazardous Air Pollutant
HCS	(OSHA) Hazard Communication Standard
HSWA	(Federal) Hazardous and Solid Waste Amendments of 1984
LEL	Lower Explosive Limit
LQG	Large Quantity Generators; Hazardous Waste Generator in Excess of 100 kg/mo.
LUST	Leaking Underground Storage Tank.
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
MSDS	Material Safety Data Sheets: Hazard Information Required for Chemical Substances by OSHA
NAAQs	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NESHAP	National Emission Standards for Hazardous Air Pollutants (Under CAA Regulations)
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
O&M	Operating and Maintenance
OCS	Outer Continental Shelf
OSHA	Occupational Safety and Health Act: Established Hazard Communication Program and Employee Right-to-Know Law (1970)
OVA	Organic Vapor Analyzer
PCB	Polychlorinated Biphenyls: Toxic Substance Used in Electric-Device Cooling.
PCI/l	Picocuries Per Liter
PEL	Permissible Airborne Exposure Level
PID	Photoionization Detector

<b>POTW</b>	Publicly Owned Treatment Works
<b>ppb</b>	parts per billion
<b>ppm</b>	parts per million
<b>PWP</b>	Project Work Plan
<b>PRPs</b>	Potentially Responsible Parties
<b>QA/QC</b>	Quality Assurance/Quality Control
<b>QAPP</b>	Quality Assurance Project Plan
<b>RBCA</b>	Risk Based Corrective Action and Decision-Making at Sites with Contaminated Soil and Groundwater. (Hawaii DOH)
<b>RCRA</b>	Resource Conservation and Recovery Act: Federal Hazardous Waste Management Law. Regulates Waste Generation, Transportation, Treatment, Storage or Disposal Sites (1976, 1984)
<b>RQ</b>	Reportable Quantity
<b>RUST</b>	Registry of Underground Storage Tanks
<b>SAP</b>	Sampling & Analysis Plan
<b>SARA</b>	Superfund Amendments and Reauthorization Act: Amends CERCLA and includes Community Right to Know Law. Requires facilities report their chemical inventories and emissions (1986).
<b>SDWA</b>	Safe Drinking Water Act: Establishes maximum contaminant levels for drinking water (1974, 1986).
<b>SHSP</b>	Site Health & Safety Plan
<b>SIC</b>	Standard Industrial Classification
<b>SIP</b>	State implementation plan
<b>SPCC</b>	Spill Prevention Control and Countermeasure
<b>SQG</b>	Small Quantity Generator: Hazardous Waste Generator between 100-1000 kg/mo.
<b>TCLP</b>	Toxicity Characteristic Leaching Procedure: A toxicity test for certain substances declared hazardous by the EPA.
<b>TMK</b>	(Hawaii ) Tax Map Key
<b>TPH</b>	Total Petroleum Hydrocarbons
<b>TPQ</b>	Threshold Planning Quantity
<b>TSCA</b>	Toxic Substances Control Act: Regulates PCBs in electrical devices and chromium in evaporative cooling towers, asbestos in schools. (1976)
<b>TSD</b>	Treatment, Storage, and Disposal
<b>UEL</b>	Upper Explosive Limit
<b>UIC</b>	Underground Injection Control
<b>USGS</b>	United States Geological Survey
<b>UST</b>	Underground Storage Tank
<b>VOA</b>	Volatile Organic Analyses
<b>VOC</b>	Volatile Organic Compound: EPA listed toxic or carcinogenic organic substances.
<b>Minimal, Minor or Not Significant</b>	1) An unlikely or remote event, i.e., possible, but not anticipated under current conditions and observed features. 2) Insignificant when compared to regulatory acceptance levels, guideline action levels or when compared to background and/or baseline conditions of the local environment. 3) Any potential effect or impact attributed to the subject factor may be considered as the least likely source among a number of potentially responsible factors. 4) Any potential effect may not be measurable or detected by current technology. 5) Education, experience, and background of the investigator were utilized to conclude the situation or condition as trifle.



**Appendix - C**  
Botanical and Faunal Survey

**BOTANICAL AND FAUNA SURVEYS**

**for the**

**MAUI RESEARCH AND TECHNOLOGY PARK  
PROPOSED URBAN ZONING EXPANSION PROJECT**

**KIHEI, MAUI, HAWAII**

**by**

**ROBERT W. HOBODY  
ENVIRONMENTAL CONSULTANT  
Kokomo, Maui  
October 2008**

**Prepared for: Pacific Rim Land, Inc.**

**BOTANICAL AND FAUNA SURVEY  
MAUI RESEARCH & TECHNOLOGY PARK  
PROPOSED URBAN ZONING EXPANSION PROJECT**

**INTRODUCTION**

The Maui Research & Technology Park Proposed Urban Zoning Expansion Project lies on approximately 356 acres of undeveloped land in upper Kihei TMK (2) 2-2-02:58 (por.) , TMK (2) 2-2-24:04,08 (por.), 14 (por.), 15,16 (por.), 17 (por.). The project area surrounds the existing facilities of Maui Research and Technology Park and is above the Elleair Maui Golf Course. This study was initiated in fulfillment of environmental requirements of the planning process.

**SITE DESCRIPTION**

The entire project area is presently dry pastureland located on the gentle slopes above Pi'ilani Highway. The area is an arid savannah with low rocky ridges and shallow gullies. Elevations range from 70 feet to 270 feet above sea level. Soils throughout the area are of the Waiakoa Extremely Stony Silty Clay Loam, 3-25 % slopes Series (WID2) which are 30-33 inches deep over hard igneous bedrock (Foote et al, 1972). This soil has moderate permeability, medium runoff and severe erosion hazard. Rainfall averages a scant 8-10 inches per year with the bulk falling during the winter months. (Armstrong,1983). This site lies in the driest part of Maui.

**BIOLOGICAL HISTORY**

Originally this area would have been a dry native forest/shrubland with such trees as wiliwili (*Erythrina sandwicensis*), 'ohe makai (*Reynoldsia sandwicensis*) and hao (*Rauvolfia sandwicensis*), shrubs such as 'a'ali'i (*Dodonaea viscosa*), ma'o (*Gossypium tomentosum*), 'ilima (*Sida fallax*) and grasses and vines such as pili (*Heteropogon contortus*), kalamalō (*Eragrostis atropioides*), huehue (*Cocculus orbiculatus*) and 'āwikiwiki (*Canavalia pubescens*).

For the past 150 years this area has been grazed by livestock, usually seasonally, following winter rains when the vegetation responds with a flush of growth. This land use has resulted in the gradual loss of native plants species and their replacement with hardy pasture grasses and weeds. During the past 40 years two other environmental disturbances have influenced conditions on the property. Introduced axis deer (*Axis axis*) have built up sizeable herds within this part of Maui. These animals are able to access steeper sites than cattle and have eliminated additional species of native plants.

Also fires have swept through this area a number of times over the years. Charred stumps were encountered throughout the property. Fires, over time, eliminate species not adapted to this type of catastrophic environmental disturbance.

Today few plants species occur on the property and those that do tend to dominate. Few of these are native.

## **SURVEY OBJECTIVES**

This report summarizes the findings of a flora and fauna survey of the proposed Maui Research & Technology Park Project which was conducted in October, 2008. The objectives of the survey were to:

1. Document what plant, bird and mammal species occur on the property or may likely occur in the existing habitat.
2. Document the status and abundance of each species.
3. Determine the presence or likely occurrence of any native flora and fauna, particularly any that are Federally listed as Threatened or Endangered. If such occur, identify what features of the habitat may be essential for these species.
4. Determine if the project area contains any special habitats which if lost or altered might result in a significant negative impact on the flora and fauna in this part of the island.
5. Note which aspects of the proposed development pose significant concerns for plants or for wildlife and recommend measures that would mitigate or avoid these problems.

## **BOTANICAL SURVEY REPORT**

### **SURVEY METHODS**

A walk-through botanical survey method was used following routes to ensure maximum coverage of the many areas of this large property. Areas most likely to harbor native or rare plants such as gulches or rocky outcroppings were more intensively examined. Notes were made on plant species, distribution and abundance as well as terrain and substrate.

### **DESCRIPTION OF THE VEGETATION**

The vegetation on this large property was dominated by just two species: kiawe (*Prosopis pallida*) and buffelgrass (*Cenchrus ciliaris*). These two species make up

more than 95% of the plant cover. The kiawe trees create an open woodland across the entire property with denser growth along the rocky gullies. The buffelgrass forms an almost uniform grassland under and between the trees. All other plant species were uncommon to rare on the property. Small parts of the property had no vegetation only bare patches of soil and surface stones.

A total of 14 species of plants were recorded during the survey. Of these only 2 were native Hawaiian species. Both 'ilima, and 'uhaloa (*Waltheria indica*) are indigenous to Hawaii as well as other countries and both native species are widespread and of common occurrence in Hawaii.

Had the survey been done during the winter or spring months, a few more plant species would have been found, mostly ephemeral, annual non-native species that either wither during the summer heat or are consumed by cattle or deer. No rare native species would be expected to sprout in this area.

#### **DISCUSSION AND RECOMMENDATIONS**

The vegetation throughout the project is dominated by just two non-native plant species, kiawe and buffelgrass. The two native Hawaiian plant species recorded, 'ilima and 'uhaloa, although of uncommon or rare occurrence on the property, are widespread and common in Hawaii in general.

No Federally listed Endangered or Threatened native plants (USFWS, 1999) were encountered during the course of the survey nor were any species that are candidate for such status seen. No special habitats or rare plant communities were seen on the property.

Because the vegetation is dominated by non-native plants, and no rare or protected species occur on or adjacent to the property, there is little of botanical concern and the proposed land uses are not expected to have a significant negative impact on the botanical resources in this part of Maui.

Because much of Kihei is a flood plain and because the soils on the property are subject to erosion, it is recommended that during any land clearing work special care be taken to use accepted contouring and terracing techniques to avoid significant soil runoff.

It is also recommended that native dryland plants known to occur in this area be incorporated into the landscape design of the completed project. The Maui County Planting Plan can be consulted for ideas.

## PLANT SPECIES LIST

Following is a checklist of all those vascular plant species inventoried during the field studies. Plant families are arranged alphabetically within each of two groups: Monocots and Dicots. Taxonomy and nomenclature of the flowering plants (Monocots and Dicots) are in accordance with Wagner et al. (1999).

For each species, the following information is provided:

1. Scientific name with author citation
2. Common English or Hawaiian name.
3. Bio-geographical status. The following symbols are used:
  - endemic = native only to the Hawaiian Islands; not naturally occurring anywhere else in the world.
  - indigenous = native to the Hawaiian Islands and also to one or more other geographic area(s).
  - non-native = all those plants brought to the islands intentionally or accidentally after western contact.
  - polynesian = all those plants brought to the islands by the Hawaiians during the course of their migrations.
4. Abundance of each species within the project area:
  - abundant = forming a major part of the vegetation within the project area.
  - common = widely scattered throughout the area or locally abundant within a portion of it.
  - uncommon = scattered sparsely throughout the area or occurring in a few small patches.
  - rare = only a few isolated individuals within the project area.

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>	<u>STATUS</u>	<u>ABUNDANCE</u>
<b>MONOCOTS</b>			
POACEAE (Grass Family)			
<i>Cenchrus ciliaris</i> L.	buffelgrass	non-native	abundant
<i>Chloris barbata</i> (L.) Sw.	swollen fingergrass	non-native	rare
<i>Eragrostis pectinacea</i> (Michx.) Nees	Carolina lovegrass	non-native	uncommon
<b>DICOTS</b>			
AMARANTHACEAE (Amaranth Family)			
<i>Amaranthus spinosus</i> L.	spiny amaranth	non-native	rare
ASTERACEAE (Sunflower Family)			
<i>Verbesina encelioides</i> (Cav.) Benth. & Hook.	golden crown-beard	non-native	rare
EUPHORBIACEAE (Spurge Family)			
<i>Chamaesyce hypericifolia</i> (L.) Millsp.	graceful spurge	non-native	rare
FABACEAE (Pea Family)			
<i>Acacia farnesiana</i> (L.) Millsp.	klu	non-native	rare
<i>Desmanthus pernambucanus</i> (L.) Thellung	slender mimosa	non-native	rare
<i>Leucaena leucocephala</i> (Lam.) de Wit.	koa haole	non-native	rare
<i>Prosopis pallida</i> (Humb. & Bonpl. ex Willd.) Kunth	kiawe	non-native	abundant
MALVACEAE (Mallow Family)			
<i>Sida fallax</i> Walp.	'ilima	indigenous	rare
<i>Waltheria indica</i> L.	'uhaloa	indigenous	uncommon

# FAUNA SURVEY REPORT

## SURVEY METHODS

A walk-through survey method was conducted in conjunction with the botanical survey. All parts of the project area were covered. Field observations were made with the aid of binoculars and by listening to vocalizations. Notes were made on species abundance, activities and location as well as observations of trails, tracks scat and signs of feeding. In addition an evening visit was made to the area to record crepuscular activities and vocalizations and to see if there was any evidence of occurrence of the Endangered Hawaiian hoary bat (*Lasiurus cinereus semotus*) in the area.

## RESULTS

### MAMMALS

Three mammal species were observed on the property during two site visits. Taxonomy and nomenclature follow Tomich (1986).

Cattle (*Bos taurus*) – Cattle sign was seen over the entire property. One herd was seen during the survey. Larger numbers of cattle are pastured here during the wet season until grass resources are consumed.

Axis deer (*Axis axis*) – Deer sign was found on all parts of the property. This included tracks, droppings, antler rubbings and feeding signs. These herbivores spend the day bedded down in protected locations, then come out in the evening to feed.

Cat (*Felis catus*) – Cat tracks and scat were observed on dusty roads within the project area. Feral cats wander throughout the area hunting for rodents and birds.

Other mammals that likely occur on the property, but which were not seen, include rats (*Rattus rattus*), mice (*Mus domesticus*), mongoose (*Herpestes auropunctatus*) and pigs (*Sus scropha*). Rats and mice feed on seeds and herbaceous vegetation and mongoose hunt for the rodents as well as birds. Feral pigs are scattered throughout the dry country and make forays onto adjacent landscaped properties to feed at night.

A special effort was made to look for the native Hawaiian hoary bat by making an evening survey of the property. These bats are known to occur sporadically at mid elevations across Kula. While they have been rarely recorded in the Kihei area, little is known about their habitats and range in this locality. When present in an area they can be easily identified as they forage for insects, their distinctive flight patterns clearly



visible in the glow of twilight. No evidence of such activity was observed though visibility was excellent and plenty of flying insects were seen. In addition a bat listening device (Batbox IIID) was employed, set to the frequencies of 27,000 to 28,000 hertz, which is the frequency range these bats are known to use. No bats were detected using this unit.

## **BIRDS**

There were moderate numbers of a diverse array of birds observed on the property despite the dry conditions and general lack of feed. Fourteen species of non-native birds including one migratory species were recorded. Taxonomy and nomenclature follow American Ornithologists' Union (2005).

Zebra dove (*Geopelia striata*) – Small groups of these doves were seen and heard on all parts of the property feeding in ground clearings.

Common myna (*Acridotheres tristis*) – Mynas were seen throughout the property in the kiawe trees and flying about.

Spotted dove (*Streptopelia chinensis*) – Several of these large doves were seen flying across the property and landing in the kiawe trees.

Nutmeg mannikin (*Lonchura punctulata*) – Small flocks of these small light brown birds were seen in the trees.

Gray francolin (*Francolinus pondicerianus*) – Families of these francolins were seen on the margins of grassy openings and their calls were heard across the property.

House sparrow (*Passer domesticus*) – Several small flocks of these sparrows were seen feeding in kiawe trees.

House Finch (*Carpodacus mexicanus*) – Flocks of these finches were observed in kiawe trees in the early mornings and pairs were seen thereafter flying between trees.

Red-crested cardinal (*Paroaria coronata*) - Several red-crested cardinals were seen in a kiawe tree feeding on Kiawe beans.

Pacific golden-plover (*Pluvialis fulva*) – A few individuals were seen feeding in openings across the property.

Java sparrow (*Padda oryzivora*) – Two substantial flocks of these colorful birds were seen in kiawe trees on the lower part of the property during the mornings.

Northern mockingbird (*Mimus polyglottos*) – Two mockingbirds were seen in a kiawe tree feeding on kiawe beans.

Japanese white-eye (*Zosterops japonica*) – Two white-eyes were seen feeding in a kiawe tree near the bottom of the property.

Northern cardinal (*Cardinalis cardinalis*) – Two of these red birds were seen in the kiawe trees. More were heard calling further afield.

Black francolin (*Francolinus francolinus*) – One of these striking brown and black birds was seen on the ground near the bottom of the property.

A few other non-native birds might be expected to be found on this property such as wild turkey (*Meleagris gallopavo*), African silverbill (*Lonchura cantans*) and cattle egret (*Bubulcus ibis*). This area in its present condition is not suitable for Hawaii's native forest birds that typically live at much higher elevations in native forests.

## **INSECTS**

While insects in general were not tallied, they were abundant throughout the area and fueled the bird life observed. One native Sphingid moth, Blackburn's sphinx moth (*Manduca blackburni*) has been put on the Federal Endangered species list and this designation requires special focus (USFWS 2000). Blackburn's sphinx moth is known to occur in parts of East Maui and Central Maui but is not presently known from the Kihei area. Its native host plants are species of 'aiea (*Nothocestrum spp.*) and non-native alternative host plants are tobacco (*Nicotiana tabacum*) and tree tobacco (*Nicotiana glauca*). None of these plants were found on the property, and no Blackburn's sphinx moth or their larvae were seen.

## **CONCLUSIONS AND RECOMMENDATIONS**

Fauna surveys are seldom comprehensive due to the short window of observation, the seasonal nature of animal activities and the usually unpredictable nature of their daily movements. This survey, however, should be considered fairly representative due to the abundance of food resources present throughout and adjacent to the area and the resulting level of animal use. No native forest birds occur anywhere in the vicinity of this property. All of the other bird species are widespread and common and of no particular environmental concern.

It is noted that while the threatened Newell's Shearwater (*Puffins auricularis newelli*) and endangered Hawaiian Petrel (*Pterodrom phaeopygia sandwichensis*) were not observed on the property during the site visits, these seabirds are known to occur and use habitats high within the mountains of Maui. They fly over lowland sites during the breeding season (March through December) to access their burrows in the mountains.

It is recommended that the following mitigation measures be implemented to minimize potential impacts to these seabirds.

- Lights within the project area to be shielded so the bulb is not visible at or above the bulb height.
- No night construction associated with the development of the project during the peak fallout period September 15 to December 15.
- Disseminate information about seabird fallout to all staff working on site prior to initiation of work.
- In the event that a downed seabird is found alive, contact the U.S. Fish and Wildlife Service within 24 hours.
- If the seabird is found alive, place the bird in a kennel and contact the Hawaii Department of Land and Natural Resources Biologist or the National Park Service Biologist for instructions on where to bring the bird.

No Federally Endangered or Threatened species were encountered during the course of the survey and no special habitats were identified. The proposed changes in land use should have no significant negative impact on the fauna resources in this part of Maui.

No special recommendations are deemed necessary or appropriate with regard to the fauna resources on this property.

## ANIMAL SPECIES LIST

Following is a checklist of the animal species inventoried during the field work. Animal species are arranged in descending abundance within two groups: Mammals and Birds. For each species the following information is provided:

1. Common name
2. Scientific name
3. Bio-geographical status. The following symbols are used:

endemic = native only to Hawaii; not naturally occurring anywhere else in the world.

indigenous = native to the Hawaiian Islands and also to one or more other geographic area(s).

migratory = all species that spend part of their annual life cycle in Hawaii and part of it elsewhere. Migrant birds typically spend their spring and summer months breeding in the arctic and their fall and winter months in Hawaii.

non-native = all those animals brought to Hawaii intentionally or accidentally after western contact.

4. Abundance of each species within the project area:

abundant = many flocks or individuals seen throughout the area at all times of day.

common = a few flocks or well scattered individuals throughout the area.

uncommon = only one flock or several individuals seen within the project area.

rare = only one or two seen within the project area.

<u>COMMON NAME</u>	<u>SCIENTIFIC NAME</u>	<u>STATUS</u>	<u>ABUNDANCE</u>
<b><u>MAMMALS</u></b>			
Cattle	<i>Bos taurus</i>	non-native	common
Axis deer	<i>Axis axis</i>	non-native	common
Feral cat	<i>Felis catus</i>	non-native	rare
<b><u>BIRDS</u></b>			
Zebra dove	<i>Geopelia striata</i>	non-native	common
Common myna	<i>Acridotheres tristis</i>	non-native	uncommon
Spotted dove	<i>Streptopelia chinensis</i>	non-native	uncommon
Nutmeg mannikin	<i>Lonchura punctulata</i>	non-native	uncommon
Gray francolin	<i>Francolinus pondicerianus</i>	non-native	uncommon
House sparrow	<i>Passer domesticus</i>	non-native	uncommon
House finch	<i>Carpodacus mexicanus</i>	non-native	uncommon
Red-crested cardinal	<i>Paroaria coronata</i>	non-native	rare
Pacific golden-plover	<i>Pluvialis fulva</i>	migratory	rare
Java sparrow	<i>Padda oryzivora</i>	non-native	rare
Northern mockingbird	<i>Mimus polyglottos</i>	non-native	rare
Japanese white-eye	<i>Zosterops japonicus</i>	non-native	rare
Northern cardinal	<i>Cardinalis cardinalis</i>	non-native	rare
Black francolin	<i>Francolinus francolinus</i>	non-native	rare

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**Appendix - D**  
Archaeological Survey

**AN ARCHAEOLOGICAL INVENTORY SURVEY  
OF MULTIPLE LAND PARCELS LOCATED  
WITHIN THE MAUI RESEARCH AND TECHNOLOGY PARK,  
AHUPUA`A OF WAIOHULI & KEOKEA, WAILUKU (KULA) DISTRICT,  
MAUI ISLAND, HAWAII  
[TMK: 2-2-24: 012 por., 014 por., 16 por., 17, and por. 54]**

Prepared by:  
**Michael Dega, Ph.D.**  
Amended September 2008

Prepared for:  
**John Maloney  
Pacific Rim Land, Inc.  
P.O. Box 220  
Kihei, HI 96753**



## **ABSTRACT**

Scientific Consultant Services, Inc. (SCS) conducted Archaeological Inventory Survey of several undeveloped land parcels and one proposed easement in the “barren zone” of Kihei, Waiohuli and Keokea Ahupua`a, Wailuku District, Maui, Hawai`i at TMK:2-2-24:por. 012, por. 014, por. 16, 17, and por. 54. The total land area encompasses some 338-acres plus a small easement on property primarily owned by the Maui Research and Technology Park. The eastern portion of Parcel 054 (56 acres) is owned by Haleakala Ranch but is in the process of being transferred by sale to the Maui Research and Technology Park. The purpose of the Inventory Survey was to determine the presence/absence of architecture, midden deposits, and/or artifact deposits on the surface of the parcels and to assess the potential for the presence of subsurface cultural deposits.

A total of five sites were identified during the research, three occurring on 2-2-24: 017 por. and two sites occurring on TMK:2-2-24:054 por. The sites have been designated as State Site No. 50-50-10-6239 (modified outcrop; historic), Site No. 50-50-10-6240 (modified outcrop; historic), Site No. 50-50-10-6241 (boundary wall; traditional/historic), Site No. 50-50-10-6587 (L-shape military training feature), and Site No. 50-50-10-6588 (three mounds; traditional location markers). Subsurface testing was not conducted at the three sites on 2-2-24:017 por. due to the extremely shallow soil deposits, particularly within the documented sites themselves which occur over bedrock, and the modesty of cultural remains commonly found in the area. Testing was completed at the two sites identified on TMK:2-2-24:054 por. but no cultural materials were identified. All five sites have been assessed as significant under Criterion D. Save for orange protective fencing to be placed along the northern ridgeline boundary of TMK:2-2-24:017 por. to protect undocumented rockshelters occurring below in Waipuilani Gulch, no further archaeological work is recommended for this project area.

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## INTRODUCTION

Scientific Consultant Services (SCS), Inc. conducted Archaeological Inventory Survey on 338-acres of undeveloped land and one proposed easement in the “Barren Zone” above Kihei in Waiohuli and Keokea Ahupua`a, Wailuku District, Maui Island, Hawai`i [TMK:2-2-24:por. 012, por. 14, por. 16, 17, and por. 54] (Figures 1 through 4). Fieldwork was conducted on land primarily owned by the Maui Research and Technology Park; the eastern portion of TMK:2-2-24:054 por. in the project area (46-acre portion) is currently owned by Haleakala Ranch but in the process of transferring ownership to the Maui Research and Technology Park. The total land area of 338-acres consists of six variable-acreage parcels all associated with TMK:2-2-24:por. 14 (58.288 acres), 2-2-24: por. 16 (116.864), 2-2-24:17 (39 acres), and 2-2-24:por. 54 (124 acres). One easement, measuring 1,400 linear feet by 100 feet wide, was also surveyed per this research and occurs on TMK: 2-2-24:por. 012.

The purpose of Inventory Survey was to determine the presence/absence of surface architecture, midden deposits, and/or artifact deposits on the surface of the parcels through systematic pedestrian survey, to assess site functional and temporal affiliation through recordation and excavation (where possible), and to evaluate the significance of any identified historic properties. Fieldwork for this project was conducted by SCS in three phases over time: September 16-20 and September 23-25, 2006 by Ian Bassford, B.A.; November 19, 2006 and December 5 and 6, 2006 by project P.I. Michael Dega, Ph.D.; and September 18, 19, and 20, 2008 by Randy Ogg, B.A. and Guerin Tome, B.A.

To briefly summarize the results of the Inventory Survey, systematic survey of the “barren zone” project area led to the identification of five archaeological sites, which occurred on two of the six parcels subject to survey. The easement did not contain any sites. No areas thought to contain significant deposits in subsurface contexts were noted on any of the six parcels or the easement. Save for TMK:2-2-24:017 (39 acres) and TMK:2-2-24:054 por. (124 acres) (see Figure 1), all other parcels were void of sites and areas containing potential subsurface deposits. The results of note were gleaned through survey of TMK:2-2-24:-017, TMK: 2-2-24:054 por., and informal survey of Waipuilani Gulch, slightly beyond the southern boundary of TMK:2-2-24: por. 16. The first parcel contained two modified outcrops (historic era) and a wall (traditional/historic period). The second parcel contained an historic period L-shape and three rock mounds (traditional markers). In addition, the southern slope of Waipuilani Gulch was informally surveyed during the recording of Site -6241 and found to contain two

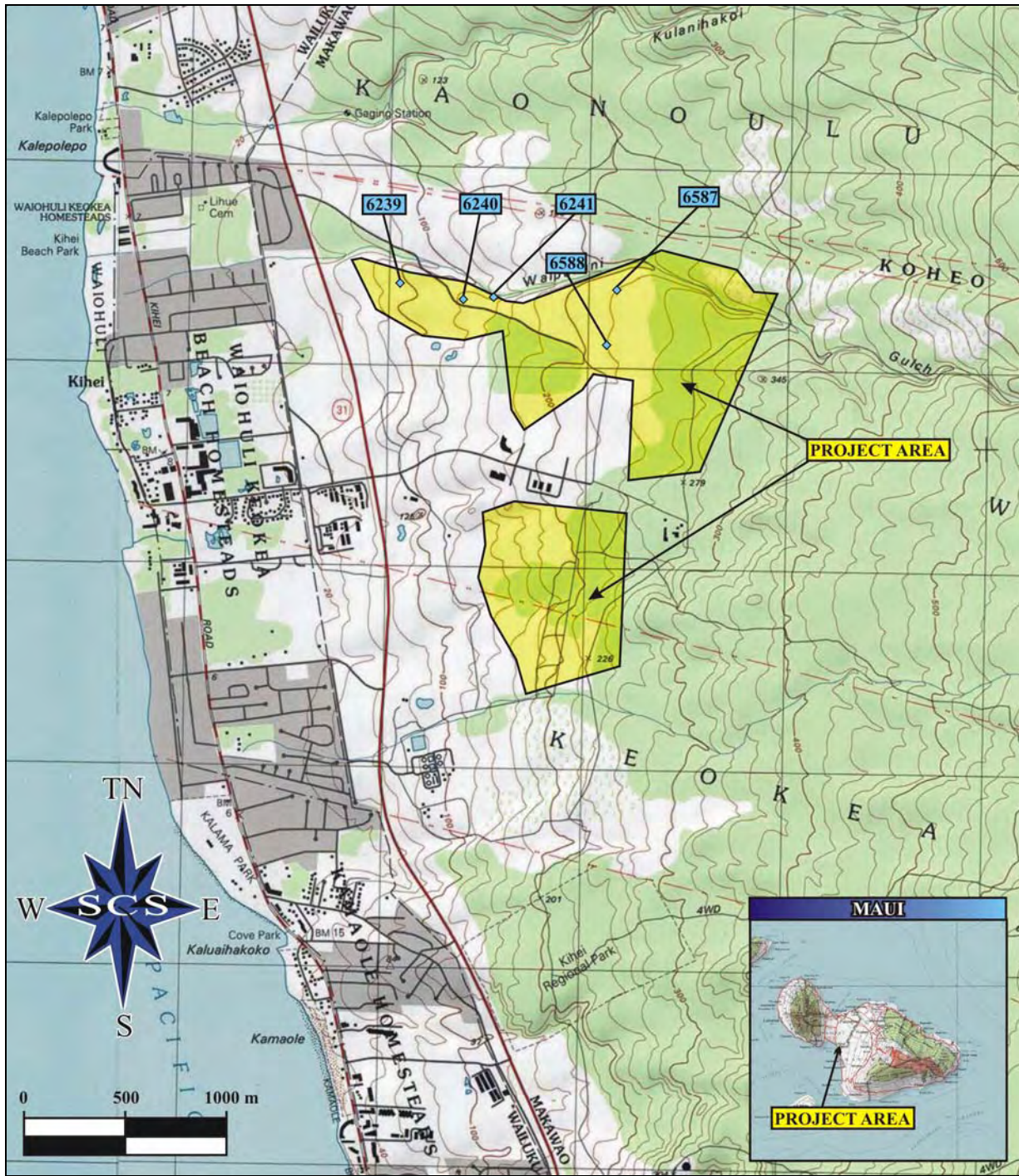


Figure 1: USGS Map (Pu`u O Kali Quadrangle) Depicting Project Area.

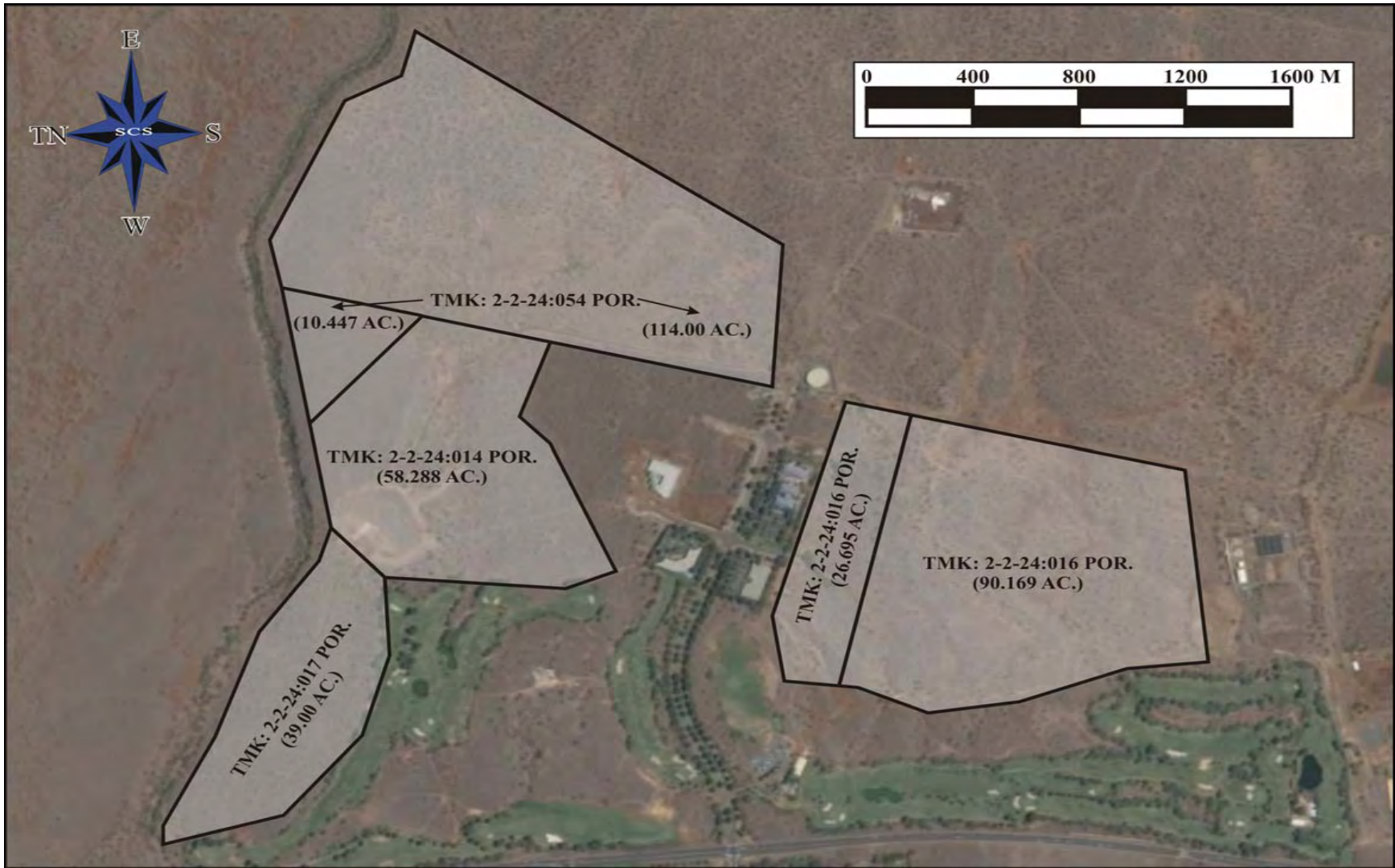


Figure 2: Tax Map Key [TMK: 2-02-24] Showing Project Area.



**Figure 3: Photographic Overview, Western Portion of Project Area. View to West.**



**Figure 4: Photographic Overview, Central Portion of Project Area. View to Northeast.  
Note: Former Borrow Pit Depression Center and Right Side of Frame.**

overhangs with several surface lithics. This site occurs beyond the boundary of the current project area and was not formally recorded. All are discussed in more detail below.

### **ENVIRONMENTAL SETTING AND PROJECT AREA DESCRIPTION**

The project area is located in Waiohuli and Keokea Ahupua`a, Wailuku District (the traditional district of Kula). The parcels are located approximately 1.5-2 km east (*mauka*) of the coastline at Waiohuli-Keokea Beach Homesteads, Kihei, a variable 40-260 feet above mean sea level (see Figure 1). Piilani Highway, the main thoroughfare in leeward East Maui, is located approximately 0.50 km west (*makai*) of the lowest portion of the project area. The southern flank of Waipuilani Gulch, a major landscape feature in this area, borders the northern portion of the project area. The six variable-sized parcels are generally bounded by Waipuilani Gulch to the north, portions of the Elleair Maui Golf Club to the west, and sections of the Maui Research and Technology Park and undeveloped land to the east (see Figure 2). Both the northern and southern portions of the project area are accessed via Lipoa Parkway.

Several unpaved roads and two-wheel tracks are located across many parts of the project area, particularly in the northern parcels. Grading activities are associated with certain sections of some of these roads and tracks. Multiple ‘push piles’ of boulders created by bulldozers or other mechanical means are located within many sections of the project area; these all appear to be modern landscape alterations. The ‘push piles,’ which are typically 1 to 2 meters high and 2 to 3 meters in diameter, often incorporate several large tree limbs and smaller trunks, clear evidence of their being ‘push piles.’ Small scatters of recent garbage and some concrete barricades are located throughout the parcels as well. Construction debris, junked cars, and other recently deposited debris are also common.

Geologically, the project area is located on the lowermost portion of the Kula Dissected Uplands, the vast network of leeward (western) slopes of the dormant Haleakala volcano that comprises East Maui. The Kula District is situated in the rain shadow of Haleakala. This general area of the current project is a gently sloping transitional landscape between the steeper volcanic highlands to the east and the narrow coastal strip to the west. The local topography is relatively flat with slight undulations, this presumably caused by uneven distribution of bedrock below shallow sediment sequences. There is a slight increase in slope to the east as the project area proceeds to more upland extents. More specific to the project area, low, rounded mounds and hillocks—the remnants of weathered basalt outcrops—are interspersed with shallow, ephemeral drainages and depressions.



Soils in the project area, defined as “extremely stony silty clay loam,” are part of the Waiakoa Series of the central Maui uplands (Foote *et al.* 1972). These soils form on smooth, low uplands, and stones cover 3 to 15 percent of the ground surface. In most areas where this soil is present, approximately 50 percent of the surface layer has been eroded. Runoff levels are average and the erosion hazard is severe (Foote *et al.* 1972). For these reasons, soils in the project area are generally only utilized as pastureland and for wildlife habitat. Low bedrock outcrops are commonly associated with these soils, and cultivation is usually impractical unless the stones are removed. Importantly, soil profiles are extremely limited, typically to 20-30 centimeters or so below the surface, overlying bedrock. Testing during the current project confirmed the shallow matrices. Cultural deposits within these thin layers are typically only very modest, both quantitatively and qualitatively.

Annual rainfall in the project area—between 10 and 15 inches annually—is the lowest on Maui, making this region one of the driest in the Hawaiian Islands archipelago (Armstrong 1983). Daytime maximum temperatures, confirmed during fieldwork, range between 80 and 90 degrees Fahrenheit. At the time of the present survey, the subject parcel was exceptionally dry and dusty, consistent with a period of prolonged drought in the area. In fact, because of this combination of low rainfall and fairly unproductive soils, the general area in which the subject parcel is located has been labeled the “barren zone” (Cordy 1977), a characterization that has been supported by numerous archaeological surveys in the area (see below).

Vegetation is dominated by xerophytic flora including *kiawe*, lowland shrubs, and grasses (see Figures 3 and 4). Plant species documented in the project area include: *kiawe* (*Prosopis pallida*), *haole koa* (*Leucaena leucocephala*), *‘uhaloa* (*Waltheria americana*), balloon plant (*Asclepias physocarpa*), *pa`aila* (*Ricinus communis*), Golden crown-beard (*Verbesina encelioides*), and *ilima* (*Sida fallax*). Various grasses, small (unidentified) weedy plants, and decorative flowers near current buildings and the golf course complete the floral inventory.

### **HISTORICAL BACKGROUND OF THE PROJECT AREA**

While Kula is an arid region, a considerable population existed along its seashore—where fishing was excellent—and on the lower slopes of Haleakala at elevations high enough (at least 1,000 feet above mean annual sea level) to support dryland cultivation and sustainable habitation. There is no evidence, oral or written, of taro farming in this dry “barren zone” area; the sweet potato, or *‘uala*, “was the staple of life here” (Handy and Handy 1972:511).

In the uplands of the Kula district, at elevations higher than *c.* 1,000 feet above mean annual sea level, traditional agriculture was based on dryland field systems. Handy and Handy (1972:488) write:

The great bulk and altitude of Haleakala makes its southern flank practically a water less desert, and the southeast and west flanks relatively dry, so that there were no *lo`i* (pond fields) cultivation at all. The arid country below the west and south slopes of Haleakala, including Kula, Honua`ula, Kahikinui, and Kaupo, were dependent on sweet potato.

Handy and Handy (1972:131) also describe the planting methods in the drier sections of Kula:

Where potatoes are planted in crumbling lava with humus, as on eastern Maui and in Kona, Hawaii, the soil is softened and heaped carelessly in little pockets and patches using favorable spots on slopes the crumbling porous lava gives ample aeration without much mounding.

At lower, drier elevations, in the so-called barren zone, agriculture was a relatively minor component of the traditional subsistence economy. The modest range of the subsistence economy also reflected occupation in the area: temporary, on a recurrent basis through time. As is discussed below, it is only within more recent times that permanent occupation was been sustained within the barren zone.

The fact that few references to Kula district are found in traditional sources is likely an accurate reflection of its relative importance compared to the often-cited and better-known districts of Hana, Lahaina, Wailuku, and other population centers on Maui. Most references to Kula are minimal even when describing important battles and their participants. Other references allude to the difficulties of living in the fairly harsh environment of the lower Kula region. During a drought in the time of Kihaa Pi`ilani (*c.* A.D. 1500–1600s), people in this area were forced to subsist on weeds such as *laulele*, *pualele*, and *popolo* (Kamakau 1961). They could restore their crops only by obtaining potato slips from neighboring districts. However, sustained settlement did occur on the Kula slopes over time. By the 15<sup>th</sup> century, for example, large settlements were appearing in upcountry Kula and the building of religious temples flourished (Kolb *et al.* 1997; Dega *et al.* 2007).

Early historical accounts and archaeological evidence suggest that the barren zone, in which the subject parcel is situated, was a transitional area in which people moved resources between the coast and the uplands to heights of over 1,000 feet (above mean annual sea level). Large, permanent settlements—with clusters of habitations, *heiau*, petroglyphs, and large agricultural terraces and garden enclosures—have been documented in the uplands of Kula, above the 30-inch annual rainfall line (Kolb *et al.* 1997; Dega *et al.* 2007). Fishponds (three at Kalepolepo) and coastal *heiau* indicate a relatively sizable coastal population relying on marine resources. Both the uplands and the coast were settled or utilized by at least A.D. 1200, if not earlier, and trails linking these areas, and crossing through the barren zone, have been identified in Waiohuli and Keokea (Kolb *et al.* 1997). This intermediate zone, the barren zone, was not subject to the population growth seen in more upland or near coastal reaches; the barren zone has a unique character.

Although relatively general and of varying quality, early accounts of explorers, travelers, and missionaries can shed some light on traditional land use and lifestyles in the project area. Eight years after Captain James Cook’s initial arrival, La Perouse sailed up the western coast of East Maui and stopped at Keone`o`io. La Perouse was greeted by 120 Native Hawaiians, who offered “...hogs, potatoes, bananas...taro, with cloth and some other curiosities...” (La Perouse 1798:345). He also noted that this part of the island was hot, dry, and rough, with soil “...wholly composed of lava and other volcanic matter” (La Perouse 1798). Water was scarce and the villagers drank from a shallow, brackish well.

Vancouver recorded his impressions of the southern and western coasts of Maui during his second visit in 1793:

...the part we were abreast of [east of Pohakueaea Point] at daylight in the morning, though terminating very abruptly in the ocean, and though its surface was very uneven, had yet a verdant and fertile appearance, and was seemingly in an advanced state of cultivation. From the number of villages and distinct houses, we were let to consider it as tolerably well inhabited [Vancouver 1884:850].

Cultivation of Irish potatoes in the Kula district began shortly before 1840, after which time Kula became known as “the potato district” because of its great success in their cultivation. During Kula’s peak potato producing period of the 19<sup>th</sup> century, dryland gardens in the uplands extended all the way from Kula to Kaupo. Corn was also planted in large upland concentrations, albeit during more recent times (A. Chun, Personal Communication). The resulting deforestation

adversely affected the amount of rainfall in the district and periods of drought became more common (Kolb *et al.* 1997). The *Honolulu Advertiser* describes the changes to Kula and the Kihei area:

Before 1850 Kula was supplied with moisture naturally through the existence of a large forest. That forest was cut down when land was cleared in Kula to open farm plots in 1850. This was in answer to the demand for food in California during the gold rush... [and] by ranchers clearing for pasture. A secondary result of clearing forests was destruction of existing fresh water ponds in Kihei on the Maalaea Bay coast below Kula. When forest was cleared, water was free to rush down the mountains carrying soil from Kula and filling with mud the ponds for which Kihei was once famous [1962: A15].

Ranching was also present in Kula prior to the 1840s (Land Court Awards, State Archives). Large sections of Crown Land were leased for grazing cattle, and, by the 1880s, lower Kula consisted primarily of pasture land for ranching. Archaeological evidence of ranching is present near the subject parcel (see below). In 1888, Edwin H. Baily, Lorrin A. Thurston, W.H. Baily, and Henry P. Baldwin met in Honolulu and purchased Maui ranch lands owned by Charles Alexander for \$50,000. The resulting ranch included 33,817 acres with 400 to 500 acres set aside for corn cultivation. The land in and around the project area was historically used for ranching activities by Haleakala Ranch Company.

The current study area does not contain Land Commission Awards (LCA), which typically implies that the land was not formally settled at the time of the *Great Māhele* (1848). Again, this aligns with the ‘barren zone’ model of settlement in that it was not a primary habitation area due to the dearth of natural resources (water, soil, etc.). Part of the subject parcel was, however, a portion (*apana* 1) of Royal Grant 9325 to Haleakala Ranch Company, Waiohuli-Keokea, Kula (Kihei), Maui.

Twentieth century activities in the Kula District included a significant World War II military presence along the beach of Ma`alaea Bay, a combat demolition training station at Kama`ole, two naval air stations at Pu`unene and Kahalui, and Army camps and hospitals in the Kula and Makawao areas. In particular, small, low walls and C-shaped rock formations—used as fighting positions by gunners—are documented as occurring near the project area (see McGerty *et al.* 2000).

## **PREVIOUS ARCHAEOLOGICAL RESEARCH AND SETTLEMENT PATTERN**

Multiple studies have been conducted adjacent to the current project area in association with development of the Maui Research and Technology Park and the Elleair Maui Golf Club (Hibbard 1994; Chaffee *et al.* 1997; McGerty *et al.* 2000; Sinoto *et al.* 2001; Tome and Dega 2002; Dega 2003; Monahan 2004). Before describing these studies, it is first necessary to present a general picture of the landscape in which these studies were conducted.

### **THE “BARREN ZONE”**

Decoding what is meant by the term “barren zone” is an important for assessing site predictability and survey results. By knowing the characteristics of the term, explanation as to the presence/absence of archaeological sites and site types is more evident in previous studies.

In geographical and physiographical terms, the barren zone is an intermediary zone between direct coastline and backbeach areas to upland forests. This medial zone appears to have been almost exclusively transitory, or at best, intermittently occupied. Intermittent habitation loci, as defined by surface midden scatters or small architectural features (i.e., C-shapes, alignments) dominate the few documented site types in the area through time. Divisive within an inland-coastal dichotomy, the barren zone was a necessary area to access more productive upland regions and the coastline. Apparently, agricultural endeavors were practically non-existent in the barren zone and tool procurement materials (basalt, wood) were selected from other locales as well. Sediment regimes in the area are shallow, most often overlying bedrock, and perennial water sources are virtually non-existent.

Cordy (1977) has taken the dichotomous model a bit further, particularly for this region, and has divided the Kihei (inclusive of Kama`ole) area into three environmental zones (or subzones when one considers the entire *ahupua`a*): coastal, transitional/barren, and inland. The current project area would occur in the transitional or barren zone: the slopes back of the coast with less than 30" annual rainfall (Cordy 1977:4). This barren zone is perceived as dry and antagonistic to permanent habitation. Use of the area would primarily have been intermittent or transitory, particularly as the zone could have contained coastal-inland trails and would have marked an intermediary point between the two more profitable ecozones. The region remains hostile to permanent habitation, only having been “conquered” in recent times through much modern adaptation (air conditioning, water feed systems, etc.).

Based on general archaeological and historic research, the barren zone was not subject to permanent or expansive population (until recently). This intimates that population pressure

along the coast was minimal or non-existent in the Kihei coastal area through time. As such, architectural structures associated with permanent habitation sites and/or ceremonial sites are not often identified in the area. The prevailing model that temporary habitation-temporary use sites predominate in the barren zone has been authenticated further by recent research.

As interestingly noted by Hammatt and Shideler (1992:10), “what is particularly striking in the many archaeological reports on Kihei is the general paucity of sites within the transitional or barren zone.” Cordy (1977), Walton (1972), and Cox (1976) all conducted large-scale survey in this zone that led to the recordation of only small, temporary habitation or temporary use sites. Several other studies in this zone of Kama`ole Ahupua`a, including those conducted by Mayberry and Haun (1988) and Hammatt and Shideler (1990), also only revealed the presence of temporary habitation/temporary use loci.

McDermott (2001:100) states that site densities are typically quite low within the “barren zone” with multiple studies having been conducted on large parcels (Kennedy 1986, Watanabe 1987, Hammatt and Shideler 2000, Kikiloi *et al.* 2000) that did not lead to the identification *any* prehistoric sites. However, military sites related to WWII training exercises have been previously in the area (McGerty *et al.* 2000), these sites often consisting of low, short alignments or walls. The few radiocarbon dates acquired from the area indicate definitive use of the landscape in later prehistory c. A.D. 150-1600+.

As may be gleaned from this praxis of the barren zone, site expectation and site density is low for the area. Even large-scale surveys at times have failed to document sites of any time period in this dry area. Coupled with forms of modern land use (construction, infrastructure, and bulldozing activities), the sites identified in this zone become much more significant.

#### **PERTINENT RESEARCH WITHIN AND NEAR THE MAUI RESEARCH AND TECHNOLOGY PARK—CURRENT PROJECT AREA**

SCS and others have more recently conducted numerous projects in the immediate area of the present project area parcels. The location of this work is noted in Figure 5 (below, following project descriptions) and summarized below.

As noted above, several studies have been conducted nearby, in association with development of the Maui Research and Technology Park and the Elleair Maui Golf Club (Kennedy 1986; Hibbard 1994; Chaffee *et al.* 1997; McGerty *et al.* 2000; Sinoto *et al.* 2001; Tome and Dega 2002; Dega 2003; Monahan 2003) (see Figure 5).

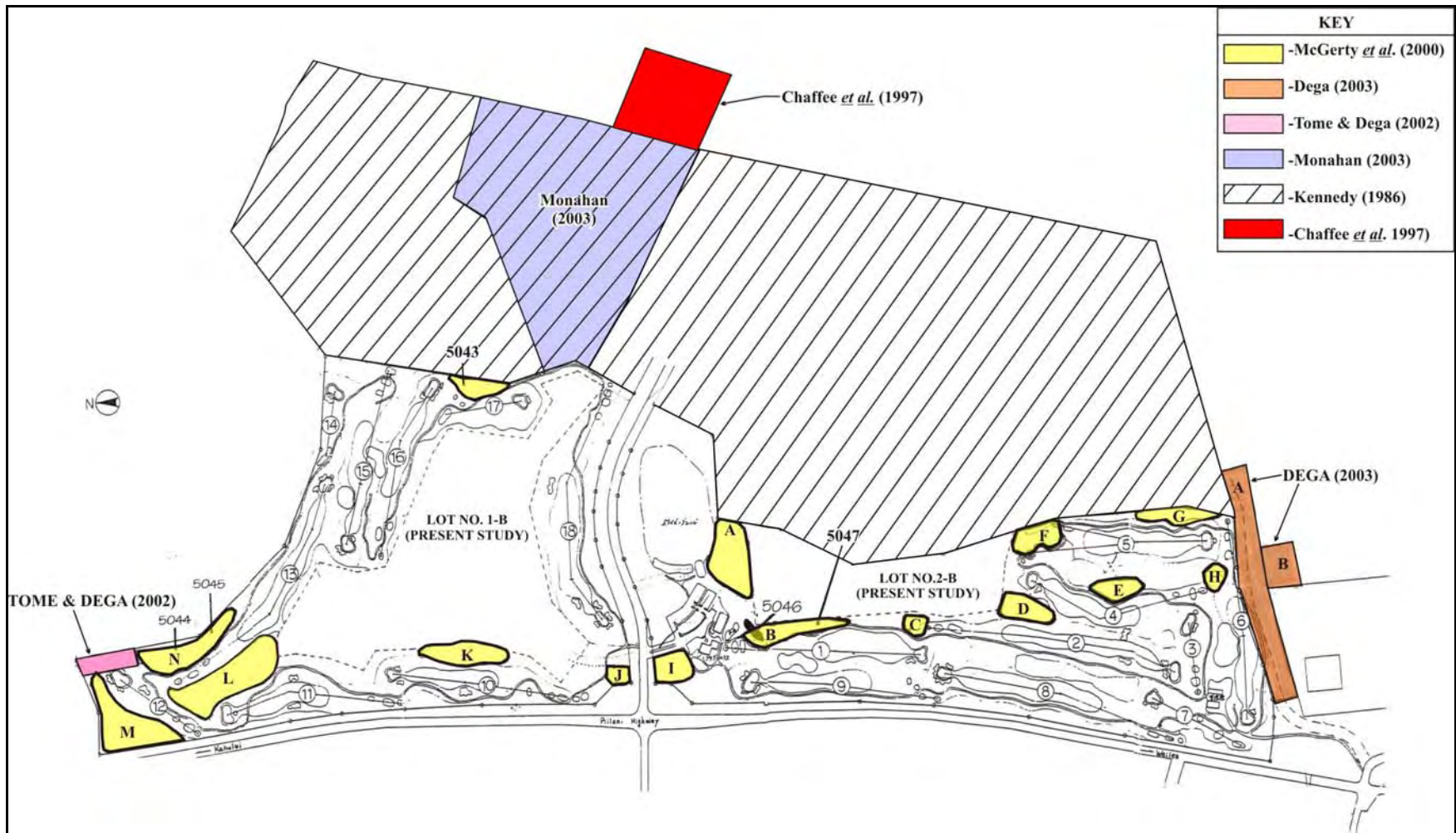


Figure 5: Previous Archaeological Studies Conducted in the Immediate Vicinity of the Project Area.

Kennedy (1986) conducted an archaeological reconnaissance of the entire 150.032 acres of the then-proposed Maui Research and Technology Park (TMK:2-2-02, since changed to 2-2-24) (see Figure 5). Kennedy's study, which did not include subsurface testing (excavation), concluded that no archaeological sites or features were located within the proposed site. The study area corresponds with much of the landscape studied herein.

Chaffee *et al.* (1997) conducted Archaeological Inventory Survey, inclusive of subsurface testing (excavation), in a portion of the Maui Research and Technology Park formerly investigated by Kennedy (1986). Three sites consisting of ten archaeological features were identified. The features included remnant terraces, stone alignments, a mound, and a modified outcrop. All of the sites were interpreted as agricultural in function with the exception of a rock mound that may have functioned as a religious feature.

Monahan (2003) conducted an Archaeological Inventory Survey, including subsurface testing (excavation), of a 28.737-acre portion of the Maui Research and Technology Park, within the area investigated by Kennedy (1986), situated immediately upslope (*mauka*) of Lot No. 1-B (present project area). Other than one surface feature—a small arrangement of stacked boulders interpreted as a 'push pile,' this survey yielded no evidence of historic or prehistoric significance.

Theresa Donham conducted an archaeological reconnaissance of the Haleakala Greens Subdivision area (Hibbard 1994). She identified a low, circular rock mound, a historical site with multiple features on the crest of a prominent ridge, a linear rock mound or wall remnant, a rock-filled terrace outlined with a low, rock wall, and other modifications along a rock outcrop. Shell midden was observed on the surface inside an enclosure.

McGerty *et al.* (2000) surveyed fifteen selected areas within the Elleair Maui Golf Club, and identified five archaeological sites (State Site Nos. 50-50-10-5043, -5044, -5045, -5046, and -5047) containing a total of seven surface features. The surface features were interpreted as agricultural terraces, perhaps dating from the pre-Contact period, and C-shaped rock formations (fighting positions) built during World War II training. Ten excavation units placed within these features yielded no cultural material.

Sinoto *et al.* (2001) conducted an Archaeological Inventory Survey of a parcel adjacent to the subject property. No archaeological or historical sites or features were identified.



Tome and Dega (2002) conducted an Archaeological Inventory Survey along the northeastern flank of the Elleair Maui Golf Club property. This survey occurred just to the west of the current project area. They identified a historical ranching corral and a short agricultural wall, collectively designated State Site No. 50-50-10-5233. No other structures or subsurface deposits were identified. No traditional Native Hawaiian sites or features were identified. Another Inventory Survey along the southern flank of the Elleair Maui Golf Course (Dega 2003) failed to yield any archaeological or historical site or features.

Finally, Scientific Consultant Services (SCS), Inc. conducted an Archaeological Inventory Survey (Monahan 2004) on two undeveloped lots totaling approximately 56.647 acres near the Elleair Golf Course in Kihei, Waiohuli and Keokea Ahupua`a, Wailuku (Kula) District, Kihei, Maui Island, Hawai`i [TMK: 2-2-24: Portion 12 and 13]. The project area immediately borders several parcels under the concern of this Inventory Survey. Pedestrian survey and subsurface testing (hand excavation) were performed in advance of a proposed residential project near the Elleair Golf Course by Betsill Brothers Construction, Inc. Four surface features—consisting of stacked basalt stones—were located within the project area, and each of these was assigned a separate State Site Number.

Test excavations yielded buried cultural material consistent with traditional Native Hawaiian activities at three of the four sites (Sites 50-50-10-5506, -5507, and -5509). Excavation at the fourth site (-5508)—a C-shaped rock pile consistent with a World War II military training feature—did not yield any subsurface evidence. The discovery of three traditional Native Hawaiian sites in this area is significant, as previous studies have generally failed to document any such activity. One of these sites (-5509) yielded a modern radiocarbon date ( $0 \pm 50$  BP), but its context is questionable and it may not refer to the (probably older) buried artifacts. Two other sites (-5506 and -5507) failed to yield datable material, although both contained buried traditional artifacts and midden. No additional archaeological work was recommended in the project area (Monahan 2004).

In summary, previous archaeological research has documented a fairly limited degree of human settlement in the Kihei barren zone, of which the subject parcel is a part. Archaeological Inventory Surveys in and around the subject parcel, some of which included subsurface testing, have yielded a modest amount of evidence of both historical and traditional human activities. These include: agricultural terraces, possibly dating to the pre-Contact period, C-shaped rock formations interpreted as World War II-era training features, and a historical ranching corral and a short agricultural wall. It is noteworthy to add that no formal survey has been completed

within the Waipuilani Gulch drainage, which would presumably yield additional pre-Contact, temporary habitation sites beyond those noted herein.

### **EXPECTED FINDINGS**

Given several factors—previous archaeological findings in the area, geographic location and known natural resources, and historical land use patterns in the area—expected findings of this Inventory Survey were as follows:

- (1) There was a relatively low probability of finding pre-Contact evidence of traditional Native Hawaiian habitation loci (permanent settlement). Short-term or temporary camps might be discovered, perhaps associated with natural rock outcrops that occur throughout the area.
- (2) Traditional agricultural features, such as rock-stacked terraces used to level the gentle slope, might also be found, especially in association with the natural rock outcrops.
- (3) There was a relatively low probability of finding traditional Native Hawaiian burials due to the extremely stony and shallow soils in the area.
- (4) There was a good chance of finding historical structures, such as rock walls, ranching corrals, or World War II-era rock formations.

### **METHODOLOGY**

The entire c. 338-acre project area composed of the six separate parcels was subject to systematic pedestrian survey at various times by SCS field crew members I. Bassford, B.A., M. Dega, Ph.D., Guerin Tome, B.A., and Randy Ogg, B.A. Pedestrian survey of the parcels was conducted by crew members walking north-south transects at 10-15 m intervals. Ground surface visibility was generally excellent through the project area which allowed for greater interval spacing of transects. Surface grasses were slightly higher in the northwestern portion of the project area (see Figure 3). Survey was conducted in October through December, 2006 and in September, 2008. The purpose of survey was to identify and document all historical and/or archaeological features across the landscape. All identified surface features were identified, described, and mapped in accordance with standard archaeological procedures. Photographs were taken of each phase of fieldwork as well as project area overviews and identified features. Two sites were manually tested (-6587, -6588) as part of the research. The other three identified sites were not tested due to perceived lack of associated soil matrix (they were constructed primarily on bedrock) and known function.

Laboratory work, conducted at SCS facilities in Honolulu, consisted of digitally drafting maps and sketches, and digitizing of all photographs and maps for archival purposes. All documentation pertaining to this project is curated at SCS facilities in Honolulu.

## **RESULTS**

Full pedestrian survey of all six parcels and one easement lead to the identification of five archaeological sites which have been formally designated as State Site No. 50-50-10-6239, 50-50-10-6240, 50-50-10-6241, 50-50-10-6587, and 50-50-10-6588. All first three sites were identified on the peninsula-shaped, 39-acre parcel [TMK:2-2-24:017] while the latter two sites were identified on the 124-acre parcel [TMK:2-2-24:054 por.] (see Figures 1 and 2). No traditional structures, scatters, or deposits were identified on four of the other six survey areas or in the easement. In addition, on the four parcels and easement which did not yield surface architecture or midden/artifact scatters, no areas thought to potentially yield cultural materials in subterranean contexts were identified. Features that most often have survived this barren landscape are related to WWII training exercises, once ubiquitous in the area. Three of the sites (-6239, -6240, -6587) have been interpreted to relate to such training. A brief listing of the descriptions and results for each of the six variable acreage survey areas and the easement follows.

### **TMK:2-2-24:016 (90.169 ACRES)**

One modern rock alignment was identified on this parcel, amidst numerous examples of modern landscape modification. The combination of landscape work and dry conditions allowed for excellent ground visibility. The alignment was composed of a single-course and extended 4 m long on a north-south axis. The field investigator (I. Bassford) assessed alignment construction, the lack of soil around the alignment, and adjacent landscape work and suggested this remnant to have been caused by mechanical blade push, the latter creating the aligned nature of the rocks. The alignment was deemed modern in origin. No other features were identified on this parcel. As noted above, landscape modification in the form of mechanical clearing lines (through blade and backhoe) was prevalent across the parcel, a symptom of neighboring infrastructure and fire clearance work in this dry zone locale. Typical for the “barren zone”, sedimentation was minimal and there were no areas thought to yield cultural deposits through testing.

**TMK:2-2-24:016 (26.695 ACRES)**

No surface architecture nor midden or artifact deposits were identified on this parcel. Ground visibility was good. No areas readily amenable to testing in hopes of recovering cultural deposits were identified. Contemporary landscape modifications were also common on this parcel.

**TMK:2-2-24:054 (10.447 ACRES)**

No surface architecture nor midden or artifact deposits were identified on this smaller parcel (Note: This 10-acre portion was divided out of the larger 054 parcel for administrative purposes by the client). Ground visibility was also good. No areas that could have potentially contained subterranean cultural deposits were identified. Landscape modifications were common on this parcel, as they were across most of the project area.

**TMK:2-2-24:014 (58.288 ACRES)**

No surface architecture nor midden or artifact deposits were identified on this parcel. Ground visibility was fair-good. No areas plausibly containing subsurface cultural deposits were identified. Landscape modifications in the form of mechanical blading, dirt road work, and digging several small borrow pits were present on the parcel.

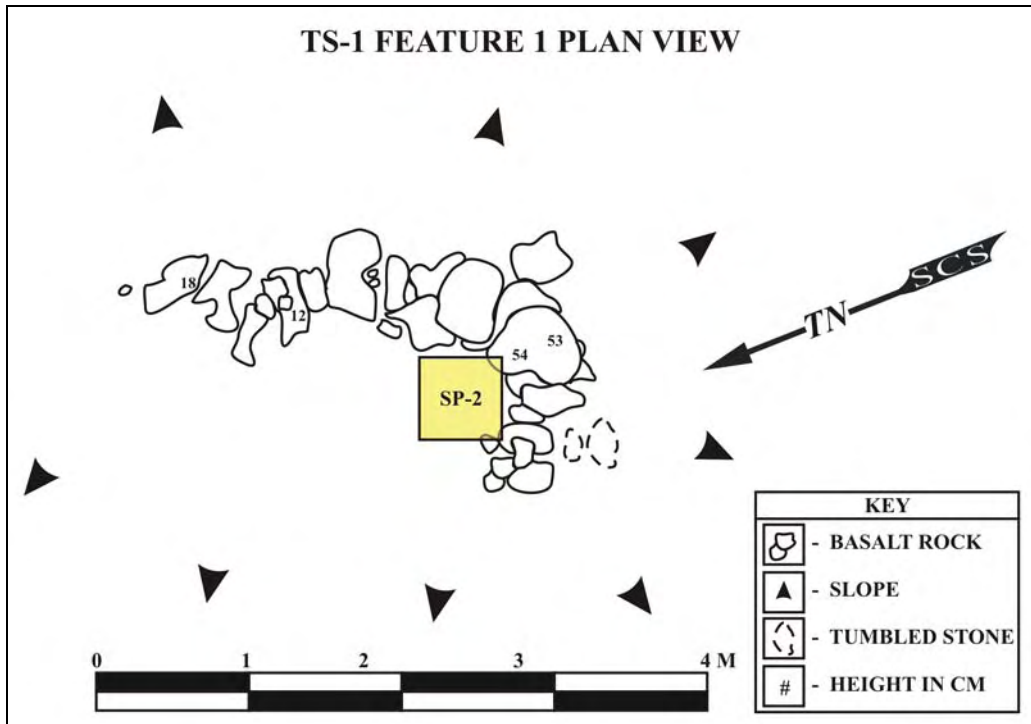
**TMK:2-2-24:054 (114.00 ACRES)**

The largest of the parcel's surveyed for this project, the 114-acres forms the easternmost boundary of the project area. While recent landscape modifications were common and took the form of mechanized work (dirt roads and such), several intact sites were identified in the western portion of the parcel. Ground visibility was good in this survey area, with some ground surface covered by thin grasses. Over-story was sparse in this area.

A total of two sites were identified on this parcel: an L-shape and three rock mounds appearing in fairly linear fashion (see Figure 1). Both of the sites were present in the western portion of the parcel, and most of the component features were constructed over outcrops. As exhibited during testing of these two sites, soil matrices were very shallow, extending to a maximum 0.22 meters below the surface (mbs).

**SITE 50-50-10-6587**

This site was identified in the western portion of the parcel at c. 95 feet above mean sea level. Occurring on a small knoll (5 feet high) over exposed bedrock, the site consisted of one feature, an L-shaped structure (Figures 6 and 7). The site measures 2.9 m long, 1.6 m wide, and rises to a variable 0.18-0.58 m above the slightly undulating outcrop surface. Oriented on a



**Figure 6: Plan overhangs with several surface lithics. This site occurs beyond the boundary of the current project area and was not formally recorded. All are discussed in more detail below.iew Map of Site -6587.**



**Figure 7: Photograph of Site -6587. View to Southeast.**

northeast/southwest axis at 20°/200°, the site was comprised of underlying outcrop with three courses of roughly stacked cobbles and few boulders. The slight L-shape occurred in the southwestern portion of the small feature.

No artifacts or midden deposits were identified on the site's surface and no standing or faced areas were present on the structure. The site was interpreted as an L-shaped feature constructed during WWII times when training was conducted in the area. The site location could have served as a gun placement or observation area during training exercises. One unit was excavated in the feature to further explore its temporal and functional roots. The unit, however, did not yield a excess of information.

#### Test Unit 2 (TU-2)

TU-2, a 0.50 by 0.50 m unit, was placed on the interior of the feature at the crux of the L-shape arm and remainder of the feature, against architecture (Figure 8). Excavation revealed one sedimentary layer, occurring above bedrock (Figure 9). The unit also revealed that the feature was solely constructed on the surface, no portions of the L-shape protruding into subsurface contexts. Layer I (0-20 mbs) was composed of dark yellowish brown (10YR 3/4) silt with moderate structure. Abundant micro roots and some macro roots were present, as well as common small cobbles (non-modified). No cultural materials were identified in the test unit. Excavation terminated on bedrock.

#### **SITE 50-50-10-6588**

This site was identified to the south-southwest of Site 6587, also in the western portion of the parcel at c. 90 feet above mean sea level. Occurring on a slightly larger knoll (15-20 feet high) over exposed bedrock, the site consisted of three features: three semi-rounded rock mounds (Figures 10, 11, and 12). The overall site measures 11.0 m long by 1.8 m wide, with each feature rising to a variable 0.12-0.60 m above the slightly undulating surface terrain. The site is oriented on a northwest/southeast axis at 152°/332°, with the three similar rock mounds occurring in a fairly linear fashion about the knoll. The Feature 1 mound is present at the apex of the knoll, with the Features 2 and 3 mounds occurring only several feet away, at a lower elevation, down the knoll. All features were constructed primarily on exposed bedrock. The linear fashion of the arranged features is suggestive of their function being related to direction-location markers. Surface materials included the recovery of aluminum cans appearing to have been recently deposited (past 10 years).



Figure 8: Photograph of Site -6587, TU-2. View to East.

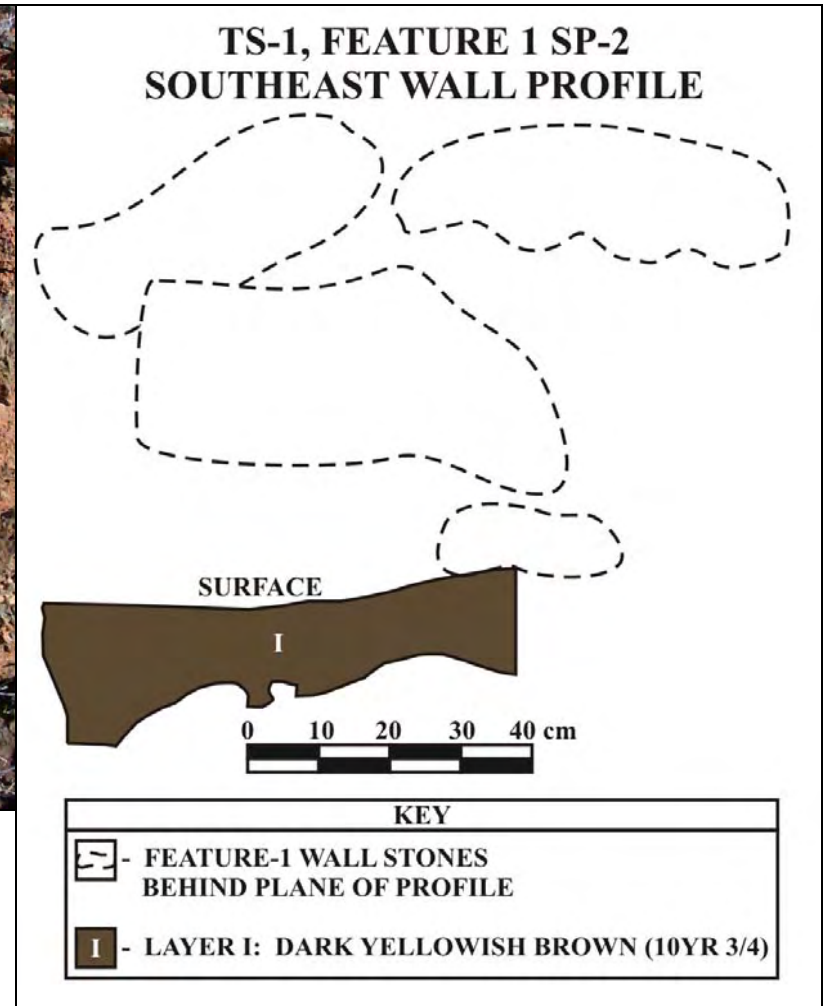
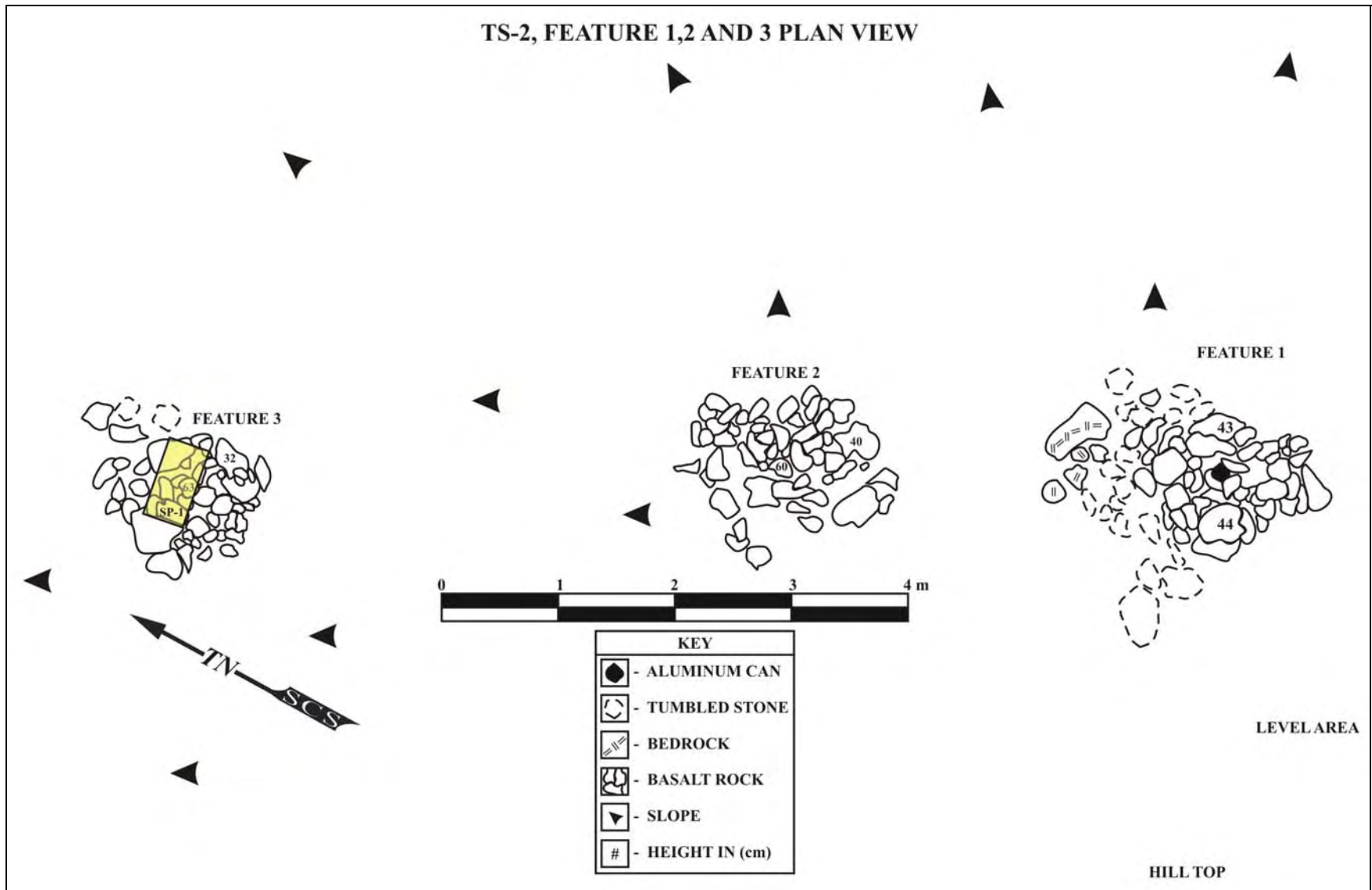


Figure 9: Stratigraphic Profile of Site -6587, TU-2. Southeast Wall Profile.



**Figure 10: Plan View Map of Site -6588.**





**Figure 11: Photograph of Site -6588, Features 2 and 3. View to East.**



**Figure 12: Photograph of Site -6588, Feature 1. View to East.**

### **Feature 1**

Occurring at the apex of a small knoll, the Feature 1 mound measures 1.2 m long, 1.0 m wide, and rises to 0.44 m above the sloped surface (see Figure 10). Oriented on a northwest/southeast axis at 130°/310°, the feature consists of piled, semi-rounded and angular basalt cobbles. The feature is rounded in plan view and does not contain facing or any formalizing elements. Surface materials include only a single metal, bottle cap. This no-descript feature is similar in size and morphology to the other two mound features occurring several feet away, down the small knoll's slope. Feature 1 was not tested.

### **Feature 2**

Occurring below Feature 1 and 1 m to the north, the Feature 2 mound measures 1.6 m long, 0.9 m wide, and rises to a maximum 0.60 m above the sloped surface of the knoll (see Figure 10). Oriented on a northwest/southeast axis at 152°/332°, the feature also consists of piled, semi-rounded and angular basalt cobbles. Feature 2 is rounded in plan view and does not contain facing or any formalizing elements. No surface materials were identified within or around this feature. Feature 2 was not tested.

### **Feature 3**

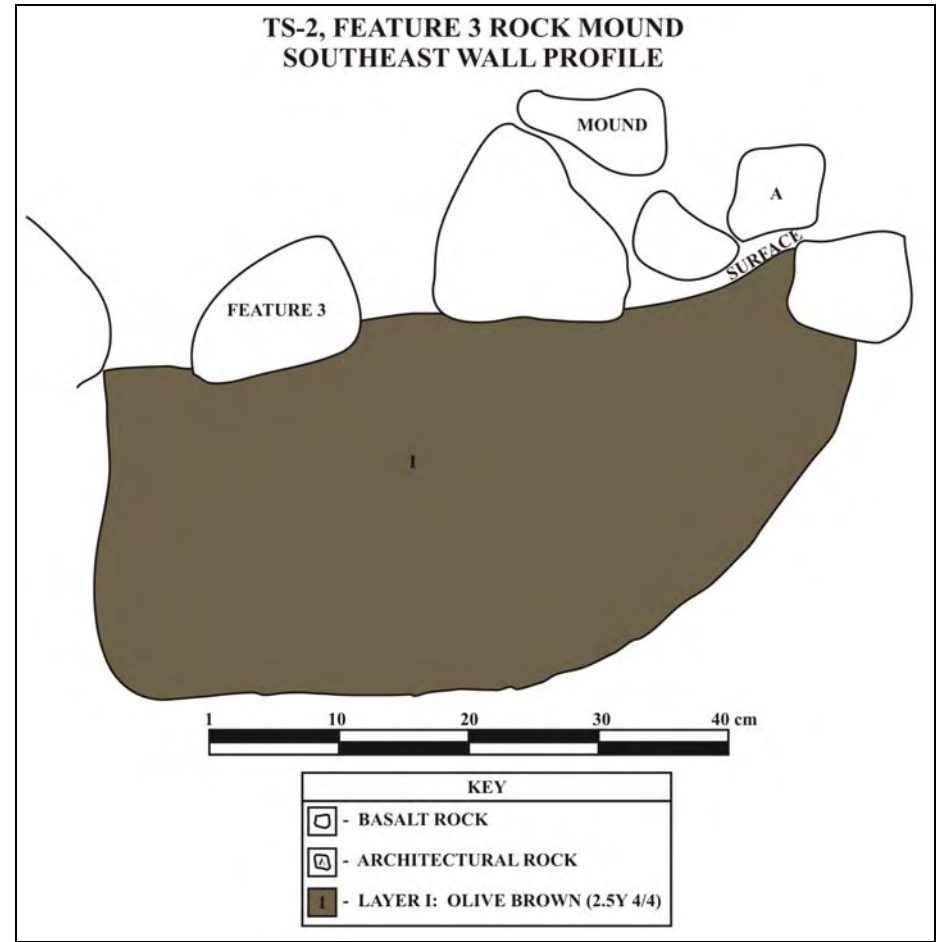
Feature 3 occurs 3.5 m to the northwest of the Feature 2 mound and is slightly lower in elevation (two feet lower on a c. 10° slope). The Feature 3 mound measures 1.27 m long, 1.2 m wide, and rises to a maximum 0.44 m above the sloped surface (see Figures 10 and 12). Oriented on a northwest/southeast axis at 152°/332°, the feature consists of piled, semi-rounded and angular basalt cobbles. The feature is rounded in plan view and does not contain facing or any other formalizing elements. No surface materials were recovered during recording. This feature was tested, having been bisected to assess internal construction and the presence/absence of associated cultural materials in subsurface contexts.

### Test Unit 1 (TU-1)

TU-1, a 0.70 by 0.50 m unit, was placed through the center of the feature and oriented on an east-west axis (see Figure 10; Figure 13). Excavation revealed one sedimentary layer, occurring above bedrock (Figure 14). This unit also revealed that the feature was solely constructed on the surface, no portions of the feature protruded into subsurface contexts. Layer I (0-20 mbs) was comprised of olive brown (2.5Y 4/4) silt with weak structure. Few micro roots were present and saprolitic gravels (decomposing bedrock) were common. No cultural materials were identified in the test unit. Excavation terminated on bedrock.



**Figure 13: Photograph of Site -6588, TU-1, Feature 3. View to Southeast.**



**Figure 14: Stratigraphic Profile of Site -6588, TU-1, Feature 3. Southeast Wall Profile.**

**TMK:2-2-24:017 (39.00 ACRES)**

Framed as a “peninsula”-shaped parcel of land to the south of a large drainage (Waipuilani Gulch), three sites were identified on the parcel. In addition, several previously identified sites (Tome and Dega 2002; see Figure 5) were re-located to the west of this parcel. Waipuilani Gluch did not occur within the parcel’s boundaries and was only informally surveyed. Ground visibility was fairly good in this survey area, with some ground surface covered by thin grasses. Landscape modifications were also common on this parcel and took the form of mechanized work associated with informal access road construction and adjacent golf course work. A large borrow pit with concrete reinforcements was present just to the east of this parcel’s eastern boundary.

A total of three sites were identified on this parcel: two modified outcrops and one free-standing wall (see Figure 1). All three single-feature sites were present in the northwestern portion of the parcel, with the modified outcrops occurring on small knolls above shallow swales and the wall occurring at the top, southern flank edge of the gulch.

**SITE 50-50-10-6239**

This site was identified in the northwestern-most portion of the parcel at c. 90 feet above mean sea level. Occurring on a small knoll with shallow swales to the north and western flanks, the site consisted of a linear-shaped modified outcrop (Figures 15, 16, and 17). The site measures 7.10 m long, 3.30 m wide and rises to a maximum 0.65 m above slightly undulating terrain. Oriented on a northwest/southeast axis at 120°/300°, the site was mainly comprised of outcrop with minimal stacking (1-2 courses maximum) of small basalt cobbles and boulders along its southwestern flank. The site consisted of an oval-shaped morphology and followed the outcropping itself.

Few pockets of sediment were evident within this site. No artifacts or midden deposits were identified on the site’s surface and no standing or faced areas were present. No excavation was conducted due to the dearth of sediment and the low integrity of the single feature. The feature was not considered a push pile as no mechanical marks were observed on the rock segment surfaces. The site was interpreted as a modified outcrop presumably constructed during WWII times when training was conducted in the area. The site location could have served as a gun placement or observation area during the training exercises.

**SITE 50-50-10-6240**

This site was similar to Site -6239 yet slightly more formalized. Located near the northern terminus of the parcel at c. 100 ft above mean sea level, this single feature site consists

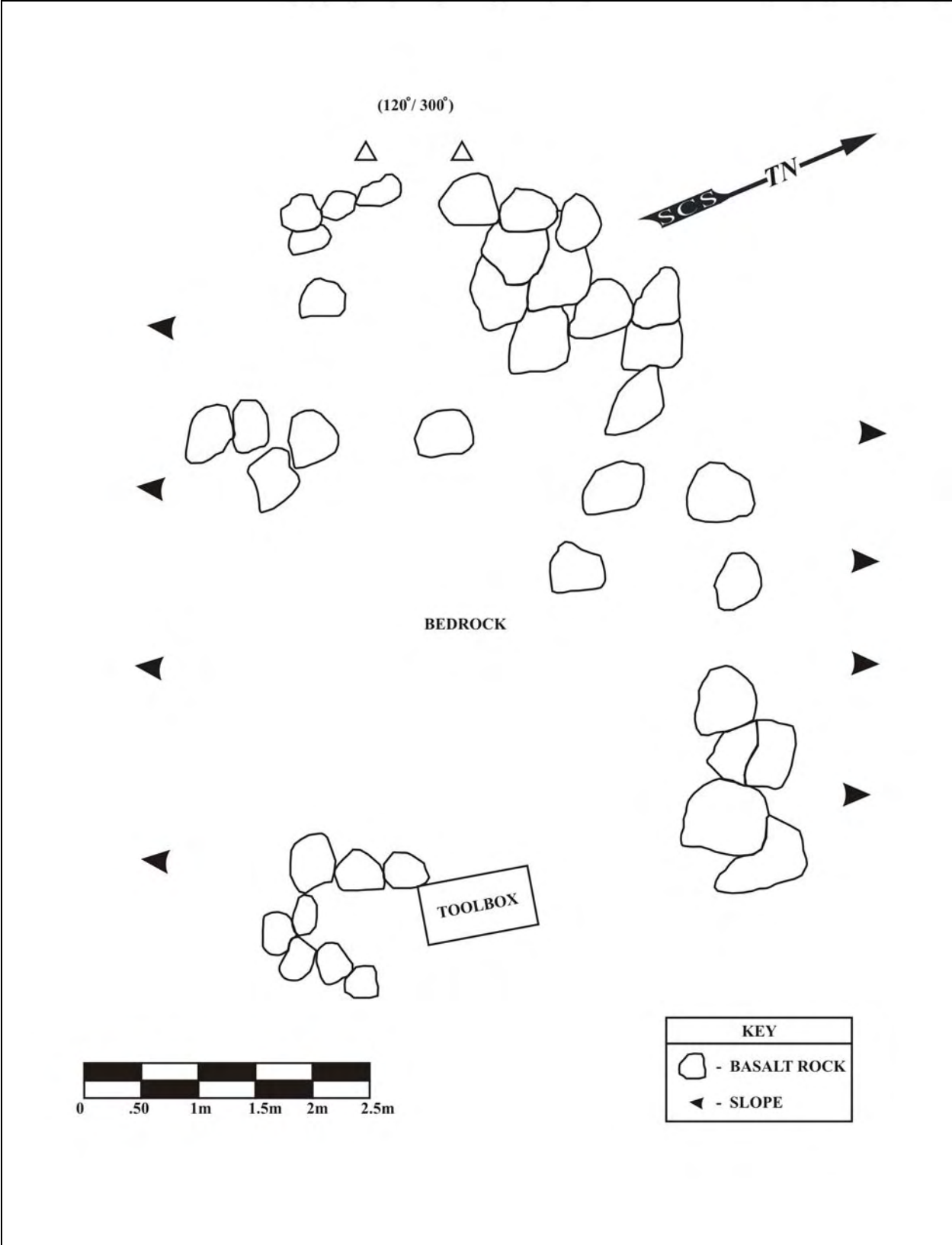


Figure 15: Planview Map of Site -6239.



**Figure 16: Photographic Overview of Site -6239. View to East.**



**Figure 17: Photograph of Site -6239 Southwestern Profile. View to Northeast.**

of a small modified outcrop (Figures 18, 19, and 20). The site measures 4.3 m long, 2.55 m wide, and to 0.70 above the ground surface. Oriented on a northeast-southwest axis at 40°/220°, the site consists of exposed bedrock with modifications in the form of 1-2 courses of small cobbles. These modifications occur on the northern flank of the site, overlooking Waipuilani Gulch. Somewhat oval in morphology, all the composite cobbles and boulders utilized in construction were not modified. Soil deposits within the site were minimal, with outcrop dominating the feature surface. No excavations were conducted at Site -6240.

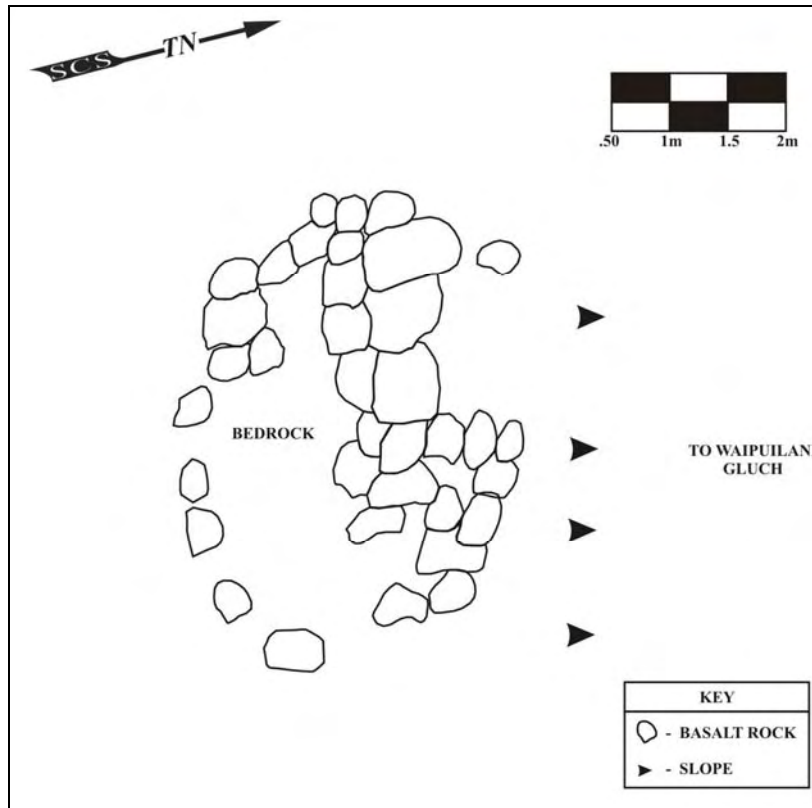
The highest part of outcrop modifications occurs to the north, which provided a slight barricade overlooking the gulch. This site was interpreted as a modified outcrop associated with historic times. Like Site -6239, this single feature site was presumably constructed during WWII times when military training was conducted in the area. The site could have served as a gun placement or observation area during the training exercises and is currently is in poor-good condition.

#### **SITE 50-50-10-6241**

The single-feature site consists of a linear wall running roughly east-west along the upper, southern flank of Waipuilani Gulch from the c. 120 foot above mean sea level mark. The wall essentially demarcates the northern border of the survey area and runs along the top of the gulch, with steep sides declining to the north into the gulch base itself (Figure 21). The site measures some 120 m long, 0.60 m wide, and rises to a variable 0.35-1.20 m above the undulating ground surface. The northern, interior flank of the wall is generally higher than the southern exterior of the wall, this due to placing the wall into the slope angle. Composed of a variable 2-7 courses of fitted basalt cobbles, the site is in good condition (Figure 22). Well-preserved sections of the wall reveal 2-3 cobbles width and chinking evident along much of the higher sections. Oriented on a rough east-west axis at 70°/250°, the free-standing wall parallels the contours of the gulch ridgeline. Site -6241 was interpreted as a boundary wall that could have been utilized during ranching times to keep domesticated animals from tumbling down the steep Waipuilani Gulch slope. That the wall follows almost exactly the upper contour of the southern gulch ridgeline leads to the inference that this is a boundary wall with some time depth. The feature is being assessed herein as a traditional-historic period wall, serving as a boundary (traditional times) or barrier (historic times).

#### **EASEMENT SURVEY (TMK:2-2-24: POR. 012)**

The final area surveyed for this Inventory Survey consisted of a corridor measuring 100 feet wide (east-west axis) by 1,400 feet (north-south axis). The easement commenced at the westernmost flank of surveyed parcel TMK:2-2-24:017 (Figure 23). This easement will



**Figure 18: Planview Map of Site -6240.**



**Figure 19: Photographic Overview of Site -6240. View to West.**





**Figure 20: Photographic Overview of Site -6240. View to West.**



**Figure 21: Photograph of Site -6241, Top of Wall Overview. View to West.**



**Figure 22: Photographic of Site -6241 Wall Profile. View to East.**



Figure 23: Planview Map Illustrating Location of Easement.

eventually consist of a neighborhood road connecting the development to Pi`ilani Highway. Full survey of the easement failed to yield any evidence of surface architecture, midden or artifact scatters, or locations potentially containing subsurface deposits. The easement area has been heavily modified due to its close proximity to the existing golf course, as well as its terminal point near the heavily used highway.

### **NOTABLE FEATURES OUTSIDE THE PROJECT AREA**

The upper, southern ridgeline of Waipuilani Gulch essentially defines the northern boundary to the current parcel. During investigations of the Feature 3 wall, and when recording the feature from the gulch side, two rockshelters were identified on the slope of the gulch itself. These features are clearly outside the current project area but could be impacted during any work on the current parcel above (debris rolling into the gulch, over and through the rock shelters). A search of previous archaeological work in the area revealed that these features have never been recorded; they are simply noted herein. There is a recognized cultural element to the rockshelters as several basalt flakes were identified on the surface of each shelter, over a soil deposit which could yield additional cultural materials. No other archaeological features were identified along the southern slope of Waipuilani Gulch near the Site -6241 wall.

### **DISCUSSION AND CONCLUSION**

Consistent with the “barren zone” model for pre-Contact human settlement in the Kihei area, the present Inventory Survey of some 338-acres (and one easement) in Waiohuli and Keokea Ahupua`a, Wailuku District yielded only a modest number of small sites: two modified outcrops and one free-standing wall (State Site No’s -6239, -6240, and -6241 respectively) on one parcel and one L-shaped feature and three rock mounds (State Site No’s. -6587 and -6588) on a second parcel. Save for TMK:2-2-24:017 (39 acres) and TMK:2-2-24:054 por. (124 acres), the four other parcels and one easement were void of sites, this presumably being the result of limited activity through time in the area, the nature of the “barren zone” itself, and landscape modification through time, particularly in recent times. Few archaeological signatures are present in this zone as a whole, particularly in subsurface contexts. While ranching activities and such may have altered the landscape of the overall zone, ranching related structures were primarily also absent in the project area (the Site -6241 wall being a possible exception). The only results of note were gleaned through survey of TMK:2-2-24:017 and TMK:2-2-24:054 por. and informal survey of Waipuilani Gulch, beyond the southern boundary of TMK:2-2-24:por. 16 wherein two overhangs with several surface lithics were identified.

Site density in this area is minimal and often empirical evidence for the limited prehistoric activity is negligible. Features that most often have survived on this landscape are related to WWII training exercises, which were ubiquitous in the area. Three sites of the current study (-6239, -6240, -6587) have been interpreted to relate to such training. Site 6241, the free-standing wall, is also of interest. That the feature follows the contours of the upper ridgeline may allow for its interpretation as a prehistoric boundary wall. As the feature runs along the top of a steep slope also allows for re-use of the wall during ranching times as a barrier. Both interpretations appear valid at this juncture. Site -6588 is also worthy of additional discussion. The empirical record of the site is scant, but based on the nature of the features (non-descript rock mounds) having been arranged in a linear fashion, the mounds may represent location-direction markers associated with traditional times. Certainly multiple trails accessed these “barren zone” areas which connected the uplands-lowlands. Temporary habitation sites are other hallmarks of these areas containing such long distance trails (see Tome and Dega 2002a).

Finally, the paucity of features and/or cultural materials within the large project area must be addressed. The lack of prehistoric features (c-shapes and such) and historical features related to ranching or military training activities—as preserved in other, nearby parcels—may be a result of grading, bulldozing, and/or other earth-moving operations. Clear evidence of such activities is evident through multiple small roads and two-wheel tracks within the project area. There are a few relatively large push piles of boulders with large tree limbs and smaller tree trunks incorporated into these piles within each TMK of the project area and smaller rock piles also abound. Most of the latter were mechanically manufactured either through adjacent construction or during fire fighting operations.

Overall, the “barren zone” yielded expectations similar to what was originally hypothesized: several small features related to historic times (military usage), an alignment of rock mounds (prehistoric), and much landscape alteration during modern times. Certainly there is a prehistoric aspect to the landscape (see Previous Archaeology section above), herein represented by the Site -6241 wall, Site -6588 rock mounds, and the rockshelters noted outside the project area within Waipuilani Gulch. The prevailing model that temporary habitation-temporary use sites and WWII training structures predominate in the “barren zone” has not been disproved by the current research.

**SIGNIFICANCE ASSESSMENTS**

The following table (Table 1) present significance assessments and recommendations for the five sites identified during the current research. Mitigation recommendations are presented below.

**Table 1: Site Designations, Significance Assessments, and Recommendations**

<b>State Site No. 50-50-10-</b>	<b>Temporary Number</b>	<b># Features</b>	<b>Form</b>	<b>Function</b>	<b>Temporal Assessment; Significance; Recommendation</b>
6239	TS-1	1	Modified Outcrop (linear)	Military Training (barricade or gun placement)	WW II; Criterion D; No Further Work.
6240	TS-2	1	Modified Outcrop (irregular)	Military Training (gun placement or observation area)	WW II; Criterion D; No Further Work
6241	TS-3	1	Wall (linear)	Boundary Wall	Traditional- Historic; Criterion D; No Further Work
6587	----	1	L-Shape	Military Training (barricade or gun placement)	WW II; Criterion D; No Further Work.
6588	----	3	Mound	Markers- Locators	Traditional; Criterion D; No Further Work

**RECOMMENDATIONS**

Based on the results of the present Inventory Survey, as well as the overall settlement pattern of the general “barren zone” area, no further work is recommended for five of the parcels or the easement: TMK:2-2-24:por 12, por. 14, por. 16, and por. 54. No further work is recommended for Sites -6239 and -6240 on TMK:2-2-24:017. No further work is recommended as well for Sites -6587 and 6588 on TMK:2-2-24:054 por. However, we encourage the landowner(s) to informally preserve the entirety of Site -6241 wall or portions thereof if given the opportunity. It is recommended that the wall nonetheless be bordered by orange construction fencing during construction on the parcel due to the potential for adversely impacting the two rock shelters noted on the side of the slope below, within Waipuilani Gulch. The fencing will serve to keep soil and other debris that may be mechanically moved from disturbing the unrecorded features below.

In the unlikely event that contractors or machine operators identify sites (artifacts, architecture) during initial work on these parcels in the future, they are to cease activity in that area and contact either SHPD or SCS to evaluate any finds. At this writing, there are very limited expectations for identifying any additional sites across the parcels. Finally, due to the shallow nature of project area sediment matrices, coupled with the very modest yields of subsurface testing in barren zone areas, Archaeological Monitoring is not recommended for any of the six parcels or the easement.

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**Appendix - E**  
Cultural Impact Assessment

# **Maui Research and Technology Park**

## **FINAL REPORT**

**TMK: 2-2-24-1, 2, 3, 4, 5, 6, 7, 8, 9, 14, 15,16, 17, 54 (por.) for the lands of Maui Research and Technology Park located above Honoapi'ilani Highway on Lipoa Avenue. The present surrounding land uses are: BioTech, Maui Tech Center and offices, Monsanto Research and Supply and pastureland.**

**Prepared for:**

**Pacific Rim Land, Inc.**

**Maui Research & Technology Park**

**John Maloney**

**P.O. Box 220**

**Kihei, Maui, HI 96753**

**Prepared by:**

**Hana Pono, LLC**

**2275 Apala Place**

**Maui, Hawai'i 96708**

**Keli'i Tau'ā & Kimokeo Kapahulehua**

**Ph & Fax: (808) 573-1643**

**Kimokeo Cell: (808) 276-7219**



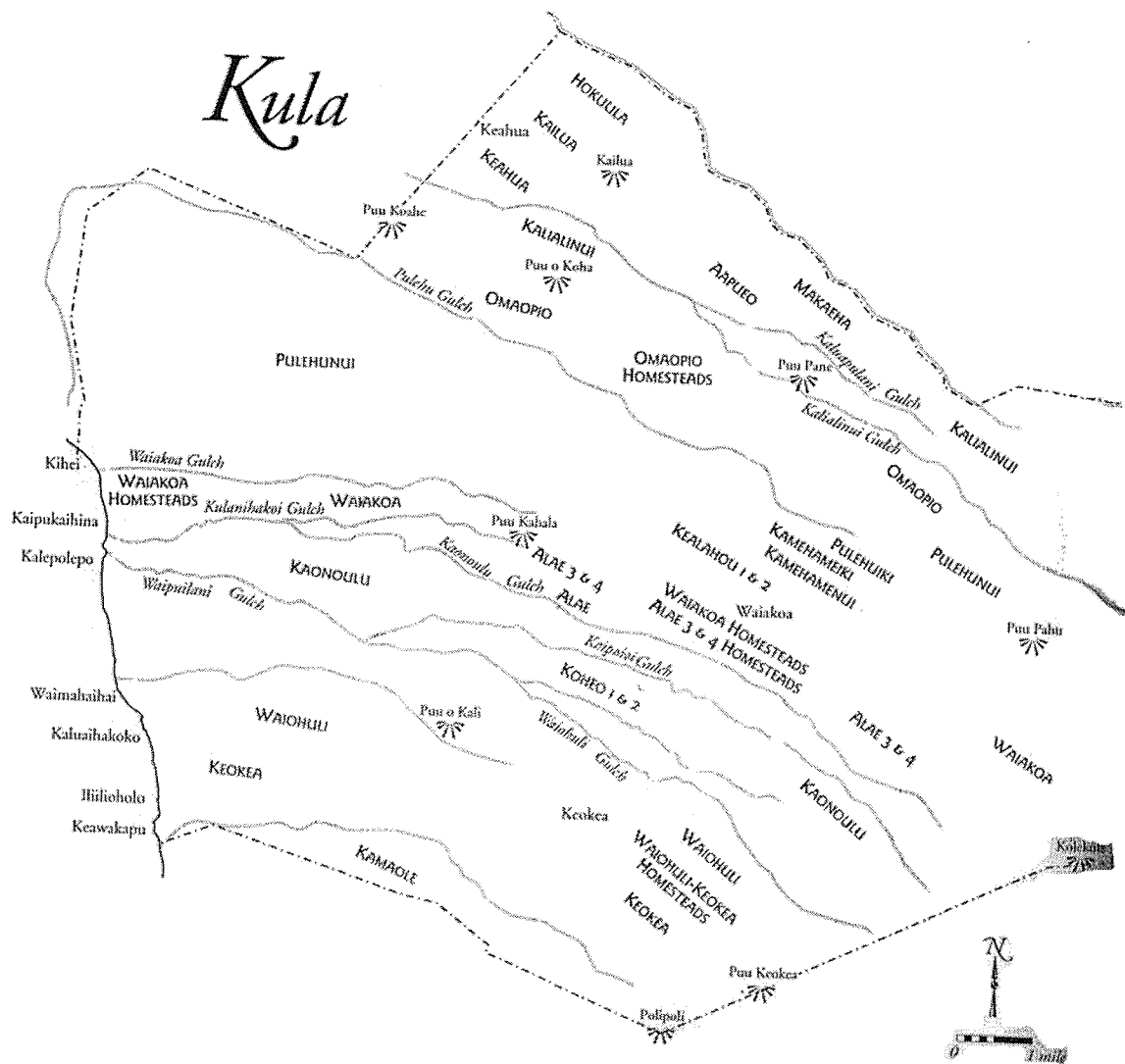
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## Scope

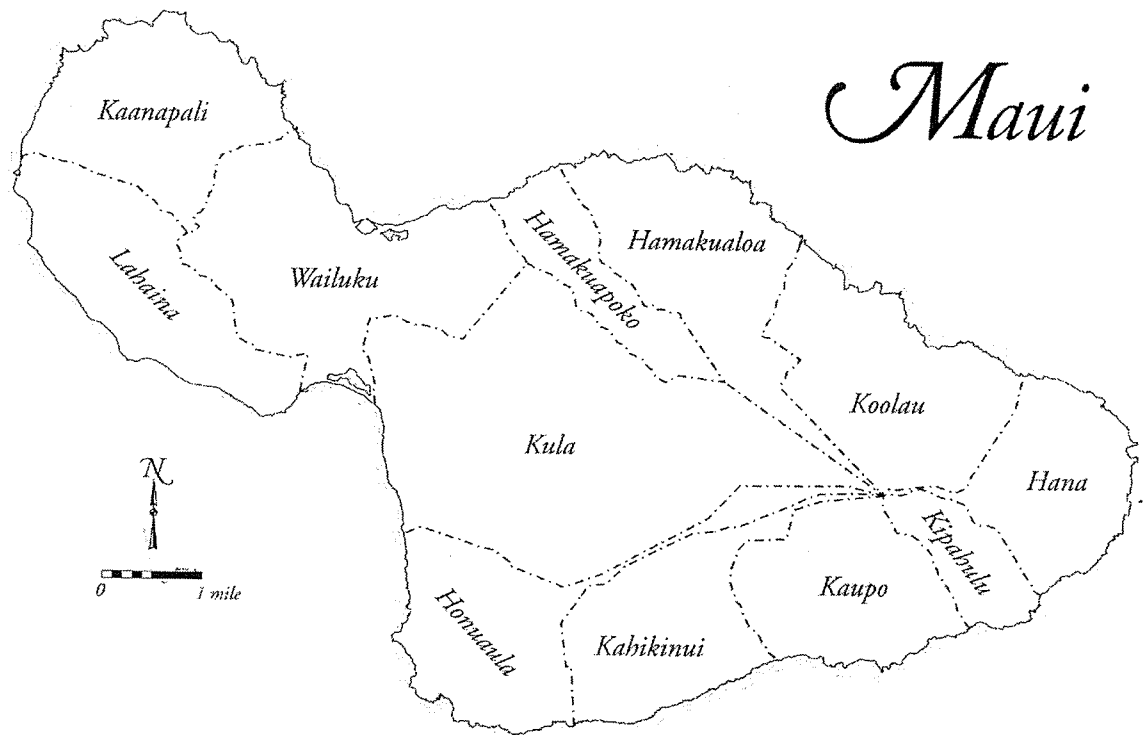
The scope of this project will basically be to compile various historical, cultural and topographical accounts and facts of the ahupua'as Waiohuli and Wailuku / Kula District where our project for Maui Research and Technology Park (MR&TP) sits. Presently, Lipoa Parkway is the roadway off the main Honoapi'ilani Highway which leads mauka (upland) towards the MR&TP.

In the introductory section of this report, we will briefly explore the possible reasons for the native Hawaiians to limit their settlement in these two ahupua'as. Several archaeological surveys have been done for these two areas and the reporting is consistent that this barren zone, in which the subject parcel is situated, was definitely a transitional area. Looking at the accompanying map, it shows that the existing gulches did not start directly from the top of Haleakalā. The path the water carved to reach the ocean was relatively shallow compared to other gulches indicating limited water flow through the targeted ahupua'a. Although the land was relatively flat and readily accessible, the lack of water was the most important reason the land area did not attract large group of residents to build expansive communities like the other four districts on Maui. In later years, the topography of this land area served very well for farming even with limited water and especially ranching.



**Figure 1: Gulches of Kula**

By looking on the map in the area of our research, Waipu'ilani Gulch is one of the few gulches that have subsidiary streams flowing into one main stream by the time it reaches the ocean taking much of its loose lepo (top soil) and 'opala (rubbish) to wash out into the ocean. This might be one of the reasons that the fishpond at the ocean tip of Kihai was called Kalepolepo (Much dirt). As a guideline in ancient times, no water meant no permanent settlement. Those who tried to settle faced harsh living conditions in windy, hot and dry conditions.



**Figure 2: The 12 Mokus of Maui**

## Introduction

Hana Pono under contract to John Maloney of Pacific Rim Land, Inc. has conducted a Cultural Impact Assessment (CIA) for (MDA) proposed project for the lands of MR&TP spreading out from the ahupua'a of Waiohuli to the ahupua'a of Wailuku/Kula. The closest road access presently to this project area is through Lipoa Parkway in Kihei, Maui.

The CIA was conducted according with the State of Hawai'i Office of Environmental Quality Control (OEQC) Guidelines for Assessing Cultural Impacts {1997} and includes oral interviews with knowledgeable consultants of Kihei, Wailea and Makena and its surrounding areas as well as archival research.

The location of our study, MR&TP, is in the kona (hot, dry) area of Maui along the trail of the Northeast trade winds kicking up regularly from distant North Maliko to Kahului gaining momentum as it winds through the funnel embankment of Ka Mauna Kahalawai and Haleakalā until it touched all the significant landmarks south passing through the 'āina (land) on its way to visit the other side of the Pacific Ocean. An extended amount of cultural background



will be provided to explain the low density of people occupying this area on the island of Maui especially in the proposed area of development.

## Maui's Five Centers of Population

### *Kahakuloa and Nā Wai Ehā*

Maui entertained five centers of population starting with Kahakuloa, an isolated valley on the northwest coast of West Maui deeply rooted in the staple lo'i kalo (wet taro plant). The next location was at the southeast and east part of West Maui, known in present day as Wailuku and Kahului. The area housed four deep valley streams which watered four areas of taro land spreading fanwise to seaward: Nā Wai 'Ehā (The Four Waters) were famed in song and story— Waikapu, Wailuku, Waiehu and Waihe'e. Eventually as we move to the modern era, sugar cane took over the former taro lands and the same waterways that were once used to irrigate the taro. The name song for the area is provided below.

#### SONG: INIKI MĀLIE –Gentle Pinches

The winds & waters of Nā-wai-'ehā

<u>Wai-kapū</u> makani kokololio	Skin-stinging wind
Makani houhou 'ili	Waikapū, wind in gusts
'Inikiniki mālie	Gently pinching
<u>Wai-luku</u> makani lawe mālie	Wai-luku, wind becoming gentle
Makani houhou 'ili	
'Inikiniki mālie	
<u>Wai-ehu</u> makani hō'eha 'ili	Wai-ehu, wind paining skin
Makani houhou 'ili	
'Inikiniki mālie	
<u>Wai-he'e</u> makani kili'o'opu	Wai-he'e, wind graceful
Makani houhou 'ili	
'Inikiniki mālie	
Ha'ina mai ana kapuana	Thus ends the story
Makani houhou 'ili	Skin-stinging wind
'Inikiniki mālie	Gently pinching

(Elbert and Mahoe, 56)

In the middle of Nā Wai 'Ehā is the sacred valley of 'Īao where chiefs and chiefess's, after living their earthly lives, requested that they be secretly laid to rest. This area funnels moisture-laden clouds onto Pu'u Kukui which sits above Mauna Kahalawai (West Maui Mountains) making it the second wettest spot in the Hawaiian Islands with 400 inches of rain a year falling on the peak. (Roelofs, 12)

### ***Olowalu through Lahaina***

Another populated area was at the southwest coast of west Maui beginning at Olowalu and continuing through Launiupoko, Laupakanui, Waiane'e and Lahaina and on to the small terraced valleys of Honokowai and Honokohau where taro lands were irrigated from streams out of the West Maui mountains. Lahaina, flanked by excellent fishing grounds, was the primary seat of the chiefs of West Maui.

### ***Ke'anae through Hana***

The northeast flank of the great dome of Haleakalā roughly opposite the more sheltered shore line of Mākena are the two adjacent areas of Ke'anae and Wailuanui which comprise the next chief center on the rugged east coast. It supported intensive and extensive wet-taro cultivation. Further eastward down the coastline is the isolated but popular town of Hana. It is a region famous in legend and history although it was supported chiefly by fields of mulched (dry) taro cultivation and sweet potato, the small steep-valley called Wailua being almost the only area of wet taro nearby. The popularity of this district was based upon the relationship of neighboring Hawai'i island and its close proximity.

### ***Kula to 'Ulupalakua***

The last major district on the south coast of East Maui, from Kula to 'Ulupalakua, was a consistently dry and lava-strewn country. Included in this area was the now popular Mākena and Ke'oneo'io which is noted for good fishing, calm sandy shores and pleasingly warm weather and sunshine. These favorable conditions attracted temporary settlers to live next to the shorelines and close inland. There were some patches of dry land taro but there was a notable area for 'uala (sweet potato) which combined with the fishing, must have supported a sizable but transient population.

The explanation of the last district is about the same with the land area of our report on Waiohuli and Wailuku/Kula since it is in close proximity north of

Mākena. Clearly the arid country below the west and south slopes of Haleakalā, including Kula, Honua'ula, Kahikinui, and Kaupo were dependent on sweet potato. In Fornander, Volume 6, he describes the planting of sweet potato in the dryer sections of Kula:

*Planting in rocky places was called makaili. There was very little soil proper, the greater portions [of the field] being gravel, with rocks all around. There were also large holes resembling banana holes. Upon the sprouting of the potato vines gravel and stones are piled up and around them, and by the time the hole was covered thick with leaves, the potatoes were large and grooved. (pg. 164)*



Hawaiian sweet-potato field, Honua'ula, Maui, in 1934.

**Figure 3: Sweet-potato field, 1934.  
(Handy and Handy, 509)**

The nature of the common Hawaiian was a bit kolohe (rascal) as demonstrated in the following Hawaiian saying of sweet potato in Kula and a beautiful young lady of Keanae.

*O ka wai kau no ia o Keanae; o ka 'ulei ho'owali 'uala ia o Kula.*

*"It is the 'ulei digging stick for the potato [patch] of Kula."* A

*handsome young man of Kula and a beautiful young woman of Ke'anae, on Maui, were attracted to each other. She boasted of her own womanly perfection by referring to her body as the pool on heights of Ke'anae. Not to be outdone, he looked down and boasted of his manhood as the digging stick of Kula. (Pukui 2447)*



spiritual beliefs and customs focused on maintaining harmonious and nurturing relationships to the various life forces, elements and beings of nature. Ancestral spirits were honored as deities known more commonly as 'aumakua. Land and natural resources were not privately owned; rather, the Hawaiian people maintained a communal stewardship over the land, ocean and other natural resources of the islands. The kupuna (elders) provided leadership and guidance to the makua (adults) who performed most of the daily productive work of fishing, cultivation, and gathering. Between the islands of Hawai'i there was some variation of language dialect and names for plants, animals, rains and winds. As an example, the residents of Ni'ihau used T's in place of K's in their language and still do today. There were also variations in physical structures, subsistence techniques and art forms. Origin myths varied according to the particular migration and genealogical line from which families descended. The prominence of akua (gods) and kupuna (elders) also varied by island. For example the volcanic deity Pele was more prominent in Puna and Ka'u. Many of Pele's followers believed her to have been a mortal person and her family believes that she still lives on today especially on the island of Hawai'i. Qualitatively, the language, culture, social system and spiritual beliefs and customs were common among all the inhabitants of the islands. Oral traditions indicate frequent transmigration and even intermarriage among families from the different islands in the Hawaiian Chain. During this era, there was continuous peace as described in this chant. (Bishop Museum)

**Mālie Maui ke Waiho Mai la** from the Bishop Museum Library

Mālie o Maui	Maui is peaceful
Ke waiho mai la Kaihuakala	Situated next to rough seas
'O Kaihuakala Mokuhanō kai uka	Kaihalulu is inland
Kaihalulu i ke alo Kauiki	And Kaihalulu on the face of Kauiki
Hii Kauiki ia Mokuhanō	Kauiki guards over Mokuhanō
Hii Mokuhanō ia Keanini	Mokuhanō attends to Keanini
Hii Waikoloa i ka ili'ili	Waikoloa cares for the pebbled beach
Hone ana ia Kapueokahi	Which softly embraces Kapueokahi
O Honua'ula mauka	Honua'ula is inland
O Kauliuli makai	Kauliuli is seaward
Pau Pe'ape'a i Keahi	Pe'ape'a is destroyed by fire (The border ends at keahi)

No ka hee-palaha  
Moku i ka ohe la ea la e

Because it's slipping away  
Severed by the sacred knife

The above chant describes the gentle calmness of the early settlers to these islands especially Maui. The title of the chant, "Mālie o Maui" means "the peacefulness of Maui." I can recall growing up in the bottom edge of Kula where we could look down to Kahului as well as Kihei, Kaho'olawe and Makena. As I woke up daily with my dad at sunrise, he would look makai (towards the ocean) and if it was so, he would automatically say, "Mālie i ke kai (The sea is calm)." As in the tradition, dad passed on to me and I passed on to my son Hōkūloa.

### **Era 3: Early Tahitian Migration – 1100 to 1400AD**

This third period, between 1100 and 1400 A.D., marks the era of the long voyages between Hawai'i and Tahiti and the introduction of major changes in the social system of the Hawaiian people's nation. The chants, myths and legends record the voyages of great Polynesian chiefs and priests, such as the high priest Pa'ao, the ali'inui (Head Chief) Mo'ikeha and his sons Kiha and La'amaikahiki, and high chief Hawai'iloa. Traditional chants and myths describe how these new Polynesian chiefs and their sons and daughters gradually appropriated the rule over the land from the original inhabitants through intermarriage, battles and ritual sacrifices. The high priest Pa'ao introduced a new religious system that used human sacrifices, feathered images, and enclosed heiau to facilitate their sacred religious practices among the priests. The migration coincided also with a period of rapid internal population growth. Remnant structures and artifacts dating to this time suggest that previously uninhabited leeward areas were settled during this period.

Honua'ula is an ancient name that was introduced to Hawai'i by Chief Mō'ikeha of Tahiti. The reason Chief Mō'ikeha decided to depart from Tahiti was to separate himself from his lover Lu'ukia who originally came from Hawai'i with her husband Olopana. Lu'ukia had created turmoil in Mō'ikeha's life and therefore the Chief felt that his separation from her would heal his wounds. (Sterling, 214)

Chief Mō'ikeha's departure was not simply moving to another section of his island and beloved home of Lanikeha. Instead, he ordered Mo'okini, his kahuna nui (influential priest) to prepare their large wa'a kaulua (double-hull canoe) to set sail to the distant land of Hawai'i. On this voyage, he would take his foster son Kamahualele to help him on this voyage. Mō'ikeha also took his sisters

Makapu'u and Makaa'oa, and his two younger brothers, Kumukahi and Ha'eha'e. At this time, Kamahualele was inspired to provide a definition of the character of a kanaka maoli (indigenous Hawaiian) in the following chant.

From David Malo's "Hawaiian Antiquities" (p. 222) we can see that Hawaiians of ancient times were equally connected to their genealogical lines and the islands they called home.

Eia Hawai'i	Here is Hawai'i
He moku	An island
He kanaka	A man
He kanaka Hawai'i e	A Hawaiian man
He kanaka Hawai'i	A man of Hawai'i
He kama na Kahiki	A child of Kahiki
He pua ali'i mai Kapa'ahu	A favorite chief from Kapa'ahu
Mai Moa'ulanui'ākea Kanaloa	From Moa'ulanui'ākea Kanaloa
He mo'opuna nā Kahiko lāua o Kapulanakehau e	A grandchild for Kahiko and Kapulanakehau

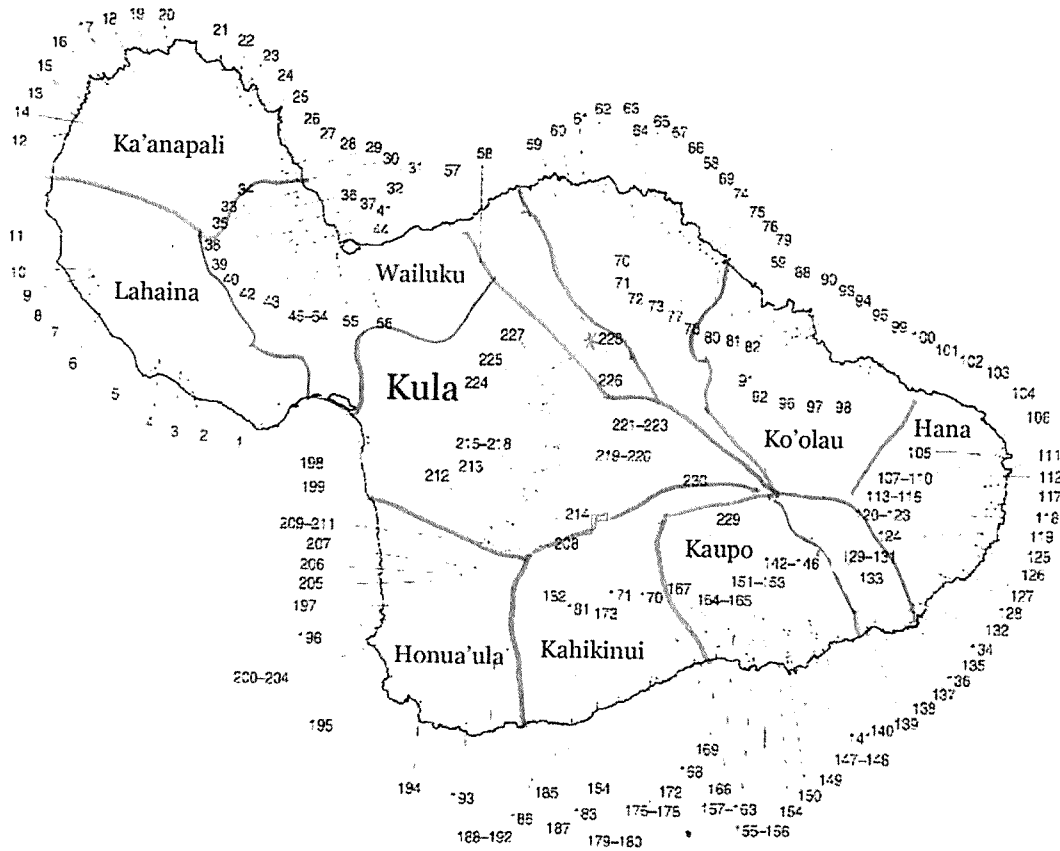
The translation of this chant describes a Hawaiian person as Hawai'i, an island, a man, a Hawaiian man, a man of Hawai'i and a child of Kahiki. This information is important in as much as Polynesians of ancient times identified themselves with their protocol genealogical chant in their first meeting.

On his inaugural sail, Chief Mō'ikeha stops at the first landfall at South Point, Hawai'i. There, the Kalae family on Mō'ikeha's first migratory journey asks the Chief if they could reside there. He grants them permission and today, one of South Point's community names is the town of Kalae.

After Kalae, the remaining families on the wa'a kaulua (double-hull vessel) followed in line by requesting to get off as they came to a place in the Hawaiian Islands that attracted them. The Chief sailed north to drop the Hilo family at the town of Hilo. He took kahuna nui (powerful priest) Mo'okini up along the North-western part of the island to Kawaihae where the famous Mo'okini Heiau was eventually built after his popular priest.

From north Kohala, Hawai'i, Chief Mō'ikeha could clearly see the beauty of Haleakalā which enticed him to set sail and island hop from Kawaihae onto the deep rough channel of 'Alenuihāhā to Hana, Maui. There, the Hana family asked and were granted permission to reside at Hana. After, he sailed around the Kaupo coastline until he arrived at Honua'ula.

The Honua'ula family was granted permission to take up residence there. Still to this day Maui is the home for some of Honua'ula and Mō'ikeha descendants. The rest of the voyagers along with the Chief Mō'ikeha sailed on to Lahaina, then Moloka'i, O'ahu and eventually Kaua'i where he decided to take up permanent residency. It is not clearly known how widespread the Honua'ula 'ohana (family) infiltrated on the island of Maui since he continued his sail North, but till this day the Mō'ikeha family, descendants of the Chief still reside in Kihei just below the MR & TP.



**Figure 5: Map of Heiaus in Maui**

Returning to Pa'ao and looking at the heiau map, we see that he changes the entire nature of the Hawaiian people with his religion and practices. Rock formations start to surface around the islands in different configurations to serve as heiau (temples) for the priests in the community. Some heiau were very elaborate stone structures while others were simple earth terraces. The wooden and feather-like images along with the pohaku (stone) images sometimes found on the heiau spring up island-wide representing Pa'ao's religious beliefs and war like attitude which contributed to a new ruling class and a working class found in the Hawaiian feudal society.



Fortunately, the land of Waiohuli and Wailuku, Kula did not attract the ali'i with the same mind-set such as Pa'ao. As shown on the heiau map, very few heiau were built on our designated ahupua'a study especially of the luakini (sacrificial) type. Several large and elaborate heiau were built on Maui at the five centers such as Pihana and Haleki'i at Wai'ehu and Pi'ilanihale heiau in Hana. The Haleki'i heiau was used for the sacrificing of the females and Pihana for the male chiefs of the enemies. Here, Kamehameha the Great after the victorious Battle of Kepaniwai in 'Iao conducted the last sacrificial ceremony of the Maui Chiefess Poloahilani in 1790 (Roelofs, 16). The number of heiau found in the different districts was a good indicator of the size of a community that lived in the area.

#### **Era 4: The fourth period dates from 1400 through 1600 AD.**

Voyaging between Hawai'i and Tahiti ended. The external influences of the migrating Polynesian chiefs along with internal developments within the culture resulted in sophisticated innovations in cultivation, irrigation, aquaculture, and fishing. These innovations were applied in the construction of major fishponds, irrigation systems, and field cultivation systems. Such advances resulted in the production of a food surplus which sustained the developing stratification of Hawaiian society into three basic classes, ali'i (the chiefs), kahuna (the priests), and maka'ainana (the commoners). Oral traditions relate stories of warring chiefs, battles, and conquest resulting in the emergence of the great ruling chiefs who controlled entire islands, rather than portions of islands. These ruling chiefs organized great public work projects which are still evident today. For example, 'Umi-A-Liloa constructed taro terraces, irrigation systems, and heiau throughout Hawai'i island, including the Pu'uhonua at Kealakekua. King Pi'ilani on the other hand was the only island king inspired to construct the King's Highway that passed through Waiohuli and Wailuku, Kula as it encircled the entire island of Maui.

The first builders of the famous Maui fishpond Ko'ie'ie were the legendary menehunes who built it overnight. Later, in the 1500's, king 'Umi-A-Liloa had the wall rebuilt. The Ko'ie'ie fishpond in Kihei was eventually renamed Kalepolepo either because of the kicking up of the dirt by all the people and/or the afternoon winds that blew the dust through the area.

Another popular mo'olelo (story) that touches Kihei and Kula through chant in this era has to do with a father/son connection whose names are Paka'a and Kua Paka'a.

Kua Paka'a received the gift of learning all the wind chants for the archipelago of Hawai'i nei. Below is the wind chant that describes the wind originating from the island of Hawai'i traveling through the southern coastline of Maui until it passes Honua'ula then moves mauka (upward) towards Wailuku, Kula and Waiohuli:

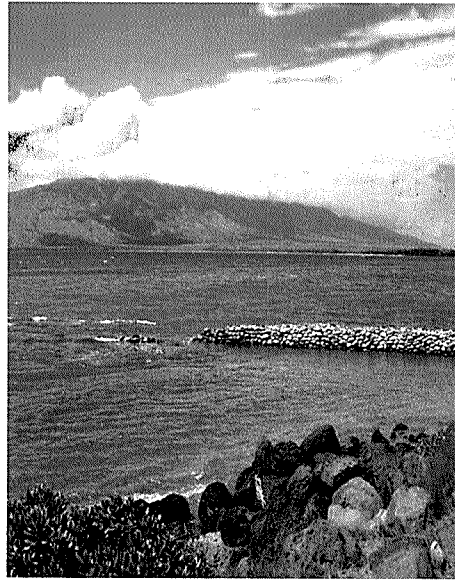


Figure 6: Picture of current day Ko'ie'ie Fish Pond

**Ka Mele Makani a Kua-Paka'a (Upcountry winds of Maui), (Fornander, 97-100).**

<p>Aia la, aia la, ke kau mai la ke ao makani, O Kapali ale ko Hilo makani, He Pakiele o Waiakea, He makani ko Hana he Ai-maunu, He Kaomi, he Kapae. He Ho'olua, he Lau'awa'awa, He Apiolopaowa, he Halemau'u, He Ku, he Kona, He Kohola-pehu ko Kipahulu, Kohala-lele iho no ilaila, Ai loli ko Kaupo, He Moa'e ko Kahikinui, He Papa ko Honua'ula,</p>	<p>There! There they are! The wind blown clouds are appearing Hilo's wind is Kapali ale Waiakea's is Pakiele Hana's wind is 'Ai-Maunu(bait eating) Kaomi, Kapae Ho'olua, Lau'awa'awa Apiolopaowa, Halemau'u Ku and Kona Kipahulu's wind is Kohola-pehu Kohala-lele blows there also 'Ai-loli wind belongs to Kaupo Kahikinui possesses Moa'e Honua'ula proudly hails the low blowing wind, Papa</p>
--	---

He Nā'ulu a'e i Kanaloa,

Hina ka hau i ka uka o Kula,

Ko laila makani no ia,

Ke noke ami la i ke pili,

Ulalena i Pi'iholo,

'Ūkiu ko Makawao,

Ka Ua Pu'ukoa i Kokomo,

Towards Kanaloa blows the showery  
sea breeze, Nā'ulu

Hau blows steadily in the Kula  
uplands.

This wind blows there

Persistently whirls the pili grass

Ulalena is at Pi'iholo

The 'Ūkiu wind belongs to Makawao

The Pu'ukoa rain is at Kokomo

Although the common people provided food, bark cloth, and household implements to the chiefs, Hawaiian society remained predominantly a subsistence agricultural economy. There is no evidence of a money system or commodity production. A system of barter in essential goods between fishermen, mountain dwellers, and taro cultivators existed within the framework of the extended family unit called 'ohana. In general, this exchange within the 'ohana functioned primarily to facilitate the sharing of what had been produced upon the 'ili (extensive land grant) that the 'ohana held and worked upon in common.

Within the 'ohana unit there was constant sharing and exchange of foods, utilitarian articles and services. It was not an organized barter system but a voluntary (though decidedly obligatory) giving. 'Ohana living inland raised taro, bananas, wauke (for tapa, or bark cloth making) and olona (for its fiber). The inlanders had need of gourds, coconuts and marine foods; they would take a gift to some 'ohana living near the shore and in return would receive fish or whatever was needed. When the fishermen needed poi or 'awa they took fish, squid or lobster upland to a household known to have taro, and would return with his kalo (taro) or pa'i'ai (hard poi, the steamed and pounded taro corm)... In other words, it was the 'ohana that constituted the community within which the economic life moved.

Cultivation of taro and fishing were the centerpieces of the material culture. The system of irrigation, fishing and aquaculture was highly developed and produced a surplus that sustained a relatively developed and unified social structure that was embraced throughout the whole archipelago. All the basic necessities came from plants. Even fishing relied on plants; the canoe was made from a hardwood tree; the net was woven out of olona or some other vine; spears were carved out of a hardwood tree; ropes were woven from the coconut husk or a vine; the sails were usually made of lauhala (pandanus leaves). Hawaiians

could not have survived without plants, and Hawaiians were expert planters and cultivators.

Sam Po was one of the major native consultants for the book "Sites of Maui" authored by Elspeth P. Sterling. Throughout the "Site of Maui", Kupuna Po shared ideas relating to Hawaiian mauka-makai use of the ahupua'a in Wailuku, Kula and Honua'ula of south east Maui. He said that the planting cycle was dependent upon the variations in rainfall according to elevation and seasons. He went on to say that planting in the uplands were done year round since there was rain daily. However, in the lowlands, planting was done when the rains came. Kupuna Po said that he had seen entire families with lauhala baskets carry lepo (dirt) from mauka (upland) to makai (lowland) one month before the rains came to put in the lava holes. Hawaiian watermelon, ipu ooloo, ipu nuhou-lani, pumpkin, and Poha or Ipu 'ala matured in about six months and were consumed while the families enjoyed the lowland plantings and fresh fishes from the sea.

## **Era 5: Chiefly rule of the Ahupua'a – 1600 to 1778**

In the fifth period, during the century preceding the opening of Hawai'i to European contact in 1778, the Hawaiian economy expanded to support a population between 400,000 and 800,000 people. The social system consisted of the 'ohana who lived and worked upon communally held portions of land called 'ili within the ahupua'a natural resource system. These families-- the building blocks of the Hawaiian social system--were ruled over by the stewards of the land, the chiefs along with their retainers and priests. The history books are filled with tales of battles among the chiefs from all islands.

In Honua'ula, high chief Kahekili gave permission to a chief named Ku-Keawe to run pigs in the upland. This chief abused his power and was killed with his body placed propped up facing the sea as an example to others who might consider abusing their powers.

Even during this period of chiefly rule, land in Hawai'i was still not privately owned. The chiefly class which provided stewardship over the land divided and re-divided control over the districts of the islands among themselves through war and succession. A single chief could control a major section of an island, a whole island or several islands depending upon his military power. Up until the time of Kamehameha I, however, no one chief was ever paramount over all the islands.

During the time of Captain Cook's first visit, King Kalani'opu'u and uncle of Kamehameha the Great ruled Hawai'i island and King Kahekili of the Valley Isle controlled Maui as well as Moloka'i, Lāna'i, Kaho'olawe, Kaua'i and Ni'ihau.

The chief divided his landholdings among lesser ranking chiefs who were called konohiki. The konohiki functioned as supervisors on behalf of the chief over the people that lived on the lands and cultivated them. The tenure of a konohiki was dependent upon his benefactor, the chief. Konohiki were often related to the chief and were allocated land in recognition of loyal or outstanding service to him. However, unlike elsewhere in Polynesia, the konohiki were rarely related to the maka'ainana or commoners on the land under his supervision. Thus, the konohiki represented the collective interest of the ali'i class over the maka'ainana as well as the individual interest of his patron chief.

The lands allocated to the konohiki were called ahupua'a. Ahupua'a boundaries coincided with the geographic features of a valley. They usually ran from the mountain to the ocean, were watered by a stream, and were bounded on both sides by mountain ridges. It afforded the 'ohana who lived in the ahupua'a access to the basic necessities of life-- marine foods from ocean reefs and streams, low lying wetlands for taro, fresh water, timber, and medicinal plants from the forest. The use rights of the konohiki included fishing rights over shoreline fishponds and reefs.

The konohiki supervised all productive communal labor within the ahupua'a month-to-month and season-to-season. He collected the annual tribute and determined if it was sufficient in relation to the productivity of the land. He regulated the use of land and ocean resources, administering the kānāwai (law) applying to the use of irrigated water as well as to fishing rights in the ocean. The konohiki was responsible for organizing communal labor for public works projects such as roads, fishponds, and irrigation systems.

The ahupua'a of the konohiki was further divided into strips of land called 'ili which were allocated to the maka'ainana (commoner Hawaiians). These land grants were given to specific extended family units of maka'ainana called 'ohana. The 'ili either extended continuously from the mountain to the ocean or was comprised of separate plots of land located in each of the distinct resource zones of the ahupua'a. In this way an 'ohana was provided access to all of the resources necessary for survival (Handy, Handy & Pukui, 49).

In Sterling's "Sites of Maui", he introduces the guardian shark Ka'ala-miki-hau of South Maui in this short chant: (p. 10)

'O Hi'u noho i Keanae

Hi'u resided in Keanae

Keli'i hue wa'a noho i Hana	Keli'i hue wa'a lived in Hana
Puhi noho i Kipahulu	Puhi was stationed at Kipahulu
Ka'ala noho i Honua'ula	Ka'ala-miki-hau guarded Honua'ula
Kamohoali'i ke ali'i nui a puni o Maui	King Kamohoali'i watched over all Maui

Included in the guardianship of Maui is the mele inoa (name) chant for Ka'ala-miki-hau who served the people of South Maui as their aumakua (ancestral god).

Eia ka 'ai	Here is the food
Eia ka i'a	Here is the fish
Eia ke kapa	Here is the kapa
Nou e Ka'ala-miki-hau	For you Ka'ala-miki-hau
Nana ia'u kau pulapula	Look upon me your devotee
I mahi'ai	That I can cultivate the ground
I lawai'a	That I may fish
Kuku kapa	And beat the kapa
A e ola ia'u, Kanui	Grant life to me, Kanui.

### **Kamehameha III (Kauikea'ōuli) & the Great Mahele**

Up until the rule of King Kamehameha III (Kauikea'ōuli) 1848, the Hawaiian people's fundamental conception of property and law was based on water rights rather than land use and possession. Actually there was no conception of ownership of water and land, but only the use of water and land.

These fundamental concepts made drastic changes by King Kamehameha III with the implementation of the Great Mahele (division of land) between the king and the ali'i (chiefs) and konohiki (headman of an ahupua'a) and the kuleana 'aina (owned land) to the hoa'aina (tenants) of the ahupua'a. The King came under pressure from foreigners who were used to owning land in fee simple title in their homelands, and he desired to free his lands from the burden of being considered public domain, and as such, subjected to the danger of confiscation in the event of the Hawaiian Islands were to be seized by a foreign power. He also wanted to enjoy complete control of his property.

## Wai and Waiwai

"Uwe ka lani, ola ka honua – When it rains, the earth lives." The popular 'ōlelo no'eau (Hawaiian saying) did not have major impact in the targeted area of our research but when it did rain, it flooded the lower areas of Kihei, Wailea, Honua'ula and Makena leaving many wetland areas still existing today. Kupuna Mary Cravalho has had many life stories living in the lowlands of Kihei next to the fishponds of Kalepolepo. She tells of an incident when it rained throughout the night while she and her husband quietly slept. She turned to her husband and said, " 'I smell mountain ferns.' then went back to sleep." When they awoke the next day, they found the water up to the front door with all the Kula vegetables surrounding their water filled yard decorated with mountain ferns.

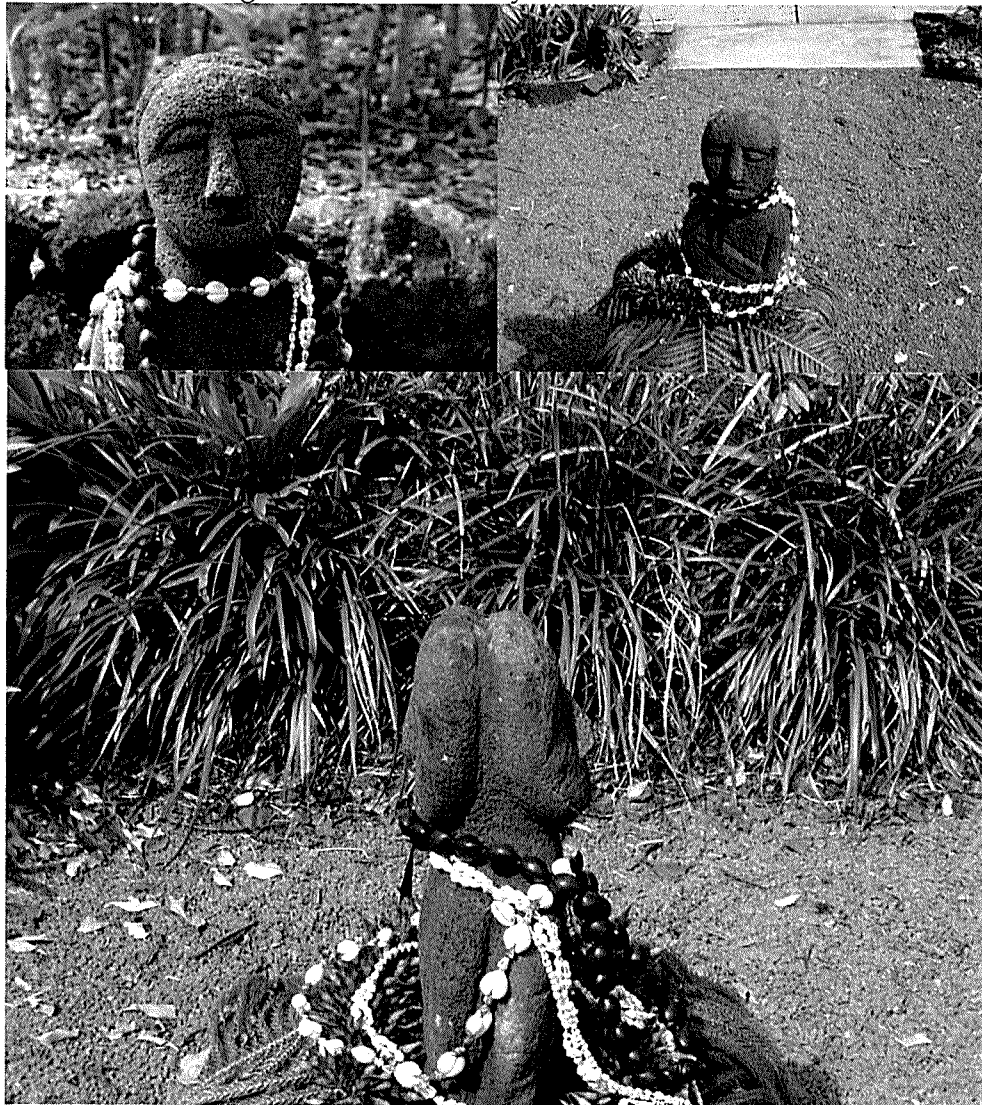


Figure 7: Lono Ki'i (Lono image) Water Goddess

Wai (water) duplicates to waiwai (wealth). The thinking behind this is that when a person has a lot of water, they are truly wealthy. In real life, we are continuously brought to the realization that water is the key element in developing new communities while sustaining the old. In 1869, Samuel Alexander and Henry Baldwin formed (A & B) Alexander and Baldwin to grow sugar and East Maui Irrigation Company (EMI) to irrigate the crops. The partners in 1876 first formed the Hāmākua Ditch Company and completed the construction in 1878. During the ensuing decade Alexander and Baldwin's plantation was incorporated as the Pā'ia Plantation and included Hāli'imaile Plantation (Grove Ranch), East Maui Plantation, and Seaside Farm. The two partners gained control of Hawaiian Commercial and Sugar Company (HC&S) in October 1898 and immediately started building the Lowrie Ditch also known as the Lowrie Canal which started in the rain forest of Kailua in the Makawao District. The ditches two main sources were a reservoir at Pāpa'a'ea and the Kailua Stream.

Maui Agricultural Company was formed in 1921 by the merging of seven small East Maui plantations: Ha'ikū Sugar Company, Pā'ia Plantation, Kailua Plantation, Kula Plantation, Makawao Plantation, Pūlehu Plantation, and Kālialinui Plantation. HC&S, anchored in Pu'unēnē, and Maui Agricultural Company based in Pā'ia merged in 1948, at which time Alexander & Baldwin owned about 35 percent of the stock of each of the companies. This merger consolidated all of A&B's sugar plantations on Maui under HC&S. In 1962, HC&S merged with and became a division of Alexander & Baldwin, and EMI became a subsidiary of A&B.

It is said that EMI is the largest water company in the United States perhaps in the world. Luckily for Maui county residents, EMI supplies between 850 million and 1 billion gallons of water per year for domestic purposes.

Our research area did not entertain the two commercial crops, sugar cane and pineapple but it provided open grazing territory for an entire new industry called cattle ranching. It covered all the open arid lands from the tip of Makawao into Kula, Ulupalakua, Kanaio, Kahikinui, Nu'u, Kaupo and Hana. The industry brought a new lifestyle to the island people but in some areas it devastated the lands because the horses and cattle ate the existing vegetation all the way to the ground.



## The Hawaiian Paniolo

Captain Cook's arrival as well as Captain Vancouver with the animals that they brought changed the complexity of the Hawaiian Islands and how the land would be used.



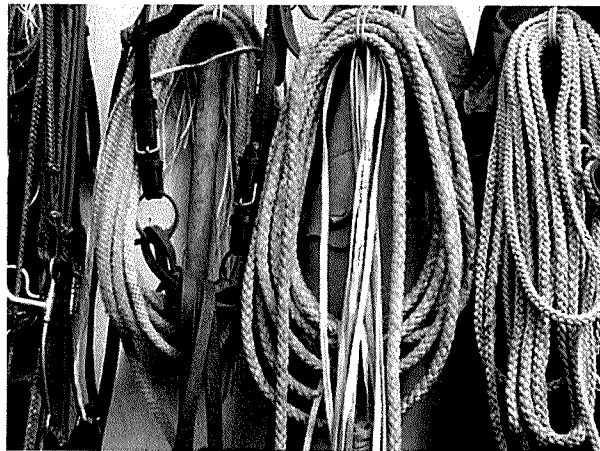
**Figure 8: Picture of cattle skull mounted on tree.**

(cattle) he had left on the island. Kamehameha the Great put a ten year kapu (taboo) on the pipi to let them breed and increase. As we have found out, thousands of cattle later swarmed over the valleys, slopes and dale in this region bearing testimony to the land's rich natural pasturage. The pleasant cool climate and rich pastureland suited the pipi (cows) very well to the point that it became a very lucrative business for those who were interested in raising cattle.

The cattle increased rapidly growing wild and causing havoc to the islanders tearing up their banana and taro patches, eating the leaves and branches of the valuable koa trees, running and ransacking villages, and overall causing major damage. Many visitors to the islands were attacked and many hurt.

One notorious instance concerned the world renowned botanist, David Douglas, for whom the Douglas fir was named. The wild cattle were so hazardous to approach that the hunters turned to digging deep pits to trap the beasts. David Douglas' mutilated body was found in such a pit in the Waimea area of Hawai'i in 1834.

Kamehameha the Great was given two pua'a pepeiao hao (pigs with iron ears- cows) by Captain George Vancouver in 1793 at Kawaihae, Hawai'i. Captain Vancouver's first visit had been with Captain Cook in 1778, he returned in 1793 and again in 1794 where he had decided that Waimea, Hawai'i was an excellent area for the propagation of the pipi



**Figure 9: Picture of hand-braided ropes**

Although there were lio (horses) in the islands during that time, no one here had any idea on how to herd cattle. Captain Cleveland in 1803 brought several lio over and let them loose in the islands. The Spanish-Mexican vaqueros were imported from California for the specific purpose of working with the Hawaiians and teaching them how to handle the great herds of wild cattle and horses that roamed the 'āina (land) of Hawai'i nei.



**Figure 10: Picture of a cow standing in Kiawe forest.**

From this humble beginnings came the paniolo (Hawaiian cowboy) learning the art of horsemanship since a successful cattle person needed to catch, brake-in and train his horse and move on to the task of roping a cow, branding, herding and even building enclosed stone wall and barbed wire fences to keep the pipi contained.

On August 22, 1908, the paniolos took their cowboyship on the road to Cheyenne, Wyoming entering the National Frontier Day events rodeo competition. There, Ikua Purdy after roping his steer in fifty-six seconds flat captured the World's Championship steer-roping contest. What made Paniolo Purdy's feat particularly outstanding was the fact that he performed it aboard an unfamiliar horse; the mount had been supplied by the mainland's rodeo association. Thus, Ulupalakua, Maui became well-known with the Purdy name hanging on the wall till today.

Archie Ka'aua, too, scintillated for Hawai'i by coming in second in time to Purdy, and Jack Low placed sixth. All this competition had been against the best in the United States and it brought more than a little repute to Hawai'i. Before the Championships, people on the mainland hadn't even known there were any cowboys or cattle herds in the isle of the sea or even the existence and location of Hawai'i. It was a great feat for the island paniolo as they returned with their trophies and justifiable pride.

This mele (song) found in Nā Mele o Hawai'i Nei entitled "Hawaiian Rough Riders" honors Ikua Purdy & Archie Ka'aua along with Jack Low. The term "Rough Riders" referred to President Theodore Roosevelt's cavalry regiment in the Spanish-American War.

## Rough Riders

Kilakila nā rough riders  
Me ka ua Kīpu'upu'u  
Me ka nani a'o Pu'u-o-ka-lani  
Me ka hae o ka lanakila

### Hui

Hu'i e, hu'i 'eha  
Hu'i konikoni i ka pu'uwai  
Hu'i e, hu'i 'eha  
Hu'i konikoni i ka pu'uwai

'Akahi ho'i au a 'ike maka  
Na rough riders hele 'ekahi  
Inu ana i ka wai aniani  
E ma'ū i ka pu'u ke moni

Hanohano wale nā cowboy,  
He maku'u noho i ka lio,  
Hālena pono 'oe i ke kaula 'ili  
I ka lawe o ka pipi 'āhiu

Kaulana Ikuwā me Ka'aua  
Nā 'eu'eu kīpuka 'ili  
Eia mai nā paniolo pipi  
Me ka nani o ku'u home

Magnificent rough riders  
and Waimea's cold rain  
with its beauty of Pu'u-o-ka-lani  
and the flag of victory

### Chorus

Aches, aches and pains  
Aches throbbing the heart  
Aches, aches and pains  
Aches throbbing the heart

Never have I seen  
Such champion rough riders  
Drinking sparkling waters  
To wet the throat when swallowed

Wonderful cowboys,  
Pommel saddle on the horses  
Pulling taut the lasso  
Bringing in the wild cattle

Famous are Ikuwā and Ka'aua  
Spirited lassoers  
Here come the cowboys  
The glory of my home.

(Elbert and Mahoe, 42-43)

The victory and pride that these paniolo brought back to the islands still linger among the old as well as the new. After returning, the Purdy family moved to Ulupalakua Ranch on Maui where he brought the paniolo skills, experience and excitement and continued the legacy he established as the best paniolo in the whole world.

*"Evidence of cattle on Maui is noted as far back as 1806 when Amasa Delano, in his Narrative of Voyages and Travels (Boston, 1817) told of his sailing to Lahaina. He reported: 'They had recently brought to this island, one of the bulls that Captain Vancouver landed at Owhyee (Hawaii). He had made very great destruction amongst their sugar canes and gardens, breaking into them and their cane patches and tearing them to pieces with his horns and digging them up with his feet. He would run after and frighten the natives and appeared to have disposition to do all the mischief he could, so much so that he was a pretty unwelcome guest among them.' "(Brennan, 97)*

There are no larger or more famous ranches on Maui than Haleakalā Ranch and Ulupalakua Ranch. Many tales have been told about the trails and pastureland of these territories. Carved in its legacy is this popular song composed by John Pi'ilani Watkins that is sung and danced regularly by the kama'āina (old timers) and mālihini (newcomers) describing Ulupalakua, Maui's home of the Paniolo.

### Ulupalakua

Kaulana mai nei, a o Ulupalakua  
He iniki niki ahiahi,  
Ka home a o Paniolo

Famous is Ulupalakua  
With its chilling evening breeze  
The home of the Paniolo

He wehi e ku'u lei, a o Ulupalakua  
Onaona me ka awapuhi  
He beauty ma'oli nō

Adorned with my lei @ Ulupalakua  
embraced with the fragrance of ginger  
with much beauty

Hā'ina mai kapuana a o Ulupalakua  
He iniki niki ahiahi,  
Ka home a o Paniolo

Thus ends my story  
with its chilling evening breeze  
The home of the Paniolo

(John Pi'ilani Watkins)

*Maui's Haleakalā Ranch, the Ulupalakua Ranch, and several others have, over the years, been great spawning ground for top paniolos who ride their ranges the way the original ones rode theirs on the Big Isle. Like the Lindsey and Purdy men who*

*have ridden the plains and mountains of Hawaii for well over a century, the Maui paniolos, too, have worked their huge acreages with the selfsame dedication, and have absorbed the Polynesian environment into their blood streams. (Brennan, 98)*

*Over on the small island of Lanai, too, is a cattle operation; nothing, of course, comparable with that found on either the Big Isle or on Maui. Today Lanai is owned by the Dole Pineapple Corporation, but before the days of pineapple take-over, the whole island amounted to one single cattle ranch, operated by lone white man and his Hawaiian cowboys. (Brennan, 100)*

Hawaii's paniolo of the past created and molded a routine that became a one-of-a-kind lifestyle. Long and hard days and cold and wet nights with only pipi kaula (Hawaiian dried salt meat) to eat were the activities of a dedicated



Figure 11: Picture of cattle skull on rocks

paniolo. As the torch-driven sun nestled down along the western sky and the mahealani (full moon) began its rise to the pinnacle of Haleakalā, the evening makani (breeze) blew in the soothing sounds of the paniolo's ki ho'alu (Hawaiian style) guitar playing calming him and his pipi down for the night.

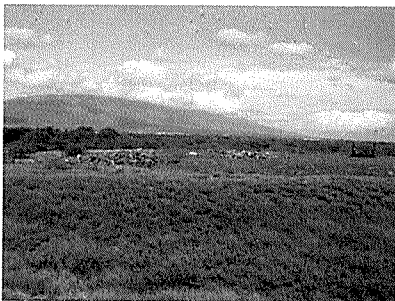
## Quiet Ka-Ono-Ulu Ranch

While the bigger ranches of Haleakalā and Ulupalakua were stealing the thunder, the Ka-ono-ulu Ranch quietly carried on raising their cattle on their ahupua'a stretching from upper Kula down to the popular ocean-side of Kalepolepo in Kihei. After years of raising cattle, the Rice family, owners of the cattle ranch, diversified into pig farming down in Kihei at the Maui Lu Hotel area. Also, farming became another area of diversification with a lavender farm, a hydroponics lettuce farm and a section filled with crops such as corn, strawberries, zucchinis and onions. Our informant and CEO of the ranch, Henry F. Rice, spoke of the lifestyle as he grew up on the ranch riding on his horse from

Kula all the way to Kalepolepo Fish Pond. While riding up and down, he recognized old stone walls, holding pens for their animals and old camp sites. Research from other sources such as the Archaeology of Kula, Maui along with the Archaeological Inventory Survey of Waiohuli and Wailuku/Kula point out other findings such as ahu(s) (boundary markers or temporary worshipping sites) and cave dwellings. That would be the same or similar description of the area of our study since Ulupalakua Ranch stretched out from Kula all the way down to the ocean and the ahupua'a was deep in cattle ranching like Ka-ono-ulu Ranch.

## Use of the 'Āina

Consultant Hamby Kahawai described her father to have had many occupations but one term new to our ears was that he was a logger. Upon questioning her about what her father logged anticipating that it would be koa (acacia) or ili'ahi (sandalwood), to our surprise she mentioned kiawe (algaroba). Why not I ask myself? Waiohuli and Wailuku/Kula have been literally overrun by the kiawe forest replacing the Hawaiian forest trees such as the koa, sandalwood, kukui, Hala, Wiliwili, 'ākia, 'āla'a and many others.



**Figure 12: Picture of surrounding area around present day Maui Research and Technology Park.**

to feed their animals. During times of famine, the locals have also eaten the seeds, a legume which is sweet to the taste.

The kiawe, a legume, was imported from Peru in 1828 to Hawai'i by missionaries who first planted it in downtown Honolulu next to the Catholic Church. The conditions in Hawai'i are so attractive to this tree that it presently grows on every island especially in hot and dry areas of the islands like our designated area of study.

Mr. John Akina logged these trees to sell to ranchers for poles to build their barbed wire fences. The wood was logged to make charcoal. I have overheard locals say they would never barbeque their food on any other charcoal except kiawe. Youngsters would spend after school and summer time hours to collect the seeds which were sold to pig farmers and others who cooked the seed



**Figure 13: Picture of Kiawe**

Above the area where the hospital will be built all the way up to Kula, Ulupalakua and Kanaio, the kiawe grows so profusely on these lands that one could call the area the kiawe forest.

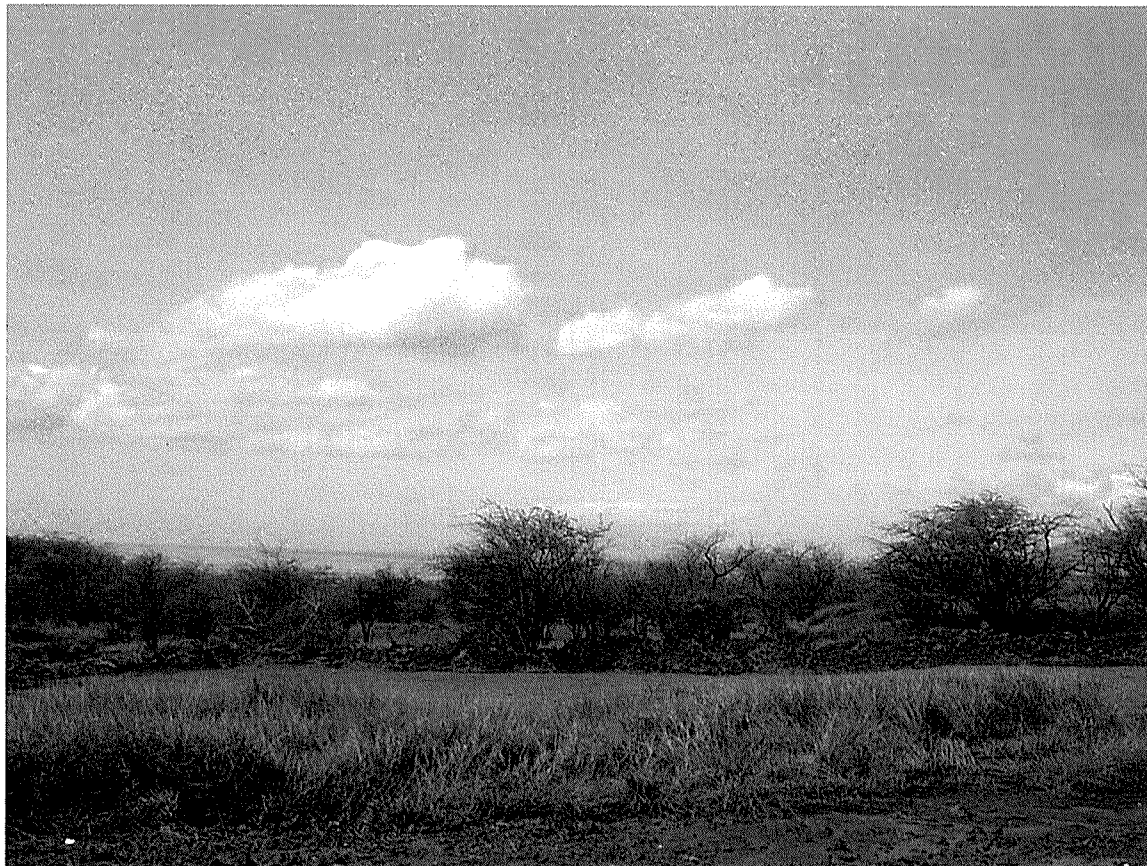


Figure 14: Land area around proposed Malulani Hospital site

## Planting Brings Makani, Ua, Ānuenue



Figure 15: Picture Ua and Ānuenue

In ancient times, kupuna said, "Ke kanu nei au, aia ia 'oe ka ulu meaning simply, I plant and the growth is yours". This saying by our wise ancestors point out that they knew the effects of planting upon the makani (wind), ua (rain), and the blessings of the ānuenue (rainbow).

In Kamakau's "Ruling Chiefs of Hawai'i", he tells of the of humble beginning of Maui's famous and legendary chief Kiha-a-Pi'ilani and wife who lived on the charity of others in the boundaries of Honua'ula with the papa

winds and Kula winds at a place named Ke'eke'e. Later, they depart from Honua'ula with the inviting kehau winds of Kula and met the 'Ūkiukiu winds of Makawao along with the Ualena winds of Pi'iholo. During the time of their visit the area was addressing a serious famine so they resorted to living on the laulele, pualele, popolo and other weeds.

One night, Kiha-a-Pi'ilani went to clear a patch of ferns to plant sweet potatoes from slips he had collected from Hāmākuapoko and Hāli'imaile. As he traveled through these areas, the sunshine beat down on his back and intense heat reflected from the 'ulei vines. Meanwhile, one kupuna (elder) remarked to another, "There must be a chief near by for this is the first time that a rainbow is spread before the trees" (Kamakau, 24). Even today, we are regularly blessed by the rainbow of Kiha-a-Pi'ilani spreading over the skyline of Makawao pouring bucketfuls of rain from ka lani (the heaven).

The kupuna had discovered the chief's secret identity. He now felt prompted to rush back to Kula so he could plant his huli (sweet potato shoots). As soon as he had completed the planting, a rain shower fell, blessing the land that was once in draught. The lines in Hawaiian below speak of the people of Kula being a highly unusual people.

He 'āina o Kula ua kaulana	Kula is a land that is famous
mai nā ali'i Kahiko	from the days of the ancient chiefs
he 'āina i piha ka e'epa	a land full of peculiarities
kau na nahi i ka pikopiko i ka he'e	for the scaling of the suckers of the octopus.

Sterling p. 243

## 'Āina Momona

The people of old referred to ahupua'a with fishponds as fat lands known as 'āina momona. The idea of calling land fat alluded to the ahupua'a being rich with fish that could conveniently serve the ruling chief and his people with necessary protein from his personal ancient ice box.

This idea can continue into the fact that Hawai'i as a whole is truly paradise and Maui can accept the adage that it is "No ka 'oi" meaning the best, as proclaimed by people of old. The round-a-bout way of describing our report on Wailuku, Kula and Waiohuli is a device to showcase the entire island of Maui providing a glimpse of our precious island while leading to this following summary which is based on the principles taught to me by my elders. The one



principle that stands out when I think of the land we are reporting on is that it has the foundation of beauty, grace and charm and the time of its recognition will surface as time goes on. It already hosts many quality organizations. Maui has always attracted newcomers from all over the world and the different ahupua'a has had its strong attractive points. It is now time for the quiet land of Waiohuli and Wailuku, Kula to take its place in Maui's great legacy by hosting the next heiau of healing (hale ola – house of healing) with the projected new Malulani Hospital.

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## Appendix A: Hawaiian Name Places for Hospital Ahupua'a

<b>Makai-(Ocean)</b>	<b>From Kihei to Keawekapu</b>
Kihei-	Shawl
Ka-ipu-kai-hina	Hina's meat dish
Kalepolepo	The dirt
Wai-māha'īha'ī	Broken water
Ka-lua-i-hākōkō	The pit for wrestling; name of a chief
'Ili'ili-o-holo	Traveling pebbles
Keawakapu	Sacred harbor
<b>Mawaena-</b>	<b>(In-between)</b>
Pulehunui	Large Pulehu;broil
Wai-a-koa	Water used by warrior
Waiakoa Gulch	
Waiakoa Homesteads	
Kū-lani-hāko'i Gulch	Agitated heaven that stands
Ka-'ono-'ulu	Desire for breadfruit
Waipu'ilani Gulch	Watersprout
Pu'u-o-Kali	Hill of waiting
Wai-o-huli	Water of change
Kē-ō-kea	The white sand
Kama'ole	Childless
<b>Mauka-</b>	<b>Uplands</b>
Pu'u Kahala	The pandanus hill
'Alae 3 & 4	
'Alae	Mudhen
Ka-'ono-'ulu Gulch	The breadfruit Gulch
Kaipoiioi Gulch	
Kōheo	To show off or to twirl
Wai-o-huli Gulch	Water of change
Kē-ō-kea	The white sand
Polipoli	Rounded
Kolekole	Raw

# Native and Polynesian plants for Maui County Information gathered from the Maui County Department of Water Supply

Type: F=Fern Tr=Tree G=Grass V=Vine Gr=Ground Cover Sh=Shrub P=Palm S=Sedge

Type	Scientific Name	Common Name	Height	Spread	Elevation	Water Req.
F	<i>Psilotum nudum</i>	Moa, moa kula	1'	1'	Sea to 3,000'	Dry to Wet
F	<i>Sadleria cyatheoides</i>	'ama'u, ama'uma'u				
G	<i>Colubrina asiatica</i>	'anapanapa	3'	10'	Sea to 1,000'	Dry to Wet
G	<i>Eragrostis monticola</i>	Kalamalo	1'	2'	Sea to 3,000'	Dry to Medium
G	<i>Eragrostis variabilis</i>	'emo-loa	1'	2'	Sea to 3,000'	Dry to Medium
G	<i>Fimbristylis cymosa</i> ssp. <i>Spathacea</i>	Mau'uaki'aki fimbriatylis	.5'	1'	Sea to 1,000'	Dry to Medium
G	<i>Boerhavia repens</i>	Alena	.5'	4'	Sea to 1,000'	Dry to Medium
Gr	<i>Chamaesyce celastroides</i> var. <i>laehiensis</i>	'akoko	2'	3'	Sea to 1,000'	Dry to Medium
Gr	<i>Cressa truxillensis</i>	Cressa	.5'	1'	Sea to 1,000'	Dry to Medium
Gr	<i>Heliotropium anomalum</i> var. <i>argenteum</i>	Hinahina ku kahakai	1'	2'	Sea to 1,000'	Dry to Medium
Gr	<i>Ipomoea tuboides</i>	Hawaiian moon flower, uala	1'	10'	Sea to 3,000'	Dry to Medium
Gr	<i>Jacquemontia ovalifolia</i> ssp. <i>Sandwicensis</i>	Pa'u o hi'iaka	.5'	6'	Sea to 1,000'	Dry to Medium
Gr	<i>Lipochaeta integrifolia</i>	Nehe	1'	5'	Sea to 1,000'	Dry to Medium
Gr	<i>Peperomia leptostachya</i>	'ala'ala-wai-nui	1'	1'	Sea to 3,000'	Dry to Medium
Gr	<i>Plumbago zeylanica</i>	'ilie'e	1'			
Gr	<i>Sesuvium portulacastrum</i>	'akulikuli, sea-purslane	.5'	3'	Sea to 1,000'	Dry to Wet
Gr	<i>Sida fallax</i>	'ilima	.5'	3'	Sea to 1,000'	Dry to Medium
Gr	<i>Tephrosia purpurea</i> var. <i>purpurea</i>	'auhuhu	2'	2'	Sea to 1,000'	Dry to Medium
Gr-Sh	<i>Hibiscus calyphyllus</i>	Ma'o hau hele, Rock's hibiscus	3'	2'	Sea to 3,000'	Dry to Medium
Gr-Sh	<i>Lipochaeta rockii</i>	Nehe	2'	2'	Sea to 3,000'	Dry to Medium

Type	Scientific Name	Common Name	Height	Spread	Elevation	Water Req.
Gr-Sh	<i>Lipochaeta succulenta</i>	Nehe	2'	5'	Sea to 1,000'	Dry to Wet
Gr-Sh	<i>Lycium sandwicense</i>	'ohelo-kai, 'ae'ae	2'	2'	Sea to 1,000'	Dry to Medium
P	<i>Cocos nucifera</i>	Coconut, niu	100'	30'	Sea to 1,000'	Dry to Wet
P	<i>Pritchardia arecina</i>	Lo'ulu, hawane	40'	10'	1,000 to 3,000'	Dry to Wet
P	<i>Pritchardia forbesiana</i>	Lo'ulu	15'			
P	<i>Pritchardia hillebrandii</i>	Lo'ulu, fan palm	25'	15'	Sea to 1,000'	Dry to Wet
S	<i>Mariscus javanicus</i>	March cypress, 'ahu'awa	.5'	.5'	Sea to 1,000'	Dry to Medium
Sh	<i>Argemone glauca</i> var. <i>decipiens</i>	Pua kala	3'	2'	Sea to 3,000'	Dry to Medium
Sh	<i>Bidens mauiensis</i>	Ko'oko'olau	1'	3'	Sea to 1,000'	Dry to Medium
Sh	<i>Bidens menziesii</i> ssp. <i>Menziesii</i>	Ko'oko'olau	1'	3'		
Sh	<i>Bidens micrantha</i> ssp. <i>Micrantha</i>	Ko'oko'olau	1'	3'		
Sh	<i>Chenopodium oahuense</i>	'aheahea, 'aweoweo	6'		Sea to higher	Dry to Medium
Sh	<i>Dianella sandwicensis</i>	'uki	2'	2'	1,000' to higher	Dry to Medium
Sh	<i>Gossypium tomentosum</i>	Mao, Hawaiian cotton	5'	8'	Sea to 1,000'	Dry to Medium
Sh	<i>Hedyotis</i> spp.	Au, pilo	3'	2'	1,000' to 3,000'	Dry to Wet
Sh	<i>Lipochaeta lavarum</i>	Nehe	3'	3'	Sea to 3,000'	Dry to Medium
Sh	<i>Osteomeles anthyllidifolia</i>	'ulei, eluehe	4'	6'	Sea to 3,000'	Dry to Medium
Sh	<i>Scaevola sericea</i>	Naupaka, naupaka-kahakai	6'	8'	Sea to 1,000'	Dry to Medium
Sh	<i>Senna gaudichaudii</i>	Kolomana	5'	5'	Sea to 3,000'	Dry to Medium
Sh	<i>Solanum nelsonii</i>	'akia, beach solanum	3'	3'	Sea to 1,000'	Dry to Medium
Sh	<i>Styphelia tamelameiae</i>	Pukiawe	6'	6'	1,000' to higher	Dry to Medium
Sh	<i>Vitex rotundifolia</i>	Pohinahina	3'	4'	Sea to 1,000'	Dry to Medium
Sh	<i>Wikstroemia uva-ursi kauaiensis kauaiensis</i>	'akia, Molokai osmanthus				
Sh-Tr	<i>Broussonetia papyrifera</i>	Wauke, paper mulberry	8'	6'	Sea to 1,000'	Dry to Medium
Sh-Tr	<i>Myoporium sandwicense</i>	Naio, false sandalwood	10'	10'	Sea to higher	Dry to Medium
Sh-Tr	<i>Nototrichium sandwicense</i>	Kulu'i	8'	8'	Sea to 3,000'	Dry to Medium
Sh-Tr	<i>Dodonaea viscosa</i>	'a'ali'i	6'	8'	Sea to higher	Dry to Medium
Tr	<i>Acacia koa</i>	Koa	50'-100'	40'-80'	1,500' to 4,000'	Dry to Medium

Type	Scientific Name	Common Name	Height	Spread	Elevation	Water Req.
Tr	<i>Aleurites moluccana</i>	Candlenut, kukui	50'	50'	Sea to 3,000'	Medium to Wet
Tr	<i>Calophyllum inophyllum</i>	Kamani, Alexandrian laurel	60'	40'	Sea to 3,000'	Medium to Wet
Tr	<i>Canthium odoratum</i>	Alahe'e, 'ohe'e, walahe'e	12'	8'	Sea to 3,000'	Dry to Medium
Tr	<i>Cordia subcordata</i>	Kou	30'	25'	Sea to 1,000'	Dry to Wet
Tr	<i>Diospyros sandwicensis</i>	Lama	12'	15'	Sea to 3,000'	Dry to Medium
Tr	<i>Erythrina sandwicensis</i>	Wiliwili	20'	20'	Sea to 1,000'	Dry
Tr	<i>Metrosideros polymorpha</i> var. <i>macrophylla</i>	Ohia lehua	25'	25'	Sea to 1,000'	Dry to Wet
Tr	<i>Morinda citrifolia</i>	Indian mulberry, noni	20'	15'	Sea to 1,000'	Dry to Wet
Tr	<i>Nesoluma polynesicum</i>	Keahi	15'	15'	Sea to 3,000'	Dry
Tr	<i>Nestegis sandwicensis</i>	Olopua	15'	15'	1,000' to 3,000'	Dry to Medium
Tr	<i>Pandanus tectorius</i>	Hala, puhala (halelist)	35'	25'	Sea to 1,000'	Dry to Wet
Tr	<i>Pleomele auwahiensis</i>	Halapepe	20'			
Tr	<i>Rauvolfia sandwicensis</i>	Hao	20'	15'	Sea to 3,000'	Dry to Medium
Tr	<i>Reynoldsia sandwicensis</i>	'ohe makai	20'	20'	1,000' to 3,000'	Dry
Tr	<i>Santalum ellipticum</i>	Coastal sandalwood, 'ili-ahi	8'	8'	Sea to 3,000'	Dry to Medium
Tr	<i>Sophora chrysohyllia</i>	Mamane	15'	15'	1,000' to 3,000'	Medium
Tr	<i>Thespesia populnea</i>	Milo	30'	30'	Sea to 3,000'	Dry to Wet
V	<i>Alyxia oliviformis</i>	Maile	Vine		Sea to 6,000'	Medium to Wet

Agreement to Participate

Ala Sandow A. AKIWA, understand that Kimokeo Kapahulehua and Keli'i Tau'a, independent investigators contracted by WCPT/GW Land Associates LLC will be conducting oral history interviews with individuals (kupuna/makua) knowledgeable about the lands of Honua'ula Ahupua'a, Maui. The oral history interviews are being conducted in order to collect information on possible pre-historic and or historical cultural resources associated with these lands, as well as traditional cultural practices.

I understand I will be provided the opportunity to review my interview to ensure that it accurately depicts what I meant to say about any of these lands. I also understand that if I don't return the revised transcripts after two weeks from the date of receipt, my signature below will indicate my release of information for the CIS/A report. I also understand that I will still have the opportunity to make revisions during the report review process.

Please check the bottom:

I am willing to participate

I am willing to participate under certain conditions.

**Consultant:**

Date: \_\_\_\_\_

Name Mrs. Sandra Akina

**Investigators:**

Date \_\_\_\_\_

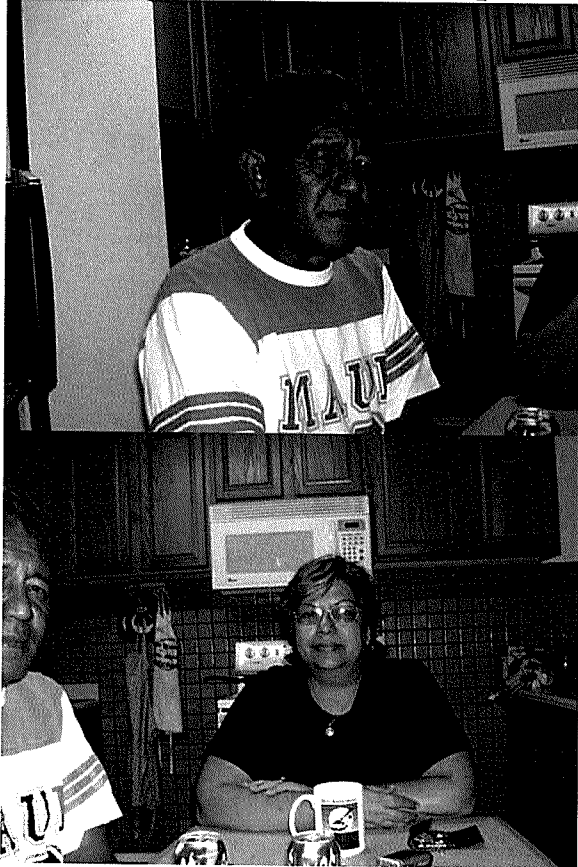
Name [Signature]

MAHALO NUI LOA.



## **Interview: Douglas Wayne “Butch” Akina**

**By Keli’i Tau’ā/ Kimokeo Kapahulehua**



**KT- Keli’i Tau’ā**

**C- Consultant**

**W- Wife of consultant (Mrs. Sandy Akina)**

KT- So, mahalo for allowing me to come talk story, your full name.

C- Douglas Wayne Akina.

KT- No more Hawaiian name?

C- No more, Butch. My nickname Butch, everybody know me like that.

KT- Yeah, and when were you Grand Marshall? What was that? Kamehameha Day Parade?

C- No, Kihei.

KT- For what event?

C- For Kihei Community.

KT- Community, wow. So, Butch how old are you now?

C- Sixty three. Just made sixty three.

KT- And we’re feeling the pains yeah of sixty three.

C- Yeah.

KT- But congratulations I heard you got some wonderful contracts, your business is expanding.

C- Yeah.

KT- More headaches but of course.

C- More headaches and the people not like, the workers not like they used to be. Today everybody is..

KT- Not committed.

C- No, they not committed.

KT- Yeah, money first and even then sometimes they don't show up.

C- The more money you pay, same thing. Doesn't matter it seems like only people want to work for money, not for the enjoyment of the job.

KT- The joy of working.

C- Joy of working is changing, the world is changing.

KT- Yup. Um, I don't know if your wife showed you the article I wrote about your father. I delivered, you remember when I used to come visit you guys? Um, but he, as you know was born on Kahoolawe.

C- My grandfather was foreman over there.

KT- On Kahoolawe?

C- Yeah, that's why they was there.

KT- Foreman for what?

C- The ranch.

KT- Ah, so how much do you remember of that?

C- I wasn't born there.

KT- I know but dad or mom them.

C- Well, my dad used to tell me.

KT- Yeah, what did he tell you?

C- How my grandfather was outlaw.

KT- Outlaw?

C- He was a smart little pake.

KT- So when you speak of Chinatown, which Chinatown?

C- In Kula.

KT- Wow, all the way up there! How they got em up there?

C- The Chinese like the opium so we used to take 'em up there for the Chinese. Us boys call

that was the reason.

KT- Yeah, um how did they get 'em up there though?

C- Kaluhi, he bring 'em up and he get good horses.

KT- Ok, rode horses all the way up.

C- Yeah, and then the cop trying to catch 'em but his horses faster than the cop!

(laughter)

KT- So the cops.

C- That's what my dad told me, I'm just repeating.

KT- So the cops um, were riding on...just like cops and robbers on horses.

C- Yeah and then he jump on his canoe, they cannot catch him. He was a gambler too.

KT- So you think your father picked up some characteristics from tutu man?

C- Oh yeah, you always get that little lean.

KT- How many in your father's family?

C- There was only three brothers that I know.

KT- And you were the youngest?

C- No, his side, our side.

KT- So was John, your father's name was Alex.

C- Alex and Frank.

KT- Frank yeah, and then your father's children was. Where were you in the....

C- I was the last.

KT- You're the last.

C- I just lost my last brother.

KT- How old was he?

C- Sixty seven. All my brother's died, I'm the only one left. I still got four sisters left.

KT- So, is that to say the females....

C- Now, now all the females going like overrun me I have no chance.

KT- But dad left the business over to you.

C- I bought that school bus business over there. The tourist one I made. I went build that one up. I had to fight Robert's, Grayline. Took me six years about three hundred thousand dollars to get the license.

KT- But now you're the biggest.

C- No, in Maui maybe. For one small, in the price like me, them all around. But in Maui.....

KT- You got the most people.

C- Well...up and down. But my class is the better class. You know I cater to people; I don't herd them like cattles.

KT- Ok.

C- You know, then school buses. We was thinking about the school buses. That's why I came home for to run the school bus. Then Robert's went under beat us way the hell down to nothing just to throw us out to their control. Then Kamehameha School called if want to go back in and get into school bus they want me to run this school bus system. So I tried it, I did and then Robert's came in and under bid me. Well, they lasted one year and Kamehameha School threw them out because their service was terrible. They just want to cut you down and boss all the small guys around. That's how I started school bus again. State they can have 'em and sell 'em. They all bunch of hypocrites.

KT- You're the one working with them so you know.

C- Oh yeah like before they, you only allowed to own fifty percent in one island. When Robert's took over they was ninety percent! How the hell that happened. Right? How that happened? Politics all that bullshit. Paying, paying, paying. And then now it's coming to the point where Robert's under bid they losing money so bad. So now they going get the State. I know they going get 'em. Now the State going suffer. Instead they leave how things was, you know, everybody takes their districts and do your thing. But you know money talks bullshit walks right.

KT- So, you said you came back. Where were you before?

C- California. I was working for this company. I was the foreman up there.

KT- Doing what?

C- Spices. Making black pepper, making spices for Kentucky Fried Chicken and right, I busted lot of records into making spices.

KT- So, you already had your family up there? Sandy and....

C- No, this is my second wife, Sandy. I had another wife up there.

KT- So what made you go up there? Work?

C- Well, there was no job when I graduated in sixty-two.

KT- From where?

C- Hawaii.

KT- What school?

C- Um, Saint Anthony. I went to a private school. Then I had a job actually after I graduated I went to the post office in Honolulu into maintenance. Then I waited, waited about two weeks, nothing happened. I had my sister and brother up the mainland, oh come up. So I sold my car, bought a ticket, just then here comes the government, "you got the job." I look at the ticket and I look at that going to the mainland I said, "ah hell I'm young the hell with it. I'm going." Take the chance. That's how I went up the mainland. I wasn't planning on the mainland, I see how different nationality operated you know. After I saw that they ain't no better than me because I didn't know any better. That's how I started.

KT- For how many years?

C- I stayed up there about.... Sixty three I left here I came back 1970. But I learned plenty you know.

KT- What State were you in?

C- California, Anaheim. It was nice those days up there but not anymore.

KT- So, coming back to Hawaii you can remember your childhood days? What did you do for fun?

C- Fun, you had to create you own.

KT- Like what?

C- Well, I had a lot of nieces and nephews, I was the boss. Since I was the youngest of the whole family and they was almost same age like me. We made cowboy games and I was the boss. If I go smoke or do anything you gotta have one cigarette or whatever they give you so they can tell on me.

KT- So dad was really into fishing.

C- Yeah, he was. That's when I was young. And he always had school buses, but you know just for Kihei was small. I guess he saw in the future that it would be the future. So he kept that and run, run, run. Get bigger and bigger and I had my two brothers over here and they didn't want to run 'em so he call me up in the mainland. In fact before that I went up he went call me in the mainland he going buy buses in Chicago if I can help him go bring the buses home. What the hell, I never did drive one school bus in my life. So I went down the motor vehicle and I went try get a license. They told me you can't get a license you need a bus and everything. The guy told me what the hell just drive 'em go for it. And I never drive a school bus I chance 'em and I went. But I knew the mainland, I knew how to travel 'cause I been up there long enough and I knew it. You knew I knew the maps so my dad would depend on me to navigate how they going get back to California or Chicago. That's how I did.

KT- Wow, you had guts just to do that.

C- I did anything, I wasn't scared of nothing.

KT- So, um.

C- I started my own business up there too. After I quit the spice company I run my own business.

KT- What kind?

C- Ah, mobile home. Wipe 'em, wash 'em. Do all maintenance everything I had my own.

KT- So where did you pick up those skills?

C- I find people and people tell me, friends, "eh, why don't you quit this company and go with me." "Doing what?" "We go clean over here." "Oh yeah, let's go." I never even tell my wife, I went. I'm the type that would do anything. I not scared of nothing. You gotta chance 'em in life, right?

KT- So was dad a philosopher? Did he spend time with you guys to kind of..

C- I was, when I was young I was always with my father. I mean to me he was my idol. But I watch him what he do and everything I watch, I watching all his mistake. But those days when you young you cannot tell your father you wrong.

KT- As an example.

C- Like you know when we saw that some methods can do 'em faster this way. Why you do 'em this way? You don't know what you're talking about you young punk you get outta here. So, but you watch and you learn so I don't say nothing. One day I went end up with em on the fishing thing. In fact I never want to. My oldest brother died and my second brother took over, then my second brother told me, "You gotta take over because this is my last day. I never going come back." We was my house we was partying, singing songs all night long and singing, "I ain't coming back no more." Fine over there playing over my house. I was supposed to go fishing with them I told them I not going fishing. By that afternoon I had the bad news the crash and I didn't want to. Then my other brother came from the mainland said, "Who the heck going run this business again? Gotta keep up the name." I said, "I don't wanna." No, no, no. So, ok. "You sure you going stay work, now don't lie to me." You know he come from the mainland he been up the mainland all his life mostly. Yeah, we started all right. I learned I had to go learn how to fly. I was a pilot, learn how to patch net, I knew how to do the rest but I didn't know how to patch net. I had to learn how to do all that. And my dad was still living so he kinda teaching me, you know. And my dad wanted me to get back because he wanted the name, he didn't wanna quit fishing. To me it was a hard job. But I went notarize them and I saw too much laws of the State came. You can't come down the beach, all this blah. You can't do this, you can't do that. I was arrested in Lanai for throwing in the place. I don't see no signs over there. They arrest me I said, "You no think I really..." I take 'em I fight em in court and won. But you know, just trying to make a living. Why cannot fish over there? Why, you tell me why? Because why? Resort coming, you want only haole boys, you don't want no locals around here? What the hell. So I went and went and I see they close out more place and more place and more place I say I quit. That's not the first time they arrest me down there. But I don't stop it. But, when you throw out the current can move your nets into the zone they're not supposed to be. I can't help it the current moves there. I lost about 20 thousand dollars, I gotta pull my nets out. And then I say, I think it's time to quit. I ain't going fight the government. Why should I fight the government. I mean they just going beat you, they get more money than me. More better I just quit. And I sold my fish only to the public, never to the market. The market never like give me my price. So if they not going give me my price, why should I

sell them to you? I might as well give 'em to the people for cheap, dollar pound and that's it! Right? I did good for the people. Except you know, the market want to control the price. But you no take 'em all and you going control. What I going do with the rest? What I going do with the rest. I might as well take out all the twenty thousand tons I catch, ten tons whatever. Why not give 'em to the people for a good price and I still make money. That's why when I see all that coming up, politics, closing here, closing there, can't go here, can't go there. Time to quit, right? Can't fight City Hall. Right, can you fight City Hall? Just like right now they like close all the lay nets. Just like right now they like close all the lay nets why they don't make say lay nets, home use only and don't give this bull where, one hour, half an hour you gotta go check your net. You going jump in the water every night check your net? Something wrong with your head, right? And you don't lay net in the day, you lay net in the night. You going jump in the water? Are you going jump in the water? What the hell wrong with this people? What's wrong, where's our culture? I can say they stop commercial on laying too much nets. Home use, never. If you get two piece net you want to go catch some fish for your family, don't give me this law you gotta jump in the water every half an hour. And that damn turtle, the turtle all getting sick. They better stop that. They gotta control. And these damn haoles come over here they tell you, "You know Hawaiians used to control nature." What the hell the damn turtle all get lumps on the head because before get a lot of food, limu, that's what the turtle eat. There's no more already. That's why all the sharks coming in, you know that? That's their favorite food. Because the turtle hungry and it's so much they cannot handle already. They wonder why everybody get bitten by the shark. Oh that right the damn turtle, who making might of the turtle? The damn tour boats. That, we go turtle land all this pollution. And what's happening? You're disturbing the nature of the whole system. Not controlling 'em, home use right? The Hawaiian's like eat one turtle why not they go get one turtle. I not going commercial. We used to commercial turtle when we was by the by the government. My father used to catch that, I see 'em. Today that turtle around, ok go ahead let em go. And all the sharks come in and you go swim, they going get you. You know what I mean? Close the beach, close everything. They let nature alone, they be better off. You gotta control things. I can say a lot of things, yeah. Commercial ok, fine. But you cannot be stupid. Still, but where the culture? I get net and maybe I like go out there catch some fish, I never jump in the water every half an hour check my damn net, that's stupid. Right? That's not one fisherman, these guys don't know anything about fishing. If anybody fishing to protect the ocean it's me. I know how to conserve them. You know what I mean? Akule, if you like salmon it's spawn, it come big school you can never get rid of 'em. And I can see the net can hurt the grounds and all that. If it's done too much. But the Hawaiian's never did do that. They just go catch what they want to eat, right? That's conservative, but you get this other nets that come in filipino's other's start learning. They go out there and start catching for sell. Hawaiians go catch for the family. Now if you could stop that. Bad enough they're already homeless. Now you starving everything right? Why you gotta do that for, right? Stop the commercial. Akule, no worry because it's like a salmon. They spawn summer then they going come, there's so much out there. And Akule is not a shallow water fish, it's not. It's a deep water fish. But they gotta come in for spawn. And when they spawn they make millions and millions, you know what I mean, so you cannot hurt that one. That's like a salmon, right.

KT- So, when you used to go catch them it was almost like a cycle then?

C- It is a cycle. It's Salmon, same principle. We know its summertime is the best time. Wintertime come they gone because they spawn. Summertime all the babies come in they grow up big, fat. Now they come in to schools getting ready for spawn.

KT- So, when you're not fishing before? What did you go and do?

C- You gotta do, you know, whatever side job you can. You know what I mean?

KT- Oh, so ok. So you add.

C- Or you go lay net for go feed the family. You know you just for you go kaukau fish. That's why the went stop lay net, a fishermen need this, he need this, he need this. He not a cattle so you take your fish you exchange with the rancher and he give you meat and you give him fish. That's how the system works, right?

KT- Yep.

C- Right, it's no money. Nobody get money, you exchange, you exchange right? Or maybe I need carpenter job at my house, well you give the carpenter fish. He don't know to fish, so you give him fish, he help you fix your house. See, it's an exchange. But the haole boys come around here or who the hell that damn stupid state, or DLNR, whatever making all this law. Can't catch the turtle, or you can't do this. What you going do with the turtle, let em... there's no food, there's no food, there's no seaweeds out there. They went wipe 'em out, because too damn much, no control. Right? That's what the haoles say, 'endangered species.' You tell me there's when the damn thing sticking their head all around in the ocean. You told me that's endangered? You know what is endangered? The Hawaiians are endanger. If they don't have food, they don't have what they get, they all going die. That is endangered. What about all the Hawaiian's let 'em all die so they can steal all the land. In fact they like steal the ocean now. Let's put it this way. How come I no can fish over there but the haole can go there, can go snorkeling and make money. How come the Hawaiian's no can go fish over there? And you get some Hawaiian place down Makena only certain Hawaiians can go fish. What the hell that kind law? I don't understand that.

KT- So you guys used to, what kind of airplanes you used to fly?

C- I had two airplanes. And hangers everything, it was a big business.

KT- Where did you fly out of?

C- Only Maui.

KT- No, but.....

C-Oh, Kahului. Before we used to land over here you know the old way that. They just built that army place.

KT- Mokulele Highway.

C- They just built that arm place, used to be a big hanger over there. That's where we used to park our plane, my brother's side. My brother was the main pilot he went school and then I had to go school.

KT- So, during the fishing season, you guys, if the Akule schools was Kahului side you guys go that side.

C- We go, yeah.

KT- You just run your boats, launch out there.

C- All on trailers see we put them all on trailers yeah. Everything was on trailer. Trailer we had big, my brother had a sanpan, was alright but a lot of high maintenance yeah. I had everything. I had plenty skips. Six boats and well equip, plenty equipment. I don't

see anybody was built the way I was built today. I was better than my brother, better than my father, I was more modern. But I just couldn't take the, 'closing over here, closing over there.' That's where the breeds go every year certain spots they were spawning, always ate. We knew every spot, the fish don't go anyplace they only go to certain spot. What the hell you close 'em for? And then they close 'em but everybody snorkel! And who's making money out of that? Oh you can't fish there but they allow snorkeling the tour boats can go but nobody can go, only haole boys make money. Just pull the Hawaiians ah, "no, no, no, no. Close, close, close, close." That's not right that's so bull. That's why I quit fishing. Over in Lanai they arrest me with the gun, on the boat! On my skiff now, I no even have one damn ID. On the skiff and they knew I was coming, somebody went go squeal. I gotta admit I knew was closed. I knew couldn't be there, but I don't see no sign in the ocean so what the hell I go for it. I tell you the truth I knew, but that's not the point. The point is why should you bring a gun to me on the....and they was watching me surround when my plane, my pilot was over there in Lanai waiting for go up. The cops was there everybody was there, why he never stop me now. Why he waited till I throw my net, right? Why, why you wanted to excite me with guns to our head?! And jump on my boat? You have no right to jump on my boat. That's communist. Why they never stop me? I fought them in court!

KT- What year was that?

C- In the eighties. In the eighties, in the eighties. When I was strong, I had a big boat take me over there, I knew. But that's not the point. There's no sign there's nothing. The sign is on the land, but we're not on the land right? But the police department was there, everybody knew the D&L was there. Why you never stop me and tell me if you throw your net I'm gonna arrest you? They let me do everything, they all sit there. I saw the damn skiff out there, I saw 'em. So I went they like confiscate everything, with the gun! From that day on I say I think this is the end of my era, as if, right? We took 'em court. But they only fight me little bit because after they was wrong because they knew. Why you never stop me, right? I no see sign in the ocean. They supposed to put sign in the ocean. I mean they made this damn laws, Hawaiians is pau already. Might as well give the damn nation go bury themselves and forget about it. It's true, that's why I'm tired of doing this, I'm tired of this bull. Damn Lingle like take this damn man away. And Lingle fighting me in court, because this is a residential. Since we were here there was no law, there was no damn code when we built over here and we run all this business here. We live Kihei all our damn life. All of a sudden, they come over here, "oh, you no can do this."

And he get free land everything, not free land, we paid for this damn thing. We build every damn thing. There was no code on what this land is. There was nobody. When we lived Kihei there was nothing! Nothing! And when I was young, Kihei was only Akina's. That's all had. We used to own almost the whole damn Kihei. Now all that and then that damn Lingle I tell her shove it. Tell her I said what the hell give the money back to the people. Don't give the money back. Fix the schools! Help the Hawaiians, do something! Tired of this bull. You know what I mean? I'm tired! I'm a business man, I'm not stupid. I mean if everybody listen to her the only reason she get one Hawaiian next to her is because you need the damn Hawaiian votes, that's all she needs. That's true. We've been here all our life, even when I went to the planning committee stating should've put this automatic to commercial. How come they changed this they go make



this no zoning, right. All our life we live here. All of a sudden, oh this all residential now. What I supposed to do? Right? Oh, you gotta get out of here, we changed the law. Who is the people? Who is the government tell you get the hell. Eh, cost me, how much that went cost me? Shoot cost about 200 thousand to fight the case! At least 30 thousand I know to fight the case. Or else I gotta get out of here, and where the hell I'm going? There's another Hawaiian down to the grave again. What happened? Eh, I've been through a lot of courts and everything. Just to get one license. Bum bye make two of us, cost me 300 thousand dollars to fight Robert's and all these guys. Where's the poor Hawaiians? I thought the Hawaiian's, I thought the Hawaiians, you know get some rights. We have no rights, shoot we no belong here. I get more work in the damn California, I think.

KT- So when your dad was living you guys used to go all the way down Makena pick up kids? Or did they have to walk in somewhere over here?

C- Oh, Makena hardly anyone. Mostly we pick up the whole Kihei.

KT- Just Kihei?

C- Well, way back you know you talking about banana wagons. You're talking way the hell back. Actually if you talk school buses from my dad's time to me continue, looking pretty close to ninety years. Eighty eight is guaranteed!

W- Nineteen twenty eight.

C- Yeah, till me still running. And then you get these jackasses that on island that never did do transportation school bus. And they come here just to throw you out so they can control 'em, just beat through them cheap, it's impossible to make money. Now they suffering.

W- Yeah, nineteen seventy there were forty one contractors in the seventies. Now there's only ten.

KT- Forty one...

W- Contractors within the State of Hawaii. On Maui, Maui had um I think about thirteen or fourteen.

C- No, more that much.

W- No had, had. Now it's only three.

C- Not our area, our area was only about four.

W- When we bought it, yeah.

C- Was only about four.

W- But when your dad was....

C- See the law was in Hawaii a contractor can own only work fifty percent of one island.

W- But we took over, yeah.

C- No, that was the law from when I was in. When my dad was in a contractor can only own fifty percent of one island, one county. Like Lanai, and Lanai and Maui all same company. You can only own fifty percent. When Robert came in he end up ninety percent. I ask him how come is that? Well, well, well, well, well..... (laughing) Forget it, they all bunch of crooks. You can tell 'em I say too, I don't care.

KT- So Sandy, you're not from this island but.

W- No I am from this island. I'm from Waihe'e. Waihe'e valley.

KT- Oh you are?

C- Taro patch country.

KT- So when you look at getting involved with Butch you knew that his family was literally the family of South Maui?

W- Oh yeah, when we grew up um...

C- Everybody thought we owned the whole Kihei.

W- Yeah, um when we used to come down to the beach on weekends I always thought that beach, Kamaole I was Akina's beach. Because I always saw all their skiffs, the nets all laid out there. So we never went swimming there we always went down further. But I always thought that that was Akina beach. I was surprised to find out it was Kamaole I.

KT- Is that where your father built, he had a bar 'eh?

C- Yeah.

KT- Right there?

C- No we had what you call Seaside Tavern. There was a war, during the war, we had a camp right next to us. Ten thousand troops right around us. Nobody could come in, we could come in, we owned it.

KT- So during the war your dad's fishing business was still going on?

C- Oh strong boy he had to go catch turtle for the government for feed 'em. Big kind turtles, three hundred pounds you know that.

KT- And you went out with them?

C- I was young so my dad tell me.

KT- You had any idea on how they prepared it to eat?

C- Oh that's good meat boy that's steak.

KT- Steaks? Like how we eat?

C- Oh yeah! That's better than the cow. Or make good hekka, soup and you know the oil from the turtle we used to boil and save the oil. If you get burned, put that on you, never get scar.

KT- Really yeah.

C- Never scar. We had 'em by the gallon, somebody stole 'em all. Like it would never scar, you get a burn you put that turtle oil on you, you never scar. Sting like hell!

KT- Our people learn a lot on survival.

C- Yeah, but he wasn't, my dad that's all he did was fisherman really. He brought all of us up all eight kids. Of course he had a bar and all this but it's like a Seaside Tavern. I was young boy. I was born in forty three after war, but my dad used to tell me, you know. I remember money, you know in the closet like, you know like we never know what was the value of money. We just go grab 'em put 'em in our pocket, what's that we going do with 'em, everything free. Stole there, candy there you know everything's free right? So value we never know, I was young though. But after the was then times came hard because the government not around.

KT- So what kind of families, you remember, used to live in Kihei when you were growing up?

C- Umm, never have too much really.

KT- Was the Plunkett's here? Was the Moikeha's here?

C- Yeah But the Plunkett's was here when had the, the plantation time. You know when? You know I go Suda Store, this used to be A&B and in the back over there is the camp, the sugar camp. And had a theater, open air theater you gotta...

KT- Drive in?

C- No you walked in but it's open air. You know ten cent and certain times you take canned goods it's all free. That's all, I remember that. And you sit next to the Filipino's they smoke Tascani no more the mosquito. (laughter) You sit next to them, they no understand what you talking about that's alright. Open air theater, yeah, in the back of Suda Store. Used to be not Suda Store, plenty people owned that before Suda but A&B used to own that used to be like a two story bedroom. In fact you know how Hali'imaile, the General Store that's how used to look like. If you look at that, look like that. I remember, I was young kid you know. But I remember a lot of stuff cause I was kinda always nosy looking around what else to do. You gotta remember you know, I'm the youngest of all. The whole family so I just remember things but I remember.

KT- Of the boys, who was the teacher in the family?

C- My oldest brother used to be just like my father.

KT- John.

C- No, oh the oldest boy Frank. He was the contractor. In fact he was one of the biggest contractor in Maui. Heavy equipment.

KT- What was his company name?

C- I don't know, I guess maybe Akina Contractor's, I don't know. And my other uncle he was kinda fishing and doing odds and ends job. My old man was strictly fishing and school bus. But my uncle Frank was actually the top man. He was big in construction.

W- But your dad was doing the fishing and he was doing the wood.

C- Wood, you know those days, survival right. For the government, he used to fly for the government everything right, that was those days but my uncle Frank actually was heavy equipment contractor. In fact when I was fourteen years old I used to drive the truck, construction. Big truck, no need any kind license no matter.

W- You folks owned Seaside Tavern before you sold it to Aunty Becky.

C- Yeah during the war, during the war. We lease 'em, we owned all the land, when we sold the land, everything gone. We leased 'em

KT- So when you said you owned all the land, can you give me an idea from where to where?

C- Oh Kamaole I we owned eleven acres then we owned all the way up eleven more acres.

W- Fourteen acres.

C- We owned the land all around the place.

W- Twenty eight acres my father-in-law had in that area.

C- We owned plenty land, you. Way up there, way up here.

W- By St. Theresa's somewhere they had property over there too.

C- My uncle them owned more land, they owned plenty.

W- And where Billy lives too, right? Your father bought that place right?

C- We owned land all around Akina's used to own 'em all. Nobody want to live Kihei, hardly any people. There was no sign, street name; you gotta know all the green house, the white house, that's all you know.

W- In fact when we grew up we used to call the Kihei people kiawe beans.

C- Cause we eat kiawe beans too! You ever eat kiawe beans? You gotta get the one in the sun, just like jelly beans we call them, go eat.

KT- Dry?

C- Yeah, good eats. Yeah the one in the sun you pick, sweet. The cow can eat 'em, you can eat 'em. Those days was starvation. (laughing) Was hard days but was good days, good days. We had no white man around telling on you. In fact white man was all Wailuku, Kahului, Makawao, Kula and all of that. Everybody scared. Till I went mainland and said this damn white man ain't better than me son of a bitch still in the sewer too I say to 'em right. And I learn right. They wasn't any better than me, in fact I was better where I was, we had a better life, cleaner life. Today, forget it.

KT- So, you never spent any time on Kaho'olawe with dad?

C- Oh I used to roam, I used to roam that island when it was illegal I was on the whole island. I know every part of that island, I know everything. We used to go hunting, fishing, I got caught lot's of times there.

KT- Before they started bombing it.

C- Yeah, we was on there when they was bombing. (laughing) No, when they was bombing we was there, but during the weekdays they don't bomb they let you know they not bombing. We used to go there no bother the government, the federal never bother. It's when the damn State took it over. No can go over there, what the hell's the difference, right? Now open days you can go, same federal, why the hell can't do any day. Then the Hawaiians come, oh preserving the fish. What preserving the fish? Not preserving the fish.

KT- What kind of fishes you used to catch over there?

C- Whoa, there's a lot of fish. Any kind you like. Anything you know.

W- Like what?

C- Holehole, moi, marlin, anything. Anything you want. Ulua's rubbish, that's a rubbish fish. Anything you name it. Opihi, you sit on the rock, you don't go da kine struggle looking under the hole. You sit on the stone and you eat. But we only go over there and get what we need for our luau's and that's it, we go home. The Hawaiian, they know how to preserve you know, they don't wipe 'em out. We don't sell that kind stuff, we just go for the..our own use. I'm a commercial fisherman. I don't go out there kill the ocean, I know how to preserve.

KT- Did dad talk to you guys about taking care of the land?

C- Oh yeah. He would always say, why go kill 'em.

KT- Never used to have as many goats when you were growing up, I mean deer.

C- No, that deer never come till later.

W- That was introduced by our neighbor.....

C- No way, no way. It was introduced by the State. He was only one game warden that's all. He ain't never introduce. They brought only four I think, yeah. Actually, it was involved with the ranch. The ranch was looking for the future. That's why you got, one day the deer comes you get one on the land you going charge for hunting. It's all tricky they ain't stupid. You think the ranch like the damn thing on their land going eat all the grass? But they was thinking, what is the future, right? What the sense, you no can hunt on the land. Nobody own the land, who own the land? The ranch, where was the damn deer? On the ranch, right? So maybe one day we go make money we go charge people come hunting in my land. You ever thought of that? Who own the land? The Hawaiians own nothing, who owns us. They went buy the ranch how long, the ranch get cattle the deer going eat all his grass. So why the hell you all that? No, that's what it is. Eh, you think I was born yesterday? You think I stupid? That's why you gotta think

right? What you think, what the Hawaiians went go put 'em over there? No way, correct. The ranch went go put this. So one day they can charge people for go on their land. Today, same thing; you like go on my land, oh you going get permission, maybe I charge you. You look today, all the ranch no more cattle over there, you see any cattle? But their land, they still paying the cheap tax, right? The same as us. The sugar cane, now they selling all their damn land, making big money. Why they no get rat for all that taxes, the back tax like. They selling all the land, Hawaiian's lose all their land because the government come in and "oh, you get our land, we charge you all tax." The Hawaiian's no can afford the tax, all gone!

W- That was my father's situation. He couldn't afford the tax so they was gonna change.

C- Too much land we own, so they push you right. They force you in the back door. The haole's from the mainland or whoever like the land raising the tax. No can afford, he no work for nobody he had nothing. Gotta sell land over there because my father was sick, he had cancer. Couldn't afford the doctor's so we had to sell the land for pay the bill.

What you going do? What you going do? No more insurance.

W- So he sold it to.....

C- Was bought by the Canadian. My father no work for nobody, I mean there was nothing in Maui, right? Really there was nothing. In the sixties, nothing. There was no job that's why everybody had to leave. You know the part of the problem is the taxes got to him. They don't give you because you live there all your life and then they tell you, "oh no need worry about the tax." No you pay your taxes or you going lose your land. And who the hell, who's the big boss? All the haoles in the back, they like grab all this. They see the future, so that's why the Hawaiian's lose every damn thing, and it's still going on today just like this land. Same principle what went happen to us. Oh, we change the zoning, you don't belong here because that's not a business zone. This is residential, how the, I was here before that damn residential came up. So I had to fight 'em in court now it costs me money. Lucky I had a little bit money. But that's why no can make money because every time I fight 'em in court, fighting in court. I getting tired of fighting, next time I'm out of money shot everybody be a renegade like Ben That's true, right? You only can push one Hawaiian in one corner so long. That's true, you want to know the truth, how I feel I tell you how I feel. I mean I help, I do this I help out a lot of families this damn jobs. And teach 'em not only you know. I teach 'em culture, I teach every damn thing. You know what I mean, haole's come in run the damn business now these boats own all these tours coming in these big boats came in, they own 'em all. They the owners. Not local people no more own tour companies. I think the last is, Robert's the last but he's going down the drain too. It's all these mainland people coming in taking all this damn bull. What you going do? You can't do nothing, right?

KT- We gotta educate our people.

C- How can they all....

KT- Fight 'em in the court.

C- If only the Hawaiian's get together and stick to one nation. Not one group here, one group there, one group here. No can. I'll tell you a good one. I was on the board Kahoolawe, right? When they first started. I went in the.... So we was sitting on this table, all us guys. So they ask everybody what we going do with Kahoolawe?

Everybody come, well...we go and only Hawaiian's can go over there. Fine with me. So they came ask me. I said you know what we should do? We go put one gambling casino

on Kahoolawe and then that's where the Hawaiian's going get some money, right? Make more sense right? Cause how the Hawaiian's going get over there? They don't own no boats, you going swim? Canoe? I don't think so. They fired my ass off the board. Never did call me back, fine with me. I don't care because I hate meetings anyways. What would you decide? I mean if you get a something, somehow you gotta create money right? Right? And if the Hawaiian's can make the gambling like the Indians you can create enough money so the Hawaiian's get power. Money talks, bulls\*\* walks I going guarantee that, right? They fired me off the board. Never even tell me nothing, never call me back. Ever since then. Lot of them don't even know my father was born over there that's what they knew about Kahoolawe. And they never been on the island. I've been on the island before they was born. Ask my wife, I used to take her over there pitch dark I used to take her over there, two o'clock in the morning. "Where you going?" "I going Kahoolawe. I going go pitch 'em. I going park in there go sleep. Then tomorrow I going bag up fish I going home." They think I crazy! I go right in the bay, pitch dark you no can see nothing I know where to go because I've been there lot of times. And we would go over there just fish enough to go home, then we go home. Opihi, anything, but those days are gone. Forget it. Whose running that? The Hawaiian's or the State? That island right now? Who own it? I thought the Hawaiians own it but the Hawaiians' got no say. Forget about it. I tell you Hawaiian's if they don't shape up now, no can. Kihei, forget it you don't see one Hawaiian walk on the road no more. If you do they all dope up or some damn thing wrong with 'em or they homeless. Why? They did it themselves, they fight each other. Forget it, right? They don't get together, be organized right. Tell you right. Tell you straight I don't care, jeez!

KT- You know like the high top out there that didn't bring it back.

C- I don't care, tell Mr. X that I said too, I no care.

KT- Nah, we don't need to say that.

C- No, one time he asked for help I gave 'em all free. Then my mother in law all them wanted to go see, they had all the Hawaiian performance. I short ticket, two tickets. My father in law just like go hear music, they old people. Oh, no I no can give you that. I said, "what do you mean Mr. X? That's for your da kine, your ohana. You mean they gotta pay? And I give you everything free, go pick up all the musicians, send all my buses down there." Cannot? I don't think so. You think that's right? You know Mr. X he passed all the land you no his big mouth oh the Hawaiian's no can here. But you give him one piece of property ah, he go pass.

KT- Sandy what is this?

W- Oh I wrote the script for that when we had our family reunion. It's about the family.

KT- So, can I look and?

W- That's for you to, yeah. To, you can have, you can have it and make copies.

KT- Mahalo.

W- I had a professional come in and do the editing and taking the...I wrote the script out and he went to different places as I wrote it and he read off my script and put it together for me.

KT- Great. You got a hard copy of that script?

W- Volumes and volumes. We went through, it's binders and binders it took me a long time to write it and it's down below.

KT- Excited to look at it.

C- I don't know. I feel sorry for the Hawaiian's and how they fighting and all this kind. I don't know. Like, what I no can understand too, get the Hawaiian homeland. This Hawaiian go inside there he get one, then pretty soon where the hell he went? He went go sell 'em to somebody. That's not things to be sold. If you don't want to do nothing with 'em give 'em to the next guy and he buy it. Ha? That's not right that. That whole system's getting screwed up. You know what I mean? You cannot go start selling or trading. And if the guy get big land all around get house everything give the first guy no more nothing. He get the first choice, right? Give him one chance. Not the kind guy get everything already. I mean they get the system wrong, they gotta check background or look at this. No, no. The next guy get 'em. And this guy get a land over here, Hawaiian land, he still get his house over here, right? Now he go rent house. What about the guy no more nothing? How come he no more the first choice? That's what I don't like about this system. I don't think that's right. And you cannot tell 'em if you don't tell you gotta tell 'em go right back into the pot. No more such a thing as selling, right?

KT- I was surprised when I heard that that's what they were doing.

W- We know people that had three properties.

C- I know a guy don't even get Hawaiian blood get 'em!

W- They sell it. They sold the first.

C- I know guys no more Hawaiian blood. See how crooked coming. The Hawaiian's their way, I mean. That's why sometimes I like nothing to do with it, you know. I get 67 percent Hawaiian but I just don't agree with that. Give the guy that need it first. If you got a home everything fine. But don't go keep your home and then go Hawaiian land and still own over here, right? Or if you get one, give 'em for your kids, now that's different, right? Blood line, right? But that's not right that. That's getting greedy that's what you call that right. Playing politics inside that system. That's what it is.

W- And then you have the old people that still on the list quite a way back and never get there yet.

C- That's wrong that. That's why I stay away from the Hawaiians. They call me. No, no, I don't want nothing to do with it. I no bother no more. You know what I mean? I was kine arrested but I pau. I don't think that's right what they're doing.

KT- On the maps I saw what they call this side Waiakoa Homestead. Are you familiar with that?

C- I don't know.

W- Kula one.

C- Oh, Kula one that's the place yeah, nice over there. In fact my grandmother, my grandfather is Thompson. My grandmother the one own all the land from, after you pass Kula, all the way down to Wailea, she own all that, my grandmother. Thompson, was German but my grandmother went own all the land from the King. From the, all the way up there all the way down to Kihei. You know Thompson Ranch? That's my grandfather. But in order to get the land you gotta be my grandmother right? Had the Hawaiian blood.

KT- Still in the family.

C- All gone.

KT- All gone.

C- All gone.

W- She was um, what did she do for the king? The queen.

C- That side I don't know too much. I know my grandmother, how you going get the land those days with the king? You gotta be the Hawaiian, my grandmother the one own all that. See, the Thompson get five wives. We come from the first one. The first generation I come from. My mother was a first generation, Thompson side. Dunno all the history. What going do? Right, we're sorry, me I getting old already. Just gotta do what I gotta do, survive my family and that's all I can do.

KT- So what he just said is in here? The Thompson connection.

W- This is the Akina side.

C- Thompson is my side. That's my mother's side.

KT- So you got all the pictures of his brother's and uncles?

W- As much as, some of it. I don't really remember it was I did that in 1997.

C- That was our first...

W- Our first reunion.

C- We were going mostly all lost already. We just lost my brother about a month ago.

KT- Natural causes of death or?

C- Heart attack.

KT- Heart attack.

C- My oldest brother died in the car. My other brother died in the airplane. Terrible kine accidents.

W- Your dad died of diabetes.

KT- Really?

C- He was eighty two. He was good shape, I don't know why never catch diabetes long time ago.

W- Well, they knew he had diabetes but he had cancer of the colon so they did the chemo they had to stop the diabetic medication.

C- Came worse.

W- So then when he was cured of the cancer then the diabetes came. And they were supposed to amputate his leg but then...

C- I think that was better because I don't think my father like be in one wheelchair, he was too hyper.

W- He was a strong man. Very proud man.

C- Brain strong till the day he died. My mother died when I was young. I was only like about sixteen. Was hard on me.

KT- So dad brought you guys up then, yeah?

C- Not really. Only me and him left. Everybody was gone already. I had my oldest brother around too he was just like my father, my oldest brother. And when I get mad with my parents I run too. They all come up there, if not my oldest brother come. I was the rascal one, I always moving. Like when my father them fight, you know how brother's fight right? Me I go over there ah, it's like nothing. I didn't care, that's not even my problem. I go my uncle's house, I visit 'em all, I no care. Right? That's the way I was, right?

KT- So you were saying there were family feuds?

C- Oh yeah, always one. Three brothers.

W- There were three brother, yeah. Was Frank, the oldest was Frank then John then Alec.

KT- So there were feuds?



C- Yeah but little while, then pau, come back. I remember like New Year's everybody get around and all the fun, party make one. The party last for weeks. One family going make, that's one week. The other one make one week. The other one make, one week and never end. But I was youngest but I always observe things. I watch, even today in life. They tell me how come you know? I say you gotta look then you see things. Always look then you learn, right? Never close your eyes, right? Till you go sleep.

W- What was that incident at Suda Store, Akina's fight and the feuding?

C- Yeah, my brother losing. My oldest brother losing, this guy like bust up my brother, the other one come around. My father come, I was young though, that was before my time. Family always fight each other but they forget about it. One thing with this family, they'll fight but they'll forget about it. Never last forever. Those days no more nothing for do anyway what else you do? No more TV, right? What else for do, right? You gotta think it's that way right? No more TV, you know how bad boys right? Yeah that was their enjoyment, what the hell. Nothing else for do, it's all family anyways they not bothering nobody else. But nobody better come in Kihei and play with us. Oh boy, that's it. Everybody join, they join. Ha? Cannot come you know like Makawao, Lahaina or whatever. You no come Kihei, you don't ever enter. That's how those days used to be. Then they joined back again. You know we fight each other but the one's outside come that's haole's for you. Those was old days right? What the hell there's no TV no more nothing, that's something. You can't be happy forever, right? Big families, my house had kids sixteen kids. Two sides, we was the smallest only eight! The other side sixteen. Right? And they all big, you know? It was a hard life, I mean it was a fun life but it was hard. The old man's icebox never very much food or get fish, you can only eat fish so long, right? But we survive 'em right? I think was, sometimes I look back it was better days. You thought it was hard but survival. I was young boy. I'm the youngest in the whole Akina family, I'm the youngest. I mean all my uncle's all their kids, everybody I'm the youngest. My father the youngest, I'm the youngest. You know out of the whole clan, you know the whole family, I'm the youngest. Still surviving and I'm the only one still doing business with the name. That's why I picked the name to keep the name going, right? If I go, I don't know who going take over.

KT- You no more sons?

C- I get one but....my daughter maybe. My son is too playboy.

KT- He married?

C- No. Playboy you know.

KT- How old is he?

C- Twenty eight.

KT- And your daughter how old is she?

C- Thirty. That one work hard.

KT- She come and work with the.

C- She's the General Manager. She asked me one day, "Dad, why can't I be the General Manager?" "You want to be the General Manager, take 'em!" She's doing a good job, hell of a good job. I kinda semi retired because I let her run 'em. Give her a chance. I'm in the back, she asks me questions do 'em this way. I kinda stay away.

KT- What's her name?

C- Cassie.

KT- and what's your son's name?

C- Douglas, same as me. Douglas. He still playboy, never grow up yet. I get one other girl but she's in some foreign country someplace I don't know. I get the grandkids, my grandkids I take care one.

KT- The girl?

C- Yeah.

KT- That's Hawaiian way, yeah?

C- What you going do, throw 'em around? Get two. But one my other nephew took 'em. They adopted 'em. This one I found the father, not bad he call every time check. He cannot handle so she stay with me.

KT- Well, Butch I appreciate your time for talk story. Can I take your picture before I go? Just right here. OK.

C- Yeah. I had a hard life.

KT- Sounds exciting.

C- I love to invent things. I'm the type that I gotta do better than the next guy. In fact I was the one really made the tour company shape up. When they came in I bought tour buses that nobody had in Hawaii. They thought I was stupid cause the buses get video inside, TV, karaoke. They thought I was nuts. Today what? Everybody gotta do that, right? Yeah you ask my wife. When I first started tour, I came in with the best equipment ever had in Hawaii.

W- Right, right.

C- Big shows in Honolulu, the best everything had. They thought I was nuts, today what, everybody gotta do?

KT- So your husband had a vision.

W- Yeah, he's a visionary. That's what he is; he's always ahead of his time.

C- I gotta tell you one thing. My wife went help me plenty. She learned plenty and she did help out. Only true love stuff, yeah. She's a good woman.

KT- I'm glad to hear you say it.

C- I hardly say it anymore. It's true though, my wife is good. She thought I was nuts sometimes but not really.

C- Pick up and let go the rest.

W- So what we did was we called, um...Ulupalakua.

C- They all came help us, they always come help us.

W- We told them bring whatever you have.

C- People came from Hana. I give away over three tons to them, they don't know what to do with it.

W- Whatever they could load in their truck, they brought.

C- Then I let 'em go the rest. Give 'em back, you know give 'em back. I never kill 'em, make sure my bag is, I let 'em go. I let 'em go. I get enough fish already and what I going tell. Day and a half was sold.

W- Then we came home, by the time we got home was like four o'clock in the morning. And that's from all day and all night and then coming home. And I thought oh my goodness I gotta go teach because I was a teacher. I didn't have substitute plans so I had to go teach, so what am I going to go do with all this fish? I gotta sell the fish. I had peddlers, my bus drivers that would want extra money. Frank them would want extra

money. And I would have them buy it from me and then they could sell it. No more than dollar, whatever price I set they had to stay there.

C- Dollar quarter you go, if I sell dollar you sell dollar quarter.

W- Yeah, if I sell seventy five cents, you can charge dollar. You cannot make too high because it's not right for the people right? And so I'm sitting in the, full of scales, in the bathtub I said what am I going to do with all this fish? So I called the three stations, I used to always advertise with the Filipino's yeah because they love the fish. Three stations and then I said ok I gotta go to school so I went to get my kids ready to go to school. And he drove bus and then in the afternoon I went running down I said oh you pick up the kids and I'm going to go into town because that's where we had the whole thing situated in town at one of our bus driver's property. And I said I'm going to go help her and he said help her? Help her what? I said sell all that fish because we had tons we had about 10 thousand pounds we brought out. And so he says, "there's no fish left." And I said, "Are you kidding?" No, people had like, it was like a circus they said. It was around that Mokapu, Mokuahu, I forget what street. But anyway um people were lined up. Even the mayor's wife was there.

KT- Who was the mayor then?

W- Hannibal Tavares. And lined up.

KT- Japanese?

W- Yeah Japanese and Filipino's.

KT- No but the mayor's wife was Japanese right?

W- Was Japanese yeah, loved that fish. And they just, it was all gone by the time school ended at two o'clock.

KT- What year around was that?

W- Had to be in the eighties. Yeah, had to be in the eighties, late seventies, early eighties.

KT- So you guys were really busy yeah?

W- Oh yeah. You know at one time we ran five businesses.

KT- What were they?

W- We had um, rooter service. He was the first one to have to do rooter service on Maui, before Roto Rooter even came. And then we had um cesspool pumping. And the bus business we ran for my father-in-law. And he used to blow wells, he had um these wells that he had to blow for people when they would get clogged.

C- Oh yeah I never tell you how many businesses I used to own too yeah?

W- I said five, right.

C- And that was all same time.

W- Yeah, and the fishing and then I was doing real estate on weekends. And I was teaching.

C- I was the first guy brought Roto Rooter in, in Hawaii. Maui, I mean.

W- It wasn't Roto Rooter, it was Maui Roto Rooter.

C- But same principle but I name 'em different. In fact Roto Rooter like sue me because my name was too close to them. So I had to name 'em, what I went name 'em, Maui Rooter? I had to change the name, they tell me that or I going sue you so I change the name.

W- We had to change the advertisement too because the....

C- Change advertisement, what I had? Pumping.

W- You had pumping, you had cesspool, you had Rotor service, you had the blowing the well and the fishing. And we were running the business for dad, school buses. And then I was doing real estate on weekends and on top of that I was teaching! (laughing)

KT- So what made you guys do this?

C- At that time I had nothing to do.

W- Survival. We just had that energy before, you know. We were very young, we were young and we knew we had to make it.

C- I was in my thirties. I'm the type that will go for it. Nobody teach me, they teach me little bit. After that I do it my own.

KT- So after how many years, you retired from school teaching?

W- Um, I started in '69 and then I went to the mainland and then I came back in '71, no '70 and then I started teaching again, yeah. I retired actually after vice principal at Maui High School and that was in '95 I retired with enough years of service and you can, I have 22 years accredited of full service. But that's because I took like part time work. You know I do part time teaching so I could run the business, the businesses with him so I could help him.

C- The reason why I went into pumping, I tell you why. This one guy, he did all the pumping. So I told him one day, "Eh, give me your card. I got a lot of jobs for you." To drain, I know the cesspool whatever need 'em. He look at me and he walk away. Eh! Ok, come home tell my wife I'm going to be a pump business. And I did it! He take one week, I took one day and finish the job. That's how. I threw him out of that business. I ask him I get a lot of jobs give him customers I can tell 'em call you, he walked away! Oh no! After all that I going into pumping. (laughing) And I went go see this guy he get building this, he get big tanker, I like 4000 gallons. I like this I like that. "Eh, you sure?" "No worry." Ok no more afraid. And what he do throw 'em water everything. I didn't want 'em all I ask him I just get job for you. That's all I said and he just walk away!

W- We even sold fishing nets, we went to town.

C- Oh yeah, plus I had, I build nets, I build everything. I sell 'em. I had a big business going on, on the cart everybody.

W- We could get free yeah? Our nets, we brought extra and then we put the....

C- Back then was too expensive so I went Taiwan buy all my nets for all my fishing. I tell, eh I going buy 'em might as well build all the net, build everything.

W- And then we would sell it to the people.

C- And then I tell people I sell regular net and I had longer net and better price. Geez, I made a killing. Pretty soon I get tired you know. I get tired of business, ah I give this up.

KT- Bored.

C- Bored! I had everybody come over here all these guys, you like drink? Yeah come over here drink maybe. Oh, we go make lead. Eh, they like that they had fun. Of course I teach 'em right? I teach 'em how to make net, they all learn. I think my wife did.

W- It was, yeah he taught us. All my kids, we make um the nets and he would tell us, ok.

KT- You had a system.

W- He would say I pay you at the end of the summer so you have money for school clothes. Crazy we would have to whistle, we never got our money. That ok we all had fun.

C- What they learned?

W- It's like the fishing too, was like a family thing because this kitchen was built for that. For their fishing.

C- That's how this kitchen was built.

W- Because I had to cook and I have huge pots. I had to cook pots and pots and pots of food and I had to take all the beer and all the fish you know in the back of my, my I had a station wagon that was like should be for a taxi.

C- I bought her that station wagon because we had a Mustang. That damn Mustang ain't worth shoot, I go turn 'em in brand new. I said I should've keep 'em worth a lot of money. Ah, turn 'em in go buy the station wagon so we can make use of all that.  
(laughing)

W- So I would see the kids out of the tuna boat, yeah? So we pack up. I couldn't go down to the beach with less than seven cases of beer. And all this food and all the fishermen.

C- That's all my kids always with us on the beach.

W- Yeah, who would all come with their family, and they knew they he was going to be there.

C- All his family and his kids all come. We would stay overnight, two days, three days. Sometimes one week and all the family come and everybody, right?

W- They're families were there.

C- And you know all those kids small and then but all taken care of right?

W- And everybody had to work when you get there because you had to haul fish, you know.

Everybody had to work, we had to haul the tadai's hundred pounds we have to carry. And those days, you had to lift it up and give it to the guys and dump it into the big containers with ice yeah.

C- And all my equipment was A-1 shape. I had mechanics take care of everything. Painting, all nice, we not going on the beach look like one junk. Everything was look nice. Painted all scrape up.

W- And then we would come home and then it was up to me, what I going do with this fish right? And these guys all too much you know and everything so I had to call for ice. And I would have to drive the truck. I tell him, "you take home the kids." I just take my oldest daughter, that was his oldest daughter from his first marriage.

C- Was steel covered.

W- Yeah, I would take my oldest daughter and we'd go, we would drive up to Wailuku and they would open the plant for me. The ice, for the ice, block ice. They load it for me in the back of the truck, come back here my daughter and I, two o'clock in the morning we were loading ice into the big truck to save the fish because these guys were all...

C- What do you mean? Had the Bank of Hawaii manager deliver ice for me.

W- Yeah, he was our ice man. We used to have all kinds of people come.

C- The bankers deliver ice to me that's his job. Sleen my car was.

W- Alvin, Alvin Nishihara.

C- And he go on the boat too! His job.

W- And he loved that! He enjoyed it you know it's so different from what he had, the pressure of the bank, right? Come out and do physical labor.

C- Had all these business guys used to come, run with me. All business guys come help me.

W- And everybody get paid with fish. Take home fish.

C- Well, that's better than money, no tax. And when I give fish, I give fish. People would come help on the beach if I see one old people over there on the beach, I tell 'em take this and go give to that old people. If I see old people at the beach, you know Hawaiian's like that sitting around, go take this fish and go give them. Because they get too much pride I know that. Take 'em, give 'em.

W- I couldn't sell. If we caught less I couldn't sell. That we would have to give.

C- I would give away.

W- All of that give away. That was my father, my father in law always told me that Akule, Akule, that kind of fish you have to take care.

C- It has ears.

W- Yeah it has ears to hear and you must take care and you always give, you always give you don't just keep you know. And we learned that and we did well.

C- Lot of old people I see them around. I know they hungry they like eat fish but get too much pride. And whoever working with me, eh go over there take this fish, maybe take twenty pounds, go give that to the lady over there. I think maybe that's Pele or something. Go give 'em anyways.

KT- Clear that up with me again. If you don't keep, catch a thousand pounds.

W- No if we, if we.

C- One ton.

W- Yeah, we had to catch, for me to sell it has to be over two thousand pound before he would allow me to sell. If less than it's all give away.

C- Cause I get all my fisherman, I get all my friends. That's all give away. I won't sell anything. If I catch two thousand pounds to us that's bad, bad, bad. I rather give 'em away. I lost anyways so what's the difference, might as well give 'em away. If you going lose might as well lose all the way. I give 'em all away.

W- Well, it's always taught, his dad said you gotta give.

C- No, I always give. No matter I catch 30 tons or whatever, but it doesn't matter it's. I already lost money on two thousand pounds so not going help me anymore, might as well give 'em all away so people still come back and help me.

KT- So, um dad said that's the Hawaiian principle or just an Akina principle?

C- No that's my principle.

W- Oh no for the.....

C- No, no this one. You give away this one ton it's my principle, I was the one say.

W- I don't know where dad got that from but he always told us....

C- No but give 'em one ton not from my father. My principle is if we catch less than one ton, it's all giveaway. I don't care what. Because I already lost money, I know that. So what the hell, it ain't going help me, give 'em away. But I get more in return than I could sell 'em, right. Because I cannot make money on dollar a pound on two thousand pounds. That's only two dollars out. Everytime go out cost me four five thousand. The best way you give 'em away, when you catch big that's how you come out make 'em. So, better to give 'em away.

KT- Most of the time you used to catch big though.

C- Oh yeah, I catch twenty, thirty, forty tons. Ten tons, our average. I make my own. Those days everything cheap, yeah? I had mechanics for my plane, wash my plane

everything. Pop the plane yeah they take care our mechanics car, they wash the car. They all fish with me. Everybody had their own job, everybody had their own job.

KT- So, dad never used to go fly to see the fish.

C- No, no, no.

KT- Who went train you, your brother?

C- I went school.

KT- To see the fish from the....

C- Oh, I would just go with my brother. I knew already. I just go with my brother. When I was young everyday I go with my brother. I was young, sick. I come down puke and ew sh\*\*, I don't want this sh\*\*. (laughing) But when I took over he said, "Well who going fly the plane?" I guess I'll do it and then I went learned how to fly, buy my own plane, buy everything.

KT- You guys are the last Hawaiian entrepreneurs. I mean the volume of business....

C- I get a lot more ideas I like do but I too old already. See my son was up to grade I would do it. I get lotta more years, I don't think so. I tell you what I going come, you like know? Hmm? One professional gambler (laughing) That is my dream and I can do it.

KT- Yes, if you can make the money.

C- No, not greedy just make enough to make a living, not to come millionaire. That's impossible but to make a good living and have a good time that's my dream.

KT- You gotta take care health first, though.

C- Oh yeah, I take care my health. Either one doesn't matter, you know what I mean? I no kid you. Just because I say gambling you know not out there but I know slot machines. That's where the money is. No, you don't get greedy, you not going come rich. No way! But, you going have fun, win and you going to make enough. Like you make enough I talking about six thousand a month, that's good enough. Right?

W- He studies it like everything else.

C- I study and I study everything and read, I read books. Any book, I read 'em. Anything I want to do with my life, I going to study and I'm going to read about it and I'm going to do. That's my dream, that's my last dream. No hard work right, it's only brains. I'm gonna beat the damn system that's my dream. And then I going write a book.

W- So he has a computer and plays, you know the disk and he plays it. Two o'clock in the morning he's up.

C- Practice it.

W- Practicing. He finds a method, a system that he tries and he flies off to Vegas or Reno and tries his system. Oh, didn't work, back to the drawing board.

C- Back to the drawing board. But I get fun with it anyway.

W- So it's not just gambling just to gamble.

C- No, gambling it's not the gambling.

W- No it's to beat the system.

C- It's not the gambling. The gambling, I hate gambling, but I'm a challenger, let's put it that way. I'm a challenger. Any human thing made, it can be beat. Hmm, if you're smart enough. You know you just gotta be spunky enough to beat 'em right? Right? Anything human beings make they think they can't figure out but, you know if you think about it anything human makes can be beat. Hmm, true 'eh? So that's my challenge in

life, I mean that's a hard one but that's the kind I like. But one good thing about it is it's not hard work. You just using up here and doing things; practicing, practicing, practicing. But it keeps my mind going right?

W- I told him it's fine with me as long as you don't the company money, you use your own money.

C- No I don't touch that. I don't touch no company money, right?

W- Yep.

C- I don't take money. I never touch company money to gamble, hmm. I not greedy, I just go in there. All I want is to hit, make six thousand or break even or make money. That's all I want. I don't want the guys go, I don't want the twenty million. You keep the damn thing. I don't even want the jackpot on the damn machine. All I want is the two hundred, hundred dollar, fifty dollar, that's where you're making money, right? And you're having fun, right? Why be greedy. Just like when I used to sell fish. I could've sell 'em for two dollars a pound, make big bucks. For what? What I going do it for? I want to help the people, I want to do this, I want to do that right? When I made enough money for me to experience and enjoy my life I didn't care. I made lot of people happy, right? Then I'm happy.

W- Even when he did his Rooter service. My sister in law Mele was his accountant, right? She'd say, "ok when you come home empty your pockets." Ok. "What? You don't have any money?" "Oh no, I did." This was when it first started out, people really didn't know about it. And he would go to these home and would had poor Hawaiian's.

C- I sit on the porch, like this sitting there. They get the money here, plenty kids around, ah sh\*\*. I look at the money, I take enough for one six pack, here that's enough.

(laughing)

W- Yeah, that's what he would do because he would feel sorry, yeah. And his sister said, "how you expect to make money in this business you just getting enough for a six pack of beer? Gotta pay for the bills."

C-I survived. Somehow God bless me, right. I never was greedy. I seen too much people you know poor and the rich, that's the worst one! Whoa I see poor people, I look you know and their kids. I walk in the house I can see everything. I see on the table they get the money ready. Not the rich, oh they going try to chew you down. The poor always get the money. I can see they get hard time already. I looking around, I tell 'em, ah only need one six pack enough to go store buy beer and the rest is for them. No worry about it. (laughing) I can't help it. I just can't help it. I'm not selfish but I work late but what I going do? Can't help it. I used to go a lot of people. If fact when I went quit, people was still calling me. I wish you was back in. We getting ripped off.

W- We didn't quit, we sold the business.

C- Yeah, but they getting rip off, same thing.

W- And we told the guy, see I was flying back and forth with my teaching profession. I met these, at a party, I overheard these people talking about Rotor Rooter wanting to come to Maui. But they couldn't come to Maui.

C- They had 'em in the phone book!

W- Because they couldn't come to Maui because there was one company there, I didn't say was my husband's and my company, that were the prices were so inexpensive that they couldn't make money if they came here. So when we sold the business to his friend



we told him, he told him don't raise your prices too much because you'll volume in the whole island.

C- You going invite 'em in. I had 'em controlled the whole island.

W- You'll get volume but if you raise your price, Rotor Rooter is trying to come in. They're in the phone book already but they haven't been able to come in because the prices were at a point where they weren't going to make money. No, he didn't listen. They raised his prices and they came right in and then everybody came in and then he closed up. He ended up, he ended closing up.

C- I used to go all the way Hana help 'em.

W- Yes, we'd go all the way to Hana.

C- Had this one guy I went go do. Twenty years he suffer on this one line so the plumber's going do 'em. Going cost him 20 thousand dollars, twenty grand. So he call me up he just happened to see in the paper or whatever, he was this teacher from Baldwin High School. Forge his name already. So I went over there he ask how much going cost to clean this drain, I mean twenty years and.

W- Les Skillings.....

C- No was one Hawaiian, Kamai....

W- Oh, Kamahiwa.

KT- Oh, Hinano.

W- Hinano.

C- Yeah him! He call me, how much cost me? I said, "twenty nine dollars." I look 'em right. So I went in there, five minutes he was done, open. He was so happy tell me, "you stay over here, don't go, don't go no place." "Where you going?" "No you stay here." I sit down write the bill. He went down the store, he bought pupu, beer. Eh, lucky I never have one other job I got so drunk over there. (laughing) He was so happy! Cost him 20 thousand dollars, the plumber wanted to charge him to fix that one line. And he suffered for 20 years. I did it in five minutes, twenty nine dollars. I said how many people I help like that.

W- That was Mrs. Kamehiwa's husband. Yeah, the principle at Kihei School.

C- Yeah? He was so happy I never seen one somebody so.

W- What's her name? Andre...

KT- Yeah, Andrea.

C- I did it in less than five minutes and was going cost him twenty grand. You know how much people I went help rotor rooter and save their life. How many people I went help in Maui. When I went quit, man, people was still calling me. They can't beat you. I was honest, ha? I was there I finish the damn job, I no care how much went cost me.

Because I really wanted to find out what's wrong, the more you learn right? It wasn't the money, it was the knowledge right? The more I learn the more I come better, right.

Money wasn't everything to me but knowledge, right. Just like I tell all these young kids today what, when you go school, the school pay you or you pay the school? (laughing)

Right? Listen, but not only listen pick up things and learn, learn, learn, right. Do your own experiment, right? Do 'em because this guy taught me....no, no, no he only giving you one fundamental, right. The rest is up to you boy. Right, you have to, you have to. You cannot, if somebody teach you that no mean that's all you going learn. You gotta learn by yourself too.

W- All your family members were entrepreneurs right? Your father, your uncles and then your sisters.

C- Everybody run their own business.

W- All of them.

C- Only me the one, the youngest and went come up this big. That's why when I named my company I wanted to keep 'em for all my family. My uncle's and the whole Akina, that's why it's named Akina. I wanted that name, I'm the youngest so I keep up that time, right? And I'm the last one doing it.

KT- So how many buses you guys have with education, school buses?

C- Oh we get school buses, all the equipment there's about fifty or sixty.

W- Fifty, about fifty increment we have.

C- Had more and I kinda going down, I don't want too much because I getting too old.

W- Hard to find drivers.

KT- Really.

W- We're looking for an accountant if you know anybody who's an accountant.

Someone to work in our office here.

KT- Question so is it certified kind?

**Interview: Michael J. Boteilho**  
**By Keli'i Tau'a and Kimokeo Kapahulehua**  
**January 7, 2006**



Interviewers= KT/KK and Consultant=C

C: Whatever I know is more Chinese than Hawaiian.

KK: We going to show you some Chinese things.

KT: So you get the background on what we're doing.

C: Had this other boy before, Keoni Fairbanks, he had to come. What happened to Keoni?

KT: He's still at Hawaiian Homes.

KK: He's the one used to be at Kaho'olawe? Yeah, he moved to Hawaiian Homes.

KT: So, this is Pulehu right here, yeah? So when we look at land we look at what's on there. So I'm shooting from across the valley. Here's all the stone wall. Right here are gullies, so I ask myself what were they thinking they make all up here, but no can get down inside. In fact the picture. So we look at the picture and it looks like the Garden of Eden and we look at this and we encourage people to beautify. Again here's all the petroglyphs along the wall yeah. So, we walked up the street that's Pulehu stream the one we went. Here's more petroglyphs not the same that one is just over there. But fast forward we ran across this guy here.

KK: Talking about more Chinese.

C: Right.

KT: This one of a kind find. In the whole state of Hawaii, because everywhere I went that had petroglyphs, Big Island, you know they get choke pictures. No more this. This is Japanese.

C: Japanese? Whoa.

KT: Chinese characters but Japanese because what this reads is this character here is Dai nihon, and over here is ito. So my students still haven't been able to translate so I might have to walk an older person up there. But what they interpreted was, and when I saw this and he and I were up in a river bed. They used to bring the Iliahi, the sandalwood, down through the riverbed get them down Makena to ship to China, right?

C: And then the thing is, they going stop write their names. Same like today.  
KT: Right! Yeah.  
C: They going stop. I was here. They going carve in the table.  
KT: Right, no difference, because that's all they had.  
KT: You're full name please.  
C: Michael J. Boteilho.  
KT: Where were you raised?  
C: Up Kula, born and raised up here.  
KT: Where you went school?  
C: Kealahou.  
KT: And then?  
C: Kula Elementary.  
KT: And then?  
C: Maui High. Then in the Navy.  
KT: And then when you came back, what did you see for the future for you?  
C: Livestock, raising cattle, that's about all.  
KT: Which is what you're doing now.  
C: Not now, it's not feasible now.  
KT: Ok, talk about that feasibility.  
C: You cannot find land to raise cattle.  
KT: Ok.  
C: All the land we used to run cattle get houses on top.  
KT: Which was where?  
C: Like Kula 200, Kula Glen.  
KT: So you guys were leasing the land. When you say you guys that's your dad.  
C: My dad, my dad. And then you know feed gets expensive. Everybody rather eat mainland meat than local meat. All the local markets shut down. We used to supply like Azeka's, AhFook's, Ooka's. We supply them lot of local beef but they all closed down. Then you get all the mainland chains coming in they bring in all their beef.  
KT: So, I see all this fun stuff hanging over here.  
C: That's tools that we used to use before on the ranch. Go help a few friends that run cattle nowadays that's about all. But before three days a week we were on horseback working cattle.  
KT: So today what are you doing?  
C: Working for the water dept.  
KT: As we sit here I have something in mind. I just going throw it out, not relative to this, but Kimokeo can you see my teaching students getting paid to have them have exposure to all of this. Every one of these things that I see here has a story.  
C: Everything has a story but today's cowboy is they read one book two days, they one cowboy.  
KT: Like everything.  
C: Yeah, you know before most cowboys was like cattle, born on the ranch. So that's how you follow everybody. Now today, look all the ranchers today. They bring managers all with degrees. No common sense about the 'aina, how the land drought's. Then they try bring in mainland ways of running animals here. Mainland run their way,

we run our way. Two different type. You can come from Makawao to Kula there's a big difference on the type of grass that you have.

KT: So talk about that grass, what is the difference?

C: Food runs on the grass, but you get down Haiku you get more rain there so your grass not as strong. Mostly your minerals run down to the ground. Where up here you don't have as much rain the grass is more potent. I used to put ten in there I butcher them and they probably go about 450 pounds, 500. Ten same steers same breed ate Makena.

Butcher same time those go about 700 pounds, they're much different.

KK: The protein, the enrichment.

C: Right. From Pukalani up this way is way better country. If we had the rainfall this would be an ideal place for raise cattle. Look right now the drought we have.

KK: When the last rainfall we had over here?

C: I forget. Probably a couple months ago. But the thing is you get one rain you need the follow up, yeah.

KK: No come back yet. Get one rain never help, one rain is like no rain.

C: Yep, one rain come up get everything started.

KK: And then make yet.

C: So you need the follow up one more rain and one more rain. Then now even if we do get the rain, days short cold, the grass no grow like it really should.

KK: The cattle you guys used to have over here, what kind cattle was that?

C: We used to use a lot of cross cattle. They were more hearty cattle they could handle droughts, more tough. Today everything is certified Angus.

KK: Yeah, the fashion now.

C: Yeah but you know certified Angus is a name of a brand of beef. No mean it's Angus, only Angus cattle. Lot of people think it's only Angus, which is not only Angus.

KK: Well, they change that now because they're not only looking at the real way. They just looking at what is cheaper and more marketable since the public knows more Angus they going buy more Angus.

C: Just ways of selling. You know it's a way of selling your beef.

KK: This cross bread you talking about where did you guys get it from?

C: We bought it from the mainland, lot of ranches had lots at one time because they could handle droughts. And they were more tough cattle, but then the market changed you know. They like their nice steaks so they start bringing in different like Angus was good beef cattle. Was a tougher animal where they could handle the drought.

KK: More tolerant.

C: More tolerant to the area.

KT: Mike this does not have any relevance but what is you ethnicity?

C: Pure Portugese.

KT: Pure Portugese. So the Boteliho line is pure.

C: Pretty much. I have probably about 3<sup>rd</sup> or 4<sup>th</sup> generation, pure. But then my kids already all mix.

KT: So you can trace back to where, where did they come from?

C: From what I hear Portugal. And then my grandparents was born here then my parents and then me.

KT: So why did your great-great grandparents come?

C: I have no idea. I guess everybody wanted to see the other side of the world or something.

KT: Well, coming to Hawaii in that early age was either for working or being luna. Portugese used to be luna, Portugese-German. You don't have trace back to anyplace?

C: Never did.

KT: I'll talk to Antone about helping you out. So, fast forward here Mike. As we showed you the pictures, if we go across where is the Ag park compared to here?

C: Pretty much same elevation.

KT: In alignment.

C: Straight across, below here.

KT: We have the key to go onto this property.

C: Haleakala, right below here. Cause you can go down here and come back to that park get one road. You know when you come up the Ag park get the road right before you turn into the Ag park. Right below that on the right get one corral.

KT: Right that's where we went.

C: Ok, if you go in there you come over you can come up this road. That's what they call Waihono that area, small Waihono. You come inside there, you cross you come over then going get one corral here. If you turn right going below the corral you can come up Kihei Heights.

KT: Remember that.

C: If you turn left you going come back up to this road right here.

KT: So, you familiar with the area that we're talking about?

C: Yeah, I used to hunt in there. Wasn't that pineapple something at one time.

KT: That's what I'm trying- it's still pineapple but not as full.

C: But I think we used to come way this side too?

KT: Yeah!

C: Cause if you look the trees no more that real big trees. But as far as when I was one kid till now Haleakala always run cattle in there.

KT: Right, ok. Now, I interviewed Kauai yesterday.

C: What Kauai is that?

KT: Thomas.

C: Oh, Thomas, yeah.

KT: His whole family line was cowboys, right?

C: Right, like us.

KT: So, he said they used to herd the cattle down to Makena landing and some others yeah.

C: Right.

KT: Now as a cowboy where would you herd if you were raising over here during the old days? All the way down to Ma'alaea, or Kihei? Kihei had one ramp right that they used to..

C: Well depends how far back you looking. Because probably in the...

KT: Let's go as far back as you can think that had cattle.

C: Now when you say as far back, as far as what I seen or what I heard.

KT: What you heard.

C: Well, if you look the movies they take the cattle Makena landing and ship out. But did you know at one time this island had over 36 slaughter houses for butcher cattle?

KT: No, give me some locations.

C: Right Oma'opio. On top Boteliho had one. Go more down Costa had one. You go further down had one. Rubello had one. And I think one more Sakagawa had one. Five.

KT: That's David?

C: Right by David's house get one slaughter house.

KK: Down there where he was talking about that's the original slaughter house.

C: Ok, right there that is five. Now you come up going down Kula, Pulehu the old road right on the right, one more there. That's six. Then Pukalani, Makawao, what's that Maha road where the chicken farm stay? Ok as soon as you turn up Makawao you go there.

KT: Makani Road.

C: Makani, ok. Go down little ways turn left, right inside the slaughter house there. Go more over Perriera had slaughter houses. Everybody had slaughter houses. Makena had slaughter house. Kihei had 2 slaughter house. Right across Kale Makai had slaughter house right there.

KT: But that's for the convenience of the guys raising the cattle right.

KK: Not so much convenience they must have had the acreage for the land.

C: Well, that was, had everybody up Kula. Right now this island lucky if we have 25% of cattle that used to have on this island. We no more cattle. Everybody in Kula had cow, milk and cow always few head of cattle. Even the farmers used to raise cows. Feed them all the opala grass like that. But today you don't have that kind of stuff. But the inspector told me we had 36 slaughter houses at one time in operation on this island. But me I know was the fancy kind, I never have ice box. We butcher you take down. You no hear anybody get E-coli and all that kind.

KK: Right around this area we're looking at about 8-10 yeah?

C: What slaughter house?

KK: Yeah.

C: From Oma'opio I would say 5 then you come up the camps get six. Had one right here, then seven. Ulupalakua Ranch had one, eight.

KT: Right here.

C: The next one Pulehu road, eight. On top there when you go China town on the right. Jane had one for kill chickens. You know had lot of slaughter houses here. And lot of oh, Makani road, where the chicken farm stay. The green one that one was a big slaughter house from Likoi. Was one big slaughter house.

KK: Now they have their own up by Makawao.

C: Right now only get DeCoite and Nakasone that's the only two on the island. Haiku had McGrath used to kill rabbits or the cannery. Had a lot of slaughter house. Hana ranch had slaughter house, pretty much everywhere had.

KK: You know you call this Waiakoa gulch? When you guys come through here what do you guys call it? Waiakoa gulch?

C: Over here? No one different name um Kulaloea gulch I think.

KT: So we went down here, going back, and we saw a heiau but you know any other Hawaiian stuff on the land?

KK: That's the corner, on the top going on the side get all this black rock going up. It's not like a flat heiau, it's just pile of rocks.

C: But what is the, how can you identify one heiau? Just by how the rocks pile up?

KT: Well, one of them is passed down the stories, word of mouth. Family to family.

KK: Obvious one would be having a stack really nice, neatly like a certain height. Most of them have a height of about 5-6 feet.

C: And every one at Iao, that's a grave.

KK: Not necessarily, it can be like an altar like a church and it serves like a purpose of a person or the purpose of a God, serve the purpose of an area.

KT: Let me clarify that. Heiau's were not connected to burials see, misconception. Heiau's were place of worship but the reason why you can find graves close to it is because in ancient times they weren't designated graves. Where you die that's where they put you in. That's why today some people, "oh my gosh, what is this over here?" They never take the bodies to a designated place they would call it graves.

KK: Just before the missionary times yeah. When the missionaries came, like my grandma she's Portugese so the Catholic they all had their graveyard by one church.

C: But as far as way back that one tape that they brought out that had pretty much tell us a lot of stories of the old cowboys.

KT: What tape was that?

C: Paniolo.

KT: It's entitled "Paniolo?"

C: You ever seen that tape?

KT: No.

C: I might have it, I'll try go get it later on. But that gave us the whole break down.

KT: Historically.

C: That was a real good tape. Lot of old timers and a lot of old timers around and when you know that wasn't on the tape. But from what I see around here, mostly I find Chinese stuff.

KT: Ok, as an example.

C: For example couple days I was up the ranch I find this spurs. And you know this not from no big bugga.

KK: Oh, it's a small guy.

C: You know this wasn't no Hawaiian or no Podagee, no, but that's one old spur.

KK: Where you find this?

C: Up above the pasture I just was walking down.

KK: Now they get more mercy on the animal so they no make the spike so long yeah.

C: I get some with spike. Depends on the animals. Spur's you not gonna abuse it you just kinda wake up call. You know like anything people abuse some stuff, but this person not one abuser.

KT: You mentioning a lot of in the cattle people. Was there any connotation among different owners, different workers?

C: No, pretty much.

KT: They all got along.

C: We had less people on the island and more beef and everybody could sell their beef.

KT: So the main thing was that you could take to market and make everybody happy.

C: Was pretty stable because you never have an abundance or surplus of beef. Everybody got rid their beef. But now it's a different ball game that this Maui cattle man started up. But that's only a few ranchers it's not everybody involved.

KK: Oh for their meat?



C: Yeah, I don't know. Those things that we did they're trying to do. You had Sakagawa, Nobriga, ourself we used to supply local market. Willie Jacinto, Joe Santos. They all used to supply local markets and what not.

KT: Willie Jacinto was always a cattle man.

C: Yep, Willie taught cattlemen.

KT: And he's still doing it.

C: Still doing it and he's probably 70 something still going. Another good cattleman Bill Evey

KK: Oh, yeah Bill Evey, where is he now?

C: Somewhere Haiku I think Bill lives. But you know had plenty other good ones. Jacinto, my dad you know they raise cattle they supply them, market.

KK: You know when we go through here, look like had one big fire.

C: Down here? Early or lately?

KT: Recently you know all the Kiawe down and stuff.

KK: No stay all charcoal.

C: Every now and then would get fire close to the power line sometimes box like that.

KK: Oh, but it never come up this far?

C: No, no come this far.

KK: And look like they had a water line going through this area where that water came from?

C: Where is this now? Haleakala take their own water down for the cattle. They have to get their own water. Their water go down to Kihei.

KT: So, they drill their own?

C: No, no county water. But their pipes went down that's why you see lot of water tanks down there what not.

KT: So before I forget, so what is your attitude about where Maui is going?

C: I think Maui is "Goodbye, Hawaii!" You know how they say. Right now I think we're the minority. What I predicted 10 years ago it's Maui going to pay a big result, and it's coming to that real fast. Real, real fast. Us local guys what ours kids going get? If we don't have nothing they sure not going to get nothing. Look affordable housing, what costs today. It's not going to get any better. Look our land tax they trying to squeeze us out. We live here we have to pay high taxes. This other guy come buy next to us he pay high price, let him pay the high tax. Why should? When we sell then the next guy pay the high tax. We never buy our land high so why should we pay the high tax?

KK: Yeah I agree with that.

KT: It's something that we got to do politically to move it so we don't get screwed.

C: But we're outnumbered put it that way. We're outnumbered.

KK: How long you been on this land?

C: Over here. This land right across here was from my grand-dad from my mom's side. This one we had to buy to get right of way to get into that land. So to get to that land we had to buy this for get that right of way. Okay, after we buy this then all these haole guys build up here. All of a sudden there's a right of way up here. Thirty-fifth in the back access. But when we wanted couldn't. But this other people come, they find em. The state don't want to own it, the county don't want to own it but on the map shows that the right of way is there.

KK: How many kids you get now?

C: One boy one girl.

KK: And where are they at now?

C: They living up Kula.

KK: They got their own place?

C: Yeah, they live up Kula. My son about 30 my daughter 20 something. She's going to MCC.

KT: So, you're brother's they were all desirous to continue being cowboys.

C: No, I guess by the time, I figure my grandpa cowboy, my dad cowboy. My dad had 5 boys I guess all would be cowboys but never have cowboy job so I pretty much the only one that kinda stayed in there. The rest turn to truck driving that kind of stuff yeah. So I'm the only still cowboy on a part time base.

KK: So you know on the property we seen a lot of panini yeah. Not so much cattle so look like all the panini growing wild like one grass you know. Before the panini get people they would be using them, yeah.

C: Before had two types of cactus. Had the red and the white. The red from Pukalani to Kaupo, you couldn't see nothing. And animals thrive on that. Never need water, get fat. I guess these people couldn't catch all that cattle, missionary type guys the big ranchers so they brought this bug. So the bug ate all the good panini. That's all food. And now get nothing else for eat so the bug eating the white one. So pretty soon no more panini. But panini had trees you could ride the horse underneath.

KK: Wow.

C: It wasn't like what you see now. Was big things. Just past Kula glen there was all cactus when we had all that. And had cattle inside there, big trees, cut trail with the paiola. That's what you do, you cut you do underneath with the horse.

KT: Paiola is.. this is paiola.

KK: That's one old one they don't make this anymore.

C: You make this. Sometimes you get rough cattle you like cut the horn you use this side.

KK: Oh, you saw them.

C: Yeah, and then this side for cut trails. That cactus was a real good feed for animals. Pig, Kamaole how much pig had, Tavares ranch like that. Used to have pig drives, not only cattle drive, pig drive. Take down to the pier. Before my wife's grandfather he used to tell me he was small boy used to go with the meal and one horn he blow and feed corn to the pigs. And then when come more huge they make one heard then take them down to the beach. But you never see that anymore.

KT: Goats.

KK: You raising the goat?

C: Yeah, that's the only one you can afford to raise.

KK: But they sell yeah?

C: Yeah, goat is one pretty hot item right now. Thank god we get Filipino's who buy the goat.

KK: They come up here buy them?

C: Yeah and then I raise them and I have one middle man, George, come and then he re-sell it.

KK: Which George Tam is that the one that used to have the boat?

C: Yeah, Dolly. So he come get them from me and then he re-sell. I just raise them. So around about 60-70 nannies.

KT: Yesterday, Thomas told me that in different areas that you're familiar with there used to be different places where water used to collect. Where it used to create natural pools.

KK: For the Hawaiians?

C: Around here no more. But you know if you go- that's why I keep coming back to Chinese you find a lot of cisterns where have Chinese houses up here.

KT: Oh, they made it.

C: So, that's the only ones I know of, old cisterns run off on the house, yeah. In fact a lot of the old houses all had cisterns before. So that shows we had better rainfall before too. Then another place get dams in the gulches, but that is all man made get cement. Like dams to hold back the water, that is all man made. As far as natural kind you know depends on the year. You know if get plenty rain get few ponds water.

KT: So, VonTempsky exactly where is that?

C: That's from Bill Leavy right up to the mountain. Yeah, but then they keep selling yeah. Start from down here by the post office. Makai that then go right back up past the petting zoo, above there go way up you can see one big patch pine trees, it goes above that too. It's one long strip yeah. Think get about 3000 acres above the road and downside maybe 1500. But VonTempsky used to lease a lot of his land the farmers was using all that makai land, that was all farm land. And then what the farmers wouldn't use, Haleakala ranch was using. But now they have some kind hunting deals down there.

KK: With the hunting?

C: I guess one of the daughters married some guy that turned a lot of the land for hunting now. Private hunting.

KT: For what kind of game?

C: I think deer and he bring in different stuff and guys pay to go shoot. And then if get too much grass then somebody put cattle in.

KT: So as far as you know the use of this property we are talking about. Back in the old days Hawaiian only used to put little kind. There really wasn't any kind of settlement right there. Only in the riverbeds like the petroglyphs indicate and was kind of ongoing yeah, moving through. So there wasn't really any kind of settlement type of vegetation of plants, right?

C: I would think so.

KT: So the first...did plantation come before cattle? Cause right now get pineapple.

C: Right.

KT: Not everything, you know get pineapple. So that was, did sugar cane come on the land? How far up sugar cane came?

C: I cannot tell you that. I would think pretty high up.

KT: How close from here?

C: I don't know if it was sugar cane or pineapple but this land I think was farmed before it was ranched. Because you look the size of the Kiawe trees.

KK: Small.

C: So that shows you had some kind of farm up there either sugar cane or pineapple. I would think more pineapple. But then you look the white country, Kipahulu, had sugar cane. Hana had sugar cane but they had enough rainfall.

KT: But sugar cane was a staple product of ancient time.

C: Right.

KT: The difference is they commercialize it so that now you plant to harvest. So, what I'm trying to find is the history of the usage of the land. Some of the things that you guys did yeah, were just for cattlemen that us guys who no raise cattle who are not around cattle. What are some of the unique things that you can recall. You know fond memories.

C: Well, before every time one ranch would have branding everybody go help. Always help each other. Maybe this week we go Haiku help Jacinta's. Next week Jacinto come up help us, following week we go do somebody else's job. Always weekends we, families would go.

KT: Ok, when you would go outside of the work that you did what else is expected when you go. The whole families come, you bring food.

C: Yeah, pretty much one big potluck. Or the ranch that's hosting the brand, he make the food then next time the other guys doing it, he make the food.

KT: So Mike, in other words was work but was play. Was fun.

C: To a point.

KT: HA! Work is never play but you love the work so.

C: The thing is everybody think cowboy is only ride horse. Cowboy is everything. You gotta do everything from carpenter, mechanic, you know plumber. It's not only ride horses. You gotta know how to pick one sick animal, how to doctor that sick animal, you know. But everybody think ah, they buy cowboy boots cowboy hat they one cowboy. No. It's something you learn.

KK: So, did you guys use any of the plants on the land for the animals to cure the sickness. Or was it purely medication that you would learn already where you would get it.

C: Well, was more commercial medicine. But then one good medicine we used to help cattle plenty was Koa, haole Koa. Haole Koa is high in vitamin A, which was good for their eyes.

KT: So what, you would use the seeds?

C: No the animals eat that.

KT: The leaves.

C: Yup. But then you but haole Koa horses eat too much haole Koa they spilling the beans they come like us, all the tail fall down! It comes short because high in protein. But that was good feed for cattle. Even for fattening cattle, very good. Except the fat comes yellow and people no like the yellow fat. Before people like yellow fat.

KK: Oh yeah, they fry 'em.

C: Today they tell you no eat fat. Before you like fat. But without fat the meat no more taste. But the Koa would make the fat kinda yellow like that. Now everything they want grain fed.

KK: The pineapple brand, molasses, corn.

C: Yeah, but right now we don't have even that so even the pineapple we cannot get for them so they're feeding different feeds that they bring from the mainland but cost money for bring it all in. Cost a lot of money. Everything cost money.

KK: Never used to be though.

C: Well, for example in the 70's we were selling beef probably was getting \$5 a pound, carcass. Gas was 55 cents a gallon. To butcher that steer was 27 bucks. Feed was a lot cheaper. Today we pay \$80 to butcher a steer. Gas is what \$2 a gallon and they still getting the dollar something little over a pound.

KK: The rancher.

C: So, does that make sense?

KT: Yeah.

C: When you can sell that same calf today, get \$400 they keeping them up to a certain age for get the same \$400. Probably 7-8 month old calf you can get \$400 today. They keeping em up to 18 months to get the \$400. Cause there's a lot of buyers here that are buying cattle. Like right from the cows they buy the calves.

KT: Mike, what are some things that you guys used to do that you don't see happening anymore? Unique things to the paniolo.

C: Oh, family parties. Before always had after Thanksgiving every weekend you had one party to go. Not today. Gatherings go down the beach once and a while all the families. Go down the beach, stuff like that.

KT: What about rodeos?

C: I was never into rodeos. My brother's was into rodeos I was never because your rodeo cowboy and you regular cowboy is two different cowboys.

KT: One is show and one is work.

C: And I guess they only get on limit for where they're at. We work different, we had to yeah. They going for fun. But that's pretty much two different cowboys. Rodeo cowboy and regular cowboy.

KK: You know on this land look like the Kiawe tree young so they never have too much Kiawe around. I know that my dad when he was a cowboy he used to use the Kiawe beans for feed the animals.

C: Real good feed.

KK: So where would you guys get your Kiawe beans then?

C: Before when our increment first came up after dream season. We used to buy lot of Kiawe beans from the Filipino's. Was maybe couple cents a pound. But in those days was big money. We used to feed cattle with that, horses, rabbit. Everything eat Kiawe beans. Kiawe beans was real good feed.

KK: Where do they put them, in the huluhulu bag?

C: Yeah we used to take the bag, active feed bags we would give to them and they would pick and then we would buy the feed back, the Kiawe. That was real good feed. Even we used to chew them. Sweet! Try get one real nice Kiawe bean and chew on it, it's sweet. Plenty people used to use Kiawe bean to feed. But today everybody lazy.

KK: So you were talking about the family the cowboys so would you guys ever cross each other's land. Would you take you horse 6-7 hours that way to Makena side and they would come this side or round up. How would you guys go? You guys trail them or you ride to the round up?

C: Some places we ride on the road. We even used to drive on the road by Kula 200 we used to ride up.

KK: So most of these roads were already cattle driven.

C: Even Hana we used to drive cattle from Hamoa to Makalai.

KK: Yeah, I see the guys in Kaupo they still using the road about 6-9 months ago I see guys driving cattle on the road.

C: But like before the big ranchers- Ulupalakua, Haleakala, they were to themselves they were never involved. We were the small potato ranchers next to them. So they never bother too much with us. So we never enter their property. We ranch around them or like I say we would go through the road but never through their property.

KK: Was there at one time on this land when you guys cowboys big pilikea amongst each other or everybody knew their territory and knew the rules and understanding?

C: I guess they had honor among each other.

KK: Honor yeah?

C: They never was fighting people. They had respect before. That's one of the things nobody get respect.

KK: But there was one thing that everybody had to go to. They didn't do it on their own. So, who shoe your horse? Did you shoe your own horse or did you go to a horseshoe man?

C: I had different guys used to come shoe horse had like this guy Tony Spange to shoe our horses. Henry Silva used to shoe horses. Plenty cowboys used to come shoe horses. Side money, to shoe a horse was like \$4.

KK: \$4.00 a horse?

C: Yeah, today I think it's \$50-60 to shoe a horse. Then some ranchers do their own.

C: Get Carly Chung. Carly's a good shoer Henry's still shoeing but he's getting old like the rest of us.

KK: Henry???

C: Henry Silva. He long time horseman, cowboy. Get lot of horseshoer's today.

KK: You know any of the guys used to work on Koomoa ranch, was this Koomoa ranch originally?

C: This side. That was when had Earnest Martin he was like the manager before. He was there a long time. Henry Kikiwi. Jimmy Miguel. Wilford Souza worked there for a while.

KK: These guys are sill around. Kikiwi around though yeah?

C: No. Wilford Souza still around. He's a old time cowboy too. Wilford Souza.

KT: Martin Kikiwi passed away?

C: No Henry Kikiwi. Yeah, no make me scared, I just was talking to Martin.

KT: He around 50-60's.

C: Martin? Yeah, Martin was Ulupalakua Ranch. This is Ka'ono'ulu ranch. And had a lot of cowboys there.

KK: So the big ranches was like, Haleakala, Ka'ono'ulu, Ulupalakua, Rice.

C: That's about it. Hana. And way back we had like Gold Ranch. That was HC&S had their own ranch, Gold Ranch. That was big ranch. Lahaina had Pioneer Mill, had their own ranch. But those ranches all shut down yeah. But the big ranchers were pretty much to themselves and the other ranchers, like I said we used to go work with each other's animals. Help out.

KK: So, Kumu asked you the question, what year were you born.

C: 1951.

KT: Lot of accumulated knowledge through experience.

C: That's why I say cowboy was through experience not through book. You know today is degree's no common sense, no experience.

KT: What would you advise young people if they said they're interested in getting into this area, learn about it.

C: Learn is fine, just to get the feel. But as far as to be, I wouldn't recommend it. There's no future.

KK: All the ranchers now using motorbikes for round up. Like Ulupalakua I see them use their big tire motorbikes.

C: The motorbikes are good. But there's still places you need horses, the motorbikes cannot go.

KK: They're never going to go where the horse can go.

C: Yeah, and the motorbike cannot hold one calf when you branding. Lot of people finding that out.

KK: I think when they change their styles, finding out what you say. A lot of them don't have the feel and the common sense. The big thing for me with my dad was the spirit being high in the cowboy. Feed em, clothe em. You cannot overwork them because you have long ways for go. A lot of things about going from Mauka to Makai people don't realize that once you hook up the horse we going be going for couple days not 2 hours. Just to go Makena going take 6-7 hours.

C: Yeah, but you know before the animals were tough. Your horses could handle. Today's horses cannot handle.

KK: Their blood change like our blood. From your father to you to you to your kids. We talk about our kids. But the environment change and the type of lifestyle change so it's not applicable anymore.

C: That's why you look today, the horses, the men before uses all dogs. Top working animals. Wasn't the best looking but they knew their job. But today you have to have this kind dog for work cattle, this kind horse for work cattle. Before you ride anything the job is what made the animal or the man. Doing it that's what made everything.

KK: My dad is from Niihau so I'm on my way to go there in June. But I can relay to my friends about you about a real cowboy. When I went to Niihau they know that I was the haole Hawaiian. Because my hands was all smooth and those guys over there like you with all the dirty jacket. They not going to wash their clothes everyday.

C: Once you ruin the jacket you kill the feel from the jacket.

KK: So they keep the mana in the lepo and they just use their jacket and they use the same jacket.

C: You know this jacket was like canvas. Every time wash come soft,

KK: We appreciate your time Michael. I think the important part about people like you who still around maybe not so much people to apply what you did, but at least they can learn what was before. It's up to them to carry on the important things. Like you like us open space is always a deal so we're hoping that they're going to do that here.

C: I hope so too. I think I'm the only person who has 11-13 acres here. Everybody is 2 acre lots.

KK: Small yeah.

C: But sooner or later they're going to grumble my goats making noise, my chicken making noise.

KK: You seen this morning in the newspaper, yeah?

C: I never see yet.

KK: Front page that the next time they meet they are going to talk about the peacocks and the chickens. No can be in residential area.

C: But like all these people come to Kula for country. What is country?

KK: Yeah, animal.

C: Animals.

KK: They don't hear this dog barking or the chicken coo in any country anymore. Better you have dogs animal and chicken crowing and goats running around. Whether they're tame or wild it's a healthy life.

C: What they rather have one goat next to them making noise or one house next to them making noise?

KK: Yeah, especially with a jukebox.

C: One of my crimes is to sell em all. You know, pack 'em, pack 'em, pack 'em. They cut like bologna and eat that. But today poi no make the skin.

KT & KK: No.

C: Even for find sour poi today hard. No more sour poi.

KK: No, they make em too watery.

C: Before the poi you eat, you come back the can full again. Now no more that kind poi.

KT: Mike, we really appreciate you taking time out.

C: I don't know if I'm helping any or what.

KT: Of course, tremendous.

C: You know like over here. (walking ) From this branch go down see that's why the bottom get one small hog wire go way down go over I think you met that other guy across the big gulch raise cattle. Come up. Before this was all panini. And from what I heard the old man Rice you to raise pigs inside here. And then he come get the babies and leave all the mother's down here. They used to raise our pigs in here.

KK: Oski Rice?

C: The father.

KK: Oski's father?

C: Yeah, used to run all pigs in here. This here was all cactus way back.

KK: So you're saying that one of the roads come right up here.

C: This one right here you go right down you going hit that road. You stay on that road you keep going down, going down. You going come to one corral. By that corral you turn right get one gate you open, you going come out that side corral.

C: Like the guy Oma'opio he raising for milk, different kind goat.

KK: The one all stringy yeah?

C: That can be all right, but more slow growing yeah.

KT: Describe the horses again.

C: We're talking about the Hawaiian horse, which to me kinda resembles some of the Mustangs. They're small but they can handle, they're tough. But today everybody looking for tapered horses. Quarter horses, thoroughbred, registered horses.

KK: Get more value yeah?

KT: And they work the ranch.

C: Actually for cowboy horse you need one more with heart than with breed. The thing work. Same like one man, you need one with the heart more than muscles or anything else.



KK: I see right here you get, is that a lungong tree, or lychee?  
C: Lychee.  
KK: So the Chinese people went put that?  
C: I put that.  
KK: Oh, you put that. But up here did you see these trees before on the land.  
C: No. But they say this house had, but I think it's too dry up here.  
KK: Right, but look like this one growing healthy.  
C: Yeah but never going get one lychee. They say you gotta lick 'em yeah?  
KK: Oh, I see over there get the milk can over there. So that's the milk can from the...  
C: That's old kind they make them like that more round. But nowadays they make em ugly they paint them yeah.  
C: I like how natural the frost is like that.  
KT: How far back they used to use that?  
C: Oh, up to probably.  
KK: Sixties, seventies. Sixties we used to have the milk wagon. Haleakala still had the milk wagon carrying that.  
C: Before they used to deliver milk house to house.  
KT: How come you get all these cows here? You collect them?  
C: Whenever I go pasture I come home and put them around. Then once and a while guys come they like they take them home.  
KK: Well, that's good memories of the past yeah? You not going find plenty of them anymore.  
C: Like I said, now I stay with the water works not with so much cows.  
KK: You still with the county water works?  
C: Yeah, I just started. No more job home so, keep me out of trouble.  
KT: So who owns all of this?  
C: That's all my stuff.  
KK: For working animals.  
C: My trailer stay down my mom's place for our cattle like that.  
KK: You gotta come with the land or else you cannot get to the place. When I was with my dad, nobody get on the truck unless it's a working day. We never used to jump on the truck for ride around.  
C: You know that's the thing with new trucks today the price on the truck. Before truck was strictly for working. Today they buy one four wheel drive Dooley for go down store for go buy one loaf bread, huh? And they pay fifty thousand for the truck.  
KK: Everything is a work animal.  
C: But truck was strictly for work, not for da kine, holoholo.  
KK: Solar panel over there?  
C: Get lights come on by the statue at night time.  
C: Yeah.  
KK: Was you went put em in.  
C: Yeah was not too long it's only about little over a month, just coming out.  
KK: Where's it from, Waikamoi?  
C: Yeah. Was on the side. Small kine though.  
KT: The hybrid kind cactus.  
C: Makuli kind cactus. Thing old.

KK: Old that thing. They used to have this in the land. This the one that cut the water inside?

C: No that one cactus. I forget the name of this one.

KK: They used to get the one that cut water.

C: Yeah they take the water outside

KK: Even the kids not going know that stuff cause no more already.

C: See over there is my smoke house, we went smoke meat like that.

KK: This one Kupuna ti leaf yeah?

C: Supposed to cut 'em, too tall. No can reach.

KK: Eat laulau.

C: Every time come night the wind over here. Too tall.

KK: So the wind you know the wind that comes over here. You know the Hawaiians had a special name.

KT: Is that for milk?

C: That's for cream that, cream kind.

KK: The thick one Kumu.

C: The makai one is the milk.

KK: They also had the cheese one yeah?

C: Yeah they get different kind.

KK: Who's house that, that your guys one?

C: That's my house but I rent em out yeah when I need help.

KK: That's your family in there?

C: Our friends. And then I get one bunk house that's what I live in.

KT: So Mike, what I'm going to do is transcribe what we talked about. Bring 'em to you, show you what we going submit. Those who trust us they just sign off on it and you'll get it.

C: This what, not going be on TV.

KK: This not going be public.

C: Bum by they, you know the friend how come you no tell my name and all that.

Agreement to Participate

I, Mary C. Cravalho understand that Kimokeo Kapahulehua and Keli'i Tau'a, independent investigators contracted by Pacific Rim Land Incorporated will be conducting oral history interviews with individuals (kupuna/makua) knowledgeable about the land area currently the Maui Research and Technology Park in Kihei, Maui. The oral history interviews are being conducted in order to collect information on possible pre-historic and or historical cultural resources associated with these lands, as well as traditional cultural practices.

I understand I will be provided the opportunity to review my interview to ensure that it accurately depicts what I meant to say about any of these lands. I also understand that if I don't return the revised transcripts after two weeks from the date of receipt, my signature below will indicate my release of information for the CIS/A report. I also understand that I will still have the opportunity to make revisions during the report review process.

Please check the bottom:

I am willing to participate

I am willing to participate under certain conditions.

**Consultant:**

Date: 11/24/06

Name Mary C. Cravalho

**Investigators:**

Date 11/24/06

Name Keli'i Tau'a

MAHALO NUI LOA.

## **Interview: Mary Carvalho**

**By Keli'i Tau'a/ Kimokeo Kapahulehua**

**October 5, 2006**



***KT- Keli'i Tau'a***

***C- Consultant***

KT- So once more, your name is?

C- Mary Cabral Carvalho

KT- And you were born in?

C- Nahiku, Maui.

KT- Nahiku?

C- Nahiku, upper Nahiku.

KT- So you went to school in Hana?

C- Hana School, Kaeleku School and then Hana School.

KT- So when did you move in the area of Kihei?

C- In 1949.

KT- 1949, what made you move there?

C- In 1949 we moved to Kihei.

KT- Why did you move there?

C- Well, because at the time the plantation, they formed the Union and where I formally lived in Puunene Plantation (my husband worked for the company) and then they started charging us house rent so we decided we might as well buy our own home rather than pay them rent. So we moved to Kihei. Land was real cheap at the time. (laughing)

KT- How much did it cost?

C- It cost us a thousand dollars for half an acre and it was close to the beach.

KT- Exactly where was it?

C- On, where, next to where Maui Sunset is now.

KT- So the house is not there anymore?

C- It is, oh yeah! We lived in it for twenty years and my parents lived with me. Then my father had a stroke but our house was off the ground so it was hard for him. So then we

moved to Uilani Street and we built a home on the ground, you know level ground, because of my father. And we lived there on Uilani Street since 1969 and still there, my house is still there. But the other home is still there, yeah we sold that.

KT- So you and your husband moved from Puunene to buy cheap land but you just mentioned mom and dad; what were they doing?

C- They were retired. My mom and dad...

KT- What did they do?

C- My father was a forest ranger for Hana district and Marian Cabral. And when he retired he wasn't well so they moved (they used to live out in Hana) and then they moved in with us. My father was 80 years old when he had a stroke and it was hard for him to get around and all. We had a ramp but still it was hard. And they used to have tidal wave-1960 all those tidal waves. So we had to evacuate because we were close to the beach so we decided we better get something else. We moved to; Francis Akina opened up a subdivision.

KT- Where was that?

C- On Uilani Street, close to his home Francis Akina used to live. Uilani Street is between the Baptist Church and Kalama Park.

KT- Okay.

C- The fire station, I would say. So we built our home there and- but before we built our home my mother died so only my father moved with us.

KT- So how old was mom when she died?

C- My mother was eighty-two.

KT- So your family-well before I continue; How old are you?

C- Oh, I'm 88 years old.

KT- So your family is known to live a long life.

C- Yeah, my father was 90 close to 91 when he passed away.

KT- Wow.

C- And now I have a sister that lives up Iao, she's 97. And one here is Kahului she's 94.

KT- And did they all live in Kihei for a while?

C- No, they never did, no. The one up Iao lived Waiehu and then she moved to Iao and then the one in-Ali lives here in Kahului and she used to live in Kahului; her husband was Bill Helm, the old timers, the Helm family.

KT- So, Mary living in-so how old were you when you were in Kihei in 1949 that would be?

C- I wasn't even fifty then, so yeah I've been in Kihei for most of my life in Kihei, really.

KT- So you've seen a lot of changes.

C- Oh yes. When we moved to Kihei the road was only until Kalama Park.

KT- But people were living in Makena?

C- Yeah, was a dirt road, yeah.

KT- So there was access but it was only dirt road. What was there in Kihei that you can remember? What kind of stores?

C- They had only the A&B Store, afterwards was Suda Store.

KT- So where Suda is, is where A&B was?

C- Yes. And then they had the little post office next to it. Johnny Ventura was the manager of the store at the time and he opened up- the little post office right next to the

store. And he was Post Master and manager of the store and I used to work out of that post office. I would deliver mail; I was the first mail carrier.

KT- Really? Can you remember how many houses you would deliver to?

C- Well we, actually Johnny I remember going with Johnny begging people to have rural route; home delivery and we had thirty five people on the route at the time.

KT- Okay.

C- Yeah and I used to deliver mail; we get through real early and all. And then my daughter worked there, Jeri Serrao she worked in the post office. Then afterwards they moved to the big one where she is. She worked there and she retired out of the Kihei Post Office.

KT- Oh, wow. So what vehicle did you ride to deliver?

C- We had to use our own car. In those days we used our own car.

KT- So what kind of car were you driving?

C- I had my husband, we had a 1951 Chevrolet and we had to... And then afterwards when they first started Maui Meadows up and down those hills. Oh, he had to- good thing my husband was a mechanic he used to fix brakes almost every, at least every other week he had to fix the brakes, yeah.

KT- So was it dirt road going up Maui Meadows?

C- No part, it was already partly paved; yeah most of it was paved. That was way, years afterwards of course.

KT- So the time that they built Maui Meadows, that was really the first kind of development of Kihei.

C- Yeah, well, the first development I would say was Maui Lu.

KT- Oh, that's right.

C- Yeah, Maui Lu was the first that started condominiums, yeah and uh. Yeah, when Maui Lu first started they um...

KT- So, um there was only South Kihei Road for you to drive on to deliver your mail.

C- Yeah, um hmm..

KT- So, was there a Lipoa Street?

C- Yes, they had Lipoa.

KT- Was there a Honoapiilani Highway then?

C- No. The Honoapiilani was, no.

KT- The up mauka.

C- Yeah, the Piilani Highway, yeah what they call the Piilani Highway. No, no, there was no such, even when I gave up delivering mail; No there wasn't Piilani Highway.

KT- When did you retire?

C- Uh, I was age fifty-six. I didn't exactly retire because afterwards I became only a sub carrier because the route grew too much and it was too much for me.

KT- But by then they hired some other people right? Paula said she used to go too.

C- Oh yeah, Paula yeah and Paula used to go and then afterwards then they had two carriers. Two different carriers and I used to substitute like Christmas time when they needed extra help. Yeah, and then when other carriers would go on vacation I used to work- take their place because I was no, I was never a regular carrier.

KT- So, Mary since the post office was located on South Kihei right at Suda Store as we know it; you had to travel all the way and your farthest route out was Maui Meadows.

C- Maui Meadows, yeah.

KT- So the area that we are researching is in between your route which is presently Maui Tech where they are interested in putting in a full hospital in South Maui. Can you recall what happened during rainy season? Talk story about that.

C- Well, one experience I had when we were still living still on Ewa Road near Maui Sunset, one experience I had, it had happened we were flooded and my father was with me and he had another slight stroke and I couldn't get him out, out of Kihei; and luckily there was a woman that was a nurse and she came, she was able to get to my house to tend to him. Yeah, and several times we were just stranded in Kihei. Even now, in case we have heavy rains, right there the junction by Suda Store you wouldn't be able to because I saw where cars were washed into the ocean there. Right there by that junction there. So, of course we could, like now with Piilani Highway we could if you could get up to Piilani Highway. Like where I live now they didn't have opening to get up to Piilani Highway we had to down the South Kihei Road in order to get out of south Kihei.

KT- So one more time, I'm not really sure so I want you to say it one more time. Your house is exactly where in Kihei?

C- It's um, between the Baptist Church of South Kihei Baptist Church and the Fire Station where the library is.

KT- So right now that's Kalama Street?

C- No, I live on... As you're going toward Kalama Park I live on the left of- yeah you have to make a left turn on Uilani Street toward Welakahao, you know where? Okay, now if in case we, they just opened up the road from where I am, I have to go up and get across Welakahao in order to get up on Piilani Highway.

KT- So, down there....

C- I live just four houses off Kihei- South Kihei Road and sometimes before they didn't have the traffic light and now that; it used to take sometimes I get out to get to the main South Kihei Road and it would take me 20-25 minutes before I was able to get out of, to get on the highway but now at least they have the traffic light so that gives me a little more leeway. That's why I usually go south- I mean go north instead of South. Yeah like I go shopping more that way and good thing they have the Kaiser Clinic, you know, north of my way because it's easier to get that way then, you know.

KT- So, the area that you're describing where you live, you were surrounded by what they call wetlands.

C- Yes, uh huh, Azeka's- close to Azeka's Shopping Mall.

KT- All wetlands.

C- Yeah, uh huh and the Miranda's property was considered wetlands, yeah.

KT- So you've seen a lot of change?

C- Oh yes. (laughing)

KT- In your opinion, is it a good or bad change?

C- It's hard to say. Well, my children were brought up, you know, there and they didn't like the changes because the beaches were all freed. They'd go camping whenever they felt like it and, yeah, there was... so my children don't like it. (laughing) They all moved away and I still have one son in Kihei and uh, as far as he is concerned (he's 51 years old) and as far as he's concerned he doesn't like the change. But, it's created jobs it did a lot of, you know, you have to look at those things. It created jobs for our kids and so...

KT- So your husband was associated with the plantation?

C- Yes, he worked for HC&S.

KT- So, he started with them from Hana or he came here?

C- No, my husband was from Kula. He's a Kula- his nephew is Elmer Carvalho. He worked for HC&S and we lived in Puunene the first 10 years.

KT- So, where did you folks meet?

C- Um, through his nephew (laughing) and we met at the party, yeah I was still out in Hana, living out in Nahiku.

KT- So when you folks first got married you folks lived in Puunene.

C- Yeah because my sister and then Bill Helm, my sisters husband's worked for the Sugar Company so.

KT- Can you describe Puunene?

C- I didn't like it because up in Nahiku the homes were far apart. You know it rained, it was so clean there and when I first moved they still had the train tracks and they used to haul the cane by train and the dust- oh it was! I just didn't like it, and then the homes, you know everybody- the homes were so close to each other and; no I didn't really like it.

KT- Plantation homes?

C- Yeah, plantation homes but we had a lot of benefits though because we had free housing, free lights and free doctors. Everything was there, when the Union organized in '46 they did start charging us house rent and lights and, you know so it was a different world to live in after that.

KT- So how far did the train tracks run?

C- All the way down to Kihei because they had sugar cane down, yeah, Kihei.

KT- Maui Tech Park, did it go that far?

C- No, I don't think so; I'm not too sure. I think it only went as far because there was a camp- camp four I think they called it...

KT- Mokulele Highway.

C- Right above where the Suda Store, around that area I would say the train tracks were because the Pires used to live, Victor Pires used to live over there near the store and he; yeah I think the train tracks ran until there. And they used to haul cane from there and we lived close to the train tracks.

KT- So you didn't work for the plantation but did you have an opportunity to ride the train?

C- I did ask- well, no. Not the sugar train, I rode the train that used to go to Maui High School.

KT- Passenger train.

C- Yeah, uh huh. I rode that after they- just before they closed up. The train used to take people up to Maui High School and my sister used to go to Maui High but I rode it after, after- just before they closed the whole thing, yeah. They gave up that, but I didn't.

KT- What was your husband's responsibility with the plantation?

C- He was a tractor operator and when the war broke out they took him as a worker to build the airport. At the airport as a tractor operator he plowed up all the area to build that bunker's because they closed the road, in fact, to go to Kihei. But we were still living in Puunene at the time but he was, went to work as a tractor operator at the...

KT- So he's responsible for building the bunkers?

C- Bunker's yeah! Well, he actually helped build the airfield.

KT- Which is on Mokulele Highway? Yeah, nobody can remember that because they all who lived then passed away.



C- Oh no, no. I got on a plane ride from there to Honolulu after there, was still during the war.

KT- What airlines was flying out of there, can you remember?

C- I think it was Hawaiian and I'm quite sure it was Hawaiian. Yeah because I remember; anyways I'm sure was Hawaiian Airlines, I'm sure it was.

KT- When I was a child I can remember flying out of there too. So, it was a great life?

C- Yeah, oh yeah. Yeah we went to Honolulu because one of my sister's lived in Honolulu. In fact, she lived- her back yard was Hickham Air Force Base and when they attacked Pearl Harbor she was right there. I mean she saw the whole thing. In fact her husband still lives here in Puunene too- I mean in Hale Mahaolu. Yeah, he's 95.

KT- By the way, what nationality are you?

C- Portugese.

KT- And your husband was?

C- Portugese.

KT- Pure?

C- Pure, yep.

KT- So Elmer Carvalho is pure Portugese?

C- Yes.

KT- Who was his- what was his mother's maiden name?

C- His mother's maiden name was Pierres. She was Pierres.

KT- Do you folks keep in contact at all?

C- Oh yeah, um hmm, we do. Well, they're all gone now.

KT- But, do you periodically talk to Elmer?

C- Yeah, I do.

KT- How old is he now?

C- I think 80- he's in his early eighties because he was, you know. I'm quite sure he's about 82, I would say.

KT- Would you consider calling him and telling him I want to interview him?

C- I would.

KT- Okay, I'll leave you my number later but let's get back to you. So, did you go- did you folks go down to the ocean?

C- Oh yes. Right there in front of my first house the children used to play on that; because they had a reef outside, the one they're trying to rebuild, and we used to go when low tide we'd go right out to the reef and get shells and all kinds of things.

KT- Did you folks eat things from the ocean?

C- Oh, yeah. Squid and I had a friend, Ludy Perreira, he used to live next door to us and he used to go squidding and he taught my oldest boy how to squid, how to pop the squid. Oh yeah, I love squid and then we used to always get ogo (limu) yeah, a lot of ogo, I love ogo.

KT- Yeah, so the area that you lived in was really wealthy with ocean things?

C- Oh yes. The reef had a lot of shells. I still have some of the shells, those coral shells. Yeah we still have.

KT- Down close to your area, one of the fishpond names is Kalepolepo.

C- Yeah, I lived right there. In fact our area is considered Kalepolepo, yeah.

KT- Now, do you, do you think and it's possible I was just writing some stuff last night and I said-Can you remember during the rainy season that all of the top soil from Kula come down and change all the water?

C- Well, when we first moved to Kihei in January of '49, was rainy season. I remember we were there- maybe about 2 weeks in about the middle of January I would say. I remember one night it rained in Kihei, wasn't that bad, but toward morning I told my husband, I said, "I hear water running through our yard." And he said, "never mind and go to sleep." And I remember I kept saying I said, "I hear water running." I told him, "I smell mountain fern." 'Cause being brought up, you know in Nahiku, I said, "I smell mountain fern." He said, "You crazy!" And finally I got the flashlight and I went out (I couldn't stand it) I went out and sure enough water was running. Good thing our house was; well the old lady, Alec Akina told us that to make sure build our house off the ground. And sure enough was good thing, our house was about 2 feet off the ground. And sure enough water was running right through our yard and the next day we went out and there was panini's and vegetables from Omaopio (laughing) in our yard and yeah, I experienced that. And then another time; and then before my mother died (she died in '76) yeah, that time too that we had heavy rain and we had, they said was 7 inches up in Kula and that rain, all that our whole yard was all flooded again. Then after that I know we were in our new house now and I'm not sure what year that was but we had flood in. And my brother was living on; he had a Quonset hut where McDonald's is right now. He lived in a Quonset hut and the thing- and they had to, the army had to go rescue him and the children and they came to stay with me out of that. But we've had a lot of other experiences, a lot of flooding. I think in 1980 they had one. I know my son-in-law was in the police department and he got flooded. He got called and he couldn't even get out of Kihei. He couldn't even go to work that day.

KT- One of the causes was because it was all wetlands.

C- Yeah and they didn't have the outlets like they do now. Even now, you know right next to St. Theresa's Church they have all those lilies growing there? That is a bad place. I don't see why they don't take out all those lilies because if in case we have any heavy rains, those homes along the, you know-South Kihei Road, they used to get all flooded. And now they'll get all flooded again.

KT- So all the years you were there, it still hasn't changed?

C- No as far as the lowlands; No, I don't think so. They said they detoured the water. There used to be a ditch along Miranda's property and then would go into the ocean to that area near St. Theresa's Church and but they've covered that ditch so I don't know where that water will be going.

KT- So the bridges that they built to go under the road is not sufficient?

C- No I don't think so. I don't think it is you know. I know when I was delivering mail up by, um...what was that place called now; I know they have a ditch or just before Keonekai we used to go there. The road, they didn't even have Keonekai at the time, but we would go up there and we would go down low (they have culverts now there) but one time I couldn't deliver the mail because that place was flooded. But still they have the culverts but if we have heavy, heavy rain I don't think they'll be able to. And then I saw by Hale Kai; no Kihei Akahi where they built- Henry Miranda was there and they had just, they built housing in there and they just built the housing and the road. They just raised the road but the whole road was washed out completely. You couldn't get beyond;

this is where the police substation is, it's on Kamaole, by Kamaole II, yeah. They, you couldn't get across there, the whole road was washed out and that's why I say.... And then now they built that place by Kanani, Kanani. They built some homes down in that hollow. I don't know how they allowed them to build that because that area always flooded. That's right by Charlie Young's bridge, yeah beyond Charlie because that....

KT- You know that's interesting; My associate Bully Kapahulehua, I don't know if you know him but we just went and took some pictures of some petroglyph's (you know those writings on the wall).

C- Yeah petroglyph's, uh huh.

KT- Right in that area and as you were living in Kihei, were there any Hawaiian stories or any Hawaiian things that you can recall that was there where we're talking about where the hospital will be built?

C- Where are they planning? It's on Piilani, yeah?

KT- Yeah, right by the Maui Computer Tech; Mauka over there.

C- Yeah well, that's up high.

KT- Yeah but the water, the road comes out through Lipoa so while I was saying yeah that all of the school flooded on big rains and so...

C- Oh yeah Lipoa used to be really flooded because the church, the Catholic Church, they were just building the second Catholic Church, the one that they use as a hall now.

KT- Right.

C- And the water went right into that church. That's why the present one they built it high up on a hill but that area was awful. Lipoa used to flood really bad.

KT- So can you recall anything up there?

C- Up that side, no.

KT- Any Hawaiian temples that somebody told you about?

C- I don't know too much about up there really; I wouldn't uh...

KT- Of course, like you said, cars never passed so unless you cowboy you wouldn't be riding around there.

C- Yeah, uh huh. Like now, I belong to the Kihei Senior Citizens, of course the bus goes because even Maui Meadows has- has really grown. But, no.

KT- When does the Senior Citizen's meet down here?

C- On Tuesday's and Friday's.

KT- Where do they meet?

C- They meet at the Community Center.

KT- What time?

C- From 9am to 11am.

KT- Community Center.

C- Yeah up by where the swimming pool is.

KT- So, since you live here you don't go to the meetings anymore?

C- No, well I don't. I'm just temporary. I'm anxious to go back because I had a fall and Dr. just don't want me to be left alone. So, my son is in San Jose California and he came and then, well he's old enough to retire and so he's going to claim his Social Security and he's coming back to live with me so I'll go back to my house. Oh, yeah.

KT- No place like home, right? Anything else you want to say?

C- You know who you could, if you want to interview anybody else that lives- is Eleanor but she was Xavier but she is Gomes. She lives on Ewa Place in Kihei.

KT- How old is she?

C- Oh, in her eighties, yeah and they actually moved to Kihei before I did. Yeah, Joe Xavier

KT- Is she healthy?

C- Oh, yeah. Oh, yeah.

KT- Do you keep in contact with her? So if you don't mind contacting her, I'll leave you my number and then let me know what, you know.

C- Yeah, because she and her husband still lives there and then her father. Because they moved to- they're the one's who moved to Kihei after because he used to work for HC&S too.

KT- And her father was there before they moved there?

C-Before, yes; Joe Xavier moved.

KT- And how's the father's health, good?

C- Oh, no he passed away; only Eleanor and Val-Val's home.

KT- If you don't mind if you can call her and call Elmer Carvalho, I would love to interview them.

C- Okay, sure. Yeah Eleanor lives right in Kihei.

KT- Okay well, let me end this here.

Agreement to Participate

I, Edward Y Cheng Jr., understand that Kimokeo Kapahulehua and Keli'i Tau'a, independent investigators contracted by WCPT/GW Land Associates LLC will be conducting oral history interviews with individuals (kupuna/makua) knowledgeable about the lands of Honua'ula Ahupua'a, Maui. The oral history interviews are being conducted in order to collect information on possible pre-historic and or historical cultural resources associated with these lands, as well as traditional cultural practices.

I understand I will be provided the opportunity to review my interview to ensure that it accurately depicts what I meant to say about any of these lands. I also understand that if I don't return the revised transcripts after two weeks from the date of receipt, my signature below will indicate my release of information for the CIS/A report. I also understand that I will still have the opportunity to make revisions during the report review process.

Please check the bottom:

I am willing to participate

I am willing to participate under certain conditions.

**Consultant:**

Date: 6/5/06

Name: Edward Y Cheng Jr.

**Investigators:**

Date: 5/5/06

Name: Kimokeo Kapahulehua

MAHALO NUI LOA.

## **Interview: Papa Chang**

**By Keli'i Tau'ā/ Kimokeo Kapahulehua**



**KT- Keli'i Tau'ā**

**KK- Kimokeo Kapahulehua**

**C- Consultant**

**W- Wife of consultant (Mama Chang)**

KK- Papapauka... There's Mala Wharf, right there we was over there.

C- It was by Maui Prince Hotel, yeah?

KK- Mmhmm.

C- But from this map, smaller maps come. If you read over here that's two one yeah?

KK- Yeah. There's the edge of the lava flow.

C- And it doesn't clearly say Honua'ula but Honua'ula comprises most of this area. Yeah, but then you look at the like area seven. Map seven, right here. This map just to give you an idea. So you take map 2 one which gives you the names, that's one of the few maps that has all the old Hawaiian names yet, you know. And some of the old Hawaiian, you see this that's all Mahele's property that. A lot of it's been erased and changed..

KK- But you know these these guys they had um they in Hawaiian. The bureau conveyance they never transfer em because they was too lazy and they get 'em in records.

C- Sometimes they better off to leave it that way. Somebody translate it, they change the meaning yeah?

KK- Yeah they do.

C- Cause no more Hawaiian meaning. Hawaiian words are so clean by itself, yeah. They don't have legal terminology for so many stuffs.

KK- No more. No it's pretty much a spiritual culture terminology. And it's for the people over there, yeah. It wasn't given for the people everywhere. That's why everybody was indifferent in the ahupua'a. Then they can tell you who you are, what you are because they know your ano(nature)already.

C- Ok, you look at this map this is the old Ulupalakua Road that used to come to Makena. Makena landing is over here, yeah? We're over here, you see that lot right there, that's our place.

KK- Like this kind lots, Keauhou.

C- Yeah, but there's two Keauhou. There's this one and I guess this is the ahupua'a. But anyway then if you want to look at tax key seven, this area, that's what this map is. Just to give you an idea of what references you might be using, or we might be talking about. So this is map seven. See this is my lot right here.

KK- Wow. What's that in the front? The State?

C- In front here? It's now State. Ulupalakua was claiming it.

KK- Oh, multiple claim.

C- This is one long darn story. You know, Ulupalakua sold this property and sold Makena Landing which is all this stuff over here they sold it to my great grandfather. Kukahiko. John Kukahiko that's the one buried down here by the Kukahiko house. You know the big grave? This was John and Kamaka.

KK- By the beach?

C- Yeah, on the beach. He was the one that bought this place in 1883. This place and this place. And then later on he bought some stuff back here. But then this lot and that lot he bought from McKee's daughter.

KK- Oh, the original people.

C- Yeah but the story with McKee's daughter, McKee had a daughter and son. He passes away, he gives the property to daughter and son. The daughter, one of the daughters, well the daughter marries a Raymond who eventually buys Ulupalakua. Raymond passes away, she becomes the owner of Ulupalakua Ranch by herself.

KK- McKee.

C- McKee. And then later on it's transferred to uh, I think Baldwin at that time. The Baldwin's wasn't the original owners. And when you start looking at who owned Ulupalakua Ranch before McKee, now before McKee is before Mahele, you know. Cause Mahele's start in 1840's yeah? We bought this in 1883 had passed away before that.

KK- Forty three years later.

C- Yeah.

KK- Wow, that's not too far away, forty three years. From Mahele to....

C- The story goes that much of the land that McKee bought, now we talking about approximately 20 plus thousand acres to 30 thousand acres. Much of that land that he bought was leased to McKee, not sold to him.

KK- By the Hawaiian's.

C- Uh, no from Kalākaua. This is before Mahele now. Oh, ok Kalākaua's the one that give to Mahele.(correction-Mahele from King Kamehameha III) So he leases 'em when you go start tracing records it's hard to find how all property all got transferred to this one man. But somewhere along the line you'll hear of Talbert Wilcox. Yeah, Talbert and Wilcox were people that bought property to farm. The original farmer down here was one haole named Nolan. And then he joined Wilcox. Wilcox or Talbert I'm not sure which I forgot. I used to know.

KK- This Wilcox is the one same....

C- But Nolan sells his interest so now Talbert joins Wilcox. So when you look at a lot of these maps, these maps were done by Talbert and Wilcox to claim the property that they thought they bought, or they thought they lease, and etc.

KK- They make their own map.

C- Yeah, you gotta realize that a lot of this stuff that you see over here that's all been subdivided at one time by Mahele. And now comes one guy and he buys the majority of this property under one name. But he gotta go and keep these titles clear yeah? And back in the old days during my father's time you pay the tax for seven years, you're the owner. You no need put notice in the newspaper.

KK- Automatic. They take away.

C- Yeah, yeah. You can become the claim owner. The quiet title process is changed. Anyway, come back to this story we were talking about when my father, my great grandfather buys this piece and this piece in Makena landing which is. Which, when you look at the map, it's this piece and that piece. And you question is, who own this? When we go try trace the owners. See what happened was my father thought, he always thought that Baldwin never own next door. This was way back after WWII. You know from Keawakapu all the way till this lot they went subdivide it and so had half acre lots all that stuff was sold long time ago. Had owner's already. So they took this land along the beach, and at that point in time Ulupalakua came through and they went stake this property, our property. What they sold to us they come through one stake to sell, to make a long story short. But this used to be the old Makena Road that came through here.

KK- Through the Prince Hotel?

C- That's all part of it down there.

KK- Down by the beach yeah?

C-Yeah.

KK- Right over there come down through you?

C- Yeah.

KK- That one come through, you know that Angus lot?

C- By the hill yeah, yeah.

KK- The road come through there, that paved part?

C- Yeah, that's the old road, this is the old road, a part of it down there. You see Uncle Charlie's place over there? That's the old road. Now that old road we call is, is not the old government road. It's the World War II road.

KK- Oh the military road.

C- Yeah. Because if you read, you read some other stuff about this the old government road was in here. You gotta remember that Maui had a road completely circling the island.

KK- On the ocean side. The Kahakai Trail.

C- That's right. That's the one we call the government road but it was built by uh, well they named the road now.

KK- Well you know it's funny because when we stay Kipahulu, this um this guy Teddy his mother's mother they had this property on the road. They show the road and the lighthouse, and Hana Ranch took 'em. Like Ulupalakua you know they call like how you state it.



C- Well, you hear the story about the road in front of Prince Hotel, the one go past the church and dead end then circles around. And what's now an old road that they kept as a walkway, etc. That's part of the old King's Hwy, the old road, ok.

KK- Yeah.

C- When the urbanized Makena area, the County and I guess in conjunction with the State, went take that road and swap for the new road. Now comes Dana Hall and Leslie Kuloloio and my father and George Perreira claiming that they don't own the road. It's the old King's highway and nobody owns it except you know from the old days. It's a traditional road, leave it alone. You don't have the right to change.

KK- Hui O Makena.

C- Yeah, Hui Ala Nui Makena.

KK- Wow.

KT- So, what came from that? They won the claim?

KK- No they never win.

C- They settled it by leaving that area open but not for commercial traffic. But that road is still, it's a walk path, it's a pathway now and it dead ends on both sides. And then that George Ferriera got a big settlement. Hui Ala Nui O Makena got I think, two or four acres, above the golf course. Three acres. George Ferriera.

KK- Because we went to see Hui Ala Nui O Makena when we were starting up, they said was supposed to be for cultural yeah? And we like go over there with the canoe's, they said no, not for you guys. And the we went go see Roy Figueroa and he said, "oh I cannot discuss that." So, was me and Jimmy Ross because we wanted to go for the keiki.

C- Yeah I think Hui Ala Nui O Makena has the place of what it is to be used for and how it is to be used which is according to what I understand is a cultural thing. But, I don't think 500 thousand is enough money to do what they had intended to do twenty years ago. You know, dollars have changed yeah?

KK- Well, they're doing the same thing as Olowalu now, taking on King's trail. The County taking on King's trail and surrendering that for something with them so. Aunty Patty just called me yesterday and I said I dunno you gotta get.

W- On the King's trail?

KK- I don't know some road that belongs to the Hawaiian or city land and then the county went swap with them or something just recently. They still doing that today. They doing the same thing down at Haiku on Holokai Road. Holokai Road was a King's trail along the ocean and they kinda gave it to the subdivision, the county. You know what I mean? And people fighting over there because the owner's stopping the fishermen from going inside. And they been using that trail for years.

KT- So the Ku'ula next door, by the hotel.

C- Yeah.

KT- You guys ever relate to that?

C- Which one?

KT- When you walking down the path to the ocean.

W- Kukahiko, you mean by the graveside?

KT- It's just sitting over there by itself, going through the hotel, what is that hotel.

C- The Prince Hotel?

KT- No, no, no.

KK- Makena Surf.

KT- Makena Surf.

W- Oh, the little cove there.

KT- Get the Ku'ula right there. Any of the family ever use that over there? It a fishing shrine, they got it locked down.

C- Yeah, yeah. We used several things. One they got a canoe hale the other is the fishing shrine. I not sure what the proper Hawaiian terminology was, but back in the old days when they, before they start closing that area it had stone wall built around it. It wasn't very large maybe it was you know.

KK- This hale's over here it's all separate hailes for your brothers and your sisters. Kukahiko one is everybody?

C- No. It's not everybody. This place my father bought from the Kukahiko's. The place that's down there that we had built, that I had built for the Kukahiko's. I was the President at that time for the Kukahiko Corp., the remaining heirs in the Kukahiko Estate that still had Kukahiko property. See most of the Kukahiko property owner's sold their shares. They sold their share to Jimmy Campbell, and the houses that you see up above Makena Landing and all those houses that you see before the Kukahiko house, except for the Lu'uwai house, was all sold to Jimmy Campbell. Kukahiko got two lots out of that place. Two of which we sold and we built this place down here. But the remaining owners incorporated it because they didn't have a large enough share to have one legal lot. And there was some sixty owners at the point this property was finally awarded to the Kukahiko Corp. There was sixty owners. Now there's a lot more because there's more keiki's yeah. Cause that stuff was awarded back in 1974. Well this one here, this was my father's property that he had trusted to his kids. And what we intend to do is to have a family subdivision here.

KK- That's nice, probably going be only the local family left around here.

C- Yeah. But one of the blessings that we had is my father, the State changed his taxes. Excuse me, changed the zoning, this place was all ag. The State came through and they said, "on the water side it's rural. On this side it's agriculture." And then his taxes went up as a result of the change makai side of the road to be rural. Of the old road, this road here. So, he went to court, at first he went challenge the taxes, they wouldn't allow it so he went to court. The court gave him ag dedication, which I still use. So I pay for where the house sets but all the rest of the stuff is ag. So I hardly pay any taxes, I don't pay the taxes like the Kukahiko's pay.

KK- Awesome!

C- So as long as I do some kind of nursery and some kind of ag, which we intend to do, our family subdivision going be, we'll build on the ocean side and the side mauka on the road will remain ag.

KK- What's the ag right here with all the trees?

C- Yeah.

KK- Those trees was always there long time I remember now bigger the trees.

C- Yeah, well had papaya here before. Before that my dad raised alfalfa. there's a well down there. Built by one of my dad's brother's in 1920.

KT- Still get water.

C- Oh yeah, yeah. The water's not as good anymore, they dug too many wells above us and I, no what I think what happened was if you dig a well too deep you hit the fresh water and then you think you going dig a little more and you going hit more fresh water.

Sometime you hit the salt water. And once that salt water mixes with the fresh water everything down below gets mixed. And I think that's what happened. The water used to be colder, not as salty.

KK- Too many guys digging. They splitting 'em up maybe.

KT- For the record can you give me your full name.

C- Edward Quai Ying Chang Jr.

KK-Quai Ying Chang?

C- My father's name father was Quai Ying Chang.

KT- Try spell.

C- YING CHANG.

KT- I don't know if Kimokeo told you, our kuleana is um, we're going to have this transcribed come back to you have you look it over make sure everything ok and submit it as part of our work. I'm going to make sure we got everything.

KK- Oh that's Stan Garcia's place? They going subdivide? They doing it already?

C- They're in the process.

KK- I seen 'em at the church. Because this place over here stay.....

C- I mean you got, you got a heiau in there yeah.

KK- Yeah get, eh? Right in front the house?

C- Behind. Well, next to him, next to him the Garcia's is David Lono's place, yeah. Old David Lono. And had one old house with the swings in there long time ago you remember? It's torn down now.

KK- Had all ducks and animals all running through there?

C- Yeah, that was George Ferriera's place that he got from one of his aunt's, or our aunt's, Mary. So there were two plots in there in front which Farrington them bought already.

KK- They went subdivide already.

C- No they bought. And now they're going to put, uh I don't know 4 houses or was it 2 houses. Four houses wasn't it. And then Sam Garcia's bought the church from that, yeah?

KK- That one they went go get the meter before the lot to divide it because you can do that. So they got their meter before get the lot subdivided. They get all the meter. Then the question was brought up how come you guys get the meter you know you never even sub.

C- Who is this, Sam? Or Farrington?

KK- No, Farrington. Going get all the water meter for that lot.

C- Yeah because what Farrington does is he builds individual houses but he condominiumized the area so that by condominiumizes the area he can get lots to supply each building. Not lots, meters, to supply each building. It's a State process.

KK- It maximizes the lot.

C- Yeah, yeah. This Makena place over here you look all individual houses but they condominiumize. The house owner owns the property the building sits on but everything else is condominiumized.

KK- But the one next to Kukahiko they only going build one house, eh, those people. They went make one lot on there.

KT- So how old are you now?

C- I'm seventy four.

KK- Whoa, young man. And you, mama?

C- Yeah.

W- I'll be seventy three this month.

KT- And you lived here all your life?

C- Uh, no. No, I moved here about age four or five I'm not sure. I can't even remember that young.

KT- Where were you born?

C- I was born in Wailuku. My dad, my dad worked for Kahului Railroad way back then. Then he got tired of working till somebody else came back and started farming. That's about 1937, I think. All my brother's and sister's were raised down here from kid time but I wasn't raised here till about four or five years old.

KK- But Norma Lei went go Kentucky.

KT- Who were your neighbors?

C- Mostly family, the neighbors uh, we came down Ulupalakua Road yeah.

KT- So give us some names.

C- Uh, well there's my great-great grandmother which was a Haihai and then her sister Moloa, who lived down Makena landing. And later on the World War II came they throw all those houses down and then John Lu'uwai came down. John is Boogie Lu'uwai's father. And then across the bay there was Piho's, the Piho's lives now where Dogul lives, you know where Dogul Milney just before the church.

KK- Oh yeah on the top the hill.

C- Yeah and then where Eardmen lives now, Eardmen's house is, that's the place they call Apuakehau where the Hau tree is. And that, that island out there that I don't know it's referred to as my father them referred to Dickson island but I think at one time it was owned by a guy named Pikanela. Pikanela was the Chiefs down here, the Ali'i Chiefs down here Makena area for that Hau.

KT- Doesn't sound Hawaiian but.

C- That's a funny kind Hawaiian name and he's recorded as Pikanela, yeah. And Boogie said you know that word means something but we forgot already yeah.

KK- In front there get one fish pond?

C- Between that island and Erdman's road or Eardman's house there's a fish pond, yeah.

KK- Get one fish pond yeah over there. Cause get on the map all the fish ponds, yeah.

C- This is that island I'm talking about, this is where Eardman is right. No, no wrong side, wrong side, this is the church yeah? Uh, the fish pond is right in here, right in here, right in this general area. If you look it's got all kinds of rocks, low tide.

KK- This is where we went with the canoe for the funeral?

W- That's right.

KK- That's why I asked you about that, because that day I seen all the rocks in here. Was so clear the bay, you know. It goes round and round you know everytime I go around looking oh what is this.

C- Small kid we used to go down there you know with the kind bag pole has uh, net has two poles. Throw stone make lot of noise. Everyday get Weke inside, sometime get Pananuu inside.

KT- Even today?

C- Yeah!

KK- But the State own that.

C- But it's not as good because the inlet has been ruined, yeah. You said the State owns that?

KK- Who owns this?

C- I think it's all privately owned.

KK- They should redo that wall.

C- Yeah.

KK- Get one nice fish pond by the church.

W-Used to have clams through here, I know we used to see clam shells.

C- Still get clams down there.

KT- So where did you go to school.

C-I went to school at Ulupalakua.

KT- Wow.

C- Yeah, up the hill. My father and mother used to drive, see they had a bus contract from the County and drove all the kids that lived down here up to Ulupalakua then went up to Kanai pick up those kids and brought 'em to Ulupalakua. And then the afternoon they took 'em home.

KK- Where is the school over there?

C- Ulupalakua, uh before the Catholic Church, next to the old Congregational Church.

Uh, you know where the baseball park is?

KT- Yeah.

C- Uh, you go and then there's a baseball park go down and then there's a bunch of houses and then you see one, is that church still or just the site there? But there used to be a camp retreat. It's all overgrown you can't even tell there was anything there. That camp retreat is right next to where the church used to be. And then you go further past it's all empty grounds, yeah. You go further past it's where the Catholic Church is.

KT- From kindergarten through eighth grade?

C- Uh yeah but only three rooms. Was first grade to eighth grade; never had kindergarten when I was young.

KT- How many kids were going?

C- Let me make a guess. My graduating class was six people.

KT- Who was the teacher?

C- So, uh the teacher I had was the principle who was Furokawa. My mother was a teacher for a while, and Furokawa's wife.

KT- Was she a college graduate, you mother?

C- Uh, no my mother was not.

KT- Just high school.

C- But the other two teacher's were college graduates.

KK- Had one school by Keokea too, yeah?

C- Yeah.

KK- Right here by the gas station below.

C- Yeah, yeah.

KT- So you guys had that bus service going that way and Akina's going that way because Akina's serviced Maui High and Baldwin.

C- But you gotta remember we never had road between here and Kihei, you know.

KT- Right, right.

KK- All separated.

KT- Never came through.

C- This road over here was built during World War II by the army.

KK- So you guys only can go up you guys no could go this way through the trail?

C- Yeah.

KT- So if you came to end of Kihei Road you guys had to walk in over here? Or you never did come this way?

C- We very seldom went that way, there was no need to. You know, over here when we were kid time if we went that way was probably to go fishing or to go store. During my father's kid time, see my father, my grandfather had a store in Makena.

KT- What was the name of the store?

C- Uh, Chang Store.

KT- What was the merchandise?

C- Was a General Store, yeah mostly food stuff, yeah.

KK- And how you guys went get your guys stuff? You guys go up this road?

C- Ulupalakua, order from wherever.

KK- But no more boat come inside deliver nothing?

C- Back then they did, yeah, there was some delivery yeah. You gotta remember that this harbor was in before Kahului Harbor was.

KK- This was after this.

C- Makena, yeah. Makena actually had two harbors, they had one by the church. And then later on when Talbot and Wilcox built Makena landing, Makena landing was known as Talbot's Bay. Talbot's Wharf, that's where they shipped all their stuff from, you probably heard some history where they were raising sweet potatoes down here and selling it to the gold rush days. That was part of the Talbot and Wilcox thing.

KK- Oh, out of here?

C- Out of here. They brought in animals and shipped animals from here. Ulupalakua used to be sugar cane.

KT- Wow.

C- Way back, you know, way before I was born.

KK- Because they used to store the sweet potato underneath the ground yeah, before the ship come? Or in the like, Makena Golf Course they show like all the little imu like that look like they store things before.

C- There's plenty, there's plenty stone wall that's closed off you notice? No more opening like some walls had? And then look like one plot where the stone is loose that they keep stacking 'em up to, uh somebody claimed that that was used to store potatoes.

KK- To keep 'em cool.

C- Yeah, you know, rock wall and I think they probably had something on top to shade it, you know.

KK- The sweet potato was a Hawaiian sweet potato or something else?

C- Not sure.

KK- They talk a lot about the sweet potato up here.

C- But the success was probably with the Hawaiian sweet potato. You can't come down here and experiment with that success.

KT- So how did the people survive around here? Your father was an entrepreneur building a store?

C- Other than my farm and a few other people that, most of the people had back yard stuff, chickens and pigs. My father little bit more serious, he had plenty pigs. At one point in time before World War II he had over a thousand pigs. Then World War II came we had to cut back because we couldn't get commercial feed. We cut back to about 400. But the rest of the people, a lot of them lived off the land and fished. This place had plenty fish before. Was easy to fish.

KK- I remember coming down here in the sixties hunting down here somewhere with the truck. Like passing stone walls, all dirt road.

W- Right down here.

KK- There we go night dive.

W- The road was right here in front this house.

C- I remember kid time we used to see schools of Manini and big Uhu traveling with them in this kind of water. And you see 'em outside all you gotta do is wait a couple days at the right tide, they come right inside. And you could reach 'em with the throw net.

KK- Manini was big.

C- And we go hukilau, we gotta let some fish go 'cause no more place for put 'em.

KK- I seen the Manini when I first came down here was like this big. You hit 'em though spear would fall down with 'em.

C- Yeah, yeah.

KK- When we came down here before, night dive, yeah daytime too we see the queen all the time. Now I never see the queen, the golden Manini. Never ever see 'em.

C- Yeah. We used to go fish once and a while in the evening when we get plenty company, we just paipai maybe the paipai net is only like forty feet.

KK- What about the Opelu? Pleny Opleu out here.

C- Opelu was more on Molokini.

KK- Nobody go with the canoe out there?

C- Uh, one of my, one of my great grand uncle's did.

KK- He went go with the canoe?

C- Yeah, Kawakani. He was the one that went out there.

KK- Koa canoe?

C- No. I think was the, was the, when I was born they had plenty red wood type canoes, yeah.

KK- Because the one guy we talked to, the podagee, what his name?

KT- Mike. Mike Boteilho.

KK- We talk about a cowboy up here, they talk about finding canoes up there.

C- Hmm.

KK- Because I know Keala went find one canoe someplace around this, around the Pimoe, Pimoe area in one cave the found one remnant and how the thing was lashed. So they took the picture and try to recopy the lashing. Was able to do that.

KT- So what inspired you guys to build such a big house at a later part of your life?

C- We had planned to build that house sixteen years ago but I got side tracked with a lot of other stuffs.

W- Clearing off this land the title.....

C- One is if you remember Angus used to live down there, right? And I wanted to make sure we had clear title to what we owned before my father passed away. My father

owned 95 percent of this place. The other five percent which is about an acre of land was owned by 51 people, Angus was one of 'em. So, it's not only Angus that we had problems with other people would say, "if Angus can do that, where can I go?" So we went to court, we partitioned our share from everybody else.

KK- You partitioned your share, what is that? You take 'em away.

C- No. We own 95 percent of this lot but we don't know where so we went to the court and made claims of where we think we should be, ok? And what, what the fortunate thing Angus had already built, bigger than a quarter acre place over here. So we said let them have that, we'll take the rest. So that's how we partitioned the 51 people from us. And the fifty one people, majority of them wanted to sell. They didn't want to incorporate, they didn't want to do nothing, they just wanted the money so.

KK- They sold.

C- They sold.

W- Took us 13 years in court.

KK- To partition?

W- That's why we're late in building this. And at the end of the 13 years the Kukahiko's had the land issue.

C- It's not that simple. You don't just go to court because it's the land issue, you go through all the rightful owner kind stuff and how you arrive at that we did it basically by genealogy. We all came from the same family. Old man Kukahiko bought this place, he had ten children. And he deeded it to ten children and one grandson.

KK- Who was the grandson?

C- Uh, John Kukahiko. He used to live Kihei, was the daughter of, son of Kukahiko's daughter.

KK- So Earl Kukahiko fought for Earl, not down this side...

C- But he's from this guy. Earl Kukahiko is from Mahele, John Kukahiko had a son named Mahele. Earl Kukahiko's father went by Mahele more than Kukahiko when he was younger. That was the style in the old days, yeah? You Lu'uwai, you Mahele, you Mooloa, hardly ever carry the last name.

KK- Yeah, parts of the thing.

C- Yeah. And wasn't until we started had to do birth certificate and everything we start putting a real name. My mother's uh, my mother's father bought the Mahele land in Molokai. The only thing the deed said is Kamai. And I'm sitting here wondering, how I going prove that Kamai is my grandfather? (laughing) That's true story, I mean when he signed it only Kamai! But the family knows Kamai to be Able Kamai Laumanu, which is my mother's father. And then his brother buys same thing, an adjoining piece of land, Kumahela, they call 'em Waiweia, that's it. That's the only name on top the deed. Waiweia. And then there's a book, you know the Indye?. Have you folks seen the book the Indice? The Indice has all the breakdown is a like a Reader's Digest version a shortcut version of all the breakdown of all the land awarded during the Mahele. And most of them are first names. The one's that no more first name happens to be haoles that were given lanyed from chief's or kings. Because they used to use first name, last name, etc. Us, we not used to. My father, my father's father comes here and he marries one Hawaiian. Tutu Aihai's daughter right, which is the Kukahiko. They call him A'ana, they give him one pake, one Hawaiian name right away. He's not known as Ying Chang. We know him as Ying Chang, but the Hawaiian's all call him A'ana.



KK- Oh they give 'em, they talk to him Hawaiian, yeah.

KT- Were you raised here too?

W- I was raised here. I was raised in Wailuku, Omaopio and um during the War years in Waiakoa.

W- Yes, went to Waiakoa because my parents felt it was the safest place instead of Wailuku in case they came they would be up in the mountain. So went up in the mountain, my parent's was farmers so we went up there.

KK- Where's that Waiakoa? The ahupua'a Waiakoa, Kula.

W- Right below the Elementary School, where the Post Office is, in that area?

KT- Now Haleakala Waldorf.

W- Yeah, that's Waiakoa.

KK- Oh, the old man was telling us used to get slaughter house up there. Pig house, rabbit house, chicken house, cattle you know. Slaughter house.

C- Ulupalakua had a big slaughter house. In fact slaughter house used to be down here, Makena Landing. First it was in Kana'ena. Then he moved out to someplace in between, uh, what the hell's the name of that place. Uh, Kana'ena. Kana'ena is just before the lava flow stops where all those people go snorkel diving, that small bay is called Kana'ena, yeah. And then it moved to Makena Landing. And then I think it attracting too many sharks, about that time they stop putting in the wharf for ship stuff yeah. And the way they used to ship pipi was they put 'em in the cow pen. And the cow pen is that, you know where the restroom is? You see that area is stonewalled, yeah? The stone wall used to be that high. They chased the pipi inside and then they chased 'em out to the beach, outside get launches, they strap 'em one cow to each side and drive 'em out strap 'em in the heel lift 'em and put 'em in the boat. Yeah.

KT- You actually, you saw it?

C- I saw it, yeah.

KT- So the cows swim themselves?

C- Yeah cause I was old then. By 1988 I was sixty years old, so from about then I started knowing already. You know but about three, four years old, I no remember nothing.

KK- They swim right through the wave come up, if rough and all. If the boat come inside rough, they swim the cattle right through the row. The thing swim.

C- They just hook 'em right around the head and they drag 'em out with the launch, motorized launch.

KK- The one they get out there they gotta carry 'em by the stomach, no more dock. The same what is in there now. And when I went look the cattle seen them the first time the guys drag 'em...whoa the bugga swim! And like you said the shark, the thing stay attracting sharks because the slaughter house stay around.

C- Was there yeah.

KK- Funny where they get the cattle, they going make one slaughter house.

C- Yeah, but Ulupalakua had a large slaughter house. They had tanning operation and everything, you know for the hide.

W- Keli'i, you see the gentleman over there?

KT- Yeah.

W- He's eighty five, his name is Charlie Aki and he's probably the oldest living paniolo for the ranch today.

C- He work Kaupo Ranch.

KT- Is he ohana or just friends.

W- The wife was ohana.

C- The wife was ohana to us.

KK- He working contractor?

W- No he's just, he works for our contractor. He's non labor, you know he just likes working. He doesn't want to stay home and do nothing.

KK- He stay down here early, last time I came here was...

W- Yeah, he works full eight hours. He doesn't stop he just works. Only stop he did was lunch break, that's how much...

KT- Where he live?

C- He lives uh, homestead in Waiehu.

KK- Waiehu Kou.

KT- How does he come, car?

KK- He drive his own, he get his own truck. He get one white truck.

W- He still can ride a horse yet.

KK- When he come here, early.

W- He still does some, when the lunch have round up, he still goes.

KK- He's Aki, last name?

W- He's actually Kahaleauki, yeah?

KT- I saw a name, Kahaleauki somewhere over here, right here, Kahaleauki.

C- I tell you one story. Charlie and I are talking. I always knew Charlie as Charlie Aki but his legal name is Kahaleauki. Kahaleauki.

KK- Ceclia Kahaleauki.

C- Yeah, yeah. Anyway, I said "Aki, how come Aki?" He said, "Oh, um my father part Pake." I said, "Oh, yeah." He said, "yeah, my father from China." And you know the reason why I ask is almost all the people that got "Ah" something is part Pake, almost all of them.

KK- I show you the map Honokahau get Ah Sing, the whoe balance get all the Pake's and then get the Hawaiian connection, right. But like you said get the Pake. And he is a Pake, like all those, all the Chun family, the Keahi family, they all Pake.

KK- The name is from Kahikinui where the Tahitians went arrive, Tahitinui. You know Kahikinui, that's where the name come from, from Kealahahiki go right to Kahikinui.

C- That's how you going justify it for him anyway right! (laughing)

KT- What can you recall that you liked to leave. As I said we going transcribe this, we going bring you a copy for the family, put the pictures in. What would you like your family to know? Your offspring, you know, that might be significant.

C- Oh you know one of the things I think we losing track is the places, the names of the places over here has changed. Now I agree, I tell my family. But it's names of places is almost something you gotta live there to know the point, the fishing hole, the bays that are named separately, you know as you go along this place. I was probably taught a lot more names than I can't really remember. You know I didn't live here all the time, I don't use the names all the time. So the consequence, I would like to see the names of places change. Like, one of the things I hate to see Palauea become part of Makena. Palauea to me is Palauea. You know there's some key places on Maui.

KT- Let's look at so I can relate to what you talking about. So right there in between....

C- See Palauea's way down here yeah.

KT- Right.

C- This is Pu'u'ola'i

KT- So what you would like to see is keeping the ili's like it used to be instead of adopting what the people are doing with it for their convenience?

C- Yeah, right. At least keep some of the major, you know Palauea is a pretty big sand stretch. No go change the name to whatever they want to call it.

KT- So, as we looking at this map here, anything significant happen here that you'd like to relate?

C- About four to five years old. Went to Ulupalakua School. When I graduated Ulupalakua I went to Lahainaluna. When I graduated Lahainaluna, this was 1949, I went to the mainland to school named then I went in the army and that's where I met my wife. I got out of the army, went back to school, went to work.

KT- What was her maiden name?

C- Laureen Sakugawa.

KT- Sakugawa, okay.

C- Yeah, she's a Maui girl, but I lived in the mainland for 39 years. I was gone between the years 1949 and 1988.

KT- So, question. That life, you think, gave you the edge now as a Hawaiian, in Hawaii?

C- Well, you know my parent's were, were they wouldn't sit still for unfairness. My mother always thought that many Hawaiian's got cheated because they were, they lacked the energy to challenge certain things. My father was the same way, you know and I was brought up that way and my going to the mainland perhaps made me keener about certain things.

KT- What did you do up there?

C- I worked for a company named Leber Brother, you know I started as a chemist and then went up to manufacturing and...

KT- How did you get the expertise, Military?

C- From working.

KT- To be into that occupation that you got.

C- That field? Oh, from my college, yeah because I got a degree in Biological Science. You know my minor is in Plant Pathology actually. And I went graduate school at Southern California, you know.

KT- How many children you have?

C- I have five children. One son and four daughters.

KT- What do they do?

C- Well, they're all married now, except my son. Um my daughter's, believe it or not, all graduated from University of Hawaii. They started elsewhere, they started. Momi didn't, she graduated from California, but she went to University of Hawaii for a while. But they all started different places. One started in Los Angeles State, the other one started Indiana State. Another one started Indiana University, another started in Missouri, yeah. And those, the three oldest ones came home to Honolulu and graduated from UH. The youngest one however went back to the mainland to finish.

KT- So what kind of field of work are they in?

W- You know our oldest, Keiki Kawaiiaiea, you know her? That's the only one that's in the Hawaiian movement.

C- She's in Hawaiiana, she basically does Hawaiian curriculum, yeah. And my second daughter's a school teacher. My third daughter, what she got two degrees? She's in art but she's basically a home wife. And my youngest daughter is a house wife now. She just gave birth.

KT- None of them are asking that they want to come home.

C- Well, four of the girls live in the island. Three of the girls live in the island, one lived in the mainland. Two live in Honolulu and one live in Big Island, the oldest one lives in Big Island. And they're a little too young to retire so.

W- has three and then the oldest one by the way graduated with her degree in teaching Hawaiiana. She teaches at Nawahi, she's a school teacher there.

C- In fact she went to the first class of...

W- Immersion school.

C- First immersion school in Honolulu.

KT- Oh really?

W- She was the graduated out of the University with a degree in actually in Hawaiian teaching Hawaiian. She's a school teacher. She's the first one of the Hawaiian immersion kids to graduate out of college, so we're very proud of that girl. And she's teaching there you know in Nawahi and enjoying it. And she enjoyed and she's working right now on her Master's.

C- My oldest daughter used to go stay with relatives like my mother and father speak fluent Hawaiian. So my relatives in...

KT- Your mother and father? You father was Chinese you said, right?

C- No my father's only quarter Chinese, half Chinese rather.

KT- Your grandfather was pure Chinese?

C- My grandfather's pure Chinese.

KT- Ok, but did he learn? Do you know if he learned Hawaiian?

C- You know I don't know. He must have learned a few words, you know. All the people he delt with at the store were Hawaiians. There were no other Pake's here except him.

W- Well you grandmother spoke a lot of Hawaiian.

C- Yeah my grandma spoke, his wife spoke fluent Hawaiian of course.

W- She must have.

KT- It's the principle of immersion, living right?

C- Exactly, he was immersed!

W- You remember in the class what you told us one day? You got kind of frustrated with all of us trying to learn Hawaiiana?

KT- I cannot remember anything!

W- You got up and you said, listen you said, "don't be afraid to speak what you're learning now because you'll never learn to speak Hawaiian unless you speak it." And you told us and discussed Oleo in Hawaii. You don't remember that? You don't remember that right? And that influenced a lot of them, our haole ones, started to speak Hawaiian. Better than us.

KT- One of the most challenging thins for me is, you remember me, yeah? Come one I mean how many people I meet right? You remember what I said? Just like you telling me.....

W- Gee! We were with Hokulani at that time, she was one of the first kids in the immersion program learning. Kupuna's, Tutu's coming in ... I haven't forgotten you, yeah. Gosh, you were the only male at that time, you were the first male, oh other than Boogie. You and Boogie, you remember that? You and Boogie were the only male that came.

KT- Yeah. So most of your children you had on the mainland or you had???

C-All my children was born in the mainland.

KT- All?

C- All of them yeah.

W- But our oldest daughter she was akamai. To learn Hawaiian she went to the Kupuna's, she went to the tutu's. She came to Makena, she went to Molokai during her spring break you know and things like that to go learn the language. And that's how she, and then she tutored a girl from Ni'ihau. You know, English and she would tutor her in Hawaiian.

C- Ni'ihau dialect.

W- Yeah, so that's how she picked it up really fast. So she was very smart but she was really into it. That's what she decided she was going to do for her life career.

KT- Lot of the kupuna's are, really made an imprint in my mind. Loud and clear you said the problems with us Hawaiians is we want to be jack of all trades and master them yeah. So I cut back half, so I just focused on...and even now I'm coming back again so I'm really getting back to my language and trying to satisfy the hula area. And to make impact in trying to retain what you guys are telling me about these culture things. In fact the guy that I'm recommending you guys call, I'm turning over my history on Maui and History of Hawaii class to him to sit in for a semester. I want a break but by me doing what I'm doing, this is another reason. It works together, you know because coming to meet you folks I learn new things.

W- What's your reason for doing what you're doing with Kimokeo, working with developers?

KT- If we cannot come out, don't do this, who will do it? Haole? They won't put in the true and the Kupuna will not talk to them. So they won't be putting in what really used to be like. So what kind of impact are they going to make? If we are true to what we say to you folks then you going to see it in the report. And that's my take on this. You know I look at what can I give back? Kupuna have given me so much, the Aina has given me so much, now's my chance.

W- Do you get, you know because you're doing this kind of stuff, I'm just curious because you're doing this kind of stuff. Do you ever get feedback where our locals are saying you're working with the developers, you're working with...they don't know the true meaning of what you're doing and they say they don't realize that the reason you're doing this is so that you get the true feeling, the true value of the aina to the developers.

KT- You guys follow; you guys take Maui News?

W- Yeah.

KT- You guys follow the Oluwalu thing, okay?

W- Yes, I have been, yes.

KT- Okay. So Kimokeo and I walked into the local boys because the local boys who were leading that presentation are canoe people We never know, we just do it. Kimokeo

and I you know, we don't ask for permission anymore. We just do and later on people going to say wow those guys really were on it, they were sincere. Here is their works. W- I ask you that question because for so long Ed and I have been sort of activists too, yeah. I don't like that word too much but there was a reason for us doing that. We've always been very particular about Makena, yeah. And there's certain things we have been and we did that because we felt that we had to do that for our kids, yeah. And then of course when we get different kind of throw backs from some the local you know but that was just kind of thrown out the window. But you get it both but for us, for him, Makena is such a passion for him that I'm, I fell like it's important. Like we support Makena. And people don't understand really why we support Makena. There's a reason for us doing what we're doing. We want to make sure that things are all right the way it should be, you know. But we think, but people don't understand that. But that's why I ask you because it's a hard place to be. It's really hard.

C- You go up there and Makena is asking, Makena Resort is asking for rezoning parcels, roughly 100 acres. And uh, you know they're the only developer along this coast that doesn't use coastal waters for development. The shorelines are free; you can still roam in and out of that place. You know the stuff in front of the church they never owned, you know they owned stuff behind the church. They're very community oriented even as slow as we are but the people that speak against development think I'm a developer, I'm not. I'm listening to this developer because I don't trust the other developers. You know that's all that's there.

KT- Kimokeo got me involved with them too. When the lead archaeologist found out that the father and I worked Hokule'a, he said I want to meet Keli'I because he knew the connection. And so he's been telling developers that he's working with me. You guys gotta use these guys, they're sincere guys.

W- He's so akamai about archaeology and his father is too. And that's why I admire, I really admire.

KT- And he's sincere, that's important.

W- He's really sincere.

KT- He tells it like it is.

W- Yeah, we have found that out and it's a hard place to be, because you're now with Charlie and I can understand why you're doing this because you really don't want just anybody to do that. It's important. And I wish local's would understand that.

KT- They eventually will but at this point in time, it takes time. Our people are really, you know, they ku'i first before they listen. And that's why they all in back of the bus.

C- And there's some truth to what some of the locals say. You know they used to come down here and all open space and I said to them, "you didn't feel you were trespassing then, but you feel you're trespassing now?" I said, "You're doing the same thing then. I said the difference is you might have behaved differently." You know you pick up you're opala (rubbish) after you left, you know you kept the place clean. You didn't come down here and dump your cats and dogs and your rubbish and all your old junk. I said people do that here, you know. It wasn't uncommon to find this lot, when the road was going through, with old engines. Rubbish people just dump out of the car, you know stuff like that. Guess who's picking it up? Another local, now why are they doing that?

KT- It's still happening today?

W- Yup, it's still happening.

C- Yup.

Kt- I keep asking myself, I mean where are they? Where is their brain? I mean what's making them do it? Every time I tell myself I run 'em, write editorials and say when they do that, they're not only defacing but they're also abusing their right as a local. They're abusing their local gods because eh, who going have to live in a cesspool? So, and it's not only local, however you know locals participate in it.

C- Back in the old days you didn't have a whole bunch of people. We've owned this place since the 1940's. You know and before that is was still family property, my great grandfather bought it. And even as a kid in the 40's and the 30's hardly anybody came down here. But when the road's came then a lot of people came. And the island people they were much more humble, "oh can I stay over here?" They asked. You know it's such a nice thing to have a local say, "Uncle Eddie, can I park over here and go down there?" Oh, yes! But no, you find that the other people they come here and they say, "Oh, you not supposed to build a house over here. This supposed to be open land, blah, blah, blah." I says when do you start paying the taxes over here? You know 'cause taxes were always the principle ownership around this place. But the thing that's really changed is may people bring liability concerns. And the liability concerns makes all the residents really a lot more cautious of what they're allowing to go on. You know, so. Where before as a kid, we never worried about it. But our old folks kept us straight. You don't do this, you don't do that, you know. You stay out of the water from certain kind water. You always have somebody with you.

W- You know a lot of the responsibility, the things the Hawaiian's, were losing. They didn't keep up with their responsibility and nowadays they want to ku'i first, you know. And it's sad and it's sad. It seems like they're strong people yet they needed leadership to tell them you have to do this, you have to do that. They need to learn to do it themselves. And I hope the new generations are learning this.

C- I have a really mixed feeling on how the Hawaiian's get blamed. A lot of the Hawaiian's they can stand around and look and watch what's going on and compare it to yesterday versus today are not really the property owners so therefore cannot really speak. You know, where before as a kid the people I knew were all property owners. They lived here, they paid the taxes. Now they have left they've sold their property, you know transplanted by people that don't own property. They use the place, I don't mean they misuse it but the fact is they don't have the same passion for the place therefore don't treat it likely, you know. And that's what I see. Once your main space leaves, if you don't get good replacements, it's going to change.

KT- So right there is developed. That where Angus used to be.

C- Right.

Kt- What is coming up over there?

C- Ah, oh that? The pipes and so forth. Angus lives further down you can't see where the house was but Angus lived, you know where the parkinglot is? He lived right next to that, yeah. That development is something I have to do because when I...in the process of settling my court case I rezoned the property so that I could sell a smaller lot. Then I had to subdivide it. I had to actually subdivide away from this tax fee what it is I'm going to sell. And in the process of subdivision the County requires certain improvements. One is I had to put a swail that took care of the drainage that came through this property. The other is I have to put in a 12 inch water line fronting the

property, at my cost. And they called me a developer. And all I'm trying to do is save family land.

KT- How it's worked again. We gotta be training young kids to do research so they turn it back.

W- That's right, that's right.

KT- Yeah, because..

W- You know what? These kids coming up I tell them if you haven't made a choice yet but you love land go be archaeologist. Go be archaeologist because I don't want archaeologist come from the mainland to do archaeology work here. I'd like to see our locals do our work.

KT- That's why I have a nineteen year old I've been trying to. And Aki wants to train him but young boy right? Rather surf than be with Uncle Kimokeo and me so what can I say?

W- But I wish our kids would kinda look down that way.

KT- I hear you, yeah. Lawyers, you know, all the key positions that can help prevent further taking of all our things that we value.

C- You know when I was a kid I couldn't do anything unless I did my work first. I had to do the housework, the farmwork, before they let me go out. And then they gave me freedom to do that. But they always knew where I was you know.

W- But today is different, today get cars today. They hele on now.

C- Well kids live at home but they don't have responsibility as a family and I don't understand that. You know, I still feel responsible for my family. And for my father and mother's way of how they brought us up, how I think was a notion of theirs to begin with. You think our kids think like me, or like us? I think, yeah to a large extent they do. But I can point to families that didn't make any kind of an effort that way. And I think maybe it's brought up in this big city syndrome, you know. They got all the kinds of activities they belong to different kind clubs and different kind training.

W- You Kula? How come I didn't know you went out there?

KT- Seventh grade I went out to Kamehameha.

W- Oh, I see that's why, you went to Kamehameha.

C- So what year did you graduate Kamehameha?

KT- Sixty, so Hoku Padilla came later.

W- Did you know Hoku them?

KT- Uh, no later.

W- She's a remarkable woman.

KT- Kamehameha is a good foundation for our children. I don't know how Maui Campus going to fair because my daughter is going to graduate from Oahu

C- All day students?

KT- Maybe from Molokai and Lanai.

C- Cause I told her I went to Lahainaluna and boarding school at the age you go through those four years you know from 13 to whatever.

KT- So what year was that?

C- Forty five to forty nine.

KT- When did Earl Kukahiko go through?

C- Uh, he graduated '51, I think.

KT- Oh, wow.



C- He was at school while I was there. I think he was a sophomore when I was a senior.  
KT- Cause we research Kahoma. And you know like I'm saying we just getting into this so. The other thing I haven't answered you is, I didn't know but what's happening now is two more things; it gives me access to talk story with you folks, more intimately than I would and the second it gives us the keys to go into these areas that we wouldn't be able to go into. Like we research Kula 1800 which is the across, the farm county over there coming down Pulehu.

C- Oh, Omapio area.

KT- Omapio, okay. It helped me determine because I knew King Kekaulike had petroglyphs. I knew another one had petroglyphs. We went to an area. No so my final report was we came to a bed of petroglyphs from here to that coconut tree. At the end was a big pohaku like this with Kanji writing's on. But the final report I wrote that there were pockets throughout all the beds coming down. Because after interviewing the different peoples up in Kula they told us where they had petroglyphs on different streams, there was an indication that the families would be bringing stuff down, stopping point. To document you know, writing story about their lives. So, I would've never known that everyone of them had. So it's become very rewarding personally to take this. And Kimokeo, you know, I told Kimokeo if I going do this with him, he go get the contracts. I'll be the writer. I'll do research and stuff and it's working out good. So now he wants to expand to Big Island because he has some contacts. And Kauai is his home island so we already went Kauai look at what we would want to participate in. But anyway, thank you guys so much for your time.

W- Thank you for the information.

Agreement to Participate

I, Benny Herbert, understand that Kimokeo Kapahulehua and Keli'i Tau'a, independent investigators contracted by Pacific Rim Land Incorporated will be conducting oral history interviews with individuals (kupuna/makua) knowledgeable about the land area currently the Maui Research and Technology Park in Kihei, Maui. The oral history interviews are being conducted in order to collect information on possible pre-historic and or historical cultural resources associated with these lands, as well as traditional cultural practices.

I understand I will be provided the opportunity to review my interview to ensure that it accurately depicts what I meant to say about any of these lands. I also understand that if I don't return the revised transcripts after two weeks from the date of receipt, my signature below will indicate my release of information for the CIS/A report. I also understand that I will still have the opportunity to make revisions during the report review process.

Please check the bottom:

I am willing to participate

I am willing to participate under certain conditions.

**Consultant:**

Date: 11/24/16

Name Benny Herbert

**Investigators:**

Date \_\_\_\_\_

Name John Panin

MAHALO NUI LOA.

## **Interview: Bonnie Herbert**

**By Keli'i Tau'a/ Kimokeo Kapahulehua**

**October 20, 2006**



***KT- Keli'i Tau'a***

***C- Consultant***

***H- Hamby Kahawai (mother)***

KT- So, Bonnie, we're going to pick up where mom left off. You're now employed at?

C- Kamali'i Elementary School.

KT- Which is further down the road than where this will be built mauka; pending it's built. However, Lipoa is where the water runs down and gets into Kihei School. Does it get into yours?

C- No.

KT- Yeah, because you're a little higher, yeah. I'm not going to quote who told me what you know but share what you know about Kihei.

C- Well, my grandfather, John (her dad John Akina) was born in 1900 and he was born on the island of Kahoolawe. And the reason why I bring that up is because the Akina's were not in Kihei in the 1900's because my grandmother didn't receive land until maybe ten- fifteen years later and that land was here on Maui. And so my grandfather, Auhana which we mentioned earlier, was raising cattle for-what ranch was that? On Kahoolawe, he was raising cattle on Kahoolawe. My grandfather and Alex Akina, which is Aunty Minnie's father; they were born on Kahoolawe. So, what I know is after that. So, as far as Kihei before the 1900's, I don't know. So anyways, they came over to Kihei and in about the 1920 census, my grandfather John Akina, would do his, they would do business here right where we are right now at Kalepolepo there was a village and it was like the hub of Kihei. So, Kalepolepo (which was the Koa House which we are in right now) they had the Koa House where my grandfather did a lot of business, they did a lot of trading.

KT- So, was that where the Pacific Whale Foundation?

C- The Whale Sanctuary?

KT- Yeah. So, they told you about the Koa House, or you witnessed it as Koa House yet? You were young enough you paid attention that's the Koa House.

C- Yeah, and through research; through genealogy research where we were trying to find my mother's grandmother. We were trying to look for Luka Kalua'u and we found here through the land deed when her grandfather died. That's how we know that she had the two brothers, Apele and Ho'opii. And she carried the Kalua'u name. So when they came here about 1920, Kalepolepo, this village was going and then it wasn't until after this village started, then they had the plantation put into place. And the rest of the store is; the store and the post office she was talking about; in the back there was the whole plantation camp like. Panio Salbedo, which was a long time Kihei family, he was born in that Kihei camp.

KT- Pure Filipino?

C- Pure Filipino, and he tells about the different areas; his sister is still living. They all passed away, he only has one sister, and I don't know her first name but she's Mrs. Maeda. She lives right across the street from me so she tells me a lot of things about the Kihei Camp and you know as we was researching for our family name. So well, getting back to the point where my mother said the two brothers were asked to come down to survey the land; the rumor you was telling me about the different homestead.

KT- Right.

C- So, the homestead was the Waiohuli Homestead. And Waiohuli Homestead is where I live; Keala Place, Waimaihai.

KT- I cannot understand you say where you live because you tell me you are at Maalaea?

C- No, I live on Keala Place in Kihei.

KT- Oh, okay.

C- Okay, so anyways I live in Kihei. I live behind Foodland on Keala Place which is one of the flood places because the water's diverted. The water is diverted away from where this project is on the golf course. It comes around the golf course and then comes by- you know Douglas "Butch" Akina's place?

KT- Right, Peterson.

C- No, I mean my cousin Butchie-his real name is Douglas. Anyway, Butchie; the water comes underneath the highway (they diverted the water under the highway) away from the golf course and so it comes by his place on Alahele and then comes through Keala Place and then goes down to Kalama Park where there's the bridge (the old part of the park) that's how the water is diverted away from that area when my father built the highway. The reason why I brought up my grandfather and how they came to survey the land and where the water was, they noticed that Kaonoulu was where the water came down. And that's why, I guess, it populated first. According to the census records the village isn't called Kihei Village or Waiolohui Homestead; it's called Kalepolepo Village. And so, after the 1920's, I guess 1930's (you were born 1937?) you can tell that there's a long span of years that my mother wouldn't have contact with her grandparents and her ohana, yeah. They all died. So, any other questions?

KT- Where you're working; How many years you been there?

C- This year going be fifteen years.

KT- Wow.

C- In the Hawaiian Studies Kupuna....

KT- At Kamali'i?

C- I was at Kihei School for 10 years and then Kamali'i just celebrated their ten years being in Kihei. So I moved from Kihei School, which was at 10 years, and I served 5 years at Kamali'i.

KT- So, are you aware that the street on Keonekai and coming back a little north that they found some petroglyphs down in the community? Kimokeo and I went to fetch one of the last remaining but there was a whole flood of petroglyphs and the development company continued to pursue it and bulldozer it. The next day the guy was bulldozing.

C- Oh. Was it in Keonekai by where the storm drain is?

KT- I didn't notate the exact roads. Kimokeo just drove it in and we went down and he went down in the riverbed to get the petroglyphs.

C- Oh yeah, that's by the storm drain.

KT- But, these two books that I pulled out will indicate and demonstrate (if you thumb through it real quick, that one in particular) you'll see that for the most part a whole bunch of these riverbeds were- still have their ancient petroglyphs. So it's not unusual for this one to be found, but so low. Because of the kind of petroglyphs that were found, just from me being in the culture, I'm seeing that because they were so close to the ocean, they didn't spend that much time to do their art work as much as they did mauka like in this area. Whatever riverbeds we found, we've gone through all of them and they're pretty much everyone, holds some petroglyphs. But, so- In your area (for both of you) can you remember Hawaiian families that used to live, or might still be living (outside of your ohana cause I got Waitecha and as you can see quite a few).

H- The one that I know is the Kukahiko's. They were one of the Hawaiian families. The other one....

C- Kenolio's.

H- And then the other one would be Julia Saffery, yeah. But she passed on.

KT- She moved Oluwalu, yeah?

H- No she died, she died. She used to live right down here, or right up here, no right down. But what that Street next to Nama'o....

C- They live right on South Kihei Road.

H- That was another Hawaiian family. The Kua'ana family; the son that's still living is William- no I'm sorry, his children. And he lives up in Maui Meadows.

KT- How old would he be?

H- He would be about my age, yeah.

KT- Is he retired or is he still working?

H- He's retired, he's retired from contract construction.

KT- William Kua'ana.

H- William Kua'ana is his father and they were one. And then they had the um....what was the one married to Peggy, what's the last name?

C- Ka'ake?

H- Our cousin, what's her last name?

C- Hamili; she's a judge, yeah?

H- She became a judge but she was an attorney. She was here practicing law. Her dad came here and who else? I'm visioning all the way going down to Kihei.

KT- I'll keep you visualizing and maybe you can create some more. Bonnie being in the system that long, doesn't it motivate you to get a higher degree so that you can accomplish other things?

C- Yes, I've thought about it. It's going to be very diversified.

H- And her, she has so much talent.

C- Probably not. Probably not go back to school, maybe just...

KT- It's not necessary but it is very influential for your ancestry where they can look at somebody they can focus on and say, "I want to be like." And they move towards it, yeah.

H- Can I say something? She shared something with me this morning that I was so overwhelmed, so impressed. I told her that the talent she has; she knows her words, she knows how to reach people, she knows how to get their train of thoughts to where she wants them to be- in righteousness of course. And she was doing a job for my, I'm just going to say it, for a company (I won't say the name of the company) and she was on what is called a collection agent who would go and collect all the funds that they had put into the jar. And I was amazed that she had that talent. And I said she should go into a collecting agency company.

KT- Starting her own.

H- On her own and work for all these people who cannot collect from other companies. You know, I learned one thing in construction; when we bought our first machine, the advice we had is if you take your machine up to work and you're not going to get paid, take your machine home and go to bed. That was the soundest advice that we had. You don't want to go there and put all your hard work and then not get paid. And this is what she has been doing. I mean the respond was, how did you do it Bonnie? How did you do it? How did you get them to respond? And that's the talent she has. I was so amazed, and then I was thinking I would even help her but I got little bit money....

KT- Let me come back to the.... We can talk about that some more down...

C- I just love to see what makes people happy, what works with them. So, because I work with children and I use a lot of methods in my teaching; and I've developed some teaching methods that a lot of the teachers use in their classroom especially for our Hawaiian kids. If there's a Hawaiian child in that class, I will give more than a hundred percent. And I hate to say it, but if there's no Hawaiians in the class I just go with whatever needs to go. But if there's a Hawaiian child in the class, I make sure that he knows that he/she is valued and this is their culture. So, it works for me.

KT- So in the same way with these activities here; Our Hawaiian people going read this. This is their culture. This is what it was. This is what it is. This is what it can continue with all of your folks' mo'olelo.

C- I do have a mo'olelo because before they built the Kihei School here we went to the old Kihei School here where my mom attended (over here in South Kihei Road) used to be the Kihei Center; that was the school. So that was back in '79. We didn't move into the school till maybe about '80. When did we move there?

H-We came back in '78, oh yeah '76 the school...

C- So about '78-'79 is when the Kihei School was built. And before that, my cousins who lived- the Achuna family- we're from the Auhana family, that's one side and this Achuna family is from another son, so that's why you have Auhana and you have Achuna. And the Achuna's used to live all over there like Auntie Maile Pohala, she was

actually Maile Mossman. She was the daughter of Agnus Akina. Agnus Akina lived, you know where....

H- Right across St. Theresa's Church.

C- What's that restaurant across St. Theresa's? Marco's Restaurant. Okay, right across Marco's Restaurant my aunty Agnes used to live right there. And then next to Theresa was Gladys Smith. Aunty Abby's still living. And what they would do (now this is just from their, I never seen them do this they told us the story at our family reunion) all back in that area where Kihei School is, there were graves. Now of course, when they were developing it they found graves; but past that was all the Kiawe trees that she was talking about. My Uncle Alex and his family they would go and pick, you know the Kiawe beans, and they would sell it to the boats of whatever.

H- The dairy, Haleakala Dairy.

C- So, of all the stories, that's the only Mo'olelo we have of that area. So I told my mom that when we come we'll tell you that story. But probably Aunty Abby will be able to- she's how old now?

KT- What streets are those?

C- Lipoa Street.

KT- Are they healthy enough to talk story?

C- Maybe their children will if they meet with the children.

KT- How old are they?

C- The children?

KT- No.

C- Aunty Abby?

H- Oh, Aunty Abby is way older; I think she's in her 80's. I think once she starts relating to you, I think she will really be able to tell you about the story there. I'm so thankful that you got all us.

C- Aunty Abby is, really, the oldest of all the Akina's right now living on Maui. She is the oldest. Because right now she has a sister but the sister kinda goes in and out of Hale Makua, Aunty Lilian. She lives right across from First Hawaiian Bank, there's that one house. They're the only Akina's (well, they're Salbedo's) but they're the only Akina's that actually own the property that was originally given from Kalua'u to my grandmother to her youngest son. And then after Achuna, who's their mother?

H- Aunty Lilian is Eugenea.

C- So, it goes William Kalua'u, Luka Kalua'u, Achuna, then Eugenea, then it went to Lilian because it was five generations that property they have across the Texaco or Shell. That's the property that they still own, well besides Uncle Butchie them. Uncle Butchie them, that's not the original property. The property they have was Kamaole II.

KT- So Bonnie, I got a question. Would you consider talking to them and see what they say about me coming to interview them?

C- I don't see why they don't....

KT- Well, some just don't want to and that's okay too.

C- I can ask them and call you up and let you know.

H- You live here?

KT- This is my wife's condo and I'm still going through with my upside house. Another, Aunty Paula Kalanikau shared with me that Papa Kealakeau in Kihei, some of the

teachers called that there were some spirit's hana'ino the kids over there. Can you tell us more about it?

C- Kupuna Ka'alakea?

KT- About the idea of spirits being at Kihei School.

C- At Kihei School?

KT- What did you hear or what did you experience?

C- I guess because it's our family land, I guess nothing never really occurred but I've had some teachers that wouldn't be able to teach in their class because of the spirits. But, Kupuna Ka'alakea would come; because he was a kupuna there, you were there when Kupuna Ka'alakea was there, yeah?

H- Yeah but I never experienced any of those.

C- Then when I came in, it was his last two years working for the school because he was getting too old and it was far and it was too hot. He had to drive, he couldn't drive anymore, that was another big reason. But he would come in and he would bless, so as long as Kupuna Ka'alakea was there, didn't have any pilikia. He was a Mormon, yeah?

KT- This is what comes out of this kind of thing but we're never aware; we're never aware that things are what it is.

H- When I came off my mission, my second mission, into my own home; I experienced the spirits in my house and I made it a matter of prayer and I figured I could call on my Heavenly Father the power given to come and remove it.

KT- So what house, in Waimea?

H- In Waimea and I pleaded, I cried everything and right after I got through, my whole being; I was just so calm and felt peace. And whatever spirit was in my house opened the door, went out and closed the door and never no more it happened. Shortly thereafter the Spirit told me, I was ready to go to church one morning and the Spirit said to me: If you want to go to the Celestial Kingdom, (these are the exact words) stay on that straight and narrow path. And that's how I guide my life, yeah. I can sense things that are very uncomfortable, you know, and I walk away because it's not my area, yeah. But that was one time I really called on Him. I called my Heavenly Father the heavens and it opened the door and it shut it. So I shared it first with my daughter-in-law and she told me and she said, "Mom surely..." I teach Gospel Essentials in the Church and that's why I told my daughter I can't stay here. I go to the temple they open Tuesdays and Thursdays; I go every Tuesday and Thursday. It's possible, our ward goes on Friday and if I have someone else to go with me on Friday (cause I don't want to go by myself, there's wild boars and all that on the road sometimes) and so they have this sister that works and the only days she can go is Thursdays and Fridays and she comes and she picks me up and we go.

KT- Anything else you want to say about what I'm interviewing you about?

H- You know I think my daughter really did a good job in covering the genealogy of my family, I am very impressed. It saddens me that my family sold all the property and not keep in so that they could hand it down to their children.



Agreement to Participate

I, Hamby Kahawai, understand that Kimokeo Kapahulehua and Keli'i Tau'a, independent investigators contracted by Pacific Rim Land Incorporated will be conducting oral history interviews with individuals (kupuna/makua) knowledgeable about the land area currently the Maui Research and Technology Park in Kihei, Maui. The oral history interviews are being conducted in order to collect information on possible pre-historic and or historical cultural resources associated with these lands, as well as traditional cultural practices.

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Please check the bottom:

I am willing to participate

I am willing to participate under certain conditions.

**Consultant:**

Date: 12/24/06

Name Hamby Kahawai

**Investigators:**

Date \_\_\_\_\_

Name Keli'i Tau'a

MAHALO NUI LOA.

## **Interview: Hamby Kahawai**

**By Keli'i Tau'a/ Kimokeo Kapahulehua**

**October 20, 2006**



*Interviewer= KT and Consultant= C*

KT- So we're sitting here at Koa Resort on October 20 with Hamby Kahawai and her daughter Bonnie and they've been invited to come and participate and to share what they know about an area that they were raised (or lived) for a while as part of the report for the proposal to build Malulani Hospital next to Maui Tech Park. So, out of respect I'll go to mom first. Hamby, how old are you?

C- Sixty-nine, I'm sixty-nine years old.

KT- And can you give me your brief genealogy where I said Kahawai name which is your late husband.

C- Yes.

KT- But you personally were born Hamby?

C- Hamby Onauna Akina.

KT- Akina, so you're one of Richard's sisters?

C- I am the youngest daughter of John ohana.

KT- Oh, John, so big ohana. Where did you go to school?

C- I went to Kihei School, which is right about here, it was just the Kihei grade school.

KT- On South Kihei Road; and then where did you go after?

C- Then I attended St. Anthony Girls High School, it was then an all girls school but now I understand it's co-educational.

KT- During the time that you resided here, did mom and dad encourage you to learn about your culture or your family or things that are now lacking and now everybody wants to learn about?

C- Well, when I was growing up, I guess in the process of time our lifestyle was very Westernized, and English was of the essence because we never spoke Hawaiian; we were not allowed to even know the language, the Hawaiian language. We needed to know the English language and one purpose that we would be able to survive with this English

language to be educated, to go on to college and go into a field, whether it be nursing, lawyer, architect, whatever it may be that our lives would be better or the generation that is ahead of us.

KT- Exactly where was your house located where you grew up?

C- It was on South Kihei Road, 1764 South Kihei Road.

KT- What were the landmarks close to that?

C- Um..

KT- Maybe now, what is the landmark?

C- It's where, across- Kukui Mall, right across Kukui Mall coming back up to South Kihei Road.

KT- So, no house, no family there anymore?

C- No, everything is sold.

KT- What did your dad do?

C- My dad was a commercial fisherman. He was also a logger. He was also a mason and right during his retiring years he built several homes for rent.

KT- That's right, he was a developer himself.

C- Not only my dad but my father also had two brothers: Frank Akina and Alexander Akina. And they were, all three of them, were self-employed. My uncle Frank was a contractor and my uncle Alex was into the touring business and into the busing system. He also had a restaurant and that was our lifestyle.

KT- So, was it a fun life growing up?

C- Very much so. My parents and my uncles are hard working people. Self-sustaining, self-reliant, took care of their family and gave them all the education possible for them to have a better life.

KT- Describe logger, what does logger?

C- Okay, a logger is where my father (you would say a woodcutter) that he would go and do; you see this area was once with Kiawe trees, the Kiawe trees are also known as the Algarobia trees. And why I say logger, my father used to cut the posts for the Hana Ranch (twelve feet I think it was) and it was my job, after my father got it all set with the Hana Ranch would come down with the big loggin truck and pick it up. My job was to count every log that got into the truck and I would report that to my dad so that he could make the billing and give the purchasing order to the employer that pays for the Hana Ranch.

KT- Was the Kiawe original Hawaiian plant when our Hawaiians came to the islands?

C- Well, I don't know too much of the history of where the Kiawe tree came from, but I know that it was here when I was growing up. Whether it came during the time of the Hawaiians or whoever discovered the- I guess the Hawaiians discovered the islands, and I think they have brought all of these things to the islands. I don't think it was naturally grown here because they found that the Algarobia tree, as far as my knowledge is concerned, came from Africa. So, that's the only origin that I know about that tree. I never did the research, I wish I did.

KT- So, right now Kukui Mall surrounding you, was it wetlands?

C- Well, the history in regards to that question was; my grandfather who was Auhana Akina and my grand-uncle who was Auchuna Akina came, they were one of the first pioneers to come into Kihei and one of their purposes that they came here was to learn of the, when the rain came, how the water came down from the ocean. And they would be

the one's that would say- everyone has a different name and different gulch and when it rains they would follow the flow of water and how much damage it did, what eroded the land. And that was their primary purpose and they started to have families out here.

KT- There were different names for different gulches?

C- I think so. I'm positive; each one has to have a name, just like children. You know.....

KT- Yeah but did they create the names or was it- according to the maps that I looked at there was a Waiohuli Gulch, there was a Waiokoa and.....

C- That is correct.

KT- So, what you're saying is they just followed the existing names.

C- I'm not sure if they gave it the names or if the names was already situated on the lands, that I have no knowledge of. But I knew each one had a name and they had to follow through and watch the water fall, watch the water going through and how much erosion.

KT- So, since you lived back there, what can you remember that was built around you today? Kihei is becoming a very, it's growing. They say one of the fastest communities in Hawaii but when you were growing here, didn't the road end somewhere going south towards Makena?

C- That is correct.

KT- Where did it end?

C- Makena Road went as far as the end of- Auhana Street, that was the end and then the road from there on was just, we would call a dirt road or rocky road all the way down to Keonio'io But the road ended there.

KT- So what is the background of Auhana? It sounds Hawaiian but it's not Hawaiian, yeah?

C- Well, my understanding for the meaning of Auhana is: Hana is work and Au is like an electricity that continued to work. I guess it's part Chinese and part Hawaiian because Au is Chinese. But I guess my great grandmother Kalua'u had given my grandfather that name, Auhana. I guess they were a working family. The knowledge that I have of my great grandfather, William Kalua'u he was also a fisherman, a great fisherman because he had so many canoes. I mean, during that time it was by canoes and he had plenty nets and I think he had a vast ownership of land. And he had three children and one of them was Luca Kalua'u or Lucy Kalua'u was the only daughter then he had two sons; Apele and Achuna, I'm sorry Apele and Hoopii and they were the three children that they had.

KT- So, can you spell that last name so that we can transcribe it correctly?

C- Kalua'u: K-a-l-a'u, according to the records.

KT- Did any of your Kupuna tell you any significant Hawaiian sites of people that resided here in ancient times?

C- You know, I'm really sad to say but when I was growing up both my grandfather and grandmother died. My grandfather died in 1932, my grandmother died in 1936, I was born in 1937 so I never had no connection with any of my grandparents; both on my mom's and my father's side and I'm really sad. So now that I'm a grandma and a great-grandma, I want to share all the things that I know growing up with my grandchildren and great-grandchildren.

KT- So, this is part of it, after we transcribe it you guys will get a copy. You can give that to your grandchildren and your ohana.

C- Oh, thank you. But, only the stories that my father; after we got through dinner around the dinner table then my father would share many stories with us about his growing up. Where he went to school...

KT- So, where did he go to school?

C- He went to school at St. Anthony's. I was impressed and because when I was doing the biology class and I was in the class and my father explained everything and I looked and him and I said, "What school did you go to?" and he said, "St. Anthony." You know, I was so impressed and he talked about where they lived in Wailuku and how they owned a store there. I guess my grandfather, Ah Sing Ah Chong, owned a store there in Wailuku and that's how they got to go to school. And then my grandfather was working at the hospital, it was called Maluhia Hospital and that's where they have the-what you call that, Makua....

KT- Hale Makua.

C- Hale Makua, yeah. Well, that was once a hospital and my father, my grandfather worked there in the pharmacy. So, he knew a lot about- he knowledge of the medical technology because when he moved his family here, if anyone got a cut of something, he would know how to nurse it. If they had a high fever he would take them down to the beach and put them in the water and the fever would come down. You know, there was no prescription at that time; they used everything that was natural in nature.

KT- So if we move up to the site, according to the map I showed you, is there anything significant that you think might be important for the reader to get from what you say?

C- Well, in this particular area, this map that you have here, I don't remember ever even entering that part of this property.

KT- There wasn't a road that goes all the way up there?

C- I don't even remember if there was a road. All I know is that, I think if I'm correct, Ulupalakua Ranch used to own this because this was a cattle range that I recall. There was all this cattle in this area. I don't know what they called it during that time but there was certain cattles that was here and grazing the land and then the cattle would move to the other area. That's all I know about this property that the proposal for the hospital is to be on.

KT- So, historically as you were growing up, did you witness or experience the trains coming down to, all the way to South Kihei, Maui. Did they come to Suda Store?

C- No, I don't even remember the train. I think by the time I grew up, I think they did away with that. The only thing that was there where Suda Store was the old Kihei Store, it was called, I think Alexander and Baldwin. I think they were the owners and the purpose for that store there was to service all of the plantation homes that was in that vicinity at that time.

KT- So, what was in that small Suda Store complex; outside of a store.

C- Okay, there was a general post office that was included in there. The mail would come there, I even remember our box number- 555. That's so neat you brought this up. I remember climbing up the hill. The store wasn't down because this was a flood zone area. So, the store was built very high, you had to walk up the stairs and then it went there and then there was this big building. And they had not only food supplies, they had material, pots, pans, anything that was general merchandise for people that would need all of these utensils and so forth. But that was the post office. And when I was growing up the Post Master was Mr. Ventura. And he lives right up here, I know his home was

right up there and Mrs. Ajirogi was the Assistant Post Mistress, at that time because they both were there when we went and got the mail. And that was a flood zone area, right in that area because that- the flood zone would come in that area. In fact, all the areas down where I was living, that was also a flood zone area until they had put that main highway- running that main highway- well my husband worked on it, so that's why I had a little knowledge of it. And they did it where they diverted all of these, they channel it into one area. So, the areas that would be free down in that area, the ones that would always be flooded, would be Welakahau, Keala Street, those were the two and up at Suda. They were the heavy flood zones. But in this area, I don't- I think that they diverted it. I'm not too sure, looking at this map, it looks like it's very well balanced to build anything there. KT- So keep your thoughts on what you've shared so far and if you want to share anything else later on, I going divert my questions to your daughter.

## **Interview: Kevin Mahealani Kai'okamalie**

**By Keli'i Tau'ā/ Kimokeo Kapahulehua**



**KT- Keli'i Tau'ā**

**KK- Kimokeo Kapahulehua**

**C- Consultant**

KT- So, Mahealani, your full name?

C- Kevin Mahealani Kai'okamalie.

KT- Where were you raised?

C- Um, I was born in Keokea, raised in Honua'ula and various other places on Maui.

KT- For all the Kupuna we talk to, not too many are familiar with Honua'ula because the name wasn't used before. Compared to, you're in fact, out of the nine Kupuna we talked to already, only you use the name due to the fact that you were born and raised there.

C- Hmm.

KT- What about your Ohana, your family, did they use that name?

C- Yeah used extensively in my family.

KT- So, can you give outside of your family name, some other families that did they live there around there with you? Who are some of your relatives that could have grown up over there? Any at all?

C- Many, yeah.

KT- Like who?

C- Well, my father was a Kai'okamalie, the Kai'okamalie's were here long before the sugar, long before the white man. We can trace our, my father's side, you know family tree genealogy whatever you want to call it, at least seven generations in that one particular area. Honua'ula which encompasses Keokea to Kanaio and all the ahupua'a's in between which is Paiahu, Papa'anui and so on. But I, and my mother was a Purdy so along with the Purdy's came other names.

C- This is my great grandfather, yeah.

KT- Wow. So the entire family were cowboys?

C- Generationally I guess you could say that there were members of my father's family and my mother's family also they chose other professions. Such as back spin, working for the mill, going where the money was at the time, yeah. At the turn of the century.

KT- What mill are you talking about?

C- Pardon?

KT- What mill are you talking about?

C- Uh, at that time I believe HC&S, Pu'unene.

KT- Where was it located?

C- Pu'unene and Sprecklesville.

KT- Was there a mill in Ulupalakua?

C- Yes. The history thereof, which I'm semi familiar with, since I lived in the mill at one time or resided in the mill.

KT- But you never see it actively being used?

C- No. That was way before my time, way before my father's time. Probably before my grandfather's time, so I don't know any family member's have anything to do with the mill. Probably sold 'em by then because of it's prevalence in the area.

KT- So did you folks own land in Honua'ula?

C- Ah, yes my family still does. .

KT- Um, now and before, how did they use the land? Ranching, farming, anything....

C- Oh, to my knowledge yeah some farming, ranching also. Yeah, my father raised cattle, my grandfather raised their own cattle aside from the ranch. Yes, farming definitely there's evidence of that.

KT- I don't know if you recall the first time I ever met you?

C- I think Kahikinui I bet.

KT- Yes, yes, so that leads us to having a great desire to talk story with you. You're a man of the aina and the la'au, the kanu. Of utmost importance we wanted to hear from you on the plants you're familiar with in the ahupua'a of Honua'ula and the plants there.

C- is there a specific ahupua'a that, that you're looking into?

KT- Well, our assignment is Honua'ula but...

C- Ah, we no more enough time for talk about all the plant of Honua'ula.

KT- Right, so the one's that you are most familiar, the one's that might be endangered that this company should really consider looking at to see what kind of preservation they needed.

C- That would, oh boy. Honua'ula is, in my opinion, one of the larger moku's around Maui and well, I shouldn't say that. It was one of the most undisturbed moku's on the island of Maui and it would take some kind of a classification in breaking down the lands in an effort to understand it's biological significance, importance, it's value. So that would encompass the low lands so on and so forth.

KT- So the moku in general, is there...

C- Probably there is more endangered species than any other one particular land track that I'm familiar with.

KT- Really? More than Kanaio, Ulupalakua?

C- Kanaio is a part of Honua'ula.

KT- Oh, ok. It's the same passion you and I talked about when we were walking Kahikinui and so forth.

C- Yeah you know, Kahikinui, well Kahikinui is Kahikinui.

KT- Right. Honua'ula, yep.

C- Kahikinui is something else. Biologically it's probably one of the most restorable land tracks probably in the entire state. It harbors a lot, Kahikinui. Honua'ula, Honua'ula



on the other hand has been more utilized by modern man, thus creating probably the innovation of a lot of it's resources but there's still a lot of microhabitats here and there. Botanically, ethno-botanically.

KT- How young were you to realize that it was important, or very important to learn about native species, our plants?

C- Twelve, thirteen, eleven, twelve, thirteen, somewhere around there.

KT- Somebody turn you on or just you?

C- Um, I guess my eldest brother sorta brought up the fact that my family was knowledgeable in, members of our family in the past, was very knowledgeable about Hawaii's natural history thus creating an interest in me at that age and at that time. I think we were hunting and when he shared this knowledge of our Kupuna.

KT- So as a young boy, what kind of hunting were you doing?

C- At that time goats. There was a lot of goats everywhere at that time.

KT- With guns or with bow and arrows?

C- Ah, both. I think I had a rifle and at that, on that day, and I think my brother was carrying a bow.

KT- No deer at that time?

C- Uh, I wasn't familiar....this wasn't, yeah this was in the seventies so the deer wasn't as prevalent as it is now. I mean even in the late sixties, there's very little evidence of uh, I mean of course the deer was here for fourteen years already. In 1969 was introduced in '59, Mayor Pueokahi, on Maui. So took a while for them to become prevalent probably not until the eighties, you know.

KT- If you can recall now, some people might be reading this document, or listening to this. If we put it on audio, who have no inkling of the lifestyle of a young Hawaiian man on the aina, would it be possible for you to be out there with your brother's or yourself, or maybe your brother because you mentioned it. Or your father and you folks walking on the land, hunting and while you're walking, dad or brother says, "Oh look at that plant." Or, "Look at that plant." Is that how you pretty much learned that because while you were, you just walked it and you saw it and they talked about it.

C- Yeah, pretty much. I guess I remember you know, my eldest brother, my father died when I was young. So my eldest brother pointed out something, um I can't remember what it was at this time but, yeah, eventually I became very interested in the plants of Hawaii in an effort again to identify with who I was or who I am still.

KT- For young people it's challenging to get turned on to plants cause plants no talk back, they don't..

C- Yeah, I noticed.

KT- There's not a two way communication that human beings tend to draw towards. So, so, I'm trying to get into what was the communication with you? What did you hear, see, feel, touch?

C- All of that. I heard, I saw and I felt something.

KT- Describe, describe that.

C- Oh, just when I'm...

KT- Take a plant.

C- I mean, I don't know, you know growing up, you know there were people paddling canoe, there were you know, there were other Hawaiian's dancing hula. Um, when I was growing up there was no Hawaiian speaking Olelo Hawaii but I remember, you know,

extensively paddling canoe and dancing hula and that was the two Hawaiian activities. And though I appreciated those acts of Hawaiianess I was, I was....

KT- You weren't drawn to it?

C- Um, I was but yet felt there was more. You know at the time growing up as a child in the seventies, um this the only Hawaiian things that you were exposed to; paddling canoe and dancing the hula.

KT- Yup.

C- You know, and I knew there had to be something more. Um, and then there was a lot of talk about the (farmer) mahi'ai, you know and taro. And then both, you gotta manage our land, our aina. I went look, wait a minute. I only see X amount of Kalo on this land, you know what is the rest of it made up of? And thus that peaked my curiosity I think trying to identify with this word called Hawaiian and being Hawaiian because I wasn't being, I probably was. You know being raised Hawaiian but just didn't know it at the time because we take all that we have and grow up with as youths, probably take it for granted. You know and probably don't appreciate it until we start to, our minds start to, you know not wander but our minds start to think about who we are and what we are and where we going be, you know in this thing called life. And for me that was around the ages between eleven and thirteen when I started to think about things on my own without being guided. So, you know and walking through places you know, such as Makena um lower Kanaio, you know with my fishing net, I can remember that not going to school. You know cutting out of school just to go throw net. I remember leaving bottles of water, and was glass bottles, back then shoyu bottles, filling 'em up with water leaving 'em here and there. You know one day just tripping around knowing that we going come back to this place. Or the next day, you know to fish or whatever, depending on what we were doing if we could get a ride that far. You know, we 'eh go fill up bottles with water, you know. But yeah, through walking the land, starting to notice you know the changes in vegetation, the more.... the less people you saw, the more vegetation there was so it started to peak my curiosity, you know and fishing the lowlands and hunting the Maui 'āina and the mauka lands, um you know you notice things like this once a man or a person I should say, starts to think about you know him or herself. You know as a human being, you start to develop interests in life and for me that began between the ages of 11 and 13. But I found time to come to what we called is the city at that time we make mischief too but you know, I never forgot our roots and then later on took it to another level as far as interests were concerned. I lost interest, it became my responsibility, or I felt it to be my responsibility to understand all there is to know about Hawaii's natural history, including it's scientific significance in the populace. I think it's an important part, a very important part of our culture. Probably the most important part of our culture aside from your 'ōlelo because in my heart I believe, you know the simple fact that over ninety percent of the time things in Hawaii are endemic, meaning found no where else in the world. It is my opinion that it is Hawaii's natural history, or it's biology that redefine the Polynesian and made him a Hawaiian so that's just my personal opinion. Others see differently, some others feel nothing when it comes to Hawaii's biology. Feel nothing, know nothing, and choose to know nothing. But it's, I feel it's changing, especially in the last ten, twelve, fifteen years. Unreal, I could count on half a hand the amount of native Hawaiians that knew more than three native Hawaiian plants. Now, now it's countless the amount of native Hawaiians that have, you know that are now interested.

KT- You have pioneered the area and that's what I was going to lead towards. In your opinion, outside of you, on this island, who are the more knowledgeable Kupuna, Makua, down the spectrum of really know about, you know the natural history, you know the plant.

C- Interesting question because um, you know at the time when I desired to understand more about Hawaii's natural history or it's biology, um I found that there was no Hawaiian's that I could turn to.

KT- No one right, no one.

C- Yeah, there was no one, at that time. At that single...

KT- On this island?

C- Yeah, on this island. Um, and then later I, you know not that much later I met a man named Rene Silva. After going to, after visiting some agencies, you know with my curiosity of things that I wasn't familiar with; um some individuals referred me to Rene Silva. I don't know why, they just noticed I was Hawaiian, I guess. And every time I walked into an agency, be it the Department of Land and Natural Resources, uh The Department of Agriculture, they you know, they found it quite peculiar that you know, here was this twenty something male Hawaiian interested in things that most twenty something people period were not interested in. Um, and it peaked their interest, I don't know, sometimes fear I guess. Sometimes I would come straight out of the mountain and I, you know, hadn't showered for four or five days, you know, at a time. And I don't know if you seen a man who came out of the mountain after four or five days, he sometimes look pretty scary! So, at times you know with experiencing anxiety, you know in an effort to understand what I had in my hand or had collected. I would go into the mountain for days at a time for the specific purpose to just collect vouches of things that I wasn't familiar with.

KT- Like, as an example...

C- Like, as an example?

KT- One excursion, you came back, what was in your hands?

C- What was in my hands? Oh, the list is endless but I remember one trip that I took and went into a few gulches in the Kahikinui area and let's see, one, two, three, three of the plants that I had collected had not been seen in decades. And in one case they thought to have been extirpated, at least from the island of Maui, a Hawaiian fern that doesn't have a Hawaiian name. Well, not doesn't have, we don't know the Hawaiian name anymore, that's how rare it is, that plant's the Molokai named after the island of Molokai which is the only place they thought had to have existed at that time. Um, referred to by Hawaiians to the entire genus. Um, a lot of the species in the family were referred to as Ha or Haha hadn't been seen in a couple decades, I guess. a native tree fern, not be confused with the hapu because this fern actually grew on a tree. And the one that I collected was growing on a Koa tree. Um, I knew by it's looks that it was a Waiwaiole but it looked different from the one I seen growing on the ground. The one that was growing in this tree, definitely was different. In my opinion in speciation, uh probably the genera was the same, which it was but I knew it was a different species from that, from the common Waiwaiole I see growing on the ground. So, I collected that. Um, those are the three of note on one particular trip but you know, I'd gather all kinds of stuff like Maua and various species of um even whoa there was even a curious Akala that I collected. Come to find out it was a rare variety of Akala. You know I noticed

there was some physical differences in it's appearance and so I collected it and I believe it was Fern Duvall that I first ran into. He's an ornithologist with the State of Hawaii, or at that time he was a ornithologist, I don't know what he does now, something different. But anyway, he said, "wow, this is..." ah I can't remember at that time, I have it written down, though. I haven't been doing well in the last couple years, physically so I'm a little rusty.

KT- So, Mahealani, you had looked in books about these plants before you went. So when you went and you looked, you compared what you saw in books and pictures and then realized then that was the kind of plant that you just referred to.

C- Yeah, yeah. Well, you not used to being able to identify families and genera, yeah. Definitely, but then it comes down, come in, I think five categories in a family you have a genus, you have a species, you have a sub species, and then you have varieties. So, so the first two parts were somewhat visible, you know right off the bat, you know. The family and genus, but oh boy, when you get into species, sub species and varieties, it's a very, very interesting world. And the great part about these scientific classifications is the ancient Hawaiian's did it too. You know they have more names for Ohi'a's then science does. You know, so they noticed, they noticed these slight or miniscule differences in these plants that grew in Papa'anui from the one that grew in Kanaio, from the one that grew in Hawai'i, from the one that grew in , from the one that grew in Kanahena. You know, despite it being the same plant, it had differences and the ancient Hawaiian noticed these differences. And when I found that out, I went like, "Wow!" You know, we are as brilliant now and yesterday as the scientists' think they are today. Or claim that they are today by, you know the only difference is we didn't have the means to document it in writing. Only in 'olelo and unfortunately through the genocidal acts of a foreign country, that knowledge was lost.

KT- And, are you, you went through the different ili's, or lele's, or moku's where each of the plant was located. Can you give name of the one that was at Makena and Kanaio because you trace a genealogical sequence of these plants were the same but little different. Maybe in color, maybe in size, maybe what was hanging on it. Like for example as you pointed out; Ohi'a, a wide perspective of Ohi'a pua ahihi was generic to Makiki on Oahu but still a lehua. And right up in Ulupalakua they had, right in front of the store was Lehua Melemele or they might have had another name. So, are you, did you make the comparison as such that the one you found in Ulupalakua had a name and you went to Kanaio, had the other name?

C- Um, unfortunately in most instances um, in most instances, not all in most instances those differences were recognized only in scientific terms and not in 'olelo. But, um I've tried to come up with some Hawaiian terminology for plant differences and I'm finding it quite difficult with the exception of the, the Ohi'a. You know the many names for the Ohi'a, Lehua Mamo, Lehua Ke'oke'o. Um, Ohi'a Ha just some differentiating in color and some differation in their actual physical appearance. Oh, you know Maile is a good one, you know there's the mountain, there's two mountain Maile, you know one is called Maile, one is called Maile Lau'i which is a tiny leaf now, not a small leaf. Maile, but an actual tiny leaf, you know Maile so that's one example. Like I said unfortunately, you know the changes that took place you know, particularly in the last hundred years. You know, which in the millennium of time, is a very, very short time. Very short, it's a snap of a finger, a hundred years. It's amazing the knowledge that, that was, I hate to say lost.

KT- Not lost.

C- You know it's not lost, you know that's the wrong term.

KT- It's there for people like you and others you might have privy to groom. I'm only saying this from personal experience from where I was and where I am. By having people say, "oh, no it's not there, it's lost" and then diving into it and getting it. So, it's there but it's going to come to people like you and others, those that you train and so forth. Because they'll bring in a different spirit and they'll be able to connect to that spirit.

C- I agree, and I agree and it's no longer a hope because it's already happening, you know. Um, you know fortunately people like Rene Silva that have been able to influence the Makua to, to at least have a common knowledge of Hawaii's botanical treasures. Maui is a botanical treasure and I see it every day now, you know, driving through neighborhoods. You know it's not something I saw as a youth, or even as a young adult. Native Hawaiian plants being grown by everyday native Hawaiians, even non-Hawaiians. And you see it in people's yard's now, you know, Hawaiian plants. It's about time. I remember a conversation that I was having with Arthur Mederios.

KT- Now here's another individual.

C- We have, I was, I think in my early twenties when I met him. He actually flied me down. I was on my motorbike at that time. But anyway, I became friends with Arthur Mederios after a first confrontational meeting, I think. You know being a Hawaiian from Honua'ula and you know, my family, you know coming from the Big Island and moving from the Kipahulu area until finally settling in Ulupalakua. Um, you know, I grew up in a manner that you were supposed to be responsible, you know as a native Hawaiian. As a male in particular, you know, that was influenced partly by my eldest brother, by my uncles. You know how to be, and thus, I developed a personality. And out of that personality was born an attitude, you know I saw mistreating the land. And unfortunately those people were of a different shade of skin from me. So there I developed a, and when somebody of a different shade of skin possess more knowledge than you do and is checking upon your backyard, I going take offense! You know I started to hear about this guy named Art Mederios. Everywhere I turned because of my interest in Hawaii's natural history, particularly in Honua'ula and Kahikinui. Apparently when I was walking around in the one area this guy named Art Mederios is walking around in another area.

KT- But close by.

C- But close by, I never met him so, um.... So I guess there was this brief one or two year period where he and I kept hearing about one another and you know they're saying, "eh, there's this Hawaiian guy." I said, "what?" "You know there's this young Hawaiian guy I mean, you know that we haven't seen in a long time." So I guess that was what he had heard about me and every time I ask someone that I thought had vast knowledge or broader knowledge of Hawaii's native plants than I did, his name kept popping up. Whether it was Richard Nakagawa or Rene Souza, or Bob Hobdy, or who was at the nature conservancy at that time, more haoles but yeah Mark Deflin he say hey, I go anywhere. Because you know, I don't consider myself to be a prejudice but since so great wherever I can gain knowledge of things Hawaiian, not just plants, I going ask. Regardless and I going, you know, you gotta have a degree of respect for these non-Hawaiian's that treasure our culture, that respect our culture. Unfortunately, most of them don't, you know, the vast. But you know to those native Hawaiians that were very

helpful in helping me, you know, God bless them because I wouldn't have been able to do the work with the youth of Hawaii. With the youth of Maui, you know that I did without their respect for our culture because they're instantly, you know, boom, they dig in my background. They just said, "wow, you're a native Hawaiian who care, unbelievable, you know. Here we are to help you." So, I guess they were frustrated as I was at that time that there were no native Hawaiian's actively pursuing ways to preserve this very vital part of our culture.

KT- As far as you know Rene is not Hawaiian?

C- He is Hawaiian.

KT- Yeah, he is because he is Lopaka Aiwahi's uncle.

C- Yes he is.

KT- Yup. So, you got all this knowledge growing up but you were collecting that knowledge through brother and dad unbeknownst that this was valuable information.

C- Valuable, I don't know valuable. Cause I don't know. I think that's an understatement.

KT- That's why we're here talking because we put, we try to define value, you just spoke it in terms of now all these, pardon me, outsiders who come and build, see the value of native plants in their back yard. That's the value. What native plant's does for our aina, that's the value. Because native plants that can survive on our aina, makes the aina ulu or grow. If you bring in as we know, all these other species that become endangerous to the environment, it wipes out the whole community of plants and eventually us as an example. Like the Miconia can be very destructive so native plants, knowledge of it, valuable. From my eyes.

C- Invaluable. Um, response to that, yeah you know, as strong as some people, I don't know. I just chose. I believe all native Hawaiian's growing up at the time I did, had difficulty identifying what being a native Hawaiian was. I was interested in all kinds of things but I kept noticing this pull, and I believe that pull was spiritual. I believe it has something to do with the fact that my father loved and respected. It was a difficult time, the cowboy time, especially with the great cowboys, and I consider my father my grandfather to be great cowboys. Cowboys not supposed to go play with plants. (laughing) You know the wahine's went go play with plants but you know the stories I hear from Dr. Fleming's daughter and my aunt's.

KT- Who was... Who was your aunt?

C- Oh, Vivian, Dolly Kai'okamalie, my father's younger sister. She's the only one in our family that actually had first hand account of the love that my father and my grandfather had for native plants. Not aloud but.

KT- She's still living?

C- Yeah she's still living.

KT- That's who we gotta get to.

C- Okay. But yeah, she was, I was already head, you know up to my nose in, for lack of a better term, loving the 'aina already when she shared her stories with me. Of course I knew my grandfather because the scientist had already told me about my grandfather.

Wow! You know, everywhere I would go they would ask.

KT- Oh my gosh, Mahealani! Your grandfather is in the books that I have been reading. I only see his name now. I can bring you references. That's the man.

C- Everywhere I would go they would ask me the question, 'Who is William Kai'okamalie to you?' and I says, 'My father.' And they would look at me like I'm lying and I remember one person saying, 'Oh, you're too young.' It might have been Dr. Lyons from, not Dr. Lyons, not Machelic, that was the shell guy. Oh, God, I remember Par telling me that they arrested this guy in Hawaii for trespassing and he died a few years back and I met him like three times. But I remember him asking me who William Kai'okamalie was. He was the botanist at Lyons Arboretum, damn he's one of my hero's and I can't remember his name right now. But anyway, he had asked me and I told him he was my father and he looked at me and he said, 'You're too young.' You know, real stand offish like, don't lie to me, kinda. The way of speaking to me he said, 'You're too young.' I said, 'Oh, my grandfather's name was also Kai'okamalie.' And he looked at me. I had just given a talk, in fact, on Kahikinui on the area at a conservation conference and he looked at me and there was a tear that started coming down this man's eyes. You know that was the most touching experience but everywhere I would go, oh God, Dr.Lameru, very, very interesting man. I didn't know him very well but during the times that I had the privilege to be in his presence was, it's unbelievable. You know when, you know us native Hawaiian's we all love our culture, we all love who we are. We all now have a profound respect for who we are, you know this sense of being proud of who we are. But to see non- Hawaiians, you know to have that same passion, whoa, it's an incredible thing. You know, and it cause me to have a more profound respect for other cultures as opposed to just diving into ours. I read a lot about the Mayan's and various other Indian cultures but the Mayan's in particular peaked my interest because they were ahead of their time. It was an incredible thing. You know, I likened the way...boy you know, we have over two thousand names flowering plants in Hawaii. Our culture, our culture now, is less than two thousand years old. (laughing) That's an incredible feat in my opinion to give names to over two thousand species and varieties of flowering plants, ferns and grasses. Boy were you, that's the amazing thing I recognize you know, in my personal pursuit to understand hopefully all I can, or all there is about Hawaii's natural history, about it's botanical treasures, from the Hawaiian perspective and from a scientific perspective is. You know that's gotta be one of the wonders of the world, you know, the fact that we went name over two thousand plants, being one of the youngest cultures in the world. You know, a mere sixteen hundred years old, you know the Hawaiian, the native Hawaiian. The biological significance of where we are in relationship to the development of a culture in a mere fourteen or fifteen hundred years before Captain Cook came and developing a cultural system of living, breathing, surviving. You know I think it was an incredible thing and everything you look at, you know, our culture involves a plant or more. Everything, from the hula; there's twelve hula plants. From building a canoe; from the hull to the, from one end to the other of a wa'a. You know, one plant of another, one tree or another, you know was implemented. You know everything we did, you know every day survival depended on our surroundings. And the fact again that over ninety percent of the flowering plants in Hawaii are endemic, boy. To me it is the most vital part of our culture, aside from our ability to communicate with one another is our plants. And here in the new millennium... Honestly I never thought, the way I was going, I never thought my body was going to survive this long, and I'm a young man. It's just I dove hard and I feel very fortunate to be alive, actually despite being in my early forties. I don't know, I feel lucky

to be alive to see, not the renaissance, but that's the wrong word. The revolving of the native Hawaiian and the acknowledgement of our plants, in my lifetime is a blessing. I remember trying to impose upon other native Hawaiian's how important the plants are. They acknowledge that, yet desired not to know anything more than that. And now today, these young Hawaiians, and you especially these young Hawaiians, the University of Hawaii studying to become land managers in an effort to manage our resources. Boom! It just happened man, in like fifteen years, in like twelve or fifteen years. From not even being acknowledged as a vital, vital meaning present day, part of our culture. All we know was maile, go get a maile go dance the hula. You know we get bougainvillea's and plumeria's on our po'o, that's always the wrong plants. But more and more I feel very blessed because I thought this day would never come, not in my lifetime. You know, even native Hawaiians would recognize how vital our non managed lands are, for lack of a better term. Kalo, the hula and the canoe paddling, people acknowledge the fact that these resources are still all around us, you know. I don't care where you are on the island of Maui, you park someplace. I don't care where you are, within five miles, within a five mile radius of any point on the island of Maui, I can take you to an endangered species. Any point, any point on this island, I can take you to an endangered species. In other words, present day, it's a part of our future. It's not a part of our past, brah, it's a part of our future and we should be doing everything we can to preserve every ounce. Not just because you know, get ilima lands on West Maui we going denude all the ilima lands despite it's commonality in the biological community. That doesn't make it ok to destroy it. To build, you know, public's it's inevitable. Inevitable, what is inevitability? You know when you're dealing with the people's and it's not just about plants, the things I do with my life, in my life in the community. You know, it' isn't just about plants, it isn't just about a family thing, it's about all of us. I believe this desire is an unselfish one and those people that surround me, or I've surrounded myself with, you know we just want to be able to preserve it long enough for the next generation of native Hawaiians, or whomever, to come up with better solutions. Because modern day man brings with him the ability to wipe out everything that defines people of culture, yeah so all people of culture we need to. Not just native Hawaiian's but all people of culture. Americans, they have no culture, so they can't, they don't get it. They can't fathom the significance and the importance of one plant. I would stand in front of that dozer for one plant because it's not about one plant. If there's only one population, there's another population of Maheapilo down the road braddah. But we're not talking about that population of Maheapilo's down the road, we're talking about this one. That's just me, you know. I live in a development, you know I exist in a development, you know with my sore back I have right now and right now all I have is my books and my field notes for now, until I, I hope I become healthy again. But that's how important it is, the native plants of Maui, the native plants of Hawaii. It defines us as a peoples.

KT- In your neighborhood of Honua'ula, if you can recall when you were growing up, the most significant plants that were there when you were growing up that you've seen and that you'd like to see forever that you don't see too many other places but it's there. Especially in the area we're talking about.

C- Yeah, you know, the funniest thing is um, just in my lifetime things have changed. Land has evolved into something that is, something very un-Hawaiian. The pasture



lands, just in my short lifetime, I've seen tracts of land, I mean the Uluhe plant, when I was ten years old, through the Kahikinui forest was incredible. Now you cannot find Uluhe, it's a very common fern, very, very. The most common fern, Uluhe. If you drive around east Maui, on the windward side of east Maui, man I remember Kahikinui, man. Gee, I couldn't make my way through it, it would terrify me to see Uluhe because I knew I had to get from point A to point B. The only way to point B was through the Uluhe. Now you cannot find Uluhe on the ridges, only in the gulches. So, just in my short lifetime... So you know that's one because I was terrified, I was petrified of the conditions because I was too small, other plants of interest of course.

KT- What wiped them out? And now that you say, I can see it in my mind's eye,

C- Yeah, well the introduction of ungulates, you know way back when from Vancouver's time, you know, all the way up to the present and the management and or the lack thereof of, of these ungulates or these hoofed animals is what's cause the denudation of habitat. Yeah, pigs, goats, in particular, pigs and goats in particular. Um, and of course cattle. Us descendants from the Paniolo we like to think that they were always managed but till this very day we still have wild holoholoa(animals) on the island of Maui. And when I say wild, yeah. If you stumble upon one, you know, you may get hurt.

KT- Yep.

C- If they see you from afar, they will run. But if you stumble upon one of these animals, and I speak from personal experience, dodging, you know, dodging a twelve hundred pound hoofed animal behind the, wasn't a tree, oh boy. You know, a twelve hundred pound animal in the forest, uneven terrain, he has the advantage. So, till today we still have these hoofed animals. Hopefully they're more managed. You know there are spikes in their population growth and right now we're experiencing a spike. Nearly a two thousand one. Five, six in particular the pigs and goats. You know we've noticed a spike in their population growth, despite it being that, I don't know, some say it's because other lands are being more managed today. We're seeing spikes in other areas. So if that's the case, then it's a good thing, but other significant plants was the Mamane tree growing up. Um, I remember the Oheohina, there's an Ohimauka and an Oheohina, Ohimakai. But they were statues' trees, I remember, so yeah, there wasn't that much because they was used for the Ohia. You know and my father's later day life the mamane firewood, you know for make imu. You know most people think Kiawe was always here. Kiawe is an introduction. It's an interesting story. They say the father or the grandfather or the great-grandfather of all the Kiawe trees in the State of Hawaii, well, what some people refer to as the State of Hawaii, comes from that one tree in Thompson Square in Oahu.

KT- Wow.

C- I find that story too interesting to not believe because it's an example of how non-native plants, when arriving here without their natural enemies to keep them in balance can do. You look much of the kiawe on our leeward east Maui, it's kiawe. I mean if you ever have an opportunity to take a helicopter ride from Kahului Airport going Mauka, above Omaopio, or getting into the Omaopio and the Pulehu area, going straight across to Makena, the dominant species is Kiawe. The dominant.

KT- Tree, yeah.

C- Yeah, you know, biology. You know seems monotypic, when you get into the microhabitats and then you start to see the Wiliwili lands with the Keahi trees and the

Lama trees and the tiny plants like the Nehe and all that stuff. But just like the people of Hawaii.

KT- All those plants you just mentioned are all found in Honua'ula?

C- Yeah. Yeah.

KC- Yes, all of them. The Keahi, the Lama, Iliahi and I can go on and on right off the top of my head I can probably name fifty trees, just trees that existed in Honua'ula.

KT- But they're overrun by Kiawe.

C- They're dominated by Kiawe.

KT- Yup.

C- And it's up to us, you know, it's up to us. I think, you know for me personally, much of the battle, much of the battle in this...I wouldn't say gone, I just not healthy, that's all. Fortunately, you know through working with people like Rene Silva, Anna Palamino, Art Mederios was able to, oh boy that's the man, have been able to influence the significance and the importance of Hawaii's native plants. You know, introducing them back to the native Hawaiian. It's encouraging to see keiki blurting out names of Hawaiian plants. Unreal! It's a great thing.

KT- Where did you see that?

C- Um, where did, right while being employed on the Ranch and welcoming Maui's youth to come and see native Hawaiian plants. That's remarkable to see that how much percentage of these young Hawaiian kids already knew. Yeah, and being involved in other facets of the Hawaiian culture, just going on eco hikes, I guess. I hate to use the archaeological. Just going up on looking for cultural sites, you know, with groups of people and seeing their kids. 'Oh, Papa look, Akoko. Oh, Papa look, the Ilima. Oh, Papa Amai'opio. You know, and you didn't see that just ten years, twelve years ago, never. You would never see that so, in a short amount of time, for some reason, you know, like I said earlier. I thought this day would never come. I used to cry in the mountain. I'm a big boy, I used to cry in the mountain. You know, when are we going to get it? I remember trying to solicit funding from the United States Fish and Wildlife Service and taking them on a field trip in Kahikinui and despite them willing to give the funding, they weren't getting it. You know, it wasn't about the money, the field trip wasn't about the money, it was a portion of the field trip. The purpose of the field trip was to show them and inform them that there are native Hawaiian's out there that cared. Whose sole life passion was to hold on, to preserve these very, very rare habitats. The habitats in particular more so than the individual species, what was happening to our native eco systems. The habitat destruction caused the dissipation in speciation or biodiversity and I knew it was so important. I don't care if you get one hundred endangered species. If you don't have a habitat for those endangered species to exist in, you have no plant. That plant will cease to exist, inevitably. Maybe not today, maybe not tomorrow, maybe not next week, inevitably it will die. The purpose of the field trip was to inform them that there a group of, at least one group, of native Hawaiians that got it, that knew it. But, come to find out, they're the one's that didn't get it. You know, it was the experts. And their frivolous mannerisms, you know, in a very spiritual place, you know. I remember it was around Thanksgiving because they were talking about turkey and sh\*\* and I couldn't help but walk off from the loop and... What gulch was it? I think it was an off gulch. Was it Kamaole? Must have been Kamaole, I remember going into Kamaole Gulch and just visualizing the faces of my eldest brother, my father

and this vision I have of Akua. I was saying 'Bless them.' You know, I was angry, so angry I wanted cry. So angry I did cry. I don't know, it's hard to find anger and hate when you're in such a spiritual place. And I saw that and that moment changed me forever as a person. You know, I not going lie. I grew up angry. Very angry. Um, but that moment with the non- Hawaiian, the Hawaiian and the scientist, you know, in a very spiritual place, it changed my life forever. At first I was angry. I had visions in my mind of beating them right then and there. You know, visions, actual visions of beating 'em and I walked off. I realized they was funding for us, in these people that I wanted to beat. And after walking into Kamaole Gulch I realized, wow, you cannot blame somebody. You know there are other facets of life that I'm ignorant in, you know, so forgive them for their ignorance. For they not know who or what we are. I thought they would. They were the one's actually pushing for the funding; all we had to do was come up with the plan and another plan to execute the plan. You know, that's all we had to do. And in our minds at the time, you know, it was the activities. Management activities were fairly simple. Very, very difficult but in theory, simple. It changed my entire life right there. Right then and there I knew how important it was to get out and share whatever knowledge I had with whoever would listen. That one moment changed my life and that's what begun this process of physically, actually going out. You know at the time I didn't know how to do it, going out and soliciting groups of people to come to my backyard and share with them. You know, I look at that mountain as a part of me. In particular the leeward side because it's been so, what's that term? Not ignored.

KT- Passed over. Passed over.

C- Yeah, they say that land was destroyed you know. So they were telling me in the early days, you know, when I was going asking, you know. Just naively walking into agencies saying, 'You think you guys get some money so we can protect this stuff?' No, that's not the place to spend money at the time. Restoration was not, was not in anybody's vocabulary. You know at that time was a funny thing. 'Restoration? No we don't have money for restoration. We live in the real world.' You know that twelve, fifteen year journey, these last twelve of fifteen years was an incredible one. All kinds of money going into every island on the leeward side, you know today. And it's just, I like to believe despite...there are other projects going on, you know, on the Big Island. But nothing like what was happening here on Maui. You know the support of the community at whole. Even the non-Hawaiian community, we have work parties, work days. More non-Hawaiian's than Hawaiian's showed up for these work parties. And these work parties consisted of humping Keawe posts over lava fields, you know, to go protect individual populations of things we felt important. Never mind what science says. This is what we viewed to be important. Science not going help us. We went out and we raised our own money to buy fencing material to protect our cultural resources from further denudation by animals and loss of habitat. And now you go, you know despite it being small areas, you should see it from an airplane now. Last time I flew to the Big Island, I was flying back, you could see the work. You could actually physically see from the air, you know, the work that's been done in the last fifteen years. And I like to think it's happening on all the Hawaiian Islands because of what took place here on Maui. And that's how special we are on Maui. And that's how special undeveloped places, such as Honua'ula, Kahikinui, Kaupo are. Very, very vital to the survival of our culture and us as a people's.

KT- We've been spending a lot of time on plants. But in terms of cultural significance in Honua'ula, what areas or, items, or sites, are very valuable to you?

C- The funny part is, we were just working in a corral couple months back. Same corral, same proximity. Same corral that my father worked in, that my grandfather worked in, my great grandfather worked in. I know this because I have actual pictures of this actual corral that my father worked in, my grandfather worked in and my great grandfather worked in. Just a couple months ago, literally in fact. Wendell Wong looks down from his horse and goes, "Hey, what is this?" (laughing) The Ulumaika right there. Hunting... Oh, where was this place, Kanaena. We call it Kauai pasture. We was hunting this place called Kanaena. Walked over this stone wall to go retrieve one deer. Go down, cut the deer, walking 'em back up, climbing over the same stone wall, the exact same place. In the wall lies a poi pounder and this is just nine months ago, one year ago. Cultural significance? Hmm... cultural significance, culturally.

KT- They all are one.

C- Yeah, you know, culturally, you know, period. Places like Honua'ula, you know in my opinion, gotta stop already. You know I've seen plans to develop much of what's left of Makena. I've seen plans drawn up by the land owner's. Three of 'em. This was by accident. You know, I don't know. Development, in my opinion, should be concentrated in areas where we're not going futher in desecration of our culture. In the tracks of land, you know, open to such things. You know if it's inevitable, you know, get cane fields that's all being, you know. But places like Honua'ula. You know despite it being extensively. You know, the cultural significance of land such as Honua'ula, Kahikinui and Kaupo. There's not many places where you can just walk and see... I don't want to say the past, because people say the past is the past. That's not what I said, that's in the past. Seeing me, seeing who I am, you know. And that identification is very important to my future, I feel, because it defines who I am. Integrity, you know, as man. I see hard work in the cultural side. Ask anybody's working, they going tell you that's one of the hardest people I've ever been around. See, it's not just our past, it defines who we are. And you know, define our future as a people. That's how important places like Honua'ula is for our keiki. There's places like Honua'ula, Kahikinui and Kaupo that's still harbor our history. Our natural history. Our cultural history. Those places should be preserved inevitably, for that simple reason. Because these are the last Hawaiian places, Honua'ula, Kahikinui, Kaupo. In my opinion the most, again I don't like this term, for the lack of a better term, these three moku, in my opinion, are the most culturally significant. Culturally valuable. And it's not just because of the cultural sites that exist there but the botanical treasures. And it separated us, the plants separated us and it allowed us to have a culture. It's the plants in my opinion. Again, you know, we're trying to talk about culture but that is the culture. The plants, it is the most vital part of our culture. It defined us, it separated us. Not just the miles of separation between continents or other land masses.

KT- I must tell you Mahealani that this information is very valuable. You present cherishable memories of Honua'ula because you present detail information. So very valuable, this information that hopefully people that we're doing this for will really look at your words. Really, seriously what they're proposal. That's why Kimokeo and I go at this with passion because we're collecting vital data to assist in the preservation as much as we can.

C- Yeah, there's no, I mean, lot of things have been documented. I mean places like Honua'ula, I mean just... If you were to be dropped, you know aerially, anywhere in Honua'ula, it's a hop, skip and a jump to the nearest cultural site or something significant. Significant in Hawaii. Literally anywhere in Honua'ula, Kahikinui and Kaupo a cultural site, a rare plant or significant plant. It doesn't have to be rare, you know, a plant significant to our culture, a cultural site. I mean the fact that we're finding Ulumaika in one cattle pen that's been used for at least four generations, for at least four generations, Ulumaika stay popping out of the ground! You know, slingstone, brah, slingstones was another, in this corral. Thousands, and thousands, and thousands of head of cattle were processed through this pen, brah, and we're still finding. I know 'cause we're finding part of our culture. You know, it doesn't seem like much but try think of that one. One cattle pen, brah. Imagine what's outside of that cattle pen in these less disturbed tracks of land, Ulumaika. I mean finding one poi pounder in the year 2004 or 2005 in one stone wall, that's cool brah. That's cool. Most people may not be able to appreciate little things like this. You might have to be Hawaiian to have that appreciation.

KT- And then like you said, even now, some non-Hawaiian's have a greater appreciation than Hawaiian's for those kinds of finds. Those who have been schooled in the importance of our culture.

C- Yeah people, fortunately, people are people. I don't know. We, yeah. A lot of non-Hawaiian's out there that actually deserve to be respected and appreciated. You know, that brings us back to a whole nother....

KT- But I've been keeping you here sitting in this position, I know it's uncomfortable. So, you want to say any last words in respect to this?

C- Um, no, just again to reiterate how significant. I don't care if the property is dominated in the Kiawe trees. You know, the fact that they, certain lands in Honua'ula are dominated by Kiawe trees, you know. It doesn't take a whole lot of effort. All you need to do is look around and you going see. You going see the Native Hawaiian right there. You know, whether it be in a cultural site, a plant, a heiau. Yeah, you know, places like Honua'ula, Kahikinui, Kaupo, again should be taken out of the development realm. Just because it's the last Hawaiian places on the island of Maui, in my opinion. Whatever development is there hey, you know, it's there. But enough already. I'm not against development. No, I am against development but now they put up all these buzz words now: culturally, sensitively, ah. I don't know, I don't know what that means. Developing it, there is no sensitivity in that. You know? Just, just think again, look again. And you know when it comes to places like Honua'ula, Kaupo and Kahikinui, we need a place to take our kids to show 'em our culture. Gotta draw one line somewhere, take it's time. Not here, there. This here, pfffh. You know we deserve it as a peoples, so. Nothing like da kine brah, being on the land and talking about that land. Boy I miss the mountain.

KT- So the real dilemma is how do we do it.

C- Yeah it is. Oh boy, that's why I went change jobs, to hopefully become a part of a change.

Agreement to Participate

I, Shela Kalanikau understand that Kimokeo Kapahulehua and Keli'i Tau'ā, independent investigators contracted by Pacific Rim Land Incorporated will be conducting oral history interviews with individuals (kupuna/makua) knowledgeable about the land area currently the Maui Research and Technology Park in Kihei, Maui. The oral history interviews are being conducted in order to collect information on possible pre-historic and or historical cultural resources associated with these lands, as well as traditional cultural practices.

I understand I will be provided the opportunity to review my interview to ensure that it accurately depicts what I meant to say about any of these lands. I also understand that if I don't return the revised transcripts after two weeks from the date of receipt, my signature below will indicate my release of information for the CIS/A report. I also understand that I will still have the opportunity to make revisions during the report review process.

Please check the bottom:

I am willing to participate

I am willing to participate under certain conditions.

**Consultant:**

Date: \_\_\_\_\_

Name Shela Kalanikau

**Investigators:**

Date 11/24/04

Name Kimokeo Kapahulehua

MAHALO NUI LOA.

## **Interview: Paula Kalanikau**

**By Keli'i Tau'a/ Kimokeo Kapahulehua**

**September 20, 2006**



***KT- Keli'i Tau'a***

***C- Consultant***

KT- Okay, so I'm sitting here with?

C- Paula Kalanikau

KT- Any Hawaiian name?

C- Kapela-Kapela is my Hawaiian name.

KT- Presently, how old are you?

C- I'm sixty-eight years old right now.

KT- You resided in the area in Kihei?

C- Yes, we moved to Kihei in the early sixties, so it's going to be forty years now.

KT- You've seen a lot of change?

C- Oh, Brother Tau'a! Many changes, definitely many changes.

KT- Some good, some bad.

C- Some for the good, most for the bad.

KT- So, cite some good things you see have happened.

C- Well, you know, I was a school health aide at the Kihei Elementary School years ago back in 1970. The enrollment at that time was only about 180 students and the move took place back in eighty-two. The current Kihei Elementary School now mainly because of the growth and the flood and Tsunami area where they were then located so it was a need for them to be moved for the safety of the children as well as the community in the area. So, that's a progress-that's one progress I see that's tremendous. The growth; now it's 2006 from 1960 the 1960's, we never had, we had a little post office by the old Suda Store, which was originally owned by A&B ( and I believe it still does, not sure if it was bought out).

KT- So one of the buildings there was a post office?

C- Yes and our postmaster at that time was John Ventura (who has since passed away a long time ago) and he was then our postmaster. There was John Ventura, his wife Clara

and Ben Torres-all of which today are deceased. There was another clerk which was Jerri Serrao who was also a clerk there at the time. She was a Carvalho, Mary Carvalho's daughter.

KT- She's still living today?

C- Jerry Serrao and the husband is now living (Joe) who is a retired policeman living in Hilo. They moved to Joe's hometown where he was raised. However, Mary Carvalho, I understand is still living in the island in Kihei.

KT- So, was Mary's family a long time resident in this area of Kihei?

C- Mary, I believe, is one of the original Kupuna's. I believe she was here before I even got here. They lived on Ewa street, I believe, right across Waipulani and Ewa Street and if I'm not mistaken she's still there. They just celebrated her birthday about two months ago.

KT- How old would she be?

C- Eighty, I believe. I think they said was eightieth birthday- and I missed that darn it.

KT- So her name- her name is Mary Carvalho?

C- Mary Carvalho, yeah. She was also a part-time delivery service person that delivered for the post office in between when they were short handed. And to my dismay I became one of the employee for the post office too! (laughter) So that was kinda fun because I learned from Ben Torres, from John and Clara Ventura, the Ralph's, and whatever people there was here. We delivered like- 8:30 we left the post office- before noon we were back because there wasn't that many homes. Miyamoto's used to live way down by Wailea- well Wailea didn't exist at the time, it was only Kiawe. We had Mana Kai wasn't even there, was only Kiawe's. Then across the Miyamoto's and a few houses, and that's about it. We did our route and we were back. There was Ilikai was kinda brand new, yeah? And Kimoke Apartments, but there was so few that when you did your delivery you were back before lunch. Today delivery is lunch time; they're still delivering at my house. (laughter) So that was one progress: the school, the post office (which has since moved to Azeka One Phase one and that's big progress or I'll say tremendous- along with the growth must have something new). Another thing that I find tremendous is Azeka one and two phase which we was ma'a with the, or used to, with the old Azeka Store. When we first moved here had only one little building with these little butcher shops and they didn't have gas today, gas pump like they do then, we used to go pump our own gas then go back inside pay for it- or pay for it then go back outside and then pump our own. There was one, only one! One of those stands, and the same for Suda Store- they had only one little stand where you pump your own and pay for it and move on. And Bill Azeka and his wife, you know, had this little market which we really enjoyed because momma and papa store you get to know everybody. The aloha is so tremendous. You know, it was just so close, we were just so close knitted community. That's another growth. The Azeka Place, the Post Office, the fire- we never had a fire department in Kihei. At the time Wailuku Fire or Kahului Fire Station used to come down. And so many times the old folks would say, "Oh by the time they come to Kihei there will be only ashes remain."

KT- So when you really think about it all through those years, can you remember any major disasters? Maybe people were more careful then. Nowadays I hear the siren going up and down.



C- Well, no not then. You know, we only had one way in and one way out. There's no traffic like we have today, up there Piilani like we had only this one little road down South Kihei. In and out if we had a bad storm- let's say if we had a Kona storm, up the mountains rain, the water come down through the river by Suda and it overflows, big time. And that maybe it's once every ten-fifteen years that does happen really bad, maybe sometimes sooner. And if that happens and the water flows over that little ridge; we can't go in or out. So don't plan to go out or in.

KT- Where is this again?

C-By Suda Store the little gully over there.

KT- Oh, okay- Waiohuli.

C- Cannot go in or out so don't try. The only disaster found out back then (and I think was in the seventies) we lost a car, the car was swept over that little bridge and out into that little water out there from the storm. But, and then we had Kihei, Suda- Suda Suda Store used to really catch it because the flood really come down heavy. I think a flood was one of the major issues for Kihei then and still is. It's just not really controlled and many of us realize that we're in a flood indented area but I don't see that much progress except for the highway. Now you have a way in and out in case of a disaster.

KT- So, we're talking about first....

C- The bridge by Suda, Waiiokea or Waiakea.

KT- Suda Store where Upcountry is Waiohuli.

C- This is Kaonoulu back here, back- where's, this is Waikolani, you have another map? Waiakea Gulch I think it is. You know Upcountry they have that Waiakea?

KT- Right.

C- The gulch come right down by Suda, that's the one that flood.

KT- Okay so what I wanted to establish is: that was the gateway into Kihei. Suda Store was a landmark where people would come in; either off Maalaea or across Puunene. Now, at Puunene during the years you were here there was a local airport was there.

C- There was the- that was a Navel Air Station.

KT- But Kahului Airport didn't come into existence until later.

C- Yeah not till, well, they have the old Kahului Airport but not- yeah they was in Kahului but they wasn't as established as this. It was a really small airport.

KT- So, Paula as you- right now as you're riding from Puunene Post Office, coming across to Suda Store you see all these brick buildings.

C- Coming across now. (laughing)

KT- Those brick buildings originated from the World War.

C- At Suda Store- across Suda Store?

KT- The Highway from Puunene all the way to Suda Store...

C- Oh, yeah they have bunkers out in the field there.

KT- They're bunkers from 1942.

C- During the war, yeah they are.

KT- So if we come right in front of Suda Store there's kind of a breakwater, small...

C- River.

KT- Small stone wall going out, did that have to do with the military?

C- This is by Suda Store- that little? Yeah, they had to do some adjustment there because of the flood. I believe by the Corp of Engineers at the time.

KT- Okay, that is a very significant spot for your late husband today because there's a canoe club that he was responsible to start.

C- Um, that was back in 1972.

KT- 1972, did it originate right there and never moved? Or...

C- It never moved, um... what happened was a number of men got together and decided that; Brother George Perriera, there was Brother George Kaanana, Kuana, had many more in the neighborhood and my father-in-law, Ben Aviera . They talked about the culture, the Hawaiian culture, and canoe, and the youth in the vicinity because there was not enough going on for the youth. And perhaps that would bring the community and their families together, if they started something like that. So, they put all their heads together and decided they were going to give it a try. And so back then they formed the club; got their board of director's; got their bylaws established; did fundraiser's; got permission from the County, did this, did that, had to do everything right. And then they had a luau over there. They kalua pig, consecrated the grounds, blessed it and they had a kau kau and they all invited the community.

KT- Was that a little, it's not a hotel....

C- Sugar Beach?

KT- All of those buildings there, was it there when the canoe club started?

C- When they first started it was there.

KT- The whole, all of those buildings were there?

C- Those buildings were there and amazingly enough, you know, with so many hau trees and Kiawe trees at the time that you really couldn't see the buildings then.

KT- So the city and county willed the land to your husband and these other men.

C- Well, it was a lease at the time. I'm not sure whether they had willed it to the club.

But that was... a lot of things had happened down the years. There were other new members, new board, and they were trying to get the piece from the County, actually, to maintain it and get it from the County.

KT- So, if we start from there and we come down from South Kihei Road; there were a lot of wetlands and they still exist, some wetlands.

C- Yeah, there is. Kealia is one of 'em, we all know that Kealia Pond is definitely and it's already under the Federal Government to maintain it as such. We also have one that, and I'm surprised, (I'm not sure what they're going to do with that) just before the Whale Center here, it's a wetland there.

KT- Right.

C- And even mauka of the highway the wetlands.

KT- So let's keep traveling down South Kihei Road because right here at Koa Resort and Koa Lagoon. It's called Lagoon because it was wetland and there's still some.

C- Makai here, where you live, it's a wetland. That's where it is, the Whale.....

KT- The Whale Sanctuary is there but it's still right there and if we go further down on the left hand side by the new Safeway, coming down, there's some wetlands there.

C- By Longs, behind Longs it's all wetlands. As a matter a fact, Brother Tau'a, that's all wetlands. Where Longs is, is wetlands. Those all had been filled in.

KT- So the Catholic Church, wetlands? Was it filled to build the church or was it wetlands?

C- That was wetlands that I can recall and then there was a small church there, this is a new church. That's all area over there is all wetlands. The water goes out to the ocean.

KT- Go down to Kalama Park; at Kalama Park does the wetlands stop?

C- No, there's wetlands if you notice by; there's that cross thing. I'm trying to think, between the old Kalama and the new Kalama Park.

KT- Okay.

C- There's some wetlands still over there but he, I think a lot of them had been covered since.

KT- So what I wanted to reveal in this report; that from Kealia, from Maalaea all the way to Kalama Park or maybe a little further, was wetlands.

C- You see, um, I'm taking myself back yeah. Yeah because even by Azeka Store-going down, makai side by the church and further there was all wetlands. That was filled, even mauka.

KT- So there might be a break, even after Kalama, but we know that if we go further down into Pu'u-o-la'i was all wetlands. So, many people who come to Maui today would not have been able to visualize that; in fact if they buy property close to the beach they might be sitting on wetlands. You know their house might be on wetlands.

C- Right.

KT- So, in establishing that, we come back to where we are doing the research. And it's above, interestingly, where you were working quite a bit of your life at the school.

C- Oh yes, at the new Kihei school, at the Lokelani Intermediate, yeah.

KT- Because what we're researching is for the Maui Research and Technological Park. So we did mention again that periodically there was water that came down and threatened where you folks were at the school? Below....

C- Yes, we had run off, we did.

KT- What street is that on?

C- Lipoa; and the residents actually, on that street, used to always complain to the County because the water always runs into their home.

KT- So as you and I can see it right now, outside of the first building for the Maui Tech Park, there wasn't anything else up there?

C- No.

KT- Because there was pasture land, ranch land.

C- Mmhhh, there was, that's right.

KT- Ulupalakua and...

C- Remember though, there is a gulch that come from up there, that come down. That's why when they built the school there was much discussion to where the water was flowing because the river was running pretty close to the school.

KT- So, if we go all the way down to the ocean; Where about's was the water ending up?

C- Okay, the water was ending up by down Lipoa across, by Star Market and even on the street and of overflow across the street. Because they had nowhere to go, no drainage, so when they built the school's they definitely had to build this tremendous drainage to allow some relief. And now, still when it rains, the water still runs down towards; some of the flow runs down that Lipoa Street.

KT- So, one of the concerns of the local people is to have access. It's called gathering rights; either mauka or makai. Were the school students ever taken on excursions mauka of the school? Was there any reasons for them to go up and look at the native plants and stuff that were there?

C- Not to my knowledge. Not to my knowledge.

KT- Do you know if there are any native plants up there that would be used?

C- Well, no I don't know, because they had cattle's before and they still do. So if there was any, I don't know if there's any surviving.

KT- Kimokeo and I had privilege to research what is called Kula 1800 which gave us access onto private ownership of land. So we were able to walk some of the riverbeds from Haleakala down and to our surprise every one of them have petroglyphs.

C- I'm not surprised. I'm not surprised. Right on the side of Lokelani Intermediate School, oh I'd say back in the late 70's early 80's, Brother Ka'alakea (David Ka'alakea) walked the side of that premises upon the property of the Lokelani Intermediate School cause they were having lots of problems with the school. When I say problems they were....

KT- Spiritual problems.

C- Spiritual problems, yeah. So, I don't know if he ever shared that but we walked together with the principle.

KT- Who was the principle at the time?

C- At the time was Marion Muller.

KT- Okay.

C- And he told me go with him, and I did. And he told me, he wala'au to me, that the side there is their walk.

KT- Is the path that they walk

C- Is the path.

KT- So, can you remember if it was going mauka-makai or Makena to Wailuku.

C- Well, at the time he pointed from mauka-makai. Maukakamakai, he said go down. And I believe this is where the pilikia was yeah because the school is pretty much in the path. But there was blessings, there were several blessings on the school and he did the final one that day of the walk. So we know that much but this is probably why you see a lot of petroglyph too yeah.

KT- Well, the; from small kid time, since I'm a Kula born, I was aware because I've walked some of the ravine's and I saw the petroglyphs. But because I've accumulated more knowledge now I know that our Kupuna used to use the riverbeds to bring logs down; either for canoes or the iliahi, the Sandalwood, to bring down to the area of Suda Store or Makena Landing to ship away.

C- Yeah, that's how my papa used to do when they used to go get bamboo it was usually through the riverbed.

KT- That would be the most logical and lighter way of bringing it down. Any family stories that can connect to the area that we're talking about? What's your opinion, as an example, of this Malulani Hospital that they want to build here?

C- Well, with the growth, you know in Maui, and in the Kihei area; I think a good cause. There'd be challenges. If they could get the staff to fill all these positions for that hospital, I think it's good. I think there's a misunderstanding who the hospital's for. Because they were saying it's only the rich get's in. But that's not what I understand from what I read. The misconception there or miscommunication; and I think because this is in the making it's gonna take a while. In the meantime Kihei is growing; Kahului and Wailuku is growing; I feel there will be a need on the way, yeah.

KT- Your mo'opuna, your keiki will need a place to go.

C- They will be needing, so I'm thinking about them more than myself.

KT- So the mayor made a statement on a presentation recently. He said, "The good thing about Oahu is if I sick I can go St. Francis, you know I can, there's ton's of hospitals." If you sick here, where you go? Only one and that's limiting the community. And the fastest growing area's on this island is right here where we are.

C- Yes, we're growing leaps and bounds and we're talking about, you know (and I think you read about it with KCA, which I'm a member of) is talking about supporting the high school that they want to put here also. And that too, is overdue. You know, our children here, our kamali'i's in order to participate in high school activities they have to stay there after school. They have to find their means of getting back home and it's a big sacrifice on the family who works one-two jobs and try to make arrangements for them. So by the time all of these are through, hopefully shortly in due time, they will be able to have their own high school and their own activities there.

KT- The area where we're talking about, are there any cultural things you can think of that you'd like to bring up? Like, I have the documents that there were several heiau's within this area.

C- I believe there is a small one near the school, not very far. So I'm thinking there's possibly some more up there, which we should look into. And I know that there usually is archaeology studies and that should be our primary and foremost.

KT- All of these, these three are archaeological studies from different companies in different times. So now, the important part to this whole thing is the cultural part, which you are sharing because what you have been telling me already is not found in archaeological reports.

C- Oh, okay.

KT- You know the water and how it affects the community and stuff, it's very valuable.

C- You know when I go to the meetings at KCA, their concern to (in Kihei too) in general is the flood; the flood indented area. We know that we have all the gulches: Waiohuli, Ka'onoulu, Keokea, Kamaole; they all flow down to Kihei. As you build, as you build- there's more water coming down. So in their master plan, I'm not at liberty to say that they're not studying that (I'm sure they are) but how are they going to divert some of these concerns, is my concern.

KT- When your husband was alive, or even now, does your family go down holoholo to gather?

C- The kahakai You know, when we first moved down here, oh we loved it because the water was so pristine! The limu was so plentiful.

KT- What kind of limu?

C- All kinds-limu kohu (Well, limu kohu was not as much here as I'm sure in Paia, we used to get some out of Paia.), but lipoa, the waiwaiole, and ogo (was one of the most common one's you could find here), and even the elelee. You outside the old Kihei School, up there on the papa, all nice and clean. My papa used to enjoy coming up from the Big Island and be able to see it there-so clean, right from the water. No more sand, was so wonderful. Then you go down behind, now they call St. Theresa, same thing; plenty limu, same kind limu and the elelee back there was so clean. My papa brought something to my attention, that I didn't realize that he always told us that about Waipio Valley. He said, "You know where this is river rock? This is river water coming down." I say, "How can you tell daddy?" He says, "Because spring water, I know this is spring water." And he said, "Where water like this runs, the moi comes." I said, "Is that right!"

He says, "Well, baby I told you that when we were in Waipio. What's the matter with you, you forget?" (laughing) He scold me and then I thought, oh yes I should've remembered that because he used to always tell us that about Waipio Valley. So he said there's plenty Moi out here. As I look back today and I think about that; I think where is it today? Our water is polluted.

KT- Yep.

C- Our limu is polluted. They're going to say, they go pick today plenty young families bring their whole she bang- there's limits in what they can take now. But there's very little left now. You go in the ocean; I think some people they go and throw cloths, or something because the limu come all white. So, just the other day we were down the beach comparing to what was then and now. And even my kamali'i's now (they're all grown they have their own families) they says, "Oh mama! This place is such a mess compared to before." And that little park that we call Mai Po'ino 'Oe Park was such a lovely beach. We used to go; when I come home work from the hospital over the weekend, Saturday's, everybody pau make their job, everything pau- bring ukana down the beach we go down there spend the morning with our people, our children and my kane. And was beautiful, I used to just marvel and enjoy that ocean. Today, I have to look around because the water is so polluted I'm afraid that there's something there I cannot see. (laughing)

KT- That's where my wife went to go swim in the ocean.

C- They think today that it's pretty; I think it was prettier years before.

KT- Oh, yeah.

C- There's no comparison whatever. That's the original Hawai'i, Kihei that I see when I first moved here.

KT- So, very important point you make there because that's what I wanted to bring out: the relationship of mauka-makai and what our people expected to get. And so in future development we need to take a look at what we do so that we can try to re-pick what we still have and try to get it to (for lack of a better word) rebirthing the limu's and bringing back the Moi.

C- Yes, well, we do have an environmental problem, we know that, and we have all this run off from the cow courses, from the boats. It's interesting how they plan to alleviate that-if it's going to help our ocean-at all. Because I was told that the boats have to be out there, if there's any discharge, I don't know how many miles out there but my understanding and maybe they do research in there; my understanding is no matter how far out you go, the current will bring it in.

KT- Kimokeo just made mention that the past vice-president is going to be here October 1<sup>st</sup> to talk about green-building green houses where everything will be broken down within one's home so that there won't be solid waste being disposed. Everything goes back to the ground.

C- Well, you know what was? When we were kamalii, we never throw anything in the ocean-in You know our-everything that we cleaned in the garden was never thrown away. It was used for fertilizer; we use compost, compost, compost. When we took out of the ocean, whatever we took, we made sure we didn't leave any opala back there. We clean our mess. My concern is how we going to clean the mess today that's over there. We try to do it on our community day work but our limu is coming on the sand and staying there. Is it the current or what? Because the limu it comes and stays, never used

to be before. What is it that's causing it? What is it? The limu never stayed, when the current go back down, the place was always clean. Now it's no more, the limu all come opala over there. Is it the time?

KT- What they're putting in the, what they're building is affecting the currents that changes the cycle of the-the movement of the limu. So that's one of the conferences that I was involved in and Kimokeo on how and what can we do to make those changes.

C- Because it's hauna and I know that the neighbor takes a lot of them right here across the street from Koa Lagoon. He comes down here with his machine to scoop it up and take it to compost it. But that's only there. And these people here hired him to do that.

KT- So it's a political thing that has to be passed. Well, you're pointing out what used to happen in Kahului Harbor which they went and got those machines and...

C- A lot of that. Even before we did, Kahului had that-for many years-had that problem. We didn't have that, now we do! Now we do big time.

KT- What do you think of the fish pond being rebuilt through Kimokeo?

C- I like that. I like that. I think the restoration is a good thing for our fish pond because it is a fish pond that needed to be revitalized and rebuilt and I think they did a good job. They work hard.

KT- It's still ongoing but..

C- Yeah, and that's not the only fish pond. There's several more down the way by the VFW Hall out there.

KT- You know the names of them?

C- A'ole. But Kimokeo said that they gotta work on that on the way later on. It just has to take time and grants.

KT- So this one her is not kalepolepo. Kalepolepo is a major big name that was here but the one that they're working on now it just slipped my mind.

C- The one they just pau?

KT- The one right next to that pink ah....

C- Yeah, I know which one you talking about. The park is right there, Kalepolepo Park.

KT- Right by VFW. So it fits into what you and I just went through in wetlands that our people had built resources among the ocean side.

C- Yes, they did and that's where their livelihood was. And should still continue to be, we're losing all that you know? We lost- I shouldn't say we losing, we lost because we don't have any fishponds. We don't have the wetlands that they once had.

KT- I think, you know, presently it's not just a Hawaiian thing but many of the Caucasians have more passion to retain some of these Hawaiian cultural things than the Hawaiian's themselves.

C- Oh I think definitely, I do.

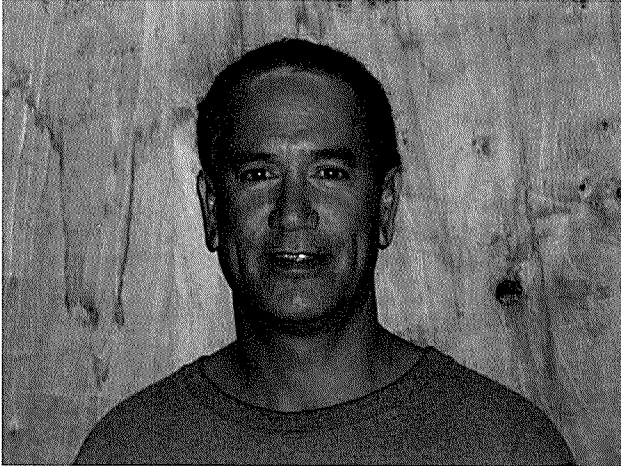
KT- So it behooves the kind of passion we have to try to keep influencing.

C- I think a lot of our Hawaiian people are concerned about what was and is but they come to some point where, Brother Tau'a, they feel that nobody's doing anything about it. Or no sense talk because talk is only cheap, cannot do nothing without... But I think talking to some of our po'e (people); a lot of them kinda give up. Like oh, nothing's being done, they're not going to do anything about it. That kind of attitude they have, you know, and that's sad but unfortunately that's some of the attitude I get and they don't want to get involved, but plenty waha.





**Interview: Robert Pahia**  
**By Keli'i Tau'a and Kimokeo Kapahulehua**  
**January 18, 2006**



*Interviewers= KT/KK and Consultant=C*

KT: So, I'm sitting here with Mr....

C: Robert Pahia

KT: You have a middle name?

C: Robert "Hale" Pahia

KT: Hale like Hale

C: Hale like the Hale

KT: Who gave you that name?

C: My mom gave me that name because she thought that the name Hale, she meant to name me after my uncle Harry. And believing the word Hale was actually Harry but I believe that name was given to me probably not from her but spiritually from someone else because they said that your name takes on your personality and I've always had that personality of always welcoming people into our home.

KT: On your hand give me how old you are. Fifty, wow. I thought you were younger than that, maika'i. So, just to jump right on why Kimokeo and I wanted to talk to you and that is, we are cultural assessors for the land across the Ag park. They want to build Ag subdivision. So when you enter off Pulehu Road off the opposite side. Presently it's Haleakala Ranch. You have any ideas about stuff that were there before?

C: I have no idea what was there before.

KT: Okay, this is why we really wanted to talk to you. Cultural assessor gathers information and then makes an intellectual, a spiritual wherever the cultural assessor is. Our thought was we're looking at what was there before. How did this survive if there were any communities within the area. In other words, what was happening on that area. So we transpose to Ag and our thought is you're one of the premiere kalo growers. I

don't know how that happened. You want to tell us how you got into kalo because the first time I knew you, you weren't a kalo man.

C: You know, I grew up on the island of Oahu in the area of Kahalu'u and many of my friends were involved in growing kalo. It was grown all around where I lived in Kahalu'u and there was no attachment to me at the time but it was just always around me. And my friends were all taro farmers but I never got into it. And then when I moved to Maui and I was working down at the low elevation site near on Hansen Road, we had a project over there and....

KT: When you say we, who?

C: The University of Hawaii.

KT: Okay.

C: So the expansion agent Ted Hori started, he thought it was a crop that we should look into so he started growing a couple of different varieties of taro. And then my friend from Oahu flew in and he started planting kalo seeds in me. His name is Keoki Fukumitsu.

KT: Was he your childhood friend?

C: He's a childhood friend, we grew up together and he was one of the taro farmers that I mentioned. So he started getting me interested because he started naming and teaching me about different Hawaiian taro's. And from that point on because of the interest I had shown in the taro my farm manager assigned me to the taro projects along side with the plant pathologist Dr. John Cho. So, when I was working with the University of Hawaii that was my kuleana. And that's where I had garnered all my knowledge about kalo but it was just a natural attraction for me to grow it and started off growing it on a small piece of land up in Kula, at a calabash auntie's house. And then I learned the need for more property when you're growing kalo because of the abundance of oha. Then I, and all of this, my wife and I, my daughter, we were growing the taro on the side while I was working for the University of Hawaii. And every year our taro fields got bigger and bigger and at the same time though I'm still working on the taro projects with Dr. Cho learning more about taro and Hawaiian taro's. Because I was involved in the University system and working with all this taro and different people I met a lot of different people who were involved. I just took a special interest into the Hawaiian varieties. The reason being well, they were Hawaiian and I found out that at one time we had over 300 varieties and right now there's only 80 at the most that are still alive today. So I took it upon myself to make this my kuleana in perpetuating all the different Hawaiian varieties. Not only that but teaching people the correct names and how to identify it. And because I was working with the UH and doing all this taro research work and on my own growing my own taro and growing all the different varieties, I got to eat all these taro's. I got to identify all these taro's, so therefore I had a greater insight and knowledge of the different varieties, where it grew best, under what kind of conditions, etc. Then I moved to a ten acre parcel where my wife and my daughter, we farmed the taro and....

KT: Where was that?

C: This was down at Pulehu. And then we moved to the Kula Ag park to a 30 acre parcel where Juanita and I farmed, we opened up 15 acres of it. And all this time I'm learning more and more. And from there I ended up going down near the airport area got some land from HC&S to farm down there then I ended up in Maliko farming kalo out there. But my expertise really is in dry land taro. Growing wet land taro's a little

different. I wouldn't say that I have, I would be an expert in that field but I have knowledge that can help a lot of the wet land growers. Yeah. So, since I moved up here I've been focusing on building my house and I just grow taro to eat at home and what I've done now because I'm not doing it on a large scale. What I do is I act as a consultant to help others start up taro farms so they don't have to reinvent the wheel and I can save them a lot of time. Anyway, like I said that's my little kuleana in this whole cultural renaissance. You know it's to teach people different types of taro's that the Hawaiian had. Our people had and to learn how to identify taro's and teach them, especially in the dryer land area how to grow it and grow it well. I've learned through trial and error.

KT: Let me ask you some questions. To bring out the reason why we're talking story. So, you were right across where we are researching which is called Kula 1800. And from what you just said, what are the optimal kalo plants that would do great in that area?

C: It's interesting because that piece of property right across Kula Ag park there is a band of land that goes from Ulupalakua all the way over, right on that same elevation it goes all the way over all the way down to Haiku area. I would say it stops by Pukalani and the reason why I say that because of the difference of rainfall. So, therefore changing the soil makeup.

KT: So it was in the same alignment as Kula Ag where you were that goes to Kula 1800. All the way to Ulupalakua.

C: Yup.

KT: So what did you find? I mean outside of the rainfall. So, what do you think our Kupuna put in that. You think, number one. Do you think they were aware of that?

C: Aware of the band?

KT: Yeah.

C: Yeah, I'm sure they were.

KT: What indicates that you think they did know that?

C: Well, because of some research and I've read books about how our Kupuna farmed. They farmed in every type of conditions there are. Down from the a'a the pahoehoe to the swampy area's all the way up to the mountains. So they just were akamai, they would have planted everywhere and if I grew it there with the little knowledge I have and I found out how well it does in this band, I know they planted over there.

KT: So, Kimokeo and I had privy to walk where you did. And we concur that you really had a prolific amount of the different varieties that you did. Can you name some of them?

C: Oh, yeah I can name them all, but there's about five or....

KT: Do you have a list?

C: Yeah I do.

KT: A hard copy?

C: Yeah.

KT: Can we get a copy so that we don't have to go over that right now on this.

C: Sure, I can give you a copy.

KT: Can I walk away with it tonight and then make a copy?

C: Sure.

KT: So, as you said, trial and error. Fifteen acres is a lot of acreage to plant kalo. And all you had 30 acres but you put 15 of them in kalo.

C: Yup, yup. And we would plant half acre at a time, my wife and I and my daughter.

KT: Describe the planting of it.

C: Well.

KT: Did you follow moon calendar?

C: Well, because it was very difficult to follow the moon calendar because of the lack of time I had and during the harvest you had a whole lot of huli of oha that you don't want to waste so I can't be waiting for the new moon or the next moon because then I would waste the huli. So I just. It was beneficial because I planted just throughout the whole year so I got to see the difference when you don't plant with the moon, with the new moon, and it makes a big difference. So yeah it was beneficial in that regard because I could see the difference.

KT: But at least you were aware that that was really true that our Kupuna followed relentlessly moon calendar.

C: Because I got to plant on the different moon's I got to see the yield's on the different varieties and the different times. So yeah, big time, definitely.

KT: In terms of size. In terms of amounts?

C: It's in terms of size, I mean they had it down so wired, it's in terms of size and in terms of oha throws.

KT: What about taste?

C: Even in terms of taste, just the overall the whole aspect of it. Our Kupuna's just had it down wired. Now that I don't grow on such a large scale I plant strictly by the moon.

KT: So, what time of year you found to be the optimum time to plant?

C: Optimum time is if you want to plant your huli optimum time would be in late winter or early spring. Late winter or early spring. The reason for that is by the time you plant it takes about 2 months for it to get a good start and then if you time it, it will go right into spring where you have the long day period. Therefore you have greater growth. More growing time. But, there's so much.

KT: Many of my Kupuna, including my 'ohana always encouraged me to talk to my plants. Did you ever get into the habit of that?

C: All the time! The plants talk to us.

KT: Describe that, describe for those who don't understand it.

C: You know I always talk about, people talk about aloha 'aina and malama 'aina and when you malama the plants they dance for you. And then they make music. It's truly one of the aspects of really hearing the heartbeat of our 'aina. I mean, it's awesome. We always talk to them. We sing to them, we play music. They talk back to us and it's just a very, very spiritual thing. We work really hard. And then we go lie under the big makua kalo's in the shade and rest and we just, uh, give us a good rest. We just love to watch them dance 'cause they would dance in the wind for us. And when it rains we would go under the makua plants and take shelter. It's just something that I wish everybody could experience.

KT: Have you told this to anybody else?

C: I've told it to a few people. Those...I tell it to people who I know can appreciate it because there's a difference if I told someone who really doesn't have an appreciation for it. It wouldn't have that impact. Where as you can feel it from the person who would appreciate it. But, anybody who grows the kalo, they will know what I mean.

KT: I interviewed Lynn Mateaki and she was sharing with me that many of the farmers there that when no rain they don't plant. They let their land go fallow. But you said that you plant all year round. So you didn't follow rain cycle?

C: No, I planted year round.

KT: What was the mentality of that? Is your mana'o saying no need rain? Describe.

C: No, rain is an important ingredient, an important component. And the reason being especially in this belt. There's a lot of, there's more beneficial points to growing in this belt versus non beneficial. Now, being that it's in a dry area with not too much rainfall, it's very warm, cold nights, very warm days. It's very beneficial because we never have the problems that people who grow in the wetlands have. Because they have a lot of rainfall, they have the Phytophthora leaf blight, the fungus. Okay now, that's a major problem for the growers today, I mean, throughout the state. If you grow in like Hanalei anyplace that's wet, Keanae they have a big problem with it. So we never had that problem. However, on the flip side of that because they have the rain, they don't have the problems with the aphids, or the thrips or the mites. Yet, we do on our side. So, we would watch the weather. Especially during the summer months when there was a lot of heat what I would do was I would watch. Because I know that's when the high population of pests come in, I would watch they would come in on the perimeter of the patch. And then what I would do is I would set up an overhead and I would simulate rainfall, because when you have rainfall the aphids don't come, the thrips don't come and the mites don't come. So I feel in my opinion that it's more beneficial growing in a dryer area because you can simulate rainfall. Yeah you gotta deal with weeds but it's better that you don't lose a crop and you still can control the pests.

KT: Did you create that approach? Or was it someone....

C: No, I created that approach.

KT: That's a wonderful approach.

C: It's just through trial and error. And I would talk with people in the wetland and they told me we don't have problems like that unless they have a drought.

KT: Wow. What would you like young people to know about what you've learned concerning kalo or other plants?

C: I would like young people to know, number one: That our Kupuna took growing taro to another level.

KT: Describe that.

C: And the reason why I say that because I was fortunate enough to eat over 2000 varieties of taro. I've tasted taro from Tahiti, Samoa, Tonga, Vanuatu, Tonga from Nepal from Africa. So I've tried a lot of taro's and when you eat the Hawaiian taro's there's no comparison. So what they did was see back in the day.

KT: You need to come back and describe that statement, no comparison.

C: In regards to viscosity. See there's a way we classify taro when we have taste testing. The Hawaiian taro's the taste, the texture, the aroma everything. I mean everything about it is just at a way higher....

KT: That you weren't able to find any other.

C: I couldn't and I ate plenty taro from all over this world and it didn't even come close. And I got to pass that on to the researchers because they wouldn't eat the taro's so they would be guessing on what they should. You know like John Cho what he breeds with you know he doesn't eat the taro so I gave him a lot of insight you know what his

breeding program and what not. Also, I want people to know to learn the different families of Hawaiian taros, learn how to identify it so when they pass it on they can pass on the correct information. Because what's been happening in the past, a lot of people are spreading taro around but they're giving them different names. So, you know that's very common. But if they know how to identify it and we have a standard for them to measure against then they can confirm it for their own selves. And I feel that Hawaiian people need to know this and it's a shame because when I go to like old time farmers, Kupuna's like that you know. And I understand why. You know they have knowledge of maybe 2 or 3 taro's but I understand why because everybody, the Hawaiian people, they would grow a lot of different varieties of taro in a suggested area and then just pick up which one did well there and they stick with that. And that's why for example, Oluwalu the grew the Kumelele, that's popular over there. Hana they grew the Haupū. In different area's they grew the specific types of taros.

KT: What was popular in Kula?

C: In Kula it was the Ohe'. The Ohe taro because it was very resilient against the cold. However, because I had the chance to grow it all different elevations I find that the Maui Lehua, the Lehua Maoli, the Ele paio and I'm growing like about 18 different varieties now out here just to see which one adapts better. And I found that probably the best taro to grow in my opinion is the Lehua variety. Because it seems to do well down in the low regions as well as up in the high region. As well it does well in the wet areas, although it's susceptible to the leaf blithe like almost every other taro. But, I find it does well. I find in Kula the Lehua does well and it makes good poi as well as good table taro.

KT: The uh, Hanalei poi, what kind of poi are they using?

C: Well they try to get as much Lehua as they can but it's very difficult because there's such a high demand amongst the other millers. So, they definitely tried to use strictly a Lehua variety. Whether the Lehua Maoli, Lehua Palai'i, or the Maui Lehua they call it Kauai Lehua. You know different Lehua's. However, you see the difference between Hanalei poi's and the rest of the poi's is the way they handle it. It's the way they prepare it to making poi. What they do is that they remove the skin prior to cooking, so after it's cooked there's no handling, less bacteria on the poi. So after it's cooked it goes, directly after it's grinded, it goes directly to a container and from there directly into refrigeration. So you have no chance of it fermenting at all and you have no bacteria in it. That's why a lot of people say that. Some people say they like it because it stays fresh a long time. But then you find the Kupuna they don't like it because it doesn't sour. Now like my other friend in Kauai, Makoale, he grows it the old. He's a miller, he mills it the old way. He says his customers they want it to sour. So you know depending on your customers.

KT: So, somebody told me that Hanalei poi they put flour into. That's not the case?

C: No, that's not ok. What they do is if they can't get enough Lehua they blend it. They blend it with either a Moi or even some Palauan varieties.

KT: Just to stretch their product, huh?

C: Just to create a greater mass.

KT: You left what you were doing due to the end of a contract or you just wanted to move on to something else or?

C: Well, I've always wanted to do something to leave for my children to pick up. We were doing it and it was my wife and I and Kiana my youngest girl. It's very hard work and I got discouraged to tell you the truth. We had the market, I mean, what I did was I

didn't go out and find the market. I created the market. I created my own market. And what I did was because nobody was growing the different varieties of Hawaiian taros, I started growing the different Hawaiian taros. And, what I was going to do was grow these different varieties of Hawaiian taro, get it out there on the market, give people a chance to learn about it for one thing. And then give them a chance to taste different poi's. And what happened was it just my partnership with this guy in Kula fell through and we worked very hard to get it to a place where now I can get it to a market. I mean I couldn't supply the demand here on Maui, let alone Oahu. But I was just getting there; you know getting enough acreage to supply it. And what happened was just you know people get greedy.

KT: So the, where you were at the Ag park, everything was grubbed before you planted. You just didn't take the land and started planting. In other words the preparation or the soil gotta be at the point.

C: Well, this parcel that I was farming on, it was farmed before with onions and different veg crops. So when I came in with the taro, it grew very well because it was like first time growing a different crop in the soil, so it did very well. I did fertilize, and in regards to fertilizing- I'm not all against synthetic fertilizers but I do believe in an integrated approach. Like for example; if you're going to use a synthetic fertilizer okay to grow your crop, well now you gotta grow your soil. In other words you gotta go put back green manure crops in there, plow it in, you gotta build your soil so you can build up the beneficial microorganisms. Because synthetic fertilizers kill it. So it depends on how you deal with your soil. Because if you don't take care of your soil, and that's what's happening with a lot of the taro farmers. They not taking care of their soil. Now if you look at it the way our Kupuna's did it, they always did that. They would always grow the soil. Then grow the plant, and they would only plant in a specific plot at the very most 2 times. Because when you plant it the second time you're not going to get as great a yield. Because of course your nutrients have become less.

KT: So the University is going through this patent controversy. What's your take on that?

C: Well, what they're trying to do is patent the hybrids. I know one has been patented. He bred what you call the Palehua. It had pretty good results and I'm sure this is the one's they're trying to patent. Across, it's what we call number six and number nine varieties but what it is, is a brother and sister. The parents being a Lehua Maoli cross with a Niue Waula. That variety coming from the island of Niue. The variety is, the number six is very good although it has a high oxalis which makes it a little itchy. However it's a good yielder and it's not resistant to the leaf blight but it's highly tolerant. Which is very beneficial to all the people who grow in wetland because they're getting wiped out. As far as it being patented I believe that the real reason that they want to patent it is to try and create more money to put more monies into the research for, to help the farmers. My, the way I feel about it is, I feel it's a good thing. You know I just talked to Pomaikai about this. But anyway I think it's a good thing and the reason being is because if we don't try and get some kind of hybrid out there, we're going to lose the industry. Okay, then people think, well the guy's only in it for commercial reasons. Well, maybe he is in it for commercial reasons but what about the end user, the consumer. What kind of prices is he going to pay. I mean it's already ridiculous. If we don't have some kind of plant out there that can produce a yield, the industry is going to

do down. I mean rapidly because I mean I've been in fields, I've been on fields in Kauai, Keanae and Wailua and it's terrible. I mean the plants are...it's just taking a beating. It's like letting our people out there go and then a disease comes in, they get sick and we don't create some kind of inoculants. So, as far as that going out in the field and people growing it, I think it's a good idea. As far as the patent, I wouldn't worry about it. The reason being because once you get a couple plants it compounds it's oha in a dramatic way where you don't even.... I mean, yeah you supposed to pay maybe one cents or two cents. I think Hawaiians should be exempt from any type of residual type of payment for what do you call that...or royalty. I mean I feel Hawaiian's should be. Because they used our variety anyway to cross it.

KT: What you think on GMO?

C: Okay, you know GMO in a broad space, I think it's dangerous. I know the University had to take a stance, a pro stance on it and you know they say that it has to go through so much tests with the EPA and this and that to even get into any type of GMO production. You have to have all these permits by the food and drug administration, the EPA and this and that. However, as we know in past nothing is a certainty. So, as far as a GMO product being produced and the pollen somehow getting in the air and maybe somehow inoculating another type of plant, uh, who's to say. It's just like, the way I see it, it's just like medicine that comes out in pill form and they give it to people for so many years and then they find out it's no good. Well, remember now from the start the food and drug said it was safe and so did the EPA, but they didn't find out till five years later that it was detrimental to the human body. Now on that take, that's the same thing that could happen with GMO altered plants. I'm not worried about the taro. The reason being. The reason being I'm not worried about the taro, number one ok; how different varieties came about in Hawaii is because long ago we had fly that pollinated the various taro's. However, that fly is now extinct. That's why if you understand how a taro plant, the flowering, it self's itself. In other words it's a female and a male but they both mature at different times. And you don't have the fly to transmit the pollen. Therefore only man can transmit it. So in that regard, I'm not worried about it pollinating our Hawaiian taro's. But, I don't think, as far as taro, I don't think we need to go that way. Dr. Cho's not going that way. I know because I've worked with him side by side, I know what he's doing. And what they do is, he uses GMO technology and what we do is.... For example I'll tell you. We go down to Fiji, we find this one taro. We found that it is totally resistant to the leaf blithe. So then what they do is they take tissue analysis and then they analyze it genetically, they look for specific markers in these varieties that are resistant. And then they try and find other taro plants that are resistant. And I mean resistant, not tolerant. And they try and look for other markers in here so they're try and identify which markers are they looking for and what they do is they'll take this plant and they'll breed it into another Hawaiian plant. When the babies come out, then they analyze this. They look to see if those markers are in there. What it does, it saves them time in hybridizing, in breeding. They're not genetically manipulating it but through hybridization they're manipulating it. Through natural process, really.

KT: So, what are some of the plants, the taro plants, you would suggest be considered in that area then?



C: Well, like I tell everybody. Number one, why are you growing it? I think you gotta answer that question first. Are you growing it commercially? Are you growing it for your family? You know that depends. Because then there's different growing techniques if you want to grow it for your family versus commercially. And it depends what is this for. Is it for poi? Is it for Kulolo? Is it just for table taro? So that has, those questions have to be answered before I would suggest a taro. Now, because of the consumers.....ahh, I guess I could say ignorance of the different varieties out there and the different tastes. They're prone to lean to what they have known which is the red poi. Which is the Lehua variety, which does very well in that area. I, if I was to grow taro in that area again, I would grow Lehua. The reason being because the people who like to make Kulolo they want a red taro. The people who want to make poi want a red taro. The people who like table taro, they like the Lehua. And it makes good leaf for laulau's. So I would grow that variety if I was to grow any variety. And there's the old saying "Huli, is power." And you know what, that is true. Because I've run into so much people always looking huli. And if you don't have the amount of Huli, you know if you only got 10 then you only can sell....But if you have 10 thousand then you know. But you gotta start somewhere. And you know what's the saddest thing Kumu? Is these people that call me up every single year from Keanae and Wailua. And I mean every year they ask me for Huli. And I tell them every year, "What happened to the ten thousand I gave you last year? What happened to it?" They tell me, "well, uh.." Well, it's the same old story. Because they don't take care their land, their 'aina, it doesn't take care of their plants. So that's why they have either weak huli or sick huli. But I tell them, "You guys have to dedicate couple patches for just huli. You just dry land it. Because then you're not going have, well you may have the leaf blithe problem but you won't have the pocket rot." But at least when you dry land it, the huli, the oha comes out healthier. Why I don't know but I just know it is. And that's why they kept on calling me because I would grow it from the dry land and it would be huge. So when you got a bigger huli and you put it in the ground, it's easier for it to take. It's easier for it to grow and everything.

KT: Now I have something to show you.....pictures.....

Agreement to Participate

I, Henry F Rice, understand that Kimokeo Kapahulehua and Keli'i Tau'ä, independent investigators contracted by Pacific Rim Land Incorporated will be conducting oral history interviews with individuals (kupuna/makua) knowledgeable about the land area currently the Maui Research and Technology Park in Kihei, Maui. The oral history interviews are being conducted in order to collect information on possible pre-historic and or historical cultural resources associated with these lands, as well as traditional cultural practices.

I understand I will be provided the opportunity to review my interview to ensure that it accurately depicts what I meant to say about any of these lands. I also understand that if I don't return the revised transcripts after two weeks from the date of receipt, my signature below will indicate my release of information for the CIS/A report. I also understand that I will still have the opportunity to make revisions during the report review process.

Please check the bottom:

I am willing to participate

I am willing to participate under certain conditions.

Must be edited.

**Consultant:**

Date: 11-27-06

Name 

**Investigators:**

Date \_\_\_\_\_

Name \_\_\_\_\_

MAHALO NUI LOA.

## Interview: Henry F. Rice

By Keli'i Tau'ā/ Kimokeo Kapahulehua

November 2, 2006



*Interviewer= KT- Keli'i Tau'ā and Consultant=C*

KT- Cultural assessment comes through the Governor's office, back a couple of Governor's, who saw the concern of many of the cultural sites being lost by development; bulldozing and so forth. So, what they put, not into law, but they put a statement within the developing process that the developing company's need to consider having a cultural assessment done on their property. Because, if it was found that there were some major sites on their property and they didn't follow the process, then they could be sued big time and that's why this activity has come to for. My partner and I, who your son-in-law knows very well because of our assistance in blessing his property that they're developing, and because we're locals, we're Hawaiian, we grew on the land it was recommended why don't we go do it then to have mainlander's come in and do something just because they know how to write. So, that's the idea of it so we're just rookies. We're just about one year young in doing this and I thoroughly enjoy because my lifetime has been always in Hawaiian Cultural things and my education is leaning toward the culture so having the opportunity to walk the land, and like I said, today I have privy to talking to somebody who was raised on Kaono'ulu Ranch, which I never was aware of. I knew all, you know, like I said I knew where your family house was and Kikiwi's because this was my stomping grounds but nothing about the Ranch. So that is my- can you give me background of you first, age, just personal stuff that I can document? Oh, by the way, before you start what we're going to do is whatever you say, we'll transcribe, bring it back and you will look it over and edit. And if you approve then we'll submit it as part of our report.

C- No problem.

KT- So, with that in mind.

C- Well, like yourself I was born in the Kula hospital too, about 68 years ago.

KT- How many sibilings?

C- We have a son and a daughter and three grandchildren.

KT- But, your brothers and sisters.

C- I have one brother that lives on the Big Island, Hawaii.

KT- That's the one that's really been shooting stuff like in Hawaiian rights and so forth, is he the one?

C- No, I think that's the wrong way to put it. He's probably as Hawaiian as I am and you are and he did not believe that OHA Trustee's should only be elected by Hawaiians blood only. He felt that anybody who was born and raised in Hawaii, grew up as an American citizen, should have the right to vote for an OHA Trustee.

KT- So that's what's happening in this upcoming election.

C- Yeah. He's not shooting barbs at Hawaiians, it's just the opposite.

KT- See, misunderstanding of communication.

C- I think so.

KT- Yeah, so when my partner says we're going to interview you I thought, 'is that the family?' I knew the family and went ohh; it was a challenge to get out of my ignorance and my shell and see that it is beyond as you described doing my homework to find out why the statement was made.

C- I think, and he's a very good studier of Hawaiian language and if you understand what OHA stands for to the Hawaiians and the Hawaiian people here, you'll see that what he did was according to OHA language.

KT- Now that you tell me that, if you can give me his phone number I want to call him and tell him how I felt before and how I feel now, just from your explanation. My relationship with Doug ...

C- His- he's got a ranch on the Big Island.

KT- In the Waimea area?

C- The Waimea area and he probably can best be reached on his cell phone because he's probably on top of his horse.

KT- And he's your elder brother?

C- Yes, he's an older brother.

KT- And he's Oskie?

C- No, Oskie is our father, Oskie Rice is our father. His name is Freddy Rice.

KT- Freddy, okay, so both of you grew up on the ranch?

C- That's correct, yes.

KT- And dad was into ranching?

C- Uh, yes, actually my grandfather, which was Harold W. Rice, he purchased the whole ahupua'a of Kaonoulu from mountain to ocean from the Cornwell family.

KT- What year was this?

C- About 1915.

KT- During the World War.

C- Yeah, and I can show you on a map here.

KT- May I take pictures as you show me things?

C- This is the, you can get a feel, this was the original ahupua'a here when the top of the mountain going down into the ocean including the fish pond over here.

KT- Which is Kalepolepo.

C- That's correct. And it also included the Alae 1 and 2 and Koheo 1 and 2.

KT- Can you put your hand on where it starts again?

C- From here to the top of the mountain to the ocean. So, that and the ranch has stayed pretty much in tact in the family. My father, which is Oskie Rice, carried on after- actually my father and my uncle Garfield King purchased the ranch from my grandfather and brought it into a corporation. In the early 80's the ranch became a family limited partnership and from there I've run the operations.

KT- So, before I get too far into it, your full name is?

C- Henry F. Rice.

KT- What does the F stand for?

C- Flower.

KT- Who gave you the name mom or dad?

C- Both of them gave me my name.

KT- Why did they look at you as being a flower? Because I, you know as a student of Hawaiian culture I understand kaona, hidden meaning, what were they?

C- Flower is my mother's maiden name.

KT- No relevance if you don't know the background and you're going to say, "What's this male having a name of flower?" Okay, so you are how old?

C- Sixty-eight.

KT- So, you're my Kupuna. So, growing up in a family with a ranch, it's almost like growing up on a horse.

C- Yeah.

KT- So you're first moving transportation was like mom putting you on the horse your dad had simply put it.

C- Yeah, we rode a lot.

KT- So, did it become your passion or it was work?

C- It's a passion. It's a way of life. It's a quality of life.

KT- At its highest peak, how many cowboys did you folks hire?

C- At its highest peak, I would say there may have been 30 or more.

KT- Because of the expanse of area, not the entire area was pasture? Of course you could be grazing through the entire ahupua'a but...

C- I think the majority of the ahupua'a was in grazing but since then we've diversified a little. Down in the area that you're interested in, at one time we had a small piggery and a small farm there where the Maui Lu Hotel is.

KT- What was the farming in?

C- We tried everything from cucumbers to melons. Since then the ranch has three farms now but they're up here in the Kula area where farming had prevailed years before it became grazing land.

KT- So what are the crops up here?

C- Uh, well, we have a lavender farm up on our ranch which is Ali'i Changs and he runs that. And we have a hydroponics lettuce farm right below his lavender farm. And then we have a pretty large farming operation right below the Kula Rice Park where we grow corn, strawberries, zucchinis, onions; that's primarily what we grow there.

KT- And you oversee that?

C- That is run by a family that's farmed up here in Kula, they do the farming there.

KT- How many employees do they have?

C- I'm not sure how many he has but most of them are contracts that help on the farm but this has nothing to do with the area you're interested in.

KT- Yeah, but as I said my report will probably cover all the way up here because of how it affects.

C- Sure, well I can see your reasoning because our forefathers before us did the farming up here and the fishing down there and the lands in between were really traveled.

KT- Right. Now, so you've pretty much have ridden your entire ahupua'a; you yourself.

C- Yes.

KT- During the course of riding that area, did you see any cultural significant places that have been documented on the national sites that should be set up?

C- I don't know whether there are any significant that are on the national sites but, you know, if you travel the land, you know it, you'll see where old stone walls, when they were built and you'll see what we call holding pens where obviously as they traveled between the highlands to the lowlands, they were camp sites, they kept animals caves.

KT- Yeah, I was just telling your son-in-law that it's ironic that we've had the opportunity to do this because we did for Charlie Jenks, it was called Kula 1800 I think you folks have some land...

C- Right adjacent to it, yes.

KT- So I was amazed at the petroglyphs that were found and I'm a student of Japanese culture too so in taking pictures of the petroglyphs in close proximity was this Japanese writing which translated with a name, I think it was Ito, which means Big Japan. And the name, but I was amazed and so getting back to being a cultural person of course our forefathers ran the logs down whether it was Koa or Iliahi to get to the ocean to ship and so forth. So, historically it's exciting to be there and looking at all of it.

C- Were those petroglyphs on movable stones?

KT- Well, it was along the revine and in shallow caves, just along the cliff side.

C- We see from time to time petroglyphs but they're on movable stones. Hawaiians before me tell me they're mostly where maybe the family rested while the man went down to catch the fish and he or she just doodled on the stones. Funny thing is, though, they used them also as they're markers facing where the best fishing was so that when they came down the following year they would see their marked stones. And if you walked the direct line to what it was facing it was pretty good throw-netting.

KT- So, as far as the ocean is concerned, you folks had access to the whole thing; were you active in fishing and things too or you just focused on being with the land?

C- No, our family, well our family's always been active in fishing too but not so much off of our land. By the time we were aware of, say the fishpond down at the bottom, it had pretty much deteriorated.

KT- Right.

C- But from listening to our older cowboys when they had the cowboy camp down more in the middle of the ranch, they would go down there and actively take care of the fishpond and fish in it, but those days are before my time.

KT- What did the camp consist of?

C- Just houses and stables and pens.

KT- Just living quarters.

C- Yeah, and working areas.

KT- So, did you folks ever diversify into other kinds of animals outside of pipi?

C- Pigs, we did a lot of pig raising at one time.

KT- Whereabouts did that happen, up here?

C- First big pig operation was down where the Maui Lu Hotel is. Then we moved the piggery up to Makawao, we have quite a number of acres in Makawao; above Makawao.

KT- All right, even now?

C- Yes. Not pigs, but pasture lands.

KT- So, can you share some of the stories some of the cowboys used to talk about that intrigued you or made an imprint in the life before your adult life. Anything significant that would contribute to the reader of this report that we're seeing a significance of these kinds of things.

C- Well, I guess as far as the land or the stewardship of the land, I think our family is- Whenever you raise animals off of the land, you begin to understand that it's the land that's the asset and you take care of the land and the grasses; New grasses, cultivating some of the old grasses. The

animal is only the end product of how good you take care of the land and so I think when you listen to older people and our older cowboys, they had a great respect about that.

KT- But they didn't do anything about it, right?

C- No, they depended on nature and the rains like what is happening right now. But where they saw better grasses, they would bring in and seed our lands with the better grasses. And so you have a lot of diversity of good grasses that can withstand drought better and flourish a lot better during the rainy season. And that always impressed us as we were growing up.

KT- Well, personally, again being a student, I'm just enthralled of what our forefathers knew how they took care of what you're saying. And so that phrase that became more predominant during the preoccupying of Kahoolawe, which is Malama ka 'Aina, just is exactly what they were doing before that phrase came up but Kahoolawe they brought it up more.

C- Sure, oh yeah.

KT- So, even presently now, how many cowboys do you have employed?

C- Actually under the Ranch we have three. The rest are outside the employment of the ranch.

KT- How does that work?

C- Other people come in and, say like our farming operations, they're the employees of the farmer who's doing the farming.

KT- Okay.

C- It's very expensive to have a lot of employees today.

KT- Right. Where do you market your products?

C- The farming operations, everything is marketed on Maui; everything is locally. The hydroponics lettuce is a great demand for the visitor industry and now we're beginning to find out the local markets are really liking it. And of course the corn and the onions and the strawberries are all locally sold. Our cattle operation, all our beef, is shipped to the mainland after we wean them off the mothers; they're sent to the mainland for pastures there and then eventually the distribution of the beef on the mainland. Very little is marketed locally. I should also say the ranch also has a land company, which is another source of its income.

KT- You said Kaono'ulu Ranch is a Corporation.

C- Now it's a family limited partnership. It went from a proprietorship to a corporation to a family limited partnership.

KT- I was just thinking of all the diversification if you were making a decision for everything that goes on, it would be challenging to keep in order.

C- Well, I think the challenge today is the stewardship of the land and keeping the land from one generation, moving it to another generation to another generation without having it split up.

KT- Did you go away to college?

C- Yes, I went to grade school here on Maui.

KT- Kealahou?

C- No, I went to Kaunoa School.

KT- Where is Kaunoa?

C- Well, Kaunoa now is a Senior Citizen center.

KT- Oh, down there, okay.

C- My family says I started out there and I'll probably end up there.

KT- I don't know if that's a good or bad thing.

C- Then I went to Oahu for High School.

C- And then I went to the mainland for college and then came back to Hawaii.

KT- What did you study when you went to college?

C- I majored in animal husbandry and business financing.

KT- What school was that?

C- Colorado.

KT- Colorado State?

C- Yeah, Colorado State.

KT- So the intent of studying that is because you grew up in the, of course the interest that you would come back and continue your work.

C- Yeah but it's a nice compliment when you say you really didn't know where Kaonoulu was because we are a very low key family.

KT- Well, I'm embarrassed.

C- Don't be, it's a compliment.

KT- Well, my peers look at me that I should know these different life activities on this island but when I first was told it, where is that? So, yes, evidently you folks kept it very low key under the shelf there, type of operation. But what is shocking is for your finger to go from where it started all the way down there. You never looked at other ranching companies as competition?

C- No. No because they were all family.

KT- Erdman's?

C- Well, before the Erdman's it was the Baldwin's. They were on that side and of course the Baldwin's had Haleakala Ranch on that side; two different brother's but my grandmother was a Baldwin too. She was their sister.

KT- Ohh, is Rice a missionary family?

C- Yeah. Predominantly grew up on the island of Kauai but my grandfather came over here to work where he met his bride, Mrs. Baldwin, Charlotte Baldwin.

KT- Indirectly the Baldwin's have a big influence with my genealogical line. As you grew up and watched Maui evolve into what we are today, what are some of the precious things you would hope that we would continue retaining and use it?

C- Well, I think you'll appreciate it because you're a study of Hawaiian culture and Hawaiiana. We sometimes use the phrase "The aloha spirit" loosely but in the true meaning of it I think that's the precious thing we should never lose between two individuals. I think the years ahead are going to have big challenges with respect to that kind of spirit being retained and I think it's the people, the Hawaiians (us who were born and raised here) it's our obligation to make sure that the spirit is not lost. So that's a big challenge. The other challenge you're going to be facing is the natural resources of these islands. Those are big challenges ahead.

KT- Right. So, how many of the events of yesteryear can you recall now? Just a couple of Sunday's ago we had a major activity that shook up the entire archipelago but can you go back further? Can you remember the tidal wave?

C- Oh sure, I think all of us, at least that are my age, remember the 1946 tidal wave.

KT- Where were you?

C- I was riding down on the school bus from Makawao to Paia. (Laughing) So the police officer stopped the bus and said that the school had been washed down so we all cheered. We didn't have to go to school. (Laughter)

KT- Was it the same Paia School?

C- Kaunoa School, yeah. But then you know, afterwards going around with our father and seeing how devastated the area was; I mean huge buildings being moved, you just, you know as small children, you couldn't imagine that the ocean had that much power. It certainly gave us a lot of respect for the ocean.

KT- So on your ahupua'a, no particular damage?

C- A little, like the fishpond and then it came in a little on the piggery operation but that side of the island didn't get as hard hit as our north shore did. It seemed like, I know the old Kihei Pier but it was already old.



KT- Where was that exactly, Kihei Pier?

C- Right across from Suda Store.

KT- Suda Store, okay; where the canoe club is.

C- Right, right.

KT- So, you folks used to go down there and jump off and play in that particular area?

C- Yeah.

KT- What can you recall was shipped in there?

C- Actually I can't recall anything being shipped in there because by then Maalaea Harbor was operating and I only remember that old Kihei Pier being used by the military from time to time. But I don't ever remember any commerce shipping being done out of there.

KT- Because you folks had animals, you could be mobile riding around a large area. A lot of the Hawaiian families tell me during their childhood their neighborhoods were far so whenever they got together they had to make up their own games and so did you see your family creating anything?

C- I'm not sure creating anything but, yeah you had to make up your own games, right. Yeah we made up our own games.

KT- Like what?

C- Sometimes we would go to the movies and see a cowboy movie and so we had imitate cowboys and Indians riding the horses all over the ranch. But then a lot of times you did a lot of roping and things of that nature.

KT- A cowboy is a little different from other families I see because you got to work with animals. So, did your brother also go to college?

C- Oh yes.

KT- What was his field of study?

C- Same as mine. He majored in agriculture.

KT- Same college?

C- No, no he went first to New Mexico Military Institute and then he went to Cornell and majored in agriculture. He came back to Maui, worked for a short time on Grove Ranch.

KT- Grove Ranch, now you gotta describe, that's a new name for me.

C- Grove Ranch was part of HC&S.

KT- Oh, okay.

C- The lands that they didn't have in sugar cane, they raised cattle.

KT- Where was that located?

C- Below Makawao was their camp. And then he went to the Big Island and he managed Kahuku Ranch for many years and then for a brief period Freddy did commercial fishing, charter fishing outside of Kona.

KT- Is he younger or older than you?

C- He is older. And then after that he came back to the land and has been cattle ranching ever since.

KT- I think that it might be true that if it's in your skin you'll always get back to that.

C- I think so, I think so, yeah.

KT- So even today you folks...

C- He would be an interesting person for you to meet some day. He's a very astute in his Hawaiian language.

KT- What made him interested in diving into the Hawaiian language and culture?

C- I think being raised around the Kikiwi's, the Aweloa's, the Earnest Morten's; they all spoke Hawaiian.

KT- Yeah. So, even those families that you mentioned, their offspring continued being cowboys?

C- Yes, one of our cowboys, Ricky Kikiwi, is a third generation. His grandfather, which is right above your head, is Hua Kikiwi and his father was foreman over at Ulupalakua Ranch, Merton Kikiwi.

KT- Merton was his father?

C- Mmmhmm. Merton grew up on this ranch too. The person just to the left of Hua in the cowboy hat, right there right ahead of you by the door, that's Harry Aweloa who was at one time the (in his retired years) was the pastor down at the Makena Church where Reverend Alike is now. That's me riding a bull.

KT- Where was this located?

C- Makawao.

KT- Where the...

C-Arena is now.

KT- And this was?

C- Wiliki; Wiliki Poepoe

KT- And?

C- That's Oskie Rice.

KT- Who is this here?

C- That's my brother Freddy Rice. He's still a very good roper. Over there in the corner is probably our most famous person, Earnest Morten.

KT- Right here?

C- Big family up in Kula.

KT- Describe him when you use the words famous. Why do you say that?

C- He's famous in my mind. (Laughing)

KT- Describe it from your perspective; to you why is he?

C- Well, he was foreman of this ranch for over fifty years. Born and raised up here in Kula; went to Lahainaluna where he boarded. In those days when you went to Lahainaluna, you stayed in Lahaina. He came back, here's another picture of him right there, he was a very, very, very strong personality. He could do everything. He knew how to work with rawhide better than anybody I ever knew. We never had to call a veterinarian because he was a doctor in his own right.

KT- Which he just developed out of interest?

C- Uh huh.

KT- Nobody taught him?

C- Right. That's my old saddle; Hawaiian tree saddle. I had a replica of that tree made out of fiberglass and covered the same way and it's a lot lighter to saddle. As you get older those old saddles get heavier and heavier. So I had a lighter one made but covered the same way with the wilia moku and everything on top.

KT- And who made the ropes for you?

C- I have a rope from Earnest Morten and Henry Silva; the two skin ropes I really have, yeah. That particular rawhide rope is not a Hawaiian weave. It's a Spanish-Mexican Vaqueros weave.

KT- So it's not locally made?

C- That on there is not locally made.

KT- This one?

C- Yeah. The crack whip is locally made, everything else is locally made- I have that raw hide rope because it probably was the old, old way that raw hide ropes were made here in Hawaii.

But, in later years the Hawaiian raw hide ropes that were made were a little thicker in order to handle the roping of wild cattle.

KT- Did you ever see it snap?

C- Oh, I've seen it snap.

KT- Really?

C- Once actually, but I think it was more my error than the rope's error.

KT- When I watched Henry putting it together; nothing can break it so it's a surprise for you to say that.

C- Well, mine was my error why it snapped. I had it on a sharp edge pulling it, pulling a steer onto a truck; that was my fault. Those raw hide ropes would never break with an animal.

KT- So it kind of got caught rather than...

C- Yeah. What are we taking a picture of?

KT- The skull.

C- Oh, yeah. That too is a pretty heavy instrument, the yoke. That's what they lead the wild bulls down the mountain with. You'd have an oxen on one yoke and you'd have the wild bull on the other yoke and the oxen leads the bull down the mountain.

KT- So, that whole idea had to be, was it developed locally or did somebody go learn it from elsewhere?

C- Well, the Vaqueros really came over and taught the Hawaiian's how to work the cattle.

KT- You think this was part of the teachings?

C- Yeah.

KT- Who, can you recall, who commissioned the Espanols to come and do this teaching to the Hawaiians?

C- Kamehameha.

KT- Thanks for helping me with that.

C- Vancouver brought the first cattle here, you know, and then they grew and then they got wild, too much in numbers and so...

KT- Just like the deer, you got any comments about what's happening with the flocks of deer? They're roaming your whole property.

C- Yeah, they are, they are. I don't see that much devastation by the deer so I'm not as concerned as other people are. Hunting keeps the numbers down. I think where the concern is, is down in Wailea where the deer goes and eats somebody's roses but on the Ranch I'm not too concerned. They're kinda nice to see once in a while.

KT- They're really getting, for lack of a better word, domesticated because we were driving to South Malu'aka researching writing for Dowling Company on the old Makena School and I swear 40 of them came across the road. We had to stop while they were crossing so I'm sure you have those large herds on your property.

C- Yeah, we have some.

KT- Any other wild animals on your property at this time? Not too many pigs are there?

C- Not that much but we have a few wild pigs. They mainly stay up in the waddle forest. We have a few down here but below the Kula Highway we have a few but that's it, deer and pigs. There are no wild goats anymore.

KT- Why is that?

C- I think they got hunted out.

KT- In your ahupua'a? I still see they're existing in...

C- Oh, over in Kipahulu and Kanaio; beyond Kanaio and into Kahikinui and Manawainui and over in Nu'u and yeah they're still over there.

KT- I guess the land is a little wilder than over here.

C- A little more arid on the bottom but if you go mauka of Kanaio and you go in the mauka section of that side of the island it's pretty nice I think.

KT- So get back to your childhood days; did dad personally work with you folks of cowboy or just called the cowboy and said, "Hey teach my son, do this."

C- Oh no, my father worked with us every day; he was on the ranch every day.

KT- What was his major focus, cowboy, or ranching?

C- He was a cowboy. And a rancher.

KT- Born cowboy or became cowboy?

C- Born cowboy.

KT- Not in Hawaii?

C- My father was born in Hawaii.

KT- Started in Hawaii? Passed down from his father?

C- My grandfather had purchased the ranch. My father was a very, very young person so he grew up on the ranch. I have a picture of him somewhere; oh it's in my house. So he was very much a cowboy.

KT- As you pointed out, since it's a family limited ownership now, are you encouraging those in the family to carry on whatever it necessitates?

C- Oh, yeah.

KT- Well, it's so diversified, there's much interest in areas people could cover.

C- Oh no, our next generation is very interested in the ranch. So yes, we're very lucky. The next generation is a very large group and so we have many, many smart people that are ready to keep the stewardship of the land in tact.

KT- Ah, wonderful. So, on the bottom side, it basically was sold off like Maui Lu?

C- Ah yes, that was that beginning of what we call our Land Company. A lot of the properties down there have been sold and then we repurchased properties, commercial properties, on the mainland. So we have a Land Company with commercial properties on the mainland.

KT- So, Doug and your daughter had to go buy their piece of land what they're developing next to the Tech Park.

C- Yeah that really is a group out of Minneapolis where Doug is from and Doug's brother-in-law is part of the group that's developing that. And of course because Doug lives here on Maui, he helps coordinate the Minneapolis office with the Hawaii office. My daughter is in real estate business herself.

KT- So it worked out well for them too...

C- So she's helping in the sale of those housing lots. I believe she's coordinating the selling of the lots. But she works for an independent realty firm.

KT- You keep mentioning your brother but you never took interest in the language per say?

C- I have a very keen interest in the language but I'm certainly not as fluent as my brother is.

KT- And he got it just by hanging around the cowboys?

C- Well, I think he worked at it in his later years; studied it. I think we all had it when we were young, just being around the cowboys, but that's cowboy Hawaiian language.

KT- Which is a whole culture in itself.

C- Oh yes, true.

KT- People who never get close to any of the people that work with cattle never get to realize the culture that is developed within the cowboys itself.

C- Yeah.

KT- No sugar cane on your property?

C- No. No sugar cane on our property.

KT- In fact, no pineapple; they stopped as they came close to you.

C- Right.

KT- And from your land going makai, it basically was exclusive ranching.

C- Yeah.

KT- Modern day uses.

C- Right.

KT- So we would never have seen any need for railroads to come onto your property?

C- No.

KT- All that part of Hawaii, Maui development stopped right at- so none of those business that had been prevalent on the opposite side of the land, there wasn't any need for those vehicles like the trains?

C- Right.

KT- They came out to Puunene pretty close to Suda Store and stopped right there.

C- Yeah, right.

KT- So, in some ways was it a victory that you stopped all of this?

C- No. You know I think your fertile lands got the sugar cane and the pineapple. Your non-fertile-arid lands, you'll find mostly in ranching.

KT- Well, that's what they say about Hawaiian Homelands; wasn't in the fertile areas they got. They saying all the junk land was thrown to the Hawaiians.

C- Where the Hawaiian Homelands are now, I would say from the topography standpoint, very hard to farm; but from fertile lands, it is very, very fertile. Some of our best pastures were over in their Koheo section, in their Waihuli section; probably the best soil, very strong soil. So, those homesteaders, especially in the Waihuli area and Koheo and Paupena in the Paupena sections where the homes are now are some very strong soils. We had great pastures over there. It's just rocky so it was very hard to bring into large farming but for small farming they're going to be very, very well off.

KT- Just a couple of months or two ago I...

C- I would also add, as you are a student of Hawaiian culture, just walking those lands over there (especially the Paupena area and the Waihuli area) you will find a lot of Hawaiiana sites. I hope they keep them.

KT- Well, that's the intent. If you were to make a comparison there's no way close to your folks' ahupua'a in terms of cultural sites?

C- I would say it would appear to me that there was a heavier population in the Keokea, Waihuli and Paupena area than there was in this particular area; just from riding it. I don't know why, I would think the only reason I can see is that the land is so strong over there.

KT- So it's kinda ironic that the agriculture is done over there rather than over here.

C- Uh, because of the water being brought over from the Hana area over into the central valley, the strong soil and more level land; to have a large farming operation over in the rocky area and steep, pretty hard. So topography, I think, played a big role in your farming; the sugar cane and pineapple over there versus over here.

KT- As I drive the Waiohuli Homesteads I do recognize the face value just driving through the neighborhood, wow how beautiful; things area growing, just flourishing.

C- Yeah.

KT- So you just gave the key why.

C- So, I would turn around your statement and say I think the kingdom was pretty smart in giving the Hawaiians some strong properties.

KT- Well, it wasn't my statement. I'm just repeating what those have privy to... Well, Kahikinui is pretty rugged area, that's homestead land. I think, well you've had some cowboys by the name of....

C- In ten or fifteen minutes I'm going to have to go to another meeting. I didn't know it was going to be this long.

KT- Okay, so, let's look at summarizing then. If you had a wand, what would you like to see retained?

C- Me personally? Two stronger knees probably.

KT- Okay, going to what we're talking about in terms of the land and the islands; how we're affecting the people outside of the aloha.

C- Oh, that's a hard question. I don't know if I have an answer to that one. I think it's only natural that you wish things were slower like they used to be but then on the other hand I think that's only a natural feeling for a person as he gets older. I think the younger people want to see the growth and the opportunities and you have to understand that and respect that also. So, if I had a magic wand I don't know what I would do. That's a tough question.

KT- From an outsider looking at what you've experienced in life, I'm in admiration that you had the opportunity to do all the things that you've done.

C- Oh I'm a very lucky person, yes. Yeah, I think quite frankly anybody who is born and raised in Hawaii is a very lucky person.

KT- I want to take that idea because many are looking at themselves and they are saddened at life's challenges.

C- All you have to do is look around and see how beautiful this place is.

KT- But you can make a comparison. They don't know that. Well, I don't want you to have to rush to the next meeting. I certainly appreciate you taking the time.

C- Well, it's been a pleasure. Now do you and a partner and you have a business that you're doing this?

KT- I will give you a card.

C- You do have a card. Can I take off this microphone?

KT- Yes you can.

C- Oh good.

**Interview: Henry Silva**

**By Keli'i Tau'a and Kimokeo Kapahulehua**

**January 7, 2006**



*Interviewers= KT/KK Consultant=C and Jody Silva (daughter) =J*

KT: So can you give me your full name.

C: Henry Silva

KT: How old are you?

C: Seventy

KT: We're sitting, in what is this place called?

C: Waiakoa

KT: You grew up here?

C: No, I grew up in Makawao.

KT: How long have you been living here?

C: Too long! Ah, forty five years.

KT: Forty five years. And you raised your lovely daughter and the rest of your children?

C: My son is older, she's younger. She's the spoiled one.

KT: They usually are, the girls.

C: Yeah, they're spoiled.

KT: Yeah, your dad, never spank. They know how to take everything. Where did you go to school?

C: Makawao Elementary.

KT: And then?

C: Then from there went to Hamakuapoko High School. And then...

KT: Which was, Maui High?

C: Yeah, Maui High. And then from there I went to MCC became a carpenter by trade.

KT: Oh, all that time your parents or your family was into Paniolo?

C: No my dad worked for the federal government. In the Haleakala National park. My brother Tony worked there too, my brother-in law Mike Pszyk, and my brother-in law Lionel Amoral and my brother-in law Lawrence Diego they all worked up there.

KT: Ok.

C: But I worked as a carpenter. We worked in Lahainaluna. We build our auto shop, machine shop, cafeteria there with Yoshimuri Contractor and Kinka Yamamoto. I don't know if you ever heard that name?

KT: Heard the name, yeah.

C: Heard the name. Yes both. So we were working there. I work with my brother-in law, Lawrence and that time we didn't have cars yet. You know, that I would drive. I got started driving when I was only 27 years old. Just little bit before that so then we got the license. Before you had to be 21 years of age, now they get 15 years they crackin' em up all over the road.

KT: Even before that!

C: So we had to catch ride you know.

KT: Yeah, yeah, yeah.

C: Then we would go down to Yoshimuri contractors and they would put us just like in the big cattle truck, like the old HC&S before had all the seats. And they would load us like that and we would go Lahaina on the old road now, you know, go like that. Take about one hour from Kahului you know, to go there and work.

KT: And yet, we still complaining.

C: Yeah! And then after that we go through to the Lahaina side I came to Wailuku Elementary and I work in Wailuku Elementary with Kika Yamamoto and Yoshimuri together the both of them I guess.

KT: So how did you get interested in cowboy stuff?

C: I always was interested in cowboy stuff but my mom and dad didn't want me to become a cowboy. And it's really hard for change, you know. See my dad never drove a car and my mom in their life. We all rode horse, all my sisters and us boys, we all rode horse. So after that we got through with Wailuku Elementary, I went too, I don't know if you know CK's, Tasty Crust, and Hale Lava.

KT: Yes, yes.

C: I worked on those buildings there. And then I came into Maui Land and Pine and I worked Maui Land and Pine and at times I worked in the field as planting pineapple.

KT: How old were you then?

C: I was about twenty three, twenty two around there. After I got into the pineapple and I did horse shoeing all my years, right to now and I still do a lot of horse shoeing. Mrs. Richard Baldwin took me from Maui Pine and called me if I would go and shoe horses in Honolulu. At that time was just when I was going get into Maui Pine real steady see. So I go down and the last time I went down was the same way, she took me out for about three months or so and I would go down and shoe horses. Honolulu for polo and then we start up here in Maui first and then we went Honolulu. Ok, I running my mouth- he went down, that's fine. And then we went down to Sprecklesville and we would ride the horses, those days you would ride the horses to the polo fields. I used to ride from Kapiolani Stable to the stadium for play polo.

KT: Wow!



C: Yeah, and we would ride from the barge up to Waikiki only had houses on the right side if coming up, going down only on the left side. This side of Waikiki was all swamps like Kanaha pond, yeah.

KT: So, let's fast forward, come back to Maui. What were you doing in that same kind of farm work stuff on cowboys that you can relate to?

C: So then after Maui Pine the Union came in and they said they was going get rid of the last hired employees hired on Maui Land and Pine. That time was called Haleakala Pine, I think it was yeah. And then from there I said well shucks they gonna throw us out I going get this job so I got this job from Elmer Carvalho as working in Maui Factors Ranch. And then from there I worked for them fifteen years on top Maalaea mountain and I worked on Kahikinui and then I quit them.

KT: What were you doing out there?

C: Any kind of job, fix fence, cowboy, rope, horse shoeing everything.

KT: Wow. While you were out there um, any things Hawaiian that you can relate to us.

C: Yeah, well I had a old friend Jim Hapakuka from Ulupalakua Ranch. I gave him a lot of hides. He was a real good hide braider, the same thing that I do. He always told me this story that he and his dad used to tell. The dad used to tell him have a canoe on the cliffs of the ocean, a big long canoe. And uh, when they would go fishing they would have another canoe way up almost on the well that time was trails, no was roads up there now have the car road, but way up far up on the horse trail. So in the years I was working cattle and on the ranch there I found that canoe. But Jim always told me had one in the ocean but I never, me I'm not an ocean man. I like ground underneath, I no like water. Water is only to drink and take a shower, other than that that tub gotta be open. So I found a canoe on the top not far from the road. Almost perfect, I have the pictures. So I had this friend of mine and Steven Perreria was our boss and Steven tell go get that bull go rope that wild bull because we brought em down from the mountain to the road, no let em go back up you know. So, this friend of mine, Alan Silva he used to work for the fire department, in fact he had one uncle Ren Silva.

KT: Yeah.

C: Ok, that's his nephew and we worked together. He was a good cowboy that bugga. And we was chasing this dumb bull, him and I and my horse went jump this round hole about this big, he jumped the hole that's why I told Alan. "I going go rope the bull and then you come back help me. But you go push stones around that hole because the hole you know just on the ground." The bull had jump over and I came with the horse. Lucky the horse watching, we had good horses too. So I went there I rope the bull then he came by me, oh, he couldn't talk. He couldn't talk, I say, "what's the matter with you?" So he jump down he tie the bull on the tree. Come back to me all pale. I say "what's the matter?" "There, right there, I see one canoe in one hole." I tell, "no way!" He tell me, "yeah come, come, come." So we go back. From on top we look like that, yeah can see in em. Just one piece maybe about that much of the canoe yeah. So I think she was small yeah. He was just about to get married to this lady. So, ok we decided oh, make lunch everything we go walk down from the road cause cannot go the truck there with stones and all that. So we walk down and we got to the canoe and we took pictures and all that and we kept it, we no tell nobody cause we no want them go fool around the canoe. So after all those years went by never went back more there but I can go back there now I know the spot. And, we found the canoe we took pictures we kept our mouth shut we no

tell nobody because we never want people go mess up the canoe. Cause you know how people is, they going try bring 'em outside and all that. Was, eh, was one long canoe you know might be from here to the corner from the house. Was big!

KT: You went down there?

C: I carry her on top here, the shoulder yeah, she was small. And, uh, so we took pictures and all and after about a year after that you know that always kept in my mind you know that Jim told me get one canoe in the ocean cliff. So I was crazy guy and my wife's uncle Steven and my father-in-law we was all crazy anyway. We drove these big bunch of goates and they went down and they saw one and they go down but. So my father went get the idea we join two ropes and I go down on the rope and he hold me by the stomach so I went down and I was scared you know going down. But all of a sudden I started going down the darn cliff yeah, just like noose like this here! The ocean down and I cannot swim. That's why I don't like the ocean.

KT: And you still went go!

C: I went down on the rope like that and we caught about fifteen or twenty goats over there. And then I jerked the rope and my father pull me up with the horse. When I went down the goats was, had the canoe. This is down by the ocean. It's about maybe about a mile different Jim would tell me they would carry the canoe and they would stand one on top the other on the cliff and they would pass, that's what his father would tell him, my friend Jim told me. And they would pass the canoe down then they would put the two canoes together and they would go fishing for the whole village.

KT: Wow.

C: They would never put the other canoe because with one canoe no could go. So had to get the two canoes.

KT: One side of the canoe.

C: Yeah, so just like one catamaran.

KT: Oh, so double hull then?

C: Yeah, that's what he tell me that his father used to tell him. See so I found that canoe too but I kept my mouth shut.

KT: Unbelievable for a portagee to keep the mouth shut.

C: I seen bodies lined up like that in caves. We used to sleep go down fishing. We used to sleep one place down by the ocean, nice place all the gravel you know. Never dawn on me and there were nice stone walls all around, you know. Maybe about that high. So he come here he come I took his uncle go show him the canoe. And then I told him this right here that's where get the other one on the cliff. And then as we went down we go sleep down there and here we put all our pop tents. And he say "oh, this is one Hawaiian grave." I say "this the best place for sleep everybody else scared come here." Ha! And we used to sleep over there all the time. Make right there on this place we go inside there was so nice the wall was about that high all around you know. So the wind no hit too much and we would put our pop tent and sleep, and when Alan come he tell me, "eh, that's one Hawaiian grave I not going sleep there." I tell him "well, you like go outside, you go outside. I sleeping right here." I quit that ranch and I always used to go fishing and sleep there.

KT: What kind of fishing?

C: I used to catch Moi a lot of Moi at the time. And Menpachi and Kupipi and Moana, Popa'a.

KT: So the regular shore fish?

C: Yeah, shoreline.

KT: Not Ulua.

C: Dry kind stone place where no can be too much big ones you know, cause I not going too far or close. Gotta get the long bamboo.

KT: I appreciate you honoring those discoveries. Of course you know the canoes that were placed down there that were in the caves upside usually used to be the coffins of our people, yeah.

C: And the cave was long you know you could go quite a ways in but had nothing. I thought might have had, get lot of petroglyph's back there. Not far from the road you can only walk from me to there and the petroglyphs on the old horse trails.

KT: This is Kahikinui?

C: Yeah, Kahikinui.

KT: This is all in Pulehu.

C: Yeah, Pulehu gulch.

KT: This one is a Haole artist

C: Plenty of this here that people went and scratched all around on some of them.

KT: Yeah, yeah.

C: I just started working Haleakala Ranch and I was "what is that darn writing." It never dawned on me because I never seen them elsewhere. After I got that always I watching, all over the place you see them.

KT: These haoles they beautified the place. Not everybody, but this is like the Garden of Eden. Look at all the colors, in all the petroglyphs on here. But it's an artist that lives on the top. So I took Kimokeo them including mine, so all the petroglyphs are along the wall. So where you saw it's the same kind of place that the rocks were this tall?

C: No, no right on the horse trail.

KT: Low kind.

C: Right on the horse trail over here where you go what's it called Twin bridges? They get one name for that. Right on the horse trail had the rock there and get some big brown rocks.

J: Almost to Waiopai.

C: This side of Waiopai. Plenty of people call that place you can go right down the ocean, called Pidgeon Pali. They get some Hawaiian name.

KT: Had different names. I used to be down there quite often, almost every weekend.

C: Over there get one hole with the windmill inside. You ever seen that hole with the banana trees inside?

KT: No.

C: You went pass right by the rock hole like that you can see the banana trees.

KT: Then it's through a river bed?

C: Yeah, it's like one pahoehoe? The kind bath right. We've been

J: And there's one by Kamehameha schools, petroglyphs right there.

KT: By Kamehameha schools.

C: Right inside the house where you were telling, that's where you get those pictures, yeah.

KT: This one is by 76 and then you go down you pass the Pulehu road going down, so it's down there.

J: By Kula glen, this one's Kula glen side. The one's we thinking of is more Kamehameha schools side.

C: By Hawaiian homes. Right there Kamehameha schools from Kamehameha school you coming up right in that big gulch.

KT: So we going up this way, we pass King Kekaulike, Kamehameha on the right.

C: You gotta go down through the pineapple field you know can go on highway.

KT: Kamehameha is on the right hand side.

C: Coming up.

KT: Pass the school?

C: Right straight line with the school on the opposite side of the school.

KT: Go Makai in the gully?

C: All in that gulch stay full right there.

KT: You know, maybe twenty years ago I was asked to go bless some petroglyphs right next to Kekaulike, the gully right there. Because Keola the canoe builder out of Lahaina they wanted me to go do a ceremony there. From that and my travels throughout the state of Hawaii I looked at why and where did our people put these petroglyphs. And for the most part every gully had petroglyphs. Every gully. And the reason for that is that they brought the Koa logs mauka. They have to take them down to Makena or to Kahului. So they went through the river beds and camp overnight.

C: Couple of days, carry that heavy bugga! Get wash get water.

KT: So they spend time drawing. Now Kimokeo is standing next to Pulehu again this is a very unusual one same thing. Oriental characters. It's one of a kind cause I've been throughout the stat studying petroglyphs and stuff. Never found this kind. So when I looked at it I went, "what, gosh." So it's a riverbed that. Maybe from here to those trees. This is all the petroglyphs and caves that we took leading to this. So when I saw and I put it all together I went of course. The orientals was brought in not only through Koa logs but Iliahi, sandalwood. Because they had to get it down to Makena or to Lahaina to ship to China. So that's why they drew this Chinese character. So I took this in. I teach at Maui Community College, Japanese students were sat down. I interviewed ten students and I said, "what is this thing." So they wrote, everybody consistent everybody wrote this line means. Dai ni hon which means big Japan. They couldn't get this one I gotta take to one of the older Japanese and see if they can get this. This one here is Ito. But this is close by to all these petroglyphs which is the whole bed of, the whole riverbed.

C: Yeah, I know Pūlehu, plenty over here too. Right there tell you get plenty too. And then we get one way up on the ranch. Just like the mans, little bit more different. Steven Boteliho, he the first guy told me that. "Henry no look like one petroglyph?" So I'm passing on the horse caught my eye one time, but I never pay attention. But then had little bit more writing but just on one rock. Right where the honeybee stay. Right there get petroglyphs way up kind of way up now, it's above, oh about half way up Haleakala Ranch on that side.

J: That one, didn't Gerard say looks like the, wasn't he saying looks like one pregnant lady on something, yeah with that one.

C: Steven Boteliho tell me the same thing and she gave birth over there that's when right over there had like old Hawaiian houses.

KT: So bring me close to where that would be.

C: It's not too far from here it's maybe about 2 miles, 2 and a half miles, you gotta go up to the gulch on the car or horse to find it. We pass we have a tractor road that pass right there that's how I seen it.

J: That would be. That house that's closest to the Cameron house. It's probably closest to that, up on this Kekaulike Highway, up here.

C: Cause no more no other houses. This side Carter. Well actually Carter is closer than Cameron. Cause from Carter you just cut right over.

KT: But private land yeah?

C: Ranch land. Even the one down by King K, I can take you there. I get all the keys from the ranch. You can see them.

J: Now when you walk right up to them, I tell em high, high, very high.

KT: As I sit here in my mind you know it tells me how rich this island is. Unbelievable.

C: You just think how much time it took to cut that with one stone. Unless they had some kind of iron tool. But I doubt with rock.

KT: Stone on stone.

C: Yeah, and for cut you know and that damn rock is smooth hard rocks like that, yeah?

KT: That's truly possessing Mana, understanding Mana. Specifically we are, in behalf of this land group. Studying for, they want to put in agricultural subdivisions over here. That's one. This is Pulehu. This is right across the Ag park right in that area. Kimokeo and I ran across a pretty good sized Heiau. Maybe from here to your trees. You know the formation of the rocks.

C: Yeah, not too far from the main road yeah.

KT: No, that one is way inside of Pulehu.

C: Get inside Waiakoa pasture, I think so get one over there. But in this side Pulehu get too where they get all the rocks yet just like they made garden or something. They all line up like that in one big square.

KT: Yup.

C: And right over there on the other side, I'm not sure now if it's on that side or the other side Waiakoa side where get one well that Maui Land and Pine drilled. Get water over there.

KT: Right now I'm just transcribing the interview with Thomas.

C: This piece here all going sell? Because Maui Land & Pine own all that this side of Pulehu road down. Haleakala Ranch own certain portion and according to what Harold told me, Mr. Richard Baldwin, that anytime they bought land and they borrowed so much money from Maui Land & Pine he wouldn't take back in money he would take in land. So that's how he get pieces of land there you know more on the low side where pineapple could grow. Interesting though, yeah.

J: This area where they want to develop, you're looking to find out if there is anything more...

KT: Well as you can see on the other map that I showed you, right there is why we're doing what we're doing. But going back to the original reason to have cultural assessments is not only to look at where they want to propose and get permission but the surrounding area. So in my write up I'll be covering Kula, Kahikinu you know all Upcountry the entire ahupua'a and how they all fit together.

C: King K that side King K you go inside that gulch it's loaded. And I didn't go below the waterfall because right there is a big waterfall but I go all up and down there. You

know look in there because we ride horse all inside that gulch. Then sometimes when the grass really big instead of ride horse we would walk foot.

KT: You never think take camera?

C: No, I'm not a photographer. I'd like to see the thing leave 'em there, don't touch it. I don't like now guys, you go take guys and then afterwards they go there they going scrape them. I hate that!

KT: Right, we don't want that. So, you know, as I'm talking to you in my mind I'm saying, and you know because I've been exposed to it. What can I personally do to have that remain like it is instead of having people like what you just described.

C: The thing is the boundaries over there is right down the center of the gulch. See so the guy that own the land from there to there, you no can tell him, he own that you know. Cause right here in Pulehu right here down here by King K the boundary right down the center of the gulch. But we had the fence on the side because you know, no can fix fence inside of all the stone you know all the pohaku. So we used to have them on the side of the gulch.

KT: By the way, what kind of horses were you guys riding?

C: I already had plenty thoroughbred, mostly thoroughbred horses when I first started Haleakala Ranch. Mostly thoroughbred then the quarter horses used to come more and more. Right now very little thoroughbred, mostly all quarter horses.

KT: Some of the horses had to adapt to the environment.

C: Yeah, mostly mares that they breed and they brought. Like Kaono'ulu Ranch bought a stallion his name was Jimmy, I think and then Dwight Baldwin bought a quarter horse stallion and then from then on they started to breed. And then Mrs. Richard Baldwin brought an Arab, which they had all thoroughbred stallions Makawao and all the studs that they bred too. Then she bought an Arab and then when racing got through they started to breed Arab's. It was good cattle horses, they all, you know it's the work you give them and the patience. You can train any kind of horse to work cattle.

KT: What is the Paniolo lifestyle that makes Paniolo unique?

C: Well in those old days was hard because you had no car. Everything was done either horse, donkey, or mule.

J: And sun up to sun down.

C: Sun up to sun down from dark to dark you work. There was no such thing.

KT: She got that so you must have said that, yeah?

J: I lived that! He's gone it's dark, he comes home it's dark.

C: I come home 9 or 10 o'clock night time 12 o'clock come home.

KT: Is that to say all of it was put in work or you spend time playing around and stuff.

C: Working.

KT: Ah, so work consisted of building fences...

C: Mostly we work with cattle and we working cattle plenty time, you know we driving one big area and we get 5-600 head and you try separate the cows with the small babies we let 'em go cause you get a lot of bulls a lot of steer that you going take out, you know. So that kind time when take. Even car lights we would take you know with the car lights so you could see. With full moon was good you can work with a moon. You work plenty with a moon.

KT: So, you just said it, you were able to learn the cycles of the moon?

C: Yeah.

KT: So outside of the times that is became full moon and the cycle is. That's all moon's getting big, right after mahelani then it dwindles little bit. So did you folks follow moon calendar for fishing too?

C: Yeah, my dad did when I was young, though. We would go get the opihi because then the full moon the water everything come more malia, yeah? You know you go. Me I'm not ocean, like I said I never was. My brother's all yeah, me I never cared for the water. To shower and that's about the best I like 'em.

KT: So what about you Jody?

J: I can swim but I rather be on the horse. I like my mountain.

C: I like the mountain too.

KT: Upcountry people tend to be like that. I'm guilty of that, if I didn't go Kamehameha my 7<sup>th</sup> grade year I wouldn't have learned the water. So, I guess that's how we grow up in the environment that we lived in, yeah. So small kid time outside of your regular work. What was unique about living in this neighborhood.

C: Here?

KT: Well, I mean Kula, Makawao.

C: Well, I got married to a Kula woman so then I had no choice.

KT: What was her name?

C: Judy Perreira.

KT: So your ethnicity is full, part?

J: Pure portagee. As much as we know.

KT: So how far back do you trace your genealogy?

J: Well, his mother came from Portugal.

C: My mother came direct from Portugal. My grand-dad my great-grand-dad came from Portugal. And then my dad, you know. I don't remember my grand-dad alive he passed away already. I remember my grandmother.

KT: When did he come?

C: Gee, I have no idea. You get a Portugese book in there. I cannot tell I know my mom came she was 8 years old. I don't know about my grand-dad, or my great-grand dad I don't know. I know came three boys and as far as we knew, my grand-dad lived over here in Kokomo. And then one was in Lahaina and the one in Lahaina that we knew about as far as we know he was never married. But we don't know if he had any children, you know what I mean. But, uh, he live in Lahaina. And then all the years, you know that's the only family we had. And then I had this friend Don Silva from Parker Ranch calling wanted if I would give him lesson on raw hide saddles and the braiding of the Hawaiian saddles and all that. So I said "Sure, why should I die and take it with me?" I learn from old Portugese cowboys.

KT: You have it in there?

C: Yeah.

KT: Can we watch it later and take pictures while you're describing it?

C: Yeah.

KT: Have you done that?

J: I can but it's hard work, hard on the hands.

KT: Done that in terms as far as documenting what I just asked.

J: No actually.

KT: I'll present it to you.

J: He actually has gone to the Smithsonian, 16 years ago and he went up. He was with the Culture of the Arts with Hawaii.

C: There was an old Hawaiian festival up there at that time.

J: Yeah, the State had a program where they would have him have a student, like an intern and they would teach you know to...

C: Teach guys braiding.

J: Yeah, to keep it alive.

KT: Who was it?

C: Craig Moore was one of them and had this guy from Honolulu, I think what was his name now? He could never learn, though. He was a good welder and all.

J: But he's taught nephews, my brother knows, he's got many other people.

KT: Some have it, some don't.

C: Yeah, and the thing it is, he found one other guy that might be one better student than him that would learn. Like Craig Moore was a good braider. A haole boy, he was really good at it. But he don't use it anymore. Now he's in Australia, just call me last night. Oh, New Zealand. Called me, we had a talk yesterday, oh about 20 minutes on the phone. And it's a funny thing. I have a friend of my Glen Souza used to work Hawaiian Air. He's related I think to that family. And he do real nice braiding. And now I have a young boy that started on the ranch, BJ Cabanting. Yeah, I think his dad works for Good Fellow Brothers, welder and oil and maintenance of the tractor and stuff. And he braided him a nice rope and then I have this crazy Chinese friend of mine now, Cully Chun, I don't know if you ever heard the name.

KT: Heard the name.

C: He used to work fire dept. and he get into, he braid him a nice rope. And he braid a couple pair reins already. And we just go through one, I think was Tuesday or Wednesday, and uh, he braiding them. So I never call em yet, I was going call him a while ago but I was busy braiding too so.

KT: So, it's an activity that you love doing just like some people love to sew lei's.

C: Yeah, it's like how before you go Ching store you bought all that making pheasant leis yeah. All pau, you no see that. Like I said I kept up this thing from 12-13 years old, I never stop.

KT: That's why you're the master. It's a challenge to convince young people to stick in something that they love and develop it so that they become masters.

C: So get one man right now, a good friend of mine, he's really good at it. He make bull whip, he make reigns, he make raw hide ropes. Now he's more into the raw hide ropes because he's selling them some \$700 and \$500. I created hundreds of them but I never sold one rope. That's all I did.

KT: Well, as earlier said, a lot of people only see the money in that.

C: I'm grateful quite a few honest men to earn a market. Plus the man show me plenty ride always you know. Because I used to go every night and then sometimes we would get together and we would all go fishing Kaholo Ranch with Steven and we would go down and he would tell, "this is one right a way, this is one right of way." I found out was up the mountain then the ocean we knew all the right of ways. All horse back, we used to go all horseback when I first got married.

KT: Right a ways, explain right a ways.



C: Hard for find em, because nowadays you take over here before right when you live down Pukalani Hwy. As soon as you get to the pineapple field, Pukalani Highway now not the new road now. Ok, so there had one right a way right straight to Makena right over, right up catch that King's trail you can come up ride right back.

J: So meaning that no one can fence it off or restrict you from going.

C: No, they made those houses Wailea and all. Those houses is on top the right of ways. They have no respect for the right of ways.

KT: I heard King's trail mentioned. Try describe as clearly as you can where would that be?

C: Actually if you go on Makena, you know Makena that road. You walk right on that road, it's about that wide. You can see some place go down the gulch and they set stone, plenty place wash out from the gulch because the people would use them. Like we used to, anytime would broke the Hawaiian's would fix. And that's the road, King's trail go all the way right to where I tell you the pidgin Pali, kinda dangerous gulch to cross right there, but you can still see 'em. I used to cross 'em on the cowboy horse. And you can go right through to Kaupo. And the other trail is up. You go up by Kanaio Church, the Hawaiian church. That's where the road used to go. And then used to come down and go right between that red hill. Right between, I don't know if you ever went there go right on top red hill, take you right to the horse trail. And over here get Davis, yeah Davis had one house. And in fact after you pass, you go over go in get couple houses right there. You see that small board gate, that's one right of way right down to the ocean, for go down to Pakau'i. I drive cattle all on that trails. All that Hawaiian homes back there I no think get one Hawaiian can fool me.

KT: You know Mr. Silva as we age, being where we are and here is your daughter and son. What do you think we can do to assist things left behind for them? You know this King's trail. The appreciation is not, you know, oh so what. But when you look at developing such a manner, progression, construction I mean the whole island. No machines, hand job, you know. How much work that was.

C: That's why I said that, we're supposed to preserve that. Even the people that go there, they brokin' em and bulldozing them.

KT: That's why we doing what we doing, this kind of work.

C: Yeah, they not worried about that, they worried about where they going put their house. And nowadays they no go with one hand or one pick or one shovel. They go with one bulldozer they scrape em off.

KT: How close up can you identify coming across?

C: Oh, some places is, you know because the ocean get all kind waves, eh? So the trails some places is come, come straight right. Close to water, mostly. And some go kinda little up.

KT: So no come mauka over here.

C: Nah.

KT: We follow Maalaea go Lahaina come around Kahakuloa come back.

C: The up trail from Kaupo used to come up to Kula here. Right straight through Kula.

KT: So you telling me had two?

C: Yeah, had one right on top and one below. Because right now you going on the road to Kaupo. You go there you can see the right of way yet on the right side of the road. Some places go below. Right there you get the petroglyph go below. And you get the

other one on the same piece land, right next to the ocean. Not far maybe about, maybe from here 808. I tell you pidgin Pali get one road there and one road on top here. They only about that wide, you can see them, real plain. Plenty get stones, guys travel night time maybe you can. Well, those days no more light. Plenty of them had kukui oil. I remember that was our time we used to burn the thing for light in the house. When we was even a young kid. Then afterwards came the lantern. But before that my mom guys, that's how only had light. And when come dark you go sleep and when get up come daytime you get up for work.

KT: By Ag park coming across again on the map where it shows, do you know if they had sugar cane coming all the way up there? Cause right now they have pineapple.

C: Sugar cane I no remember, but according to my wife's uncle and my father-in-law tell me they had pineapple on that area's there. Even over here down Kamaole over here. See all those big pines those that's all pineapple over there. That's what the old guys tell me. As far as our time was down this side.

KT: Jody when you go to work, what road were you using, Pulehu?

J: No, I use the highway.

KT: Why is that?

J: I take my daughter to school in Wailuku. And not good on the brakes.

KT: But as far as time, if you went through there is it fast there?

J: About the same, not too much difference.

C: You see before here they had Makena road go right down to Chang's place.

KT: Ulupalakua.

C: That was one road, I don't know why the county never pave the road. That's only what they had to do.

KT: They said insurance.

C: Yeah but they would pay the county. Why the heck we get our state for, get the insurance out of the state. What do you think?

KT: I agree. I just responding.

C: Would take her 20 minutes she would be down there.

J: So that area, where they're planning to develop, that is all pasture land right now. Across Ag park. And you used to.. you used to deal with cattle you used to drive cattle through there.

C: We still get cattle there.

J: Did you notice lots of other, besides petroglyphs, did you notice heiau's, did you notice anything else?

C: Funny where the rock wall stay, they never did plant over there look like, you know. I don't know if sand born or what you know because they never did plow. Above pineapple. And you know when I went there was all Keawe trees all covered and then all of a sudden they start put pineapple again. Cause pineapple was doing good they plant more area and more area. Just like you go down here right after Waikoa pasture from there down Maui Land & Pine own that right down to Kihei. Used to be called Big Waikoa. And that I think is 500-600 acres, that's a big area. And that come right up to the pineapple, that's all the same piece. Land here it's all go like this yeah. All go right from the top of the mountain it's Pulehu. I go shoe horse they give me this Pulehu address. Just go right down go all like this, this whole island it's right down to the ocean. Go behind, right across. It's an interesting thing, you know, I rode a lot all over

this God darn place in our days. We never have no cars, all rode horse. Rode from Olinda we rode all the way go to the forest go to Keanae visit a Chinese friend my dad had in Keanae. And then we would go sometime overnight. We would do fishing, catch fisha and all. The old man was a good fisherman, he was one cowboy go ranch inside Keanae side all in that mountains. Was hell of a cowboy.

KT: You guys would ride across?

C: Ride right through the forest yeah! From our house Olinda, went right through the forest go catch the Hanamanu gulch, the gulch on top is only one small little hollow. You know, then you get the new trail go like that you go right down to where we used to hook up fish. I forget the name...Puulau gap or something. Come right out to there and go to our friend's place. Down Keanae. Then we would ride home, we come home cause get plenty fish yeah. They put the fish all inside limu. So no spoil they touch the horse, because the horse come hot yeah. Then they put limu all inside like that. Get plenty limu against the horse and the fish all covered with limu. Forget that kind plenty. Nowadays you no even can see that big green limu all on top the stone.

KT: The green one?

C: Yeah, the kelp size. Thick yeah, so that bugga, just like she keep draining.

KT: See, this information?

J: Yeah, noboby know.

KT: Yeah and it's so precious.

C: Yeah we come I ride from Olinda then my dad go fishing down Makena and all. We come with one old Hawaiian guy. Andrew Puahi. He was a Kaupo man. He and my dad was really good friends. Big man, strong! Strong man, Andrew, and he had one son he was my classmate, Andrew Jr.

KT: What did he do?

C: Cowboy, he was horse shoer, he was a good horse shoer. Big man though. John Kahananui, Joe Poaipuni, all those guys. I work little while with them, I never work with Andrew Pohai, he died already. He was my dad's age yeah. But I work with Joe Poaipuni. John Kahananui I used to sharp his saw's, carpenter saw's. Nice Hawaiian man. John had little bit Chinese in him, though. But Joe Poaipuni was pure Hawaiian. In fact I still go shoe his horses. Old, old horses already getting hard time for hold the legs but we go shoe them.

KT: What made you go into horseshoeing? That's an art now. What made you go into that?

C: I love horses.

J: You had an uncle that taught you how?

C: Yeah, I had a cousin.

KT: What's the name?

C: Blacksmith in the days you know they get the touch yeah. Used to make wagon wheels and all my cousin Joe Freitas, but he learned from his dad, come from Portugal, yeah. And I think cousin Joe was born in Portugal, I not really sure but the rest was born in Kaupo. When he said the ship had leave Kaupo. Well Kaupo they came back this side. We work Kaupo for so many years, for I not sure now. But we used to tell they work over there plant sweet potatoes. And that's how they all plow, because wagons, eh. And they had horse and their plow for turn all these potatoes.

KT: What were they planting them for?

C: They could make a little park and put a little fence around. They get plenty Hawaiian trees that you can plant down there and would do really good.

KT: Many of the developers now, in order to get permission to develop. Have to put in, it's a requirement. Need park, need school, these big money guys. It's already in their plans.

C: Put plenty of them talk parks and all that, it's not the Hawaiian trees they put in on top. See you get the Wiliwili you get the Ohia you get the Sandalwood you get the Koa, you get the Kamani. Get plenty of the Hawaiian trees, some Hawaiian trees get trees over here that we don't even know the name even inside the mountain if you go, and even vines that crawling.

KT: If you don't know that Kimokeo is master of plants. He knows in's and out's. Yeah, he has a passion for plants. I agree.

C: That's how I feel.

KT: It's going to be in this where they can come to it and all we can do is say, this is our recommendation once we write it up.

J: I wouldn't, you know. If it's something that needs to be developed in that home for homes and such I would like to see it being not so commercial. You know more, you know keep it country.

KT: Well, this particular area, again is going to be agricultural sub.

C: They no need make 'em 1/8 acres. So you can plant some vegetables or plants or trees.

KT: But Mike pointed out something that is really preventing the mind to continue your folks line of work which is water, lack of water. Cannot make 'em yeah? Unless you have another way. You have another way on how things can continue to keep growing?

C: The only thing I would like to learn is how to swim, so then I can go in the ocean check what I can do with the ocean for take more land out of the ocean. Not going happen, yeah? Ok. No you know they always going be looking for that mighty dollar. It's an unreal thing.

KT: In the years of your life that you've been on this earth, you feel that you lived a great life?

C: Oh, I had good fun.

KT: Everything you've accomplished, you're really happy about. I love meeting artists such as you. There's a little more than just somebody off the street. I have said you know the story about carrying your fish with the limu. Any other ideas, stories you have?

C: Me with my raw hide braiding. I brought the first nylon ropes to the island. I met my friend Dutchie Shuman, Shuman Carriage. He just passed away, ok, I met him down there I met him I was shoeing horse in Kapiolani stable he came there with this nylon rope. First time I seen one nylon rope. Dutchie came asked, "oh, Henry you want to try?" Cause he was roping them and I was roping with raw hide rope yeah. So he tell me from now on I not going use the raw hide rope I going rope with this nylon rope. Ok so I was roping you know he was roping the animal the thing moved away. I tell him gee, where the heck you get this. He tell me, uh, saddle shop store in town. He tell, "I go take you. You go finish your job, us go." So he took me. I went down there I look at the ropes. I bought I think was 9 ropes and I bought the thing 2 or 3 cases horseshoe nails, cause at that time was hard time get horseshoe nails. And she gave me 10 cases of nails and I got all those nails plus what I could buy. And so I figured well, I bought that. Was

C: Was cheap the potato go mainland.

KT: Oh, yeah. Now I'm reading on the history for the gold rush they planted all those plants.

C: Even the corn. That's how the Chinese over here. We get China pasture over here that's the Chinese kind corn for go make whiskey mainland. They never like the Hawaiians make em over here, bum by the Hawaiians no work, yeah! But had some Podagee's used to make the okolehao, eh.

KT: Yup, that's how was.

C: I remember Andrew, I was maybe 10-11 years old I live in the ranch, Haleakala Ranch, because my sister just got married to one ranch boy. My older sister is a Bal. And I lived over there. I used to like hear the anvil he stay pounding pang, pang pang yeah. So I used to go down watch with him. He use to tell me sit down. Nice old man, big man! Big, big man.

KT: So he taught you?

C: He didn't teach me anything about shoeing. Just it got me for sit down, I like watch, you know the horses. He no like I sit by him my body might get step or something. My brother going get on his case yeah. Then I learn with my cousin Joe, about 12-13 years already I was starting to shoe little bit. I would go down and crank the forge you know any time you stop the cranking because you no more nothing motors. Afterwards, the ranch had one new motor the motor the motor keep turning the so we can make hot. Because it's with coal yeah? Now what I get on the truck now I just put the propane gas and I shoe with forge. It's an interesting thing. It's hard on your back, I say more in your mind yeah. Your head tell you your back sore, your back more sore.

KT: You going pass that art down to anybody?

C: Oh, no I get in fact I get one college guy Bill Johnson, he's a horse shoer right now. He's with me about 10 years right now I think. And then Glen shoed with me 13 years. Glen is good shoer, Glen Souza.

KT: So you do for the ranch?

C: Once and a while we go help them when they get hard time you know for catch up and they get plenty other jobs. So they say, "Hey, Henry come shoe." I rush right out.

KT: So your dad busy.

J: So ask us when the last time we shod our own horses?

C: About 6 months.

J: Needless to say we haven't been riding.

C: No sense shoe them no can go anywhere. Right now they hunting bird so once pau bird season we get our saddles out.

J: What they say, the mechanics car never fix. They carpenters houses never fix.

C: The cowboy get the worst horses. One friend I went give him one deer. Me and Gerard shot we went go by the road, was Kamaole house now and he tell me remember me Henry? He tell me no need deer right now. Now every time I pass I wave, different kind color guy now. He tell me he thought I got sun kissed was so black they no even see me. I laugh.

KT: So, I want to go see that over there but before I do I want to try to develop a summary of what we're talking about. If you had your way, what would you like to see happen in this area that I showed you on the map? That would be conservative enough that not interrupt the environment, you know. Your grandchildren traveling down there.

\$9.00 one rope, 40 feet. So I gave one to my cousin Raymond Freitas, I think it was 1 to my cousin Frank and I sold one to my friend. Same price, I never charge him nothing more for the rope, \$9.00. One to old man George and I think one to Jocinho's and I not sure if Steven Boteliho. And I kept the rest, you know. So then I gave one to my friend Wilfred Cambra and one to my brother-in-law Alex Vegas and I kept the rest. So I always had 2 or 3 extra. But, I still rope with my raw hide rope you go on top the mountain the nylon cannot work. The wind would blow the rope right back on you, with the wind. Even on top Kahikinui the wind blows you no can throw your rope against the wind so we would work with the raw hide rope.

KT: Wow. Did you learn about the different kinds of...

C: This bugga is only one little small piece over here was crack but the rest of the canoe was all perfect. But only small kind camera, no more the fancy kind camera those days. But we look all for petroglyph and take all inside had more petroglyph. And this all Kehekenui land. This is Alan Silva.

KT: How old would he be now?

C: Who Alan? He's quite a few years younger than I am, well he retired from the Fire Dept. but then they go by years service. Alan what you would figure, what 60?

J: I think what older than Norman?

C: I not quite sure I think they might be the same age. Cully Chun is 55.

C: I seen inside the cave had just like the roots. You know growing through the rock, I'm pretty sure that's what it was. Yeah, that's the roots coming through. See, now you get the canoe. Yeah but was almost perfect this one here, the one down the ocean but funny yeah, when Jim told me when I found 'em I see only half of the canoe. Just like somebody went take one saw and then cut 'em right down straight, straight. I guess from staying on the ocean cliff. Long the canoe was, I tell you might be from here to the corner like that, the house. Maybe a little further than that. And about that wide. Like that thick. And just like somebody went cut 'em. I guess the salt breeze come on top and you know keep on yeah.

KT: So, probably Koa yeah?

C: I think so! Because no more trees bigger than the Koa for come make like that. Over here, that's one big over here already.

KT: So, wasn't oiled or painted? Just decaying?

C: Yeah just decaying from old yeah. But the funny thing when the old man told me that I thought he kinda pulling my leg. The old man Jim. We used to butcher a lot of cattle and I used to skin and he used to love to braid ropes or whips or reins. So every now and then, we would ask. My boss, Steven Perreira, used to like that old man. Tell him, take take free. While he doing that he not making trouble. He was a good braider.

KT: So in other words the cattle you guys slaughtered you kept the skin, dried it out, then you cut it up to make the ropes.

J: The the pictures from the petroglyphs from Kamehameha schools I cannot find them, yeah, I cannot find them.

C: That's how I got interested in this darn thing. After that I always watch, just go. Get bodies over there. In fact a few months ago, no last year, my son and I was working one pasture down here, we call 'em Kekoa get the red cinder hill. He tell me, "eh dad you know that cave over there?" I tell him "yeah." He tell me, "eh, you know what get one hole there." I tell him I know the old guys tell me. I tell him I never go by. He tell me

the stones fall down. He go there 3 heads just like one here one there one like that about this area 3 heads like that. Look like the body stay like that. He tell me, "I wall em up so they no."

KT: How old is your son?

C: 43 going be 44.

KT: So he still cowboy.

C: Nah

KT: But he ride around.

C: I send him college that was the worst thing.

KT: Why is that?

C: Because maybe he could be cowboy, maybe he would be more happy then what he stay. (laughs)

J: He's not interested too much in the horses. He works for Island Movers delivery. And he has coins, he loves coins.

KT: At least you taught one of your children.

J: He's got some old Hawaiian money too.

C: Funny how things go on, yeah?

KT: Can we go look over there and take some pictures.

(walking)

KT: So every one of these you made?

C: Yep, every one of them I made.

KT: Is there a story in back of each one of these?

C: Well, this one here I call em my rubbish pile rope.

KT: Why is that?

C: Because below Kula Cemetary they had a rubbish pile. Everytime I would go there had this hide, I think that was made for a rug in the house. And I guess from staying in the house started to get all crooked as the years went by. So everytime we would go dump our rubbish, my wife and I. I would fool around the hide. So one day she told me like this, "Why everytime you come here you fool around that hide?" So I said well I take my pocketknife I cut a little strip like that about so long I pull. The thing wouldn't broke. I brought 'em home. And from all crooked I took little bit water with Hawaiian salt inside. Spread em on top, next morning came all soft. I strapped 'em up then I cut that and I braided that rope.

J: How many strands is that rope?

C: 8 strands. That's 8 strand, this is a 4 strand and maybe this is the only 6 strand rope you'll ever see in your life.

KT: It's truly and art.

C: And this here is one bull whip from old man Ernest Martin. I don't know if you know who that old man was, but this was his whip that he braided. They gave 'em to me for fix but it's so rotten I cannot do nothing with it. So I just kept 'em in memories of that old man.

J: And he braided that?

C: Yeah, he braided that. This one here I brought for fix, a friend of mine Alan was telling me he braided this whip with me. And this is all bracelet's that I braid for my girlfriends. This here was when I was up in Washington.

J: The folk art program. They sent him up to Washington?

C: Yeah, for one festival. And this is my friend Cully Chun now he was learning how he braided this. And this is all reins that I braid. See the one that I'm braiding yeah? And this is the saddle that I fix for guys. This is for my I guess my father and my grandfather's saddle.

KT: What is the material made from?

C: This is all cow hide wrap and it's braided under here. So that's how I spend my time.

KT: Wonderful.

C: Deer hide, the axis deer.

KT: You collect what people bring to you?

C: No, my son and I hunt so we shoot one I save 'em and cure the hide.

KT: Is it difficult to cure the hide?

C: No. This here. Here's all reins that I'm braiding.

J: So how long does it take for you to skin it, to stretch it, to cut it?

C: Skin em about 20 minutes, skin em out of the carcass and then I stick em about 3 days in water with lime and the hair all come out and then I take em all out. I stretch em on one piece of ply board about 4X4, you know. Then I stretch em all, nail em good and then clean all the flesh side real good and then put little bit Hawaiian pakai.

J: So in a week's time?

C: In one weeks time I got em braiding.

KT: Week's time. You don't sound like you're a man with a lot of time. So I appreciate this day that you're giving me to do this.

J: Always doing something, yeah?

C: Yup. One more rope here to start to braid.

KT: Hard work though, yeah?

C: Oh, kinda hard on your mind yeah? Plenty guys ask "your hand sore?" Sure sore.

J: Takes a lot of strength.

C: Real fun, while I'm doing this, I'm not making trouble. I'm in this garage here but I always I work here.

KT: And you standing up too, hard on your feet?

C: Well, with the horses on my back is heavier.

(laughing)

KT: Have you made one?

J: No I haven't. I think I made a ring once. Small little ring, really hard on the hands.

KT: Where did you go to school?

J: Here. St. Anthony and then I went to Oahu for 5 years did some business school and some beauty school.

KT: Did you know Antoinette Souza?

J: She's a little older than I am but yes, actually I think she's my brother's classmate.

KT: So you were Antone's classmate? Her brother.

J: He's 2 years older than me.

KT: I'm impressed.

C: Sometime you have time I show you those petroglyph's down there.

KT: I appreciate that. I'm going to find the time, make the time.

C: Well, if you let me know when you can.

KT: I gotta write down your phone number.

C: I'm sure Kimoeko would say how much we appreciate this.



J: I think he enjoys this, really he loves to share whatever, he has enjoyed this.

C: Then I can show you, you might even pick up something over there that I never pick up down there in the stone yeah?

**Interview: Alexa Vaught**  
**By Keli'i Tau'a/ Kimokeo Kapahulehua**  
**October 20, 2006**



***KT- Keli'i Tau'a***  
***C- Consultant***

KT- It's starting to record Alexa. First thing; you gotta speak up, number one. Number two: start with who you are your genealogy line (as much as you can).

C- Oh, okay. My full name is Alexa Odell Aheong Puaala Keaunui Vaught. I was born in Oahu and raised on Maui; when I was about a week old or two my grandma brought me home.

KT- Okay those Hawaiian names you might have to spell; so after Alexa.

C- O-d-e-l-l; A-h-e-o-n-g; P-u-a-a-l-a, K-e-a-u-n-u-i; my last name is V-a-u-g-h-t. I was born on Oahu, down in Kaka'ako and my grandma brought me home when I was about two weeks old and I was raised by my grandmother and grandfather. My grandma was Agnes Kane; actually she was Agnes Akeo and married to Moke Kane from Kauai. My grandfather Moke Kane passed away the year before I was born. My grandma remarried and married a man named Sam Paona from Lahaina. I don't know a lot about my grandfather that raised me except that they lived above the mill in Lahaina and he and he had two sisters. He helped, (after his brother-in-law passed away), Mary Levi, he helped his sister raise her children and my great grandfather was a Chinese man from China who married my great-grandmother who was Hawaiian from Lana'i and that's really all I know about them. My grandma came from a very big family. There were about 13 children, I think.

KT- Was she a Maui family?

C- She actually originated from Lanai; and then when she married my grandfather Moke Kane who came from Kauai with the Gays (the same family with the Gay, Robinson Sinclair, Gay and Robinson). One of my grandfather's auntie's married a Gay and so when the Gay's came to Lanai to get into ranching business and pineapple, the brought along my grandfather, Moke Kane. And as far as we know they were from Wainiha area in Kauai. I don't know that family because when I was born my grandpa was gone. So that family, I don't know. I know my grandmother had lots of children. She was a very prominent person in Lahaina. When she married Moke Kane they moved to Lahaina and

Agreement to Participate

I, Alexa Vaughn, understand that Kimokeo Kapahulehua and Keli'i Tau'ā, independent investigators contracted by Pacific Rim Land Incorporated will be conducting oral history interviews with individuals (kupuna/makua) knowledgeable about the land area currently the Maui Research and Technology Park in Kihei, Maui. The oral history interviews are being conducted in order to collect information on possible pre-historic and or historical cultural resources associated with these lands, as well as traditional cultural practices.

I understand I will be provided the opportunity to review my interview to ensure that it accurately depicts what I meant to say about any of these lands. I also understand that if I don't return the revised transcripts after two weeks from the date of receipt, my signature below will indicate my release of information for the CIS/A report. I also understand that I will still have the opportunity to make revisions during the report review process.

Please check the bottom:

I am willing to participate

I am willing to participate under certain conditions.

**Consultant:**

Date: 11/26/06

Name Alexa Vaughn

**Investigators:**

Date \_\_\_\_\_

Name \_\_\_\_\_

MAHALO NUI LOA.

that's where she raised her children. My grandmother was very involved with (at that time) Waine'e Church and we were raised in the Waine'e Church. She was all things that you can think of. She was president of the Ahahui Kaahumanu; she was part of the Kamehameha Lodge because of my grandfather. So I basically was raised in Lahaina. My dad on the other hand, was from Hau'ula. He was a Keaunui; his grandparents lived up in Kahana Valley. They were farmers, they took care of all the taro, they had taro lands up in Kahana Valley. They lived (from where we understood my aunty telling us the history) they lived kind of in a commune where my great-grandfather was like the Konohiki for that family. They got together and they ate together, they did things together and because he was a Konohiki if you had a misunderstanding or you had an argument with somebody and if he would say one word; and he would say, "Oki" and that was pau; everything was finished. Then they moved, my grandparents, moved their family to Honolulu because my grandmother was ill and the closest place to the hospital was to move away from Kahana Valley. So they moved to Honolulu. My dad was a Stevedore; he started Stevedore when he was very young. He went into what started first as McCabe and Hamilton and eventually was bought out by the Matson Navigation. So, he was just a Stevedore worker and my dad passed away in 1987. In 1979, I had said to my dad, "you know dad, if I walk down the road and there was a first cousin that approached me on the Keaunui side I don't even think I would recognize them and I wouldn't even know that was my family." And I said, "I know all of my grandma's side, my mother's side. My aunts, my first cousins, my second cousins, but I don't know your side." And so, my dad got on the phone and called my aunt and they decided that they needed to get together and share and meet (for me at least) to meet my aunts and my uncles; my dad's brothers. He had only one sister and he had two brothers left. And so, with that in mind, they decided to do a research on their genealogy. And so, they did, they started that and they started prior to that and I think the benefits of the Mormon Church is that they do a lot of genealogy, they keep a lot of paperwork. And so, because our great-great-grandfather was a minister for the Mormon Church, there were lots of records that they could look at; and on the Keaunui side and of course it goes all the way back. The story I got was that there were three brothers and Kea'aunui was responsible for the Wainae, Wailua area; Komohonua was responsible for the Ko'olau side of Oahu; and Muliali'i was responsible for the Honolulu side. My genealogy wasn't important until I started teaching Hawaiian Studies.

KT- Because?

C- In teaching Hawaiian Studies for the Dept of Education in the Kupuna program. Because it was a mandated program in 1979 and by the time it started it got moving, I think, by 1978 the program started and it was a mandated program that children from K-6 should have Hawaiian Studies or should have Kupuna in the school. And it started as a Kupuna thing where they hired the Kupuna who were at home and who had all this wealth of information as grandparents. And so, the program started. And it started and there are still a few more Kupuna that started then. Especially I have one on Molokai; Aunty Eliza started out when they first opened the program. I went into the program because I love children and I didn't enjoy working at a hotel, I worked in a fine jewelry store, but I wanted connection with children because I teach hula. But I went ahead and I did get involved with the Hawaiian Studies program. So I studied the Hawaiian Studies program in 1982 at Kahului School. Growing up I hated to read and when I started in

Hawaiian Studies program I started to learn about the history of Hawaii and I was shocked because when we went to school we didn't learn about history; we didn't learn about Hawaiian history. And I was, I thought, when I was reading Hawaiian history and I'm thinking, how wonderful, look at us, we have history and we've been studying American History. What are we doing studying American history when we can study our own. And so, it was just something that I got involved in and I started to do research and one day I was reading a book and I came across a name that was familiar to me; I saw a name Maweke and I thought, "I heard that name, why do I know that name?" And so, it got me starting to read and I read a lot of things, especially Hawaiian history, very, very important to me. (laughing) So, it was very interesting and it still is and it's more so when I was actually teaching with the children. History was the thing that I really enjoyed. I mean, you know, the Hawaiian Studies program was you shared your history, you shared music, you shared the dance, you shared the culture, but most importantly you shared values.

KT- Right there, let me pop a couple of questions first. How old are you?

C- Sixty-five.

KT- What motivated you to get into hula and then eventually teach?

C- Oh, I was as a young girl I attended King Kamehameha III School in Lahaina and in my third grade year they had, in that whole school, there were three Hawaiian teachers-four, I'm sorry four Hawaiian teachers that I remember.

KT- Do you remember their names?

C- Yes, Sam Mo'okini; Annie Greg; Winifred Sandborn; and Emma Sharpe. And Aunty Emma had put in a notice through the school daily bulletin through school that she was going to start hula. And, I was in the third grade then, I was in Mrs. Sandburn's class, I was very excited so I went home and I said to my grandfather and I said, "I'm going to take hula." And my grandfather said to me, "I don't have money for you to go take hula." And I said to him, "I think I can work something out." And he laughed at me. So, on the first day I went to class and I signed my name and Aunty Emma said, "Who are you?" And I told her and she said, "Who are your parents?" And I said, "My parents live in Honolulu but I live with my grandpa, they take care of me, my grandma and grandpa." "Well, who are they?" And I said, "Oh, Agnes and Sam Pauna." And she said, "Oh, that's my husband's ohana." And I said, "Aunty Emma I really want to learn how to dance but my grandpa said I don't have any money." And she said to me, "you know Alexa if you want to dance, all I want you to do is when we come to class, would you help me move the chairs?" Because we were dancing hula in a nursery, a preschool, she said, "Help me move the chairs on the side. Dust the floor with a dust mop and then after hula help me put things back." So I said, "Okay, I will do that." And so, being in the third grade that was my job; so every Tuesday I hurried down there and waited for her and she would drive some of the kids over but I was too excited, I would walk over. And it wasn't that far, it was like from Kamehameha III School to Campbell Park and I went over, waited for her, soon as she opened the door I did all my job and then I waited until it was my class. Well, I loved hula and she saw that I did and she noticed that I really did and pretty soon I was helping children to do their kaholo steps.

KT- Younger than you?

C- Younger than me. And as the years went by she started up an entertaining group called the Emma Sharpe Entertainers and then she brought in Kupuna and one of them

was my grandmother who was already seventy years old. And then she brought in boys; one of my brothers (my brother that's a year older than me). And so we had a group of children and high school girls and then we had the young men and then we had the kupuna. So, with that, hula became my life and I have to say it was not only my grandparents but with Auntie Emma taking me under her wing and teaching me the things that I might not have gotten; such as how to act when you go out into public. I spent a lot of time on weekends in her home. When I was a Sophomore in high school she decided that I could be her alaka'i. So, on Fridays she would come up to Lahainaluna High School, right after, to pick me up and we came to Wailuku. Auntie Emma taught at the, I guess it was called the community chess building in Wailuku. She would take the little children and I would take the older one's that had had hula already; took them in another room and I taught them classes and she taught me what songs to teach them. And then, the following year we came down to Kihei and we taught at, what at that time was called Auntie Nani's. It's across Kalama Park and it was in a Quonset hut. Auntie Nani started a restaurant there; last name Auntie Nani Kupihea and Red Kupihea. Uncle Red was the manager of Snow White Laundry. And Auntie always wanted a restaurant and they had this Quonset hut and she served Hawaiian food; lau lau and poi and so forth. There was a small house on their property. There were two houses, one for them and there was another house. And she was somehow related to Auntie Emma, and so Auntie Nanai said, "why don't you come down to Kihei and teach? I have a house that you can teach at, and you know we don't have that many children." And so, we came to Kihei. After we finished in Wailuku, around six o'clock, we would come down to Kihei and the first class started at seven and then we would teach until about nine. And I remember one girl and she- her dad was the man that started the corn farm, Ben Miyahira was the last name. And it was really great and Auntie Emma also later on had a house down in Kihei and we would go down to the house after we got through dinner and then spent the night and then later on Auntie Nani said, "don't even go there, why don't you just stay here." And so, on Friday nights we would stay in Kihei with Auntie Nani and then got up early and we were on the road by quarter after seven to go back into Wailuku to go back and teach from eight o'clock until noon. She would do her classes and I would do the other classes and I think back and I remember Auntie Nina Maxwell in Auntie Emma's classes. We also had Mary Kanaha and her two daughters; Patty and Pricilla. They were somehow Auntie Mary's husband was related to Uncle David. And so, these were the ladies that we got together and they were part of the Emma Sharpe's Entertainers. And when they opened Maui Palms Hotel, we had the Sunday night shows at Maui Palms. And it was really strange because, not strange, it was just different today and I look at it and I think, "wasn't that great?" we didn't get paid and it didn't matter and we looked forward to it to going there and entertain. And it was just to go out and just dance. And when we got through dancing we always went up to Tasty Crust and had dinner and then came home.

KT- How many of you?

C- There were normally two cars; Auntie Emma had two station wagons. So, there were four girls.

KT- Can you remember some of their names?

C- Oh Yes. From the Wailuku side we had the three Kanaha girls. And then we had from Lahaina was myself, Masa Medieros (she was Masa Pam Long), Alice Aki Shimamura, Ella Cosma (I can't remember her maiden name), and basically- there was

another girl-Patty Wong, from Wailuku, that came and we entertained. And then we had my brother Kk and then we had Alike Ross, Bill Labote, and then I had an uncle, his name was Keoki Levi and he was older than the rest of the younger people in there. And he was the life of the party, he loved music, he was a very, very big man; he was at least 6'4" and he was about 300 lbs. And when he laughed, you couldn't help but laugh, he was so funny; and he loved to dance, he had a beautiful voice, he would sing and eventually in one of our shows there was a movie actor named John Hall (he did movies underwater and so forth) he came to Maui and he met up with my uncle and he decided my uncle should go home with him. So, my uncle moved to the mainland for a couple of years and then came back home. But, in entertaining, when we started to get paid Auntie Emma said, "Okay you're all going to get paid well." You know a dollar a night entertainment and we all laughed because by the time we left Tasty Crust we probably paid about 5 dollars. But it didn't matter; we did what we wanted to do because the group that I danced with, we all enjoyed dancing. So, it didn't matter, so what was five dollars a week? That was dinner and that was fun.

KT- So how were you then?

C- I was just starting high school.

KT- Such a young age, you were alaka'i.

C- Yes.

KT- Let me steer something here. From all that you said getting into; to you what is Kumu Hula?

C- It's someone who not only enjoys the teaching. To me it's how I look at children, how I can malama the children and share the knowledge that I have, not only the dance part but the values; How to be a good person; A good person in a sense where the values that you learn in hula because you don't always get it in school.

KT- How can you relate being educated in Hula from Kupuna to why we're sitting here which is an interview that has to do with the 'aina that possibly might open up to build a hospital? Is there any connection to what you learned and what you'd like to share about this valuable land that we're talking about? And maybe you can start off with what we talked about, which we don't have on the recording yet, which is going way back in the 12<sup>th</sup> Century with Mo'ikeha make that connection. Because it comes up where we're talking about is close to Honua'ula. So what is the connection? What is the family tie for, which is more valuable?

C- Well, because I was not physically in that line because I was in Maui, but reading and asking questions, a lot of things my family didn't tell me on my dad's side I have learned through reading the book. And the values that they had and what they did and how they helped people. On my thing, that's what I like doing. I like to help people in whatever way; whether it's children, whether it's newcomers, that is my thing. And wanting to know about Honoa'ula, kind of, I can see a tie that I have with Honoa'ula. I've been trying to learn about Honoa'ula. And then what we're talking about with the new hospital, I'm thinking, you know that's kind of a very important thing that we need to have a feeling. I know there's a lot of controversy about- there's a huki huki between Kihei and Lahaina and I'm saying, you know it is very important, number one, to have another hospital. And you know, thinking, what would have happened, you know, if the earthquake was a big thing and the hospital, something happened to it. What would happen to people down here that would have gotten sick? So we do need a hospital. I can see we do have an

opportunity for somebody to come in and build the hospital that is not going to cost the taxpayers any money. I think that it should be done. I think that Maui Medical Hospital should at least (or whoever is making the decision) should open his mind and say, "hey, maybe they're it." Okay. I've also heard people in Lahaina say, "You know what we need the hospital, so give it to us." Okay, but here's somebody that's started this hospital on his own and he's gone out to them saying, why can't they do it on themselves? I think they can with the amount of people they have there. It's just that maybe somebody didn't think about it, or they don't want to put the money out. Okay. For me, let's do it. And with more people, or more developments happening here, we need something.

KT- So, we're going to trace that but lay down your connection; what you read with Mo'ikeha. So that's the cultural part that we want to provide on the value of this area we're talking about. True ancient times because Mo'ikeha, they noted I think came in about 1200 A.D.

C- Its, well, I'm still not all really thinking about that. The name came up and I thought, wait a minute, because they talked about when Mo'ikeha came up different people were dropped off in different areas. And I was trying to find out about Honua'ula; how did this, who was dropped off with anybody and where. I guess what they were trying to do, and I love it for it, is that dropping off the family because everybody in the canoe were family; either a brother, sister, cousin whatever was family. So, to plant these people on these different places and to start something, okay, now I'm not familiar with that-with this area, but I'm assuming that they got it going. They built this place and what did they do? They built it for people. And what am I doing? In my things, to me it's almost the same thing. I'm taking people, or I'm taking children, and then trying to teach them how valuable it is. How valuable, first of all, you are. You're very special. Look back into your genealogy, if you can find any, and then take it on and try. Try and do something. And for me to come from that line and to think, "Look what they've started." How can you continue to do this? How can you share it? Not only basically with other people, but maybe my family understands. This is you, this is who you are and where you came from, this is what they did. You need to continue. You need to pass it on. You need to share what the knowledge that you know. Why did they come? They came okay. So, they built this place and they did well. You know, even when he went to wherever he went they just didn't go in and just lay; they worked at it. Um, the good example is when they went to Waipio and it was nothing and they built it into something. And that would be, I'm assuming would have been the same thing here, what they did because along the way that they went and dropped off different people. I know that two sisters were dropped off in Makapu'u; that was one of the sisters. I mean, that is a place of importance to them; Kahana Valley because of the family. And so, my going back to that and coming up too, I say, "wow, they knew what they were doing. How do I make myself as part of that? What do I do? How can I do?" And just by finding out more information and sharing it and teaching whatever people.

KT- Well, I'd like to think that by just you and I sitting here and providing this, which will be presented to the public, whoever wants to read as well, will take that information and continue focusing in on getting what your ultimate goal would be which is really finding the answers to what was left here for us. So, how many years have you lived in Kihei?

C- Thirty- five.



KT- So, thirty-five is seventy?

C- 1971, Yes.

KT- So, today is October 20<sup>th</sup> and we just experienced an earthquake on the weekend and flooding from the tide, and ironically, your house was flooded.

C- Just my garage and my patio, right.

KT- But, this sense then how it is from the time you arrived.

C- Yes.

KT- The water does roll down.

C- Yes, we've lived on Ohukai Road for thirty-five years. Before we bought our house there was a big, major flood after a big heavy rain and the people on the mauka side of us had experienced flooding. And after that, we've had three flooding and most of it happened when they put the new highway up, the road. And under the road they have a big pipe and the water came down the road and flooded our house went right through the whole house and whatever. It was a job that they realized that they didn't do well; County came in did whatever. They protected us and they put a berm on it and somehow when they came to resurface the road they took the berm off so the water kept coming back. Lately, except for this, and the only reason that we could've prevented it was because we weren't home and unfortunately we weren't. So, it didn't do any damage except put mud in my garage. It would never have been a problem except when you're away. We were away for about 2 ½ weeks. With all the burning of the sugar cane and they must have wind because when our neighbor came over the drainage was covered with leaves and stuff and that was the problem. The water was draining properly but it couldn't go down the drain. So, if we were home, it would not have been a problem because we would have seen what was wrong and we would have kept the patio swept up like I normally do every week. I clean up the patio, there's no rubbish in there and stuff. It's just for 2 ½ weeks all the trash settled in there. So, it wasn't anything because like I said, if we were home it would not have been a problem and fortunately we had good neighbors and he went over and saw it and took care of it but didn't realize that it had gone into the garage.

KT- But being here for over thirty years from the entire strip of South Kihei; you've seen flooding areas, you've seen non-passable roadways. The more the buildings are put up, it behooves the developers to really look at the master plan and how to remedy these floods.

C- Yes, and I think like anything else, you would know where the water flows. You know, and you can tell. I mean- we on Ohukai Road, if it rains in Kihei it's not a problem. If it rains up in Kula it's not a problem because the water comes out and that's when we have a problem, basically. The normal rain in Kihei is not as bad, you know, because it's not coming down. The water's going down its normal drain or whatever. The County has gone in, and we've been after the County to fix the drainage and so forth. I had discovered that they were going to resurface the road; talked to my husband and he went to talk to the engineer and he said, "you know, we live on this side and we're catching all the water; you better rethink it." And they did. They did something so the water goes now down into the drain. But, it's only when we find out (and my son had said to me when he called) he said, "Mom, they had big rain up in Kula. Real heavy, ask Uncle Tom to go to the house." And that's where that water came from because that drainage comes down and I think there is like a small little kahawai, the water's coming from Kula, and then it shoots down in there. The drain pipe is like a big thing and it's

aiming right at the road so there's no way it is going anywhere else; it'll come right down the road. And so, when it rains there, Yes, and so many places (and I haven't been on that road) but like now we have the new highway. I remember when we first moved in and to get to cross when you pass Suda Store and you're going to go over that small bridge. I mean, there were times you couldn't go over. I mean, I know I did and after I did I thought I was dumb because I was on a Volkswagen and I went through and the water was really high. And then I thought, you know, I could have floated down in the ocean. You know, you don't even think about that. But with this new road now it makes it now where you don't have to. And it's like they say, only when it rains heavy up there do they have that kind of water problems. When we moved in our house we were told, in fact it must have been about two or three years after we moved in our house, and one of my uncles came by and he said, "I didn't know you lived here? Do you realize that I had to come over here and my job was to fill up this property?" And I said, "What are you talking about?" He said, "I had to bring in big boulders to put in. The property was below the road." And I went, "Really!" Then I said, "Is that right. When we had put in our yard, we ran into rocks but it wasn't rocks, it was boulders. We had taken out big boulders and moved it across the street. I mean they were humongous. And he said, "You know, that was my job. I didn't know you..." I said, "We didn't know anything." He said, "Yes underneath here you're sitting on big boulders." I thought, "My goodness." Then all my next door neighbors found out; they wanted to dig up some things and so they couldn't because had big boulders. We did what we could. Took out most of the big boulders and then put soil on it.

KT- So, to start with; up until the stoplight over there or just before that used to have sugar cane and mauka of Honoapiilani Highway was our cattle. There were ranches by Kaono'ulu, Ulupalakua; had different names. In the gulches that water came down from, in the report that we were able to have privy to go on this private land; almost every one of them (at least four of them) we found petroglyphs. Now, next to the new Elementary School...

C- Kamali'i.

KT- Keonekai then coming this way; there used to be, you didn't follow the story of makai of Honoapi'ilani had a discovery of a whole flock of petroglyphs. The developer let somebody go in with the bulldozer and moved it and the next day... So, we only got one existing picture that I haven't developed yet to show the importance of waterways to bring down iliahi, bring down koa to makai. Therefore, our people used to stay in specific areas. If you open up the Kula one right here and just turn to where there are pictures you'll see that...

C- Did you do all of these?

KT- Look how interesting that one is; Japanese characters, it's the same riverbed...

C- Is that Japanese or Chinese?

KT- Well, it's Chinese characters but Japanese exclamation. The writing on the left means Ito, which is the person's name. The one on the right is Diniho which means "Big Japan" and the one in the middle I have it written somewhere. But, it's been a wonderful journey that Kimokeo and I are taking in being able to walk this land because it's not privy to maka'ainana you know. So these reports, which will be after the developers present it to the Maui Planning Commission, will be available to the public.

C- So this is what you've been doing?

KT- This is basically what this interview is about; utilizing whatever information comes from the interviews.

C- You know, it's so- well, and I'm partly wrong on that, because I was born and raised in Lahaina I most familiar with Lahaina. We lived, and I don't know if you're familiar with Hale Aloha? Okay, my grandmother was the caretaker of that and that's where I was raised. And so, then I left, when I got married we moved up to Haiku and then Olinda. So we were away, we were Upcountry for about ten years until we moved down here. So, all of the history that I knew was only of Lahaina. And of course when I went home one day and then I'm now back at our church, I discovered that our Hale Aloha was sold. Our property was sold. I about had a heart attack, how terrible! And it was sold and now I know that the County has it. But to me it was a part of our life. And now I'm back at our church, I've been there for a number of years, and all the things that we had before; our church we had lots of property. We don't anymore, we just have one more piece of property and I think how shameful that it happened. But, you know, it's who was the head of the church and what they felt they needed and so forth; but it's sad and I only know of that. I know a lot of history of Lahaina about the Kaua'ula wind and I was involved when it was my grandmother and all that kind of stuff. Coming into Kihei, when we moved to Kihei, I had to go to work because we bought a house. So, basically all I did was go to work and come home and not really learn about it. And it's only been recently, when my cousin passed away a couple of years ago, she gave me a book; Fornander's book on the Polynesian coming to Hawaii. Before she did she told me that she had this book and I looked at the book and I said, "Oh, I'd like to have one." So I came home and talked to the librarian at the school and she said okay and she looked and inquired into buying one of them. Well, it was out of print and the one that they had was \$900.00 and I said, "Forget it." Well, before my cousin passed away, she handed me the book and she said, "This is for you. Please read the book and then pass it on to your daughter and then pass it on to your granddaughter." And so I said, "Oh, wonderful!" And so it's only because I got that book and I started reading and I'm going, "whoa, we were somebody. Our ohana was somebody." And what did they do and in fact I was just going over some stories that my aunty had written and cousins that had written for our 20<sup>th</sup> family reunion about how they were raised and stories and I'm saying, "you know, I need to do something." And so, I had just gone to a workshop in Honolulu before I went to the mainland and the Hawaiian Studies have a place based sessions where we go to the school and we try to teach the children about the school, number one and then about their place, you know, which was very, very interesting. And so, I automatically, not here in Kihei, I should be doing that, but automatically my thinking went back to Lahaina. And so I started and she said the idea was to start writing things about what you remembered and when you grew up. And so, I got really excited and while I was on the mainland and every chance I had, I was on the computer writing stories about what I remembered. And, I was talking to my son about it and I said, "You know, this is what I've been doing." He said, "Oh mom, that's really good." And I said, "You know, why don't you start writing? You grew up in Olinda, you really didn't know Olinda because we moved down when you were about 3 years old." And I said, "What do you remember about Kihei?" "Well, I remember this and this and that." I said, "You know what? Why don't you start writing about it so your children will know what Kihei was when you grew up because it isn't anymore?" And he said, "That's right." He almost broke my heart when

he said, "you know mom, you know when everybody's moving over here and there's no property and it's hard to get." He said, "Granted I have a house, I have my own place, I'm doing well. Sometimes I feel I just want to get up and move." And I said, "You know, that means you're leaving your island. You're going to go and you're going to think it's a good idea but then you're going to be lost because, you know, as a Hawaiian for some reason we're connected to the land." And I said, "Why make something better outside of Hawaii when you can do it here?" And he said, "You know you are right but sometimes...." I said, "Forget about people coming in and having gated property. Think of you, what do you want to do? What do you want to do? Where do you want your kids to go? How do you want your kids to be when they grow up? Do they want to be part of this land? Then you need to teach them. Say, 'this is where I grew up, this is what happens, I'm going to do this so you folks can have this but you have to learn how to carry it on and pass it on.' See son, you know more about Kihei. I worked so all I did was go to work, some home, go to work at the office and then teach hula at night and that kind of thing so I was all involved with that." But I said, "Now it's different. The job that I have now, I'm a lot more free so I'm now thinking I should have done this, I should have done that, but do it now. Learn about what area that you're living in." And it's only been- when I was in the mainland I was writing the stories about Lahaina I said to myself, "I don't know anything about Kihei." I really don't. Except I know about the fishpond and I know that it's not only there; there's lots of fishponds in Kihei. You know, did you know this? Did you know that? You know and it was only well, we went down here- what is her name, the Hawaiian girl that is down here used to be with the fishpond?  
KT- Joann Olivera's niece.

C- Yes. And through them and through Kimokeo we learned about that and we were going to do another one and we were going to do it eventually through the Akina family; Bonnie is setting it up so that we will learn. And I said, "I want to learn more, I want to know more about this place. All I know is where I live because I've been working." Now I don't work as much, I'm thinking while I was on the mainland, I should come home and I should learn more and then you called me to tell me to do stuff like this. I want to know more about Kihei. I never learned. I never knew anything. People were always busy but a lot of them are not busy anymore and we have the time.

KT- What you're saying is important for young people to get. How old is your son?

C- Thirty-eight.

KT- So, it's not unusual for young people like him (maybe younger, maybe a little older) to have these feelings because it seems like other people are making decisions for us but we're letting it happen. So, like you said, it is how I feel and Kimokeo and many of us who are taking a positive, not a physical, approach but an intellectual positive approach to not only holding on but doing something.

C- Yes, and it's important that we do that, it really is important; we need to do that. And you know, I don't want to see my grandchildren moving off island. You know, they're all going to a good school now, they're very, very young and as much as I can I try to teach them different things; values, I teach them what I grew up in. When I grew up I learned a lot of things from my grandmother, values that were very important. Um, and so, you know we have a way to better ourselves and to help one another. So I found out that I learned more from my grandmother so when I do things, I do things from what I had learned from my grandmother and I've taught my children the same values I learned.

I was very hard and you probably came from the same kind of things I did when I was brought up; you were to be seen and not heard. You had no choice, you were just given things and you did it, there was nothing wrong with it; that's the way you grew up. But, I married a haole and my kids did not like the way I did things. When I moved into Kihei I was labeled as the meanest lady in the neighborhood with my kids.

KT- By your kids?

C- Not from my kids, the neighborhood kids because I was very strict with my kids. If I was not at home and they came home from school they had to stay in the house, do their chores. The only reason I did not want them to go out and play is that if they got into an accident there was no adult around. So, I was the meanest lady and it didn't matter. When my daughter became- was ten years old- she said to my husband, "I hate mom because she lives in another world. She's not in our world." And so my husband said we better sit down and have a conversation. I was very upset. If I could have I probably would have hung her on the tree, I was so mad. How dare you, tell me your mom, about that. So we sat down and I was very upset and my daughter said, "Mom, we're not in Tutu's world, we're in a different world." I said, "What is your problem?" She said, "Every time we ask you for something we don't finish our sentence and your answer is no." And so my husband said, "You know, if we don't resolve this, the kids are going to hate you forever. The kids will get in trouble or they'll leave you, whatever." And I was very upset and then I said, "Okay, I'll make a deal. I will try real, real hard. I will try to look what is happening in today's world and not look the way I was brought up. I will work hard at it and I will try to see how I can make things easy. I cannot do it overnight and there is no way I can do it in six months. It's going to take me a long time because I was brainwashed the other way." And so the kids said, "Okay, we'll go with you that way." I said, "You gotta be patient and I have to be patient." And so for three years we worked at it and I can turn around and I can say to myself how lucky I am because my daughter is more haole thinking, in a sense where the new technology coming up, she is very involved in that kind of stuff. So, her mouth is faster and so she just stays the way she is; and that's okay. On the other hand my son is very Hawaiian and he's like I am. You don't get involved into anything unless you can see the outcome. And we both think that way. I had to say to him, "You cannot think like me because this is a different world. In my world it was okay but with today's technology with everything, the ideas of people it's very different. You have to look ahead and see how you can handle it."

KT- Even though that situation exists the Hawaiian values of ancient times have become more valuable than we gave respect to before.

C- That is so true and it continues. I see that now and I say to myself, "I'm so glad my daughter opened her mouth." If she didn't, I don't know where I would be, really. She made me see the idea to take all your Hawaiian-ness and then you look at the other side- you look at the American side and you take the good part of it but you keep what you learned in your Hawaiian. I see that in the way my kids are today. I see my son training my grandchildren and I do the same thing. Think Hawaiian; the values are important. And today, people respect him and his family because of his ideals and his upbringing and how he is. He doesn't jump at people or whatever; try to work it out. "Well, this is the way I would do it." You know that kind of thing whereas other people will get upset. There are a lot of young families that are always saying to him, "You know, I don't know what it is but you kinda bring all of us together and your kids are very well behaved and

your kids teach us things that we have not learned from our parents.” And so, I see that happening and so I know for what I have learned I have taught and they’re learning and they’re teaching. Same with me; we’re not only teaching ourselves, we’re teaching anyone that comes in contact with us. You know Hawaiian style you have to be careful of what you say about other people. You know, it’s not nice; not even kidding, it’s not nice. My husband sometimes has a habit of just saying things in fun but not realizing that it’s not always funny. Gotta be very careful and it’s something that they have a hard time because they’re not taught that way. We think before we open our mouths. I say, “You know one of the worst things I was taught, my grandma said to me, ‘Be careful of what you say because you cannot take it back.’ You cannot do that.” You know? And it’s something that you know, when we think about it, that’s true. You know its how you’re thinking.

KT- We’re reaching 10:45 and I know you gotta be going out, leaving pretty soon so; In reflecting whether you know, or historically looking at it, there has been major change in this the ahupua’a of Honoaula. The area that we’re investigating really comes under the ahupua’a of Kula which includes Waiohuli, Kaonoulu. So, as a person working in Hawaiian Studies in the DOE, you folks have had experts come and talk about plants. You as a Kumu Hula know that value of plants. Are there any things that have made an impression upon you of the plants that exist in this area that we’re talking about?

C- No, only from what Kimokeo had said to me a long time ago. I guess when he first got involved with Honoaula about all the different plants that they had in there. I don’t see a lot of Hawaiian plants at all.

KT- You know the name Mahealani Kaloku’okamaile? See this picture, he’s in that one right there.

C- Did you do this? Did you folks do this?

KT- Yes, this is our work. This is his philosophy: He said anybody can drop him anywhere on any island in Hawaii and he can point out the indigenous plants of Hawaii. The point being it still exists but it behooves us to learn what it is.

C- Yes.

KT- So, I think one of the grants that should be developed is utilize his passion. You know he’s doing construction work building houses and his bosses are saying, “Eh, you don’t belong doing this. You belong talking about who you are and what you know.” So, I agree. I mean, here is a young man in his 40’s. Do you know Renee Silva?

C- No.

KT- These are the names you should keep. The name Silva. Now, I just assisted in Mahealani in the protocol in doing a blessing for the KIRK Kahoolawe group. The weekend before the earthquake, the Saturday before the earthquake, and their goal was to go into Kula and do protocol to send the rains to Kahoolawe because it’s getting dry; and the rest is history. You can take it for what it’s worth. Whatever they did, did it have effect or what? But, this man, as a Hawaiian, is one of the brightest, passionate, I mean.... I cannot let these books out yet because they haven’t been presented but I would love to run a copy. I might have a black and white copy if you want to take a copy.

C- You know my grandfather... See, what is his name? Elden, Elden Levi is an entertainer and his grandfather's name was Levi Ka’iaokamalie. They dropped the Kai’iaukamalie and he went by the name Levi. When Elden got married, Elden shocked everybody in the whole church when the minister said, “I would like to present you to

Mr. and Mrs. Elden Ka'iaokamalie." My uncle's son (who was the Elden) dropped, changed his name without his father knowing. They were just totally shocked and father was hurt and then afterwards they said, "Why you hurt? He's brining the name back, that's what it was." So that's how my tie in; in fact Hamby's niece, I heard that somebody hit and run they had a funeral tonight, there was that Arcangel boy 25-26 years old was hit by a car (hit and run) and they're having the funeral today and tomorrow. It's his grandmother who should have been a Ka'iaokamalie instead of Levi and they all come from up that area. And so, as a child my grandma used to take me up to Kanaio and it was all the same family and I didn't realize that they lived up there. Somebody said, "You used to go up there?" and I said, "Yes. It was near the main road and then we went there and the lady's name (all I knew) her name was Aunty Mileka and she lived right on there on the main road going into Kanaio before you go into Kaupo. And we went up there at least two three times a year and it was a family thing. And I go, "I remember that." And so, one of the boys that works with Hawaiian Studies is Russell Ka'iaokamalie and he's at Makawao School.

KT- I wonder if that's the brother?

C- I was just wondering, Yes.

KT- How old would he be?

C- Russell? Maybe in his late 30's if anything early 40's.

KT- Did he work on the Mo'olele, do you know?

C- I think he's involved with Kahoolawe also. His wife is now a school teacher at Kamehameha Schools.

KT- Might be the younger brother.

C- Could be, Yes; But that's interesting that you're talking about they went over to Kahoolawe last weekend and my sister happened to be on that. KBH went over to paint the barracks and they didn't pau and so she was telling me- Actually she's my half sister. We both have the same mother but we were raised; she came back, my mom had her, when she was born my mother couldn't take care of her. My grandma brought her home, I was in the fourth grade, I raised my sister. And we got married and my grandpa said, "I'm going to go pretty soon, you need to take care of the children." I had my sister and a cousin living at home and after my grandfather passed away I took my sister. My cousin couldn't go with me and then my husband said, "I don't like this idea of us taking care of her and somebody pick her up and take her." So we adopted her. But she had an experience on Kahoolawe. And she said that the morning they were out doing the rising of the sun and she said just before they did a presentation of- they had taken a coconut and she said the earthquake started. And she said it was unbelievable! Everybody had to go back to the barracks and everything and they had a ho'oponopono because they didn't understand. She said, "You know what? I wasn't being negative." But she said, "I was thinking, did I cause that? And all of a sudden maybe the way we were thinking caused it." And I said, "Well, you know, did you guys talk about it?" And she said, "Yes we did." My problem, Keli'i is that I was raised with Emma Sharpe as the Kumu Hula or as a student, whatever, I learned a lot from her. I never- Aunty Emma was not a chanter. She taught us the traditional; Kalakaua, Ae ala o Pele, that kind of stuff. She was afraid at that time to teach us something that maybe we could not handle. And so therefore, she was more of an Auana then she was Kahiko. And so, my knowledge, every chance I get to go to whatever workshop I can, I want to learn because I never learn. And I want more

so now to learn the different protocols and the different oli's. I have a granddaughter who went to, she's at St. Anthony's and she's very young, she's only seven years old. But last year she was six years old; she went to Kamehameha School for summer program. I don't know who was up there that taught them to dance, to sing and taught them oli. This is my gifted child, this little one. She came home and she did oli for me. I had chicken skin, I sat down and I thought, "Wow, I need to do something with this child." She's a tomboy but when she dances hula there is no tomboy in that girl but she loves, I've been trying to teach her to do simple chants to pa'i the ipu and do things like this because I find that she is probably the most gifted one than my other two. They all dance hula but this one is very, very special. To pick up an oli and to sound, and she was only six years old and to come out with it; I was very impressed. I was very impressed with this child and I thought, "Okay grandma you don't know anything about things like that, the kahiko stuff. We need to get somebody to do something with her." And that kid will take-she is a learner; she's a child that you don't need to tell her what to do. She will walk in my house and she'll say, "Grandma your house is messy." And I could have dishes in my sink and she will just go right over there and she will start and she will look around, you know. Or if somebody walks in, or they come to my house; I have company they don't even know and she's the one that walks in and she says hello and she gives them a hug. You know, that kind of thing that is normal for me to do. And I'm seeing that and I'm saying, "Well, at least I'll have somebody that will pass it on." And you know, it's sometimes it's nice to have children that are very akamai but that's all they are and they have no common sense. And I have my oldest granddaughter and my daughter are both like that. But this child, I swear she is very gifted. She is as bright as can be. She is very loving and caring. She's just taken all of her- what she knows- I'm saying her Hawaiian blood and she's found all the things she can do and she does it. I mean way beyond me and I'm thinking, "Whoa, that one's going to take care of my halau. That one is going to carry on what I had and be even more better than I am." And I said, "I need to help that child. I need to expose her to the things that I know she can do." I mean a fabulous basketball player, a softball player, a soccer player, hula dancer; I mean everything. I mean, hey I can do auana, that's my thing you know, but it's more, you know; and how lucky. So I'm looking around and I'm saying, "You know I gotta send this kid someplace, she wants to learn you teach her." You know, to give a child a knife and tell her to cut onions, it's unheard of for a six year old; not this one. Show her how to be careful and everything and she can do it. That's almost scary, you know, to have that.

KT- Today we're more with it but me out of it, looking at it; the world is changing so quickly that the people are changing and periodically there will be such children and I'm glad you have one. But, two things I want to say. Number one, what came out of your mouth at the early stages of this interview saying that you're a non-reader; I'm a non-reader. I always looked at. Okay, I tell my children, "I don't like to read. But your dad is holding a doctorate degree. And why is that? Because I found what I'm passionate in doing and that's how you gotta enter your life." So my son went to MCC, quit both semesters, then he went back for the third time and I don't know what he's doing now because I kept trying to coach him to take the classes you love first. But he went the opposite way. See, no listen. But that becomes a challenge when they want to be



independent and not use the advice of the makua or their kupuna. It creates some challenges for them. He will succeed but why go the hard way?

C- Yes, go around first, Yes.

KT- Yes; Here's the path, go through the path and create more just like your creative child here. You show 'em how and she just go.

C- Yes.

KT- And that's how they need to be.

C- I think my son, my son is the- he's East Maui Irrigation Vice President and he works with all the Hawaiian boys out in Hana. He went to college for communications and came home and applied at A&B only to find himself working out in the fields. And the idea behind that was, "Mark, you have communication skills. You need to communicate to this- we brought somebody from the mainland, they don't know how to communicate with the people in the field." So he went and he was very good at it and it was strange because he's married to a Filipino. He knows more Filipino than his wife does because when she came here (they moved to America for a new life) the mother said to the little girl, "You gotta learn English, you not going to learn Filipino." So, and which is okay. But then when he went to work to Kailua and they were still kind of, you know, haole boy, you know, he doesn't know us local people and then they found out he does. And then they go, "Boy, how you know all this local stuff?" And he says, "My mother's Hawaiian. I'm Hawaiian." "You're Hawaiian?" He said, "Yes, I don't look like it but I am." And so, he works with them and he said, "Once they found out that I wasn't really a haole, I can work with them, they can work with me and I can..." He said, "What I'm trying to do is I'm trying to help educate them." But they're finding that, going to work is a good thing. Hey, I can be somebody. Hey, look at me, I'm better now. And he said, "That's how you do it." And I said, "Well, you have a gift to do that." Both my children have a gift of sharing their culture; taking what they've learned, taking their, all the values that they've learned (well not so much the Hawaiian cause they know that) he said, "Mom, they're changed now. They're very proud of themselves. They feel like they're somebody now." And he says, "I don't ride 'em. He said, "That's not my thing and when they do a good job you guys say thank you, you know." They said, "What is wrong in saying thank you because without them, I wouldn't have the work done." So, it's become a normal thing for him. My daughter is the same way; she pick up people and she teach them, she train. No, the way I learned it at home, we do it like this and don't be nasty because you know, she's the boss and whatever. You know, don't do that to people, that's not right, you know, that kind of stuff. So they learn those things but to pass it on! And then I'm finding that the grandkids have learned those things and I'm saying, "How lucky." So, I know they know. I know they have the values which are important and I'm happy for that. So, I in turn, whoever is in contact with me, they're going to have to learn from me. And a lot of friends that we have from the mainland come back year after year and I, "Oh, we're going to a party." And they, you know, "Let's not do this." You know and they say, "Eh, stop and think. If it was you, what would you want them to do?" And those are the just the simple values. But they're not trained. They don't do things automatically.

KT- Here's something you posses that was passed on to me early by Hoku Padilla and when I moved back to Maui she made this prolific statement that I agree uipon. She said, "The culture has been carried on by hula halau's and coming close." And the reason why

I embrace Kimokeo's friendship, he asked of me if I would help him when he was the President of Kihei Canoe club. That's how we became close which has lead to ceremonies here and there; but, when you really think about it, that's true. However, other areas had come from it, but those two things are the foundation.

C- I've had hula kids for so long and you know, I don't even think about it but parents do say (and look at it and I don't think it's true) but they say, "You know Auntie, you not only taught the kids hula, you taught them values; you taught them how important they were and that they should think about other people too. And for what they've learned in hula class that they should share with other people." And you know, our kids have gone away to school to the mainland and I still work with the kids who go off to school; they'll call home and they'll talk to their parents and their parents will tell me, "Auntie I gotta make 15 hula skirts." "Oh, Yes I'll be alright, I'll make it." The kids are going to have it, that's fine, no problem. But these are not Hawaiian kids. These are other nationalities and I'm saying, "Am I doing that? Am I actually doing that?" And if I am, then I'm glad I am. It's not only my grandchildren. And my goal everyday ever since I got into Hawaiian Studies class in teaching, if I can go to school and make one child happy at the end, I'm doing okay. You know, if I can give them a squeeze and they say, "I love you." That's my day so I can do that.

KT- Was it by accident you got recruited, or you just....

C- No, I wanted to do it. I mean, I was working at a fine jewelry store at one of the hotels down in Wailea and I went (in fact was Intercon) and I was- a new lady had come aboard to take over and she was on my case and she said, "I don't want you to be particular about everything in the store. I want you to sell." And I said, "Well, I can sell but I'm a very fussy person about jewelry and stuff and I'm fussy about bookwork and stuff." She said, "Well, I don't need that." So she made me upset. So, I had called DOE and I had talked to Ron Okamura and I said, "I understand you have a Kupuna program. I don't know anything about it, can we talk story?" And he said Yes so I went up and he said, "You know by the way (and this was like on a Thursday) by the way next week Monday we have a two week workshop on Maui. Kamehameha School is coming over and training teachers and Kupuna and if you're interested you can go to that." And I said, "Well, I don't know. I'll think about it." So I called my husband and I said "We need to talk." We went to lunch and I told him about the program and my husband's way of thinking was money because we had both built KNUI Radio Station and I had worked with the radio station and I was still doing stuff at the radio station and I was doing my job and teaching hula and I told him. You know I said it sounded like a real good thing I really want to get involved in. He said, "How much money are you going to make?" And I said, "Eight dollars and hour." And he said, "Is that all?" And you know, we had just bought our house and stuff and I was very disappointed. So, I got out of the car and he came out and he said, "You know what, take the job." And I said, "What changed your mind?" He said, "All this time you were talking to me about what the Kupuna has to do and stuff, you face just lit up." He said, "Take the job." So I went back to work on Friday and the lady was still on my case because she was a new manager. And she said, "Now I want this and this and this." And I said, "Oh, you know what? I'm turning in my resignation. Sunday is my last day." She said, "What did you say?" She says, "Do you have a job?" I says, "No." She said, "Then why you leaving?" I says, "Maybe you would find somebody else better than me." She said, "Well, who's going to do my

books?" I said, "I don't know but I'm leaving, I'm sorry I will stay until Sunday." She said, "That means I have to come back again." I said, "That's not my problem, that's yours." So on Sunday was my last day and I went to the meeting and I didn't know anything and I got in there and I thought, "My goodness, is this us." And for two weeks, it was just a wonderful program.

KT- Do you remember who came over?

C- It was the two ladies from Kamehameha School; Maheanlani something. Pescaia and somebody else from Kamehameha School.

KT- Little older then, Pescaia.

C-Yes. And so, I got involved in that and you know, I was so lolo because I didn't know anything and that was during the summer. Kekealani had just become the new po'o for that position. So, I went in and I checked in and I got involved and I thought, 'wow'. From that I was so excited, for two weeks, I couldn't wait to go to class. It was like, years later, it was almost like I was involved with Aunty Kanakaole; when she came to teach it was something like that. They kept saying, "You know what, it's nothing that you gotta learn. Stop and think; how were you brought up? What kind of values did you learn? That's what we want, it's got nothing to do with reading the book. This book here shows you, gives you ideas if you're looking for something on the wa'a or something, it tells you. That's all. It's what you grew up with and I said, "really." And they said, "Yes." And I went to school, I didn't start work until February of the following year. I was terrified and she said, "just remember; just go down." So, I went in told the teachers this was my first time, "You're going to learn and I'm going to learn." And then as I was teaching, I go, "Whoa, that's right, that's what I learned at home." So it became very easy.

KT- Do you know, what is his name from the Carvalho family?

C- Yeay, Ka'aehui? No.

KT- Relative to Ka'aehui, what was his name. Anyway I turned over my cultural classes at MCC to him. Oh, Hinano Rodriguez; they're ohana. But Hinano was a professor at UH when I used to go. When I was working on my doctorate he was a teacher so I used to go sit in his language classes. He emailed MCC, he said, "You know, I'm pretty good at the Lahaina ahupua'a but the Eastern side I'm not too good." So they kicked it to me to respond to him. So I called him up and I said, "Hinano, this is how you approach this." Because he was thinking he was falling short of what the job required. I said, "Hinano, you know, you've been there in the classroom. You know 90 percent or more are po'e haole. Just by that fact, you know you know more than them. So because you know more than them, you can work with them because you know more than them."

C- That's true. And you know, my biggest thing is there was a teacher and I was teaching her class (it was a sixth grade class, I think) and we were talking about sugar cane and there was a word that I used; oh, the word "hapai" and I was telling the kids what hapai was and I was showing you know, so that they would understand. And the teacher said, "excuse me Kupuna, that is not Hawaiian, that is Japanese." I went, "No, I think you're mistaken." She said, "Nope, that's what we use in our house." I said, "Oh, your father work in the sugar plantation?" She said, "Yes." And I said, "Your father would come home and say 'I tired today, I had to hapai ko.?'?" She said, "Yes." And I said, "It's Hawaiian. Your father was learning the Hawaiian." "No I grew up with that, that's Japanese." I said, "No, that's Hawaiian." And so I'm saying, you know, people

don't realize and that's what we do. It's our nature, we just throwing the Hawaiian words and so it becomes part of their culture and they think it's theirs, you know; which I think is great. But teaching Hawaiian Studies really, really- I don't really enjoy my job right now.

KT- Which is?

C- I'm like the resource teacher going and...

KT- For the DOE?

C- Yes. Kind of keeping tabs with the school. I have a good relationship with all the principals, all the sasa's. I don't have problems and they like to work with me but I miss the teaching. So, whenever I go to a school and the Makua is not there or the Kupuna, I jump in there. I just get involved in there and I teach and then of course I do a mistake because then they say, "Will you be our Kupuna?" "No, I'm sorry I cannot." (laughing) But I really enjoy it and I do that with the kids at hula, I teach them values and stuff.

KT- Every school has a Makua or Kupuna?

C- Not all, I'm looking for people. I need one at Iao and there's couple of; well, Lihikai needs somebody. It's very difficult to find because they like the pay, the pay is good now it's 20 dollars something, 22 dollars or something like that.

KT- My question, just like Mahealani; I made a statement, in there I left in the interview was, oh and even my transcriber who worked on this she said, "Wow, he-by this report (which I'm going to find a copy for you)..." By what she read of his work prevented her from away.

C- Really?

KT- That's how powerful. He's only in stories but he was grounded at a small keiki time. I was in Kahikinui doing a ceremony in the 80's; you familiar with Kahikinui?

C- Yes.

KT- You know, there's that hill that is the Luala'inua and the Kahikinui ohana had a house on the right hand side for the people go plan and so forth. So, I was there and so you can visualize. I was there looking up the road and I see this movement coming down the road. And I know, I mean this is from Kanaio. Where this guy coming from? And Kimokeo is like him. Kimokeo goes up and down the mountain by himself. These are the kinds of guys that I'm so appreciative...

C- He looks like Russell. Next time I talk to Russell; he looks like Russell.

KT- So I told him, "What, why are you so passionate?" Well, you know we're doing this with developers but the way he looks at it, you know, developers say, "Bulldoze, no more any culturally significant things." And what they're referring to is no more heiau's and no more stone walls and stuff. But his mana'o is 'eh, as a cowboy right in the corral I look down at my horse and there is a ko'i or an ad (you know the front part of it) what is that if that's not cultural." And generations have used this corral but that ko'i was for me to pick up to come to come to the realization.

C- Well, this has been very, very wonderful.

KT- Likewise. Let me go look for that report. So the process is I'm going to transcribe, come back to you to let you look at it to approve and then we'll have your signature and then submit it.

C- Okay. Wow, that's a lot of work!