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DEPARTMENT OF LAND AND NATURAL RESOURCES
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September 26, 2016

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Scott Glenn, Director
Office of Environmental Quality Control
Department of Health, State of Hawai'i
235 S. Beretania Street, Room 702
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OCT 08 2016

Dear Director,

With this letter, the State of Hawai'i Department of Land and Natural Resources (DLNR), Division of Forestry and Wildlife (DOFAW) hereby transmits the draft environmental assessment and anticipated finding of no significant impact (DEA-AFONSI) for the Pāku'i Watershed Project situated at Pua'ahala (TMK: 5-6-06-002), Ka'amola (TMK: 5-6-06-003), Keawa Nui (TMK: 5-6-06-007; 5-6-06-025), West 'Ōhi'a (TMK: 5-6-06-010), East 'Ōhi'a (TMK: 5-6-06-011; 5-6-06-018), Manawai (TMK: 5-6-06-013), Kahananui (TMK: 5-6-06-014), 'Ualapu'e (TMK: 5-6-06-026), Kalua'aha (TMK: 5-7-05-001), in the moku of Mana'e on the island of Moloka'i for publication in the next available edition of the Environmental Notice.

Enclosed are a completed OEQC Agency Publication Form and one copy of the DEA-AFONSI. A searchable Adobe Acrobat PDF file of the DEA-AFONSI can be found at the following link https://dlnr.hawaii.gov/ecosystems/files/2016/09/PakuiDraftEnvironmentalAssessment.pdf . A summary of the action can be found in the Project Summary section of the Agency Publication Form. An electronic copy of the Agency Publication Form in MS Word and a link to the electronic copy of the DEA-FONSI will be included in a separate email to your office.

If there are any questions, please contact Katie Ersbak, DOFAW Watershed Partnerships Planner at (808) 587-4189.

Sincerely,

Suzanne D. Case
Chair, Department of Land and Natural Resources

Enclosures:

17-137

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OCT 08 2016

AGENCY PUBLICATION FORM

Project Name:	Draft Environmental Assessment for the Pāku'i Watershed Project
Project Short Name:	Pāku'i Watershed Project DEA
HRS §343-5 Trigger(s):	§343-5(1) and (2)
Island(s):	Island of Moloka'i
Judicial District(s):	Moloka'i
TMK(s):	Pua'ahala (TMK: 5-6-06-002) Ka'amola (TMK: 5-6-06-003) Keawa Nui (TMK: 5-6-06-007; 5-6-06-025) West 'Ōhi'a (TMK: 5-6-06-010) East 'Ōhi'a (TMK: 5-6-06-011; 5-6-06-018) Manawai (TMK: 5-6-06-013) Kahananui (TMK: 5-6-06-014) 'Ualapu'e (TMK: 5-6-06-026) Kalua'aha (TMK: 5-7-05-001)
Permit(s)/Approval(s):	
Proposing/Determining Agency:	State of Hawai'i, Department of Land and Natural Resources, Division of Forestry and Wildlife
Contact Name, Email, Telephone, Address	Katie Ersbak, Katie.C.Ersbak@hawaii.gov, (808) 587-4189, 1151 Punchbowl Street, Honolulu HI 96816
Accepting Authority:	(for EIS submittals only)
Contact Name, Email, Telephone, Address	
Consultant:	The Nature Conservancy, Moloka'i Program on behalf of the East Moloka'i Watershed Partnership
Contact Name, Email, Telephone, Address	Stephanie Dunbar-Co, sdunbar-co@TNC.ORG, (808) 553-5236 x6590, PO Box 220 Kualapuu HI 96757

Status (select one)	**Submittal Requirements**
__X_ DEA-AFNSI	Submit 1) the proposing agency notice of determination/transmittal letter on agency letterhead, 2) this completed OEQC publication form as a Word file, 3) a hard copy of the DEA, and 4) a searchable PDF of the DEA; a 30-day comment period follows from the date of publication in the Notice.
____ FEA-FONSI	Submit 1) the proposing agency notice of determination/transmittal letter on agency letterhead, 2) this completed OEQC publication form as a Word file, 3) a hard copy of the FEA, and 4) a searchable PDF of the FEA; no comment period follows from publication in the Notice.
____ FEA-EISPN	Submit 1) the proposing agency notice of determination/transmittal letter on agency letterhead, 2) this completed OEQC publication form as a Word file, 3) a hard copy of the FEA, and 4) a searchable PDF of the FEA; a 30-day comment period follows from the date of publication in the Notice.
____ Act 172-12 EISPN ("Direct to EIS")	Submit 1) the proposing agency notice of determination letter on agency letterhead and 2) this completed OEQC publication form as a Word file; no EA is required and a 30-day comment period follows from the date of publication in the Notice.
____ DEIS	Submit 1) a transmittal letter to the OEQC and to the accepting authority, 2) this completed OEQC publication form as a Word file, 3) a hard copy of the DEIS, 4) a searchable PDF of the DEIS, and 5) a searchable PDF of the distribution list; a 45-day comment period follows from the date of publication in the Notice.
____ FEIS	Submit 1) a transmittal letter to the OEQC and to the accepting authority, 2) this completed OEQC publication form as a Word file, 3) a hard copy of the FEIS, 4) a searchable PDF of the FEIS, and 5) a searchable PDF of the distribution list; no comment period follows from publication in the Notice.
____ FEIS Acceptance Determination	The accepting authority simultaneously transmits to both the OEQC and the proposing agency a letter of its determination of acceptance or nonacceptance (pursuant to Section 11-200-23, HAR) of the

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

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

The State of Hawai'i, Department of Land and Natural Resources (DLNR), Division of Forestry and Wildlife (DOFAW) in collaboration with The Nature Conservancy (TNC), Moloka'i Program and the East Moloka'i Watershed Partnership (EMoWP) is proposing to construct a protective fence through the upper Pua'ahala, Ka'amola, Keawa Nui, West 'Ōhi'a, East 'Ōhi'a, Manawai, Kahananui, 'Ualapu'e, and Kalua'aha ahupua'a (land divisions), collectively referred to as the Pāku'i Unit on the Island of Moloka'i. The proposed fence will be approximately 5.5 miles in length and protect approximately 2,080 acres of vital watershed. The entire 2,080 acre proposed project is a mixture of public and private lands located in the Conservation and Agriculture Districts.

The Pāku'i Watershed Project is part of a larger vision to care for southeast Moloka'i's remaining native Hawaiian forests. These forests sit atop and help recharge the 'Ualapu'e aquifer - the source of residential water supplied by the County of Maui in Mana'e. Less than 15% of the original native Hawaiian ecosystems are left on Moloka'i. The protection of this natural, cultural resource is imperative to the health of the island and its residents. The fence will expand the protection of the native forest, which are some of the healthiest remaining in the State.

DRAFT ENVIRONMENTAL ASSESSMENT

FOR

THE PĀKUʻI WATERSHED PROJECT

Prepared in accordance with Chapter 343, Hawaiʻi Revised Statues

Prepared by
The Nature Conservancy, Molokaʻi Program
for the
East Molokaʻi Watershed Partnership

2016

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I. PROJECT SUMMARY

The Department of Land and Natural Resources, Division of Forestry and Wildlife, assisted by The Nature Conservancy (TNC), acting for the benefit of the East Molokaʻi Watershed Partnership (EMoWP), proposes to construct a protective fence through the upper Puaʻahala, Kaʻamola, Keawa Nui, West ʻŌhiʻa, East ʻŌhiʻa, Manawai, Kahananui, ʻUalapuʻe, and Kaluaʻaha ahupuaʻa (land divisions), collectively referred to as the Pākuʻi Unit, between 1,700 and 4,380 foot elevation in the EMoWP's East Slope management area on the Island of Molokaʻi. The proposed fence will extend from and share as a western boundary, the EMoWP's existing Kapualei Extension fence (Map 1). Construction of an eastern boundary fence along eastern Kaluaʻaha will help enclose the Pākuʻi Unit. The proposed fence will be approximately 5.5 miles in length and will work in conjunction with steep cliffs and short sections of strategic fencing near the East Molokaʻi summit to protect approximately 2,080 acres of vital watershed made up of public and private lands located in the Conservation and Agriculture Districts.

The EMoWP was formed in 1999 through a community-wide strategic planning process of the U.S. Department of Agriculture (USDA) Empowerment Zone Program in response to the ongoing loss of native forests on the island. Through this process, TNC's Molokaʻi Program became the coordinator of the EMoWP. The EMoWP is a voluntary alliance of 24 landowners, community and conservation groups, and funders who support actions to improve and take care of Molokaʻi's native forests. The EMoWP's first project, the Kamalō/Kapualei Watershed Project, constructed a 5.5 mile fence below the forest edge above the denuded landscape of Kamalō and Kapualei. Completed in March 2001, the fence prevented large ungulate herds access to the native forest, and the area above the fence showed immediate vegetation improvement. Over the years the EMoWP has gradually expanded forest protection. Most recently, in 2013 nine more landowner partners, totaling 17 new watershed areas, were added to the EMoWP, and together, now comprise the East Slope management area (Map 2).

The East Slope's immediate priority for protection are the native forest systems in the Pākuʻi Unit as they are the best remaining examples of wet and mesic forest on Molokaʻi, that are not being protected. As the primary threat to these forests is feral ungulates, the EMoWP is proposing to construct a 5.5 mile fence to prevent ungulate ingress. Upon completion of the fence, the EMoWP will conduct natural resource management activities within the fence including ungulate and weed survey and control work, restoration, monitoring, and community engagement. These activities will help improve and protect the structure and function of 2,080 acres of the Pākuʻi watershed, the irreplaceable native Hawaiian forest therein, and the rare and endangered species it supports.

Pākuʻi project planning, which has included an extensive community process has found that the East Molokaʻi (Manaʻe) community largely supports the project. Similarly, the Pākuʻi Cultural Impact Assessment prepared by Keala Pono Archaeological Consulting, LLC for TNC and included as Appendix 1, as well as a second cultural analysis prepared by Akutagawa *et al.* 2016 funded by the Office of Hawaiian Affairs and included as Appendix 2, found that the project has no significant negative impact to cultural resources or practices.

This draft Environmental Assessment (DEA) evaluates the possible environmental and cultural consequences (positive and negative) of the Pāku‘i Watershed Project. Though these project activities are exempt from requiring an environmental assessment, this EA has been prepared so that the community and decision makers have very detailed information about the watershed protection project and the natural and cultural resources of the entire landscape. Future watershed protection projects similar to this one are anticipated for other areas in East Moloka‘i.

This DEA describes and evaluates two project alternatives: a scenario for the construction of the fence described above and a no action alternative. Analysis of the proposed Pāku‘i Project conducted in this DEA recommends a Finding of No Significant Impact (FONSI). The project is expected to have primarily positive effects on the natural, cultural resources of the Pāku‘i watershed area, with no significant negative impacts anticipated to the environment, archaeological features, public access/use, or view planes of the area during or after project implementation.

Project Name:	Pākuʻi Watershed Project
Proposing Agency:	State of Hawaiʻi Department of Land and Natural Resources Division of Forestry and Wildlife 1151 Punchbowl Street, room 325 Honolulu, HI 96813
Determining Agency:	State of Hawaiʻi Department of Land and Natural Resources 1151 Punchbowl Street Honolulu, HI 96813
Project Location:	Approximately 2,080 acres of Conservation and 18 acres of Agricultural District lands within the ahupuaʻa of: Puaʻahala (TMK: 5-6-06-002) Kaʻamola (TMK: 5-6-06-003) Keawa Nui (TMK: 5-6-06-007; 5-6-06-025) West ʻŌhiʻa (TMK: 5-6-06-010) East ʻŌhiʻa (TMK: 5-6-06-011; 5-6-06-018) Manawai (TMK: 5-6-06-013) Kahananui (TMK: 5-6-06-014) ʻUalapuʻe (TMK: 5-6-06-026) Kaluaʻaha (TMK: 5-7-05-001) Island of Molokaʻi, County of Maui, State of Hawaiʻi
Property Owners:	Puaʻahala: K&H Horizons Hawaiʻi Kaʻamola: The Thacker Corp. Keawa Nui: Kamehameha Schools Bishop Estate West ʻŌhiʻa: Sam Pedro and Edmund Wond East ʻŌhiʻa: State of Hawaiʻi Manawai: Vernon Suzuki Kahananui: Multiple ʻUalapuʻe: State of Hawaiʻi Kaluaʻaha: Dunnam Family Trusts
Anticipated Determination:	A Finding of No Significant Impact (FONSI) is expected for the project.
State Land Use Classification:	Conservation District Resource Subzone; Agricultural District

Consultation:

Federal
U.S. Department of Interior
- U.S. Fish & Wildlife Service
- U.S. Geological Survey
- U.S. National Park Service – Kalaupapa National Historical Park

U.S. Department of Agriculture
- Natural Resources Conservation Service

State
Representative Lynn DeCoite
Senator Kalani English
Department of Hawaiian Homelands
Department of Health
- Clean Water Branch
- Environmental Planning Office
- Office of Environmental Quality Control

Department of Land and Natural Resources
- ʻAha Kiole ʻo Molokaʻi
- Division of Aquatic Resources
- Division of Forestry and Wildlife
- Division of Historic Preservation
- Land Division
- Office of Conservation and Coastal Lands
- Natural Area Reserve Commission
- State Historic Preservation Division

Molokaʻi/Lānaʻi Soil and Water Conservation District
Office of Hawaiian Affairs
University of Hawaiʻi
- Molokaʻi Subcommittee of the Maui Invasive Species Committee
- Molokaʻi Plant Extinction Prevention Program

Maui County
County Councilmember Stacy Crivello
Mayor's Office Environmental Coordinator
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Sam and Leimomi Pedro
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Russel Phifer
Heather Place
Kolo Place
Linda and Milton Place
Hala Pupuhi
Tammy and Ghandharva Ross
Ililani Sawyer
Pilipo Solatorio
Susʻāinable Molokaʻi
Vernon Suzuki
Peter Thacker
Pia and Kai Ward
Puʻu ʻo Hoku Ranch
Edmund Wond
Barry Wright

II. PROJECT BACKGROUND AND NEED

General

The Pāku‘i Watershed Project is part of a larger vision to care for southeast Moloka‘i’s remaining native Hawaiian forests. These native forests are located in the ahupua‘a of Pua‘ahala to Hālawa, Moloka‘i, and are collectively referred to as *the East Slope* (Map 2). In 2013, when mauka landowners in this area wanted to see expanded protection of these native forests, the EMoWP pursued the development of a Draft East Slope Watershed Start-Up Management Plan (Dunbar-Co 2013). During the development of the Draft Plan and since its completion in June 2013, the EMoWP has been gathering input on forest management in the area from the community, including residents, landowners, hunters, users, ‘Aha Kiole ‘o Moloka‘i, fishermen, and scientists. This input has been incorporated into the EMoWP’s 2016-2020 Management Plan (TNC 2015) where applicable, as well as into the Traditional and Customary Practices Report for Mana‘e, Moloka‘i (Akutagawa *et al.* 2016). The Pāku‘i Unit, which includes upper Pua‘ahala, Ka‘amola, Keawa Nui, West ‘Ōhi‘a, East ‘Ōhi‘a, Manawai, Kahananui, ‘Ualapu‘e, and Kalua‘aha ahupua‘a, is the East Slope’s immediate priority for protection because it contains the highest quality and most continuous native forest ecosystems remaining on Moloka‘i that are not being protected (Map 1). The health of Pāku‘i’s native forests and their importance to ground water recharge has led to their designation as a priority watershed area by the Hawai‘i Department of Land and Natural Resources, with a majority of the area considered Watershed Priority I – the highest priority (DLNR 2011). These forests sit atop and help recharge the ‘Ualapu‘e aquifer - the source of residential water supplied by the County of Maui in Mana‘e. Because it is not feasible to plan for management actions so far in advance, the 2020 plan does not pursue immediate action steps for areas east of the Pāku‘i Unit. Likewise, this draft Environmental Assessment applies only to the Pāku‘i Unit.

The Pāku‘i Watershed Project was planned and conceived to help improve and protect the structure and function of the approximately 2,080 acre Pāku‘i watershed, the irreplaceable native Hawaiian forest ecosystem therein, and the rare and endangered species it supports. The proposed fence will expand the protection of the East Moloka‘i montane wet and lowland mesic and wet forest systems, which are some of the healthiest remaining in the State, by approximately 4.5 miles along the East Slope contour. It will build upon the successes of the EMoWP’s existing Kamakou and Kawela/Kapualei fences, which have effectively prevented large herds of feral ungulates from continual browsing within and along the native forest, allowing for passive restoration of native forest. Through fencing, ungulate removal, invasive plant control, monitoring, community engagement, and presuppression and control of wildfires, the EMoWP’s Pāku‘i Watershed Project aims to protect and improve this vital native Hawaiian watershed in East Moloka‘i. With less than 15% of the original native Hawaiian ecosystems left on Moloka‘i, the protection of this natural, cultural resource is imperative to the health of the island and its residents.

The Pāku‘i Watershed Project fits into a larger framework of island-wide, community led conservation planning initiatives as presented in the Moloka‘i Rural Empowerment Zone Application to the U.S. Department of Agriculture (The Community of Moloka‘i 1998), Moloka‘i: Future of a Hawaiian Island Plan (Members of the Moloka‘i Community 2008), Moloka‘i Water Working Group’s Report to the Commission on Water Resource Management

(DLNR 2008), Traditional and Customary Practices Report for Manaʻe, Molokaʻi (Akutagawa *et al.* 2016), and County of Maui, Molokaʻi Community Development Plan and East End Policy Statement (April 2016 draft). Similarly, the project aligns with State and Federal conservation planning for the area as outlined in Hawaiʻi's Comprehensive Wildlife Conservation Strategy (Mitchell *et al*. 2015), the Molokaʻi Forest Reserve Management Plan (DLNR 2009), the Hawaiʻi Department of Land and Natural Resources, Rain Follows the Forest Initiative (DLNR 2011), and the U.S. Fish and Wildlife Service's Critical Habitat Designations and Proposed Protections (USFWS 2003, 2015, and 2016).

Until recently the Pākuʻi project area has received relatively little contemporary biological exploration, and native species diversity, distributions, and threats were not well understood. However, surveys initiated by the EMoWP in 2014 began the process of documenting native and non-native plant and animal species in the area, their locations, distributions, and, for feral ungulates, their movement patterns as well. While there is much more habitat left to explore, these surveys, along with a review of the literature, have resulted in a more comprehensive understanding of Pākuʻi's native forest systems and their threats. New populations of rare and endangered plant species such as koʻokoʻolau (*Bidens wiebkei*); ʻiliahi (*Santalum haleakalae* var. *lanaiense*); ʻāwikiwiki (*Canavalia molokaiensis*); alani (*Melicope reflexa*); ʻōha wai (*Clermontia oblongifolia* subsp. *brevipes*); hāhā (*Cyanea mannii*); pōpolo (*Cyanea solanacea*); nānū (*Gardenia remyi*); *Schiedea diffusa* subsp. *diffusa*; and *Phyllostegia stachyoides* have been discovered as a result, and additional surveys are likely to find more rare species known from these habitats (Figure 1).

Figure 1. Schiedea diffusa subsp. diffusa was last seen on island in Kamakou Preserve in 2001. Two populations of the species were recently discovered in the project area.

The EMoWP recognizes that the native ecosystems in the Pākuʻi watershed are valuable, not only for the rare and endangered species that they contain, but also for the ecosystem services they provide to the Molokaʻi community. Native forests and riparian areas act as a living sponge, absorbing rainfall, reducing erosion, and increasing infiltration. Native rainforests absorb mist and fog, increasing water capture up to 20% more than rainfall alone (Juvik and Nullet 1995, DLNR 2011). Preservation of the structure and function of the native forests of the Pākuʻi watershed is necessary to help ensure adequate water supply for the community that depends on this resource, to maintain biodiversity within the area, and to help protect near shore reefs and marine resources from sedimentation.

East Molokaʻi's southern coastline, which houses one of the longest continuous fringing coral reef tracts in the U.S. and 35 of the island's 53 loko iʻa (fishponds), is a vital resource of the area (Figure 2; Field *et al.* 2008, Akutagawa *et al.* 2016). The health of these near shore waters is

heavily dependent on the health of adjacent watersheds. Years of research in the nearby Kawela watershed by the U.S. Geologic Survey's "Ridge to Reef" Kawela Project suggests that excessive amounts of sedimentation due to increased erosion from over-browsing by feral ungulates in the ahupuaʻa's upper watershed have begun to degrade the reef (Field *et al.* 2008). Protection of the Kawela watershed by the EMoWP through fencing and ungulate control has resulted in the dramatic recovery of native species (Jacobi and Stock 2013). These efforts have enabled large tracts of land in Kawela to go from less than 1% groundcover to over 75% groundcover, through passive restoration of predominately native species in just a five-year period. Furthermore, preliminary estimates show that these management efforts and corresponding vegetation increase have reduced sediment from 6 metric tons per year to less than 2 metric tons per year in test plots in the 3,300-acre Kawela watershed (Jacobi and Stock 2013). These data highlight how sensitive erosion rates are to vegetation cover. Because Pākuʻi's native forests and adjacent areas face similar threats, management of these threats is anticipated to produce similar beneficial outcomes of increased native vegetation cover leading to reduced erosion and sedimentation into near shore waters.

Figure 2. View from the project area looking south to the adjacent fringing reef and Keawa Nui fishpond. The neighboring island of Lānaʻi is visible in the background.

Feral ungulates pose the single greatest threat to native ecosystems in the project area. Ungulates present in the project area include pigs (*Sus scrofa*), goats (*Capra hircus*), and axis deer (*Axis axis*). These animals directly and indirectly affect Pākuʻi's native ecosystems in a variety of ways including degrading native vegetation by browsing, trampling and spreading weeds, parasites and disease (Giffin 1978, Aplet *et al.* 1991, Mitchell *et al.* 2005). They also damage watersheds by devouring vegetation down to bare dirt and disturbing topsoil by uprooting. This disturbance exposes soil to erosion, spreads root-rot fungi to native plants, and creates open habitat conducive for invasive, alien plants brought in on the animals' body or digestive tract to take over. Studies conducted in similar wet forests in Hawaiʻi have shown a direct correlation between the increase of alien plants and pig-induced soil disturbance (Aplet *et al.* 1991), and observations made during ground surveys suggest the same is true for the project area. Additionally, soil disturbance from rooting, trampling and wallowing allows rainwater to pool on the forest floor, which later serve as prime mosquito breeding areas (Baker 1979). Avian malaria, which is a mosquito-borne illness, is responsible for the extinction of many native Hawaiian forest bird species (USFWS 2006). The American Bird Conservancy reports that native Hawaiian forest is the most endangered bird habitat in the United States (American Bird Conservancy 2015). Only three of Molokaʻi's native forest bird species remain, and disease, loss of habitat, and predation by cats, mongoose, and rats are believed to be primarily responsible for the extinction of Molokaʻi's forest avifauna (USFWS 2006, 2015).

Because Hawaiian plants only recently have been exposed to the effects of browsing, they lack common defenses such as thorns or poisons (Wagner *et al.* 1999). Therefore, browsing animals often prefer native plants to non-native ones. Browsing can result in the extirpation of native plant populations, but even low intensity browsing can affect the species composition of habitats and encourage a shift in dominance from native towards non-native species (Mitchell *et al.* 2015). Therefore, the continued, unchecked existence of these feral ungulates will lead to the insidious degradation of the Pāku‘i watershed's native forest ecosystems, eventually jeopardizing their existence. Any attempt to care for the health and integrity of these vital Hawaiian rainforests must first address the threats posed by feral ungulates.

The EMoWP's mission to protect native forests so that they may continue to provide fresh water for future generations can, at times, be contrary to contemporary hunting interests. On Moloka‘i, where subsistence hunting is of vital importance, the successful implementation of the Pāku‘i Watershed Project has required a balanced and inclusive approach with authentic involvement of the East Moloka‘i hunting community in the planning process. The EMoWP believes that community hunters are valuable partners in watershed conservation, not just by helping to control ungulates in watershed areas, but also because they are often very knowledgeable about the areas in which they hunt. As a result of involving community hunters in aerial surveys that shaped the planning process, community hunting activity above the Forest Reserve boundary line was identified as focused to the east of Mapulehu valley, with very little hunting taking place in the project area. Most hunting in the nine ahupua‘a that the Pāku‘i Project resides in is for deer and is concentrated below the proposed contour fence in the open kiawe grasslands and valley floors that these animals inhabit. While no public trails are open or maintained in the project area, Conservation District lands in East ‘Ōhi‘a and Ualapu‘e are part of the Moloka‘i Forest Reserve. Forest Reserves are generally open to public access and may be closed or restricted in certain circumstances, such as for the protection of public safety. Rules regulating activities within Forest Reserves may be found in Chapter 13-104, HAR. Likewise, most private landowners in the area permit hunting on their properties. For those landowners who want to, this project will allow the EMoWP to work with them to help make their lands more accessible to community hunting activities. This project's collaborative, multi-year community process has helped ensure that hunting interests in the area have been included in the EMoWP's proposed natural resource management activities (TNC 2015). General sentiment from the Mana‘e hunting community is in support of the proposed project and typically prioritizes the health of native ecosystems over hunting interests (Akutagawa *et al.* 2016, Keala Pono 2016).

Public Involvement

In 2012, mauka landowners in Mana‘e approached the EMoWP to explore the possibility of expanding protection to native forests on their properties. These landowners saw the positive effects of forest management in areas managed by the EMoWP and wanted to see this work done on their lands. In an effort to better understand and seek feedback on potential forest management efforts in Mana‘e, the EMoWP pursued the development of a Draft East Slope Watershed Start-Up Management Plan (Dunbar-Co 2013). During the development of the Draft Plan and since its completion in June 2013, the EMoWP has been gathering input on forest management in the area from the community, including residents, landowners, hunters, other forest users, ‘Aha Kiole ‘o Moloka‘i, fishermen, and scientists.

A bulleted history of the major components of the public involvement process used to develop the East Slope management area and the Pāku‘i Watershed Project follows:

- **2013 -** An initial meeting between the EMoWP and the ‘Aha Kiole ‘o Moloka‘i in April introduced to the ‘Aha the possibility of protecting Mana‘e’s mauka native forests with a fence and subsequent ungulate and weed control, restoration, and monitoring.

- **2013 - Present** - The community advisory Mana‘e Mauka Working Group (MMWG) is formed in May 2013. The MMWG provides guidance to the EMoWP on issues of forest management in Mana‘e. The group has met 10 times and is updated regularly.

- **2013 -2014 -** Over two dozen community helicopter trips flown to seek input on the project and determine where hunting occurs.

- **2013-2015 -** 11 community meetings done in partnership with the ‘Aha Kiole ‘o Moloka‘i to discuss and develop aspects of the East Slope with the Mana‘e community.

- **2014 -** An intergenerational community discussion on the East Slope is filmed in October and aired on Akakū Community Media cable channels between 2015 and 2016 to further invite participation in project development.

- **2014 -** Availability of the EMoWP’s 2016-2020 Management Plan is announced to the public in the Conservancy’s Nature’s NewsFlash November issue (a biannual publication sent to every box holder on the island).

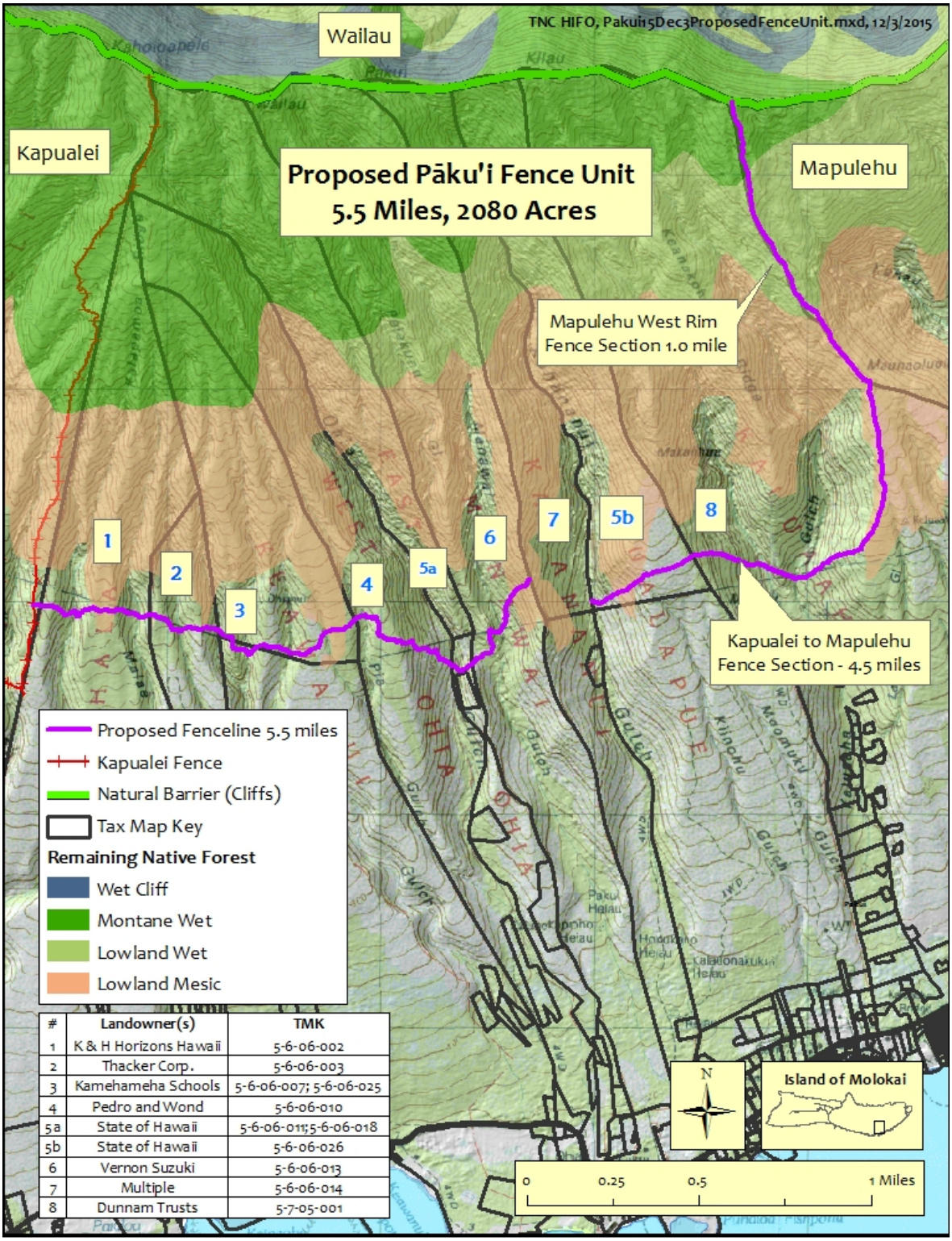
- **2015 -** EMoWP 2016-2020 Management Plan (TNC 2015) is completed in June. Comments and suggestions made through this public involvement process help further refine proposed management actions for the Pāku‘i Watershed Project in the plan.

- **2015-2016 -** The EMoWP, ‘Aha Kiole ‘o Moloka‘i, Office of Hawaiian Affairs and University of Hawai‘i collaborate on the “Traditional and Customary Practices Report for Mana‘e, Moloka‘i” (Akutagawa *et al.* 2016), in which Akutagawa *et al.* interviewed 44 Mana‘e residents and kama‘aina informants on the project. The TCP is completed in February 2016.

- **2016 -** Cultural Impact Assessment for the Pāku‘i Watershed Project is completed by Keala Pono Archaeological Consulting, LLC.

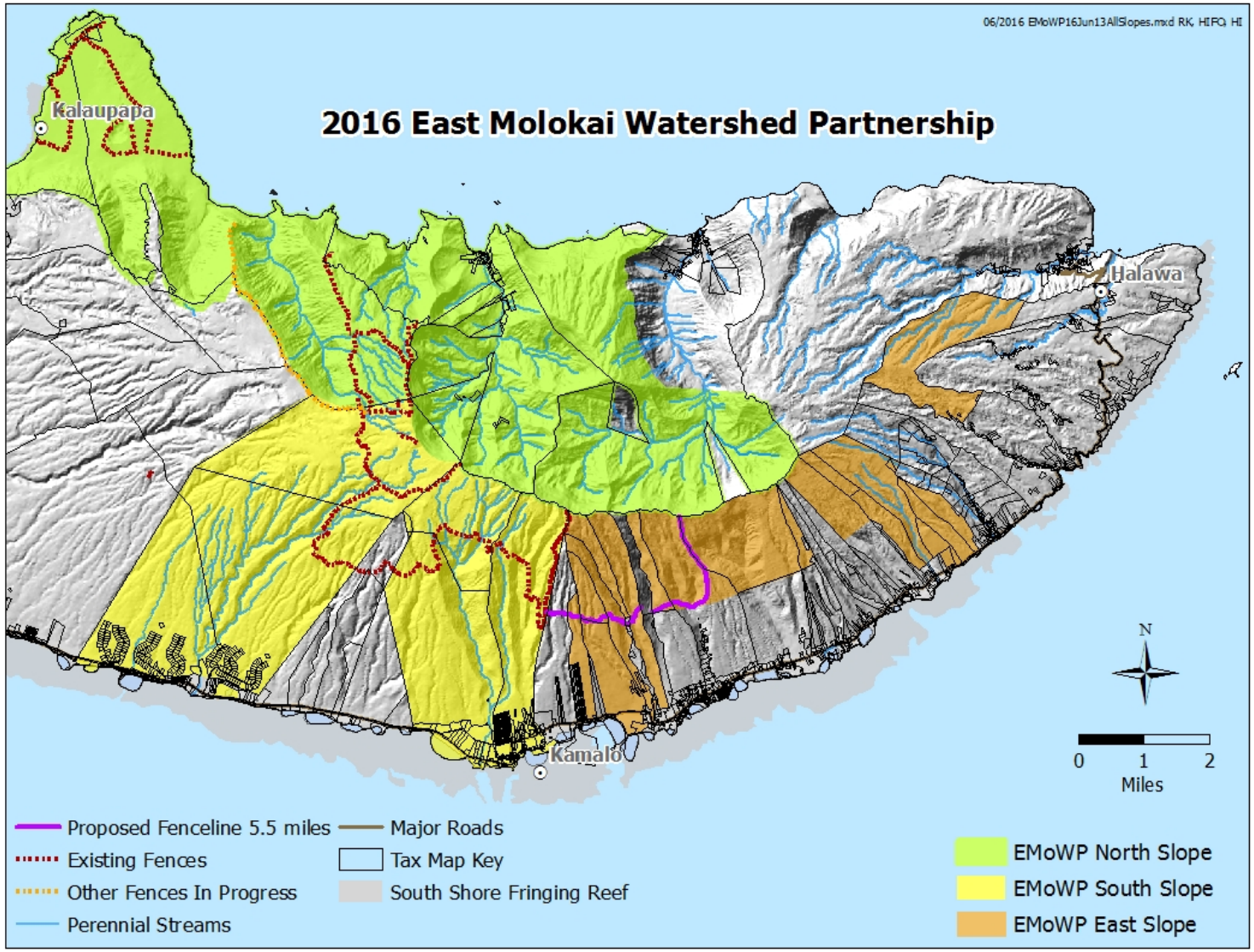
- **2016 –** Draft EA for the Pāku‘i Watershed Project is prepared.

Map 1. Proposed Pāku‘i fence unit location, size, landowners, and native ecosystems.



#	Landowner(s)	TMK
1	K & H Horizons Hawaii	5-6-06-002
2	Thacker Corp.	5-6-06-003
3	Kamehameha Schools	5-6-06-007; 5-6-06-025
4	Pedro and Wond	5-6-06-010
5a	State of Hawaii	5-6-06-011;5-6-06-018
5b	State of Hawaii	5-6-06-026
6	Vernon Suzuki	5-6-06-013
7	Multiple	5-6-06-014
8	Dunnam Trusts	5-7-05-001

Map 2. 2016 East Moloka‘i Watershed Partnership management areas and existing and proposed fences



III. DESCRIPTION OF THE AFFECTED ENVIRONMENT

General

The Pākuʻi Watershed Project area is located on the southern side of East Molokaʻi in the moku of Manaʻe. It occurs approximately ¾ mile from the nearest human development and 1.3 miles from the highway in remote, upper elevation areas from 1,700 to 4,380 foot elevation (Pākuʻi Peak) in the ahupuaʻa of Puaʻahala, Kaʻamola, Keawa Nui, West ʻŌhiʻa, East ʻŌhiʻa, Manawai, Kahananui, ʻUalapuʻe, and Kaluaʻaha (Map 1). Located near the island's highest peak of Kamakou (4961 ft.), the approximately 2,080 acre Pākuʻi Unit is made up of public and private land (Map 1). Most project lands are in the Conservation District Resource Subzone. Due to constraints imposed by the terrain at higher elevations, fence placement has to traverse into Agricultural lands in some areas. The amount of Agricultural land included in the proposed fence was limited at the request of some landowners to only those areas dictated by the steep terrain. Unless otherwise noted, all landowners in the Pākuʻi project area are partners of the EMoWP and all lands part of the EMoWP's East Slope Management Area.

The Puaʻahala Ahupuaʻa (TMK: 5-6-06-002; Map 1) contains some of the most intact native Hawaiian forest in the project area and harbors a number of rare species. The property is owned by K&H Horizons Hawaiʻi, a Seattle-based company that has declined participation in the EMoWP. In order to conserve natural resources consistent with Forest Reserve and Wildlife Sanctuary purposes in the ahupuaʻa, the State of Hawaiʻi is seeking to acquire K&H Horizons Hawaiʻi's land holdings within Puaʻahala, which includes upland native forests, coastal areas, and the Paialoa wetland – one of Molokaʻi's largest freshwater ponds, and a rare ecosystem found in only five locations on the island. Approximately 179 acres exist within the Conservation District in the ahupuaʻa, and approximately 1,245 feet of fence and 7.5 acres exist within the Agricultural District in the ahupuaʻa. Fence construction and natural resource management activities on the property will not commence until State ownership is acquired or if activities are permitted by the landowner.

The Thacker Corporation owns approximately 200 acres of the **Kaʻamola Ahupuaʻa** (TMK: 5-6-06-003; Map 1)**.** Kaʻamola is a relatively low elevation ahupuaʻa with just 33 acres above the Forest Reserve boundary line. These Conservation lands support lowland mesic native forest, and connect native ecosystems in adjacent Puaʻahala and Keawa Nui. Approximately 273 feet of fence, encompassing approximately 0.5 acres, occur in the Agricultural District in the ahupuaʻa.

The Keawa Nui Ahupuaʻa (TMKs: 5-6-06-007; 5-6-06-025; Map 1) is approximately 600 acres and owned by Kamehameha Schools Bishop Estate - a founding partner of the EMoWP. The restored Keawa Nui Fishpond, cared for by the Hui ʻo Kuapā, is located in the ahupuaʻa, south of the project area. Approximately 192 acres in the ahupuaʻa exist above the Forest Reserve boundary line, a majority of which contains montane wet and lowland mesic native forest. A total of 415 feet of proposed fence, enclosing 0.85 acres, exist within the Agricultural District in Keawa Nui (TMK: 5-6-06-025).

The West ʻŌhiʻa Ahupuaʻa (TMK: 5-6-06-010; Map 1) is noted for its steep valley walls (Map 1). Ground surveys found that West ʻŌhiʻa supports lowland mesic and a relatively large number of rare plant species, mostly located along the steep valley edge. Within the project area, roughly

170 acres exist within the Conservation District and approximately 2 acres within the Agricultural District. The Sam Pedro and Edmund Wond families own these lands.

Within the Conservation District, 220 acres of the **East ʻŌhiʻa Ahupuaʻa** (TMK: 5-6-06-011, Map 1) and 194 acres of the **ʻUalapuʻe Ahupuaʻa** (TMK: 5-6-06-026; Map 1) are owned by the State of Hawaiʻi. These lands are part of the State-designated Molokaʻi Forest Reserve, and under the authority of the DLNR's Division of Forestry and Wildlife (DOFAW). Due to the steep valley walls of East ʻŌhiʻa**,** approximately 400 linear feet of the proposed fence would include approximately 150,000 square feet of unencumbered State lands (TMK: 5-6-06-018; Map 1) under the authority of DLNR's Land Division.

The many steep ridges and valleys of the **Manawai Ahupuaʻa** (TMK: 5-6-06-013; Map 1) culminate in Pākuʻi Peak (4,380 ft.), the highest peak in the East Slope and namesake of the project. Manawai is also noted for the exceptional complex of heiau located in the lower elevations of this ahupuaʻa and neighboring Kahananui and ʻUalapuʻe, outside and to the south of the project area (Keala Pono 2016). In Manawai, 325 acres of native forest exist above the Forest Reserve boundary line and approximately 600 feet of fence is in Agricultural lands. Vernon K. Suzuki owns the Manawai lands within the project area.

The Kahananui Ahupuaʻa (TMK: 5-6-06-014; Map 1) is owned by multiple parties with the State of Hawaiʻi owning a 50% undivided interest. Efforts have been underway to divide interest in Kahananui, which would result in the State owning a sole interest in the Conservation District lands (182 acres), which include all project area lands within the ahupuaʻa. These State owned Conservation lands would be part of the Molokaʻi Forest Reserve and under the authority of DOFAW. Ground surveys to delineate the fence route will not be conducted in the ahupuaʻa until ownership has been divided (Map 1), and fence construction in Kahananui will not occur until ownership has been divided unless parties can otherwise come to an agreement for fence construction. The fence line is currently not mapped, but is anticipated to be located between approximately 1840-900 ft. elevation (Map 1).

Kaluaʻaha Ranch (TMK: 5-7-05-001; Map 1) is owned and managed by the Dunnam Family. The Ranch owns all of the approximately 700 acres of Conservation District lands in the ahupuaʻa. These lands represent the eastern boundary of the Pākuʻi Unit. The Dunnam Family is working with the Molokaʻi Land Trust and the Trust for Public Lands on a conservation easement to protect in perpetuity a large portion of these Conservation lands.

The project area is adjacent to other private and State lands managed largely for natural and cultural resource protection and ranching (Map 1). Adjacent major landowners include Kapualei Ranch (TMK: 5-6-06-001), the Molokaʻi Forest Reserve in Wailau Valley (TMK: 5-9-06-002), and the Ilima Molokaʻi Limited Partnership in Mapulehu and Punaʻula (TMK: 5-7-05-027), all of whom are partners of the EMoWP. The project area is also bordered by State-leased lands and multiple private landowners, including residents, farmers, and ranchers.

The Pākuʻi Unit's proposed southern boundary (i.e., contour) fence, which ranges in elevation from approximately 1,700 – 2,220 foot elevation along the ridges, extends from ʻĀkani Ridge on the west, where it abuts the EMoWP's South Slope management area and would share its Kapualei Extension fence (Map 1). From there the contour fence would extend approximately

4.5 miles to the eastern boundary of Kaluaʻaha Ranch, bordering Mapulehu Valley. Construction of an approximately one mile long eastern boundary fence along upper Kaluaʻaha's eastern property line and Mapulehu Valley's western rim is needed to enclose the Unit (Map 1). In total, the proposed fence would be approximately 5.5 miles in length, and would work in conjunction with steep cliffs and short sections of strategic fencing near the East Molokaʻi summit to protect approximately 2,080 acres of contiguous native Hawaiian forest in the Conservation District and small sections of the Agricultural District.

The substrate of this area is predominately highly weathered basaltic lava that erupted between 1.75 and 1.31 million years ago (Sherrod *et al*. 2007). Entisols and Inceptisols dominate soils in the area, and both are considered highly erodible land [HEL; Juvik and Juvik 1998; See soil discussion in Keala Pono 2016 (Appendix 1)]. These are considered young geologic deposits that tend to be only moderately developed and are therefore best suited for water supply, watershed and wildlife habitat according to the DLNR (2009). Annual rainfall in the project area ranges from approximately 3,000 mm (118 in.) along the summit to approximately 1,000 mm (39 in.) near the proposed contour fence between approximately 1,700 – 2,220 feet elevation (Giambelluca *et al*. 2013). Rainfall in the lower sections of these ahupuaʻa varies with the more eastern ahupuaʻa of Kaluaʻaha and ʻUalapuʻe generally receiving greater rainfall at these lower elevations than the Unit's western ahupuaʻa of Puaʻahala and Kaʻamola. Along the coast, rainfall averages across the nine ahupuaʻa in the project area range from approximately 250 – 750 mm (10 – 30 in.); this southeast side of the island is driest during the summer months (2013).

Access to the Pākuʻi project area is naturally limited by the area's terrain and environment, which is often steep, divided, and wet. Difficulty accessing the area has made resource management activities there challenging and, consequently, limited. Prior to the EMoWP's involvement in 2013, management and research activities in the project area were limited to occasional rare and invasive species monitoring and collection efforts done largely by EMoWP partners – the Molokaʻi Subcommittee of the Maui Invasive Species Committee (MoMISC) and the Molokaʻi Plant Extinction Prevention Program (MoPEPP). In an effort to provide the safest, most effective fence alignment, the EMoWP has surveyed over nine miles of fence route. Additionally, the Partnership has performed a number of biological surveys in the area to more fully understand Pākuʻi's resources and threats. These efforts have helped facilitate partner organizations such as U.S. Fish and Wildlife Service (USFWS), DOFAW, MoPEPP, and MoMISC to manage this area to conduct their missions.

Flora

Surveys of the Pākuʻi project area have improved current understanding of its vascular flora. From these surveys and a review of the literature, three major native vegetative types occur in good health in the Pākuʻi project area: (1) montane wet forest; (2) lowland wet forest; and (3) lowland mesic forest (Jacobi 1989 and 2013, Gon and Tom 2010; USFWS 2015). Vegetation in the project area generally increases in quality with increased elevation, with the higher elevations supporting closed canopy montane wet forest dominated by ʻōhiʻa (*Metrosideros polymorpha*) and, to a lesser extent, ʻōlapa (*Cheirodendron trigynum*). These higher elevations support a mid-level canopy of native shrubs and small trees including *Melicope sessilis, Melicope clusiifolia, Melicope molokaiensis, Myrsine lessertiana, Vaccinium calycinum, Vaccinium reticulatum, Labordia waiolani, Scaevola chamissoniana, Cyrtandra procera, Cyrtandra grayana, Psychotria*

kaduana, Psychotria mariniana, Dubautia laxa, Clermontia pallida, Clermontia arborescens subsp. *waikoluensis, Clermontia kakeana, Ilex anomala*, as well as a native understory dominated by ferns, typically ʻuluhe (*Dicranopteris linearis*) and ʻuluhe lau nui (*Diplopterygium pinnatum*). Vegetation in the lower reaches of the project area tends toward mixed native/non-native dominated forest and shrubland systems including ʻōhiʻa*,* lama *(Diospyros sandwicensis),* pūkiawe *(Leptecophylla tameiameiae), aʻaliʻi (Dodonaea viscosa),* christmasberry (*Schinus terebinthifolius*), strawberry guava (*Psidium cattleianum*), and a variety of non-native grass species. Highly invasive weeds such as cane tibouchina (*Tibouchina herbacea)*, Koster's curse (*Clidemia hirta)*, and strawberry guava are established in the project area, with the largest invasions occurring in the eastern most ahupuaʻa of ʻUalapuʻe and Kaluaʻaha. In the project area, the native forest edge varies typically between approximately 1,700 – 2,200 foot elevation along the ridge tops, below which non-native plant species dominate such as christmasberry, guava (*Psidium guajava*), strawberry guava, koa haole (*Leucaena leucocephala*), kiawe (*Prosopis pallida*), and a variety of non-native grass species [e.g., broomsedge grass (*Andropogon virginicus*), barbed wire grass (*Cymbopogon refractus*), sour grass (*Digitaria insularis*), and giant guinea grass (*Panicum maximum*)].

There are seven listed endangered plant species verified from the project area: koʻokoʻolau (*Bidens wiebkei*); ʻiliahi (*Santalum haleakalae* var. *lanaiense*); ʻāwikiwiki (*Canavalia molokaiensis*); ʻōha wai (*Clermontia oblongifolia* subsp. *brevipes*); hāhā (*Cyanea mannii*); pōpolo (*Cyanea solanacea*), and alani (*Melicope reflexa*; USFWS 1994 and 1996). Also recently discovered in the project area are the proposed listed endangered species: nānū (*Gardenia remyi*), *Phyllostegia stachyoides,* and *Schiedea diffusa* subsp*. diffusa* (USFWS 2015). The Molokaʻi Plant Extinction Prevention Program monitors many of these species in the project area as they are among the last of their species in the wild (i.e., < 50 in the wild, in the world). The area is also designated critical habitat for 49 plant species and two forest bird species (USFWS 2003 and 2016).

In addition to the seven listed endangered species, the three proposed listed endangered species, and the species for which the area is designated critical habitat, the Pākuʻi Project would benefit at least one other critically endangered plant species. *Pritchardia munroi, a* Molokaʻi endemic fan palm or loulu, was believed to be represented by only a single wild individual until botanists found a handful of individuals in a drainage immediately adjacent to the Pākuʻi project area (Wood and Perlman 2002). The main threat to this species is predation and habitat degradation from feral ungulates. Therefore, fencing the Pākuʻi project area would help protect one of the last known populations of *P. munroi* from extinction by increasing vital habitat.

Table 1 lists all rare plant and animal species, currently or historically known from the Pākuʻi project area and immediately adjacent areas, as well as those species with critical habitat designated in the project area. This list was compiled based on biological surveys of the project area as well as a review of the literature. The proposed fence will enclose the known populations of listed plants within the Pākuʻi project area, as well as designated critical habitat for species listed in Table 1, thus removing the main threat to all these species: feral ungulates. Additional biological surveys are planned for the project area, and are likely to discover additional populations of rare and endangered species known from these habitats.

Fauna
Birds and bats make up the native terrestrial vertebrate fauna on Molokaʻi. Of the eleven endemic forest birds known from East Molokaʻi, four are federally listed as endangered and are likely extinct [the Molokaʻi creeper or kākāwahie (*Paroreomyza flammea*), the ʻākohekohe (*Palmeria dolei*), the kiwikiu (*Pseudonestor xanthophrys*), and the Molokaʻi thrush or olomaʻo (*Myadestes lanaiensis rutha*)]; a fifth is considered endangered by the State of Hawaiʻi [the ʻiʻiwi (*Vestiaria coccinea*)] (USFWS 2006, DOFAW n.d.). Four of Molokaʻi's native forest bird species are considered extinct.

The kākāwahie was last recorded near ʻŌhiʻalele on the eastern boundary of Puʻu Aliʻi, northwest of the Pākuʻi project area, in 1963 (Scott *et al*. 1986; Map 2). The kākāwahie was also seen at two other locations in the vicinity of Puʻu Aliʻi and Kamakou Preserve in 1961 and 1962. It is likely that kākāwahie is now extinct (1986). The olomaʻo has been reported only along the Pelekunu Valley rim from ʻŌhiʻalele south and beyond Puʻu Aliʻi, and the Olokuʻi Natural Area Reserve north of the project area (1986; Map 2). It was last reported from Olokuʻi in 1979 during the U.S. Fish and Wildlife Service 1979-1980 Forest Bird Survey of Molokaʻi in the south-central part of the reserve. The small remnant population is thought to have a low probability of long-term survival (1986). ʻĀkohekohe were abundant on Maui and Molokaʻi at the turn of the century, but were last seen on Molokaʻi in 1907 (USFWS 2006). While still present on Maui, the Molokaʻi population is believed to be extinct today (2006). There are no recorded sightings of kiwikiu on island; however, fossil records show that the species once lived on Molokaʻi, and the U.S. Fish and Wildlife Service has designated 21,667 acres of critical habitat for the ʻākohekohe and kiwikiu on the island, some of which is within the Pākuʻi project area (USFWS 2016).

`Iʻiwi is considered endangered by the State of Hawaiʻi on Molokaʻi, Oʻahu, and Lānaʻi (DOFAW n.d.). The most recent confirmed sighting of the species on Molokaʻi was during Forest Bird Surveys conducted by DOFAW in May 2010 at Puʻu Haha in upper Kamalō, which identified one individual (S. Aruch, personal communications). Three more common native bird species observed in and near the Pākuʻi project area are the ʻapapane (*Himatione sanguinea sanguinea*), ʻamakihi (*Chlorodrepanis virens wilsoni*), and pueo or Hawaiian owl (*Asio flammeus sandwichensis*). Throughout East Molokaʻi, the pueo (lower, drier slopes) and ʻapapane (upper forest systems) are commonly observed, while ʻamakihi is uncommonly seen and heard.

The Pākuʻi project area also contains important habitat for other endangered animals such as nesting site habitat for the ʻuaʻu or Hawaiian petrel (*Pterodroma sandwichensis*) and aʻo or Newell's shearwater (*Puffinus auricularis newelli*), which prefer montane wet forests (USFWS 1983). A population of aʻo was recently discovered in the nearby ahupuaʻa of Kainalu, east of the project area. The project area is also roosting and foraging habitat for Hawaiʻi's only native, terrestrial mammal, the endangered ʻōpeʻapeʻa or Hawaiian hoary bat (*Lasiurus cinereus semotus*; USFWS 1998).

The native invertebrate fauna in the project area is not well known and further survey work is required. However, in nearby Kamakou Preserve, the native invertebrate fauna has been well documented and includes a diverse assemblage of land snails, including five species of rare Achatinelline tree snail: *Partulina tessellata*, *P. redfieldii*, *P. proxima*, *P. mighelsiana,* and

Perdicella helena; all of which are rare and in danger of extinction (Hadfield 1986, Hadfield *et al.* 1993, Hadfield and Saufler 2009). Given similar habitat, it is likely that the Pāku‘i project area supports some of these same species. To date, surveys have discovered *Partulina mighelsiana* and a dead specimen tentatively identified as *P. dwightii* from the project area. Other native snails verified during surveys include species in the genera *Succinea, Philonesia, Auricullela, and Elasmias*. All native species of terrestrial snail are recognized as Species of Greatest Conservation Need by the State of Hawai‘i (Mitchell *et al.* 2015). Habitat in the area is excellent for native invertebrates, suggesting that additional surveys are likely to discover more populations of endangered species known from this habitat. Other invertebrates observed in the project area are species of native damselfly or pinao (*Megalagrion blackburni, M. calliphya* and *M. hawaiiensis*).

Non-native animals observed in the project area include rats (*Rattus* spp.), a variety of birds including the Japanese bush warbler (*Horornis diphone*), red-billed leiothrix (*Leiothrix lutea*) and Japanese white-eye (*Zosterops japonicus*), a few invertebrates, and three feral ungulate species: pigs (*Sus scrofa*), goats (*Capra hircus*), and axis deer (*Axis axis*). While many non-native species negatively impact native species, feral ungulates pose the single greatest threat to Hawai‘i’s native species (Aplet *et al.* 1991). Cattle, which historically played a significant role in the degradation of native ecosystems below approximately 1500ft. elevation in the area, are not grazed in or adjacent to the project area, and the last feral cattle were removed from the island in the 1970’s. Black-buck antelope (*Antilope cervicapra*) have been observed west of the project area, with the closest sighting in Makolelau (F. Duvall personal communications), but not in or adjacent to the project area. Ungulate surveys have found that the distributions and movement patterns of feral pigs, deer and goats in the project area differ from other areas in the East Slope. While feral deer and goats are known to establish in upper elevation areas where the forest has been converted to grasslands, in the project area these animals largely occupy areas below the native forest edge (i.e., below the proposed contour fence), and primarily move laterally in the area (east - west). The health and corresponding density of Pāku‘i’s native forests are the likely reasons these ungulates inhabit the open koa haole (*Leucaena leucocephala*) and kiawe (*Prosopis pallida*) grass and shrub lands below the native forest edge. In contrast, feral pigs were found to occupy all reaches of the watershed area, from low elevation riparian systems to the summit crest. Within the project area, feral pig activity was particularly high along the summit and adjacent drainages in the ahupua‘a of ‘Ualapu‘e and Kalua‘aha, and impacts in these otherwise healthy native forests are substantial. All three feral ungulate species pose detrimental threats to the survival of Pāku‘i’s native forests, with deer and goats continuously browsing along the native forest edge while pigs exist summit to sea.

Significant and Sensitive Habitats

Approximately 469 acres of Critical Habitat Unit MW01, 1,406 acres of Critical Habitat Unit LM01, and 0.3 acres of Critical Habitat Unit WC02 within the proposed Pāku‘i Unit are designated critical habitat for 49 plant species and two forest bird species (Map 3; Table 1; USFWS 2003, 2015, and 2016). These ecosystem designations largely support what the EMoWP has learned of the project area, and confirms that Pāku‘i’s montane wet forests, which make up approximately 10% of this habitat on the island, are continuous with the montane wet forests that extend off Kamakou peak.

Table 1. Rare species benefitting from the Pāku‘i Watershed Project.

Scientific Name	Common Name	Type	Federal Status*	PEPP Species**	Critical Habitat***
Palmeria dolei	‘Ākohekohe	Forest Bird	E		D
Pseudonestor zanthophrys	Kiwikiu, Maui parrotbill	Forest Bird	E		D
Petrodroma sandwichensis	‘Ua‘u, Hawaiian petrel	Seabird	E		
Puffinus newelli	A‘o, Newell’s shearwater	Seabird	T		
Lasiurus cinereus semotus	‘Ōpe‘ape‘a, Hawaiian hoary bat	Bat	E		
Auricullela spp.	No common name (NCN)	Snail			
Elasmias spp.	NCN	Snail			
Partulina dwightii	Dwight’s partulina snail	Snail			
Partulina mighelsiana	NCN	Snail			
Philonesia spp.	NCN	Snail			
Succinea spp.	Ambersnails	Snail			
Adenophorus periens	Palai lā‘au	Plant	E	PEPP	D
Alectryon macrococcus	Mahoe	Plant	E		D
Asplenium dielerectum	Palapalai lau li‘i, Asplenium-leaved diellia	Plant	E	PEPP	D
Bidens wiebkei	Ko‘oko‘olau, ko‘olau	Plant	E	POP	D
Bonamia menziesii	NCN	Plant	E		D
Brighamia rockii	Ālula, Pua ala	Plant	E	PEPP	D
Canavalia molokaiensis	‘Āwikiwiki	Plant	E		D
Clermontia oblongifolia ssp. brevipes	‘Ōha wai, ‘ōha, hāhā	Plant	E	PEPP	D
Ctenitis squamigera	Pauoa	Plant	E		D
Cyanea dunbariae	Hāhā	Plant	E	PEPP	D
Cyanea grimesiana ssp. grimesiana	Hāhā	Plant	E	PEPP	D
Cyanea mannii	Hāhā	Plant	E		D
Cyanea munroi	Hāhā	Plant	E	PEPP	D
Cyanea procera	Hāhā	Plant	E	PEPP	D
Cyanea profuga	Hāhā	Plant	E	PEPP	D

Cyanea solanacea	Pōpolo, hāhā nui	Plant	E	PEPP	D
Cyanea solenocaylx	Pua kala	Plant	SOC		
Cyperus fauriei	NCN	Plant	E		D
Cyrtandra filipes	Haʻiwale	Plant	E	PEPP	D
Cyrtandra halawensis	Haʻiwale	Plant	SOC		
Diplazium molokaiense	NCN	Plant	E	PEPP	D
Exocarpos gaudichaudii	Hulumoa, kaumahana, heau	Plant	SOC		
Festuca molokaiensis	NCN	Plant	E		D
Flueggea neowawraea	Mehamehame	Plant	E	PEPP	D
Gardenia remyi	Nānū, Nāʻū	Plant	C	ROI	
Gouania hillebrandii	NCN	Plant	E		D
Hesperomannia arborescens	NCN	Plant	E		D
Hibiscus arnottianus ssp. immaculatus	Kokio keʻokeʻo	Plant	E		D
Isodendrion pyrifolium	Wahine noho kula	Plant	E	PEPP	D
Kadua laxiflora	Pilo	Plant	E	PEPP	D
Labordia triflora	Kamakahala	Plant	E	PEPP	D
Lysimachia maxima	Lehua makanoe	Plant	E	PEPP	D
Melicope mucronulata	Alani	Plant	E	PEPP	D
Melicope munroi	Alani	Plant	E		D
Melicope reflexa	Alani	Plant	E	POP	D
Neraudia sericea	NCN	Plant	E	PEPP	D
Phyllostegia glabra var. glabra	Ulihi	Plant		ROI	
Phyllostegia haliakalae	NCN	Plant	E	PEPP	D
Phyllostegia hispida	NCN	Plant	E	PEPP	D
Phyllostegia mannii	NCN	Plant	E	PEPP	D
Phyllostegia pilosa	NCN	Plant	E	PEPP	D
Phyllostegia stachyoides	NCN	Plant	C	PEPP	
Platanthera holochila	Hawaiian bog orchid, Puahala a Kāne	Plant	E	PEPP	D
Pritchardia munroi	Loulu	Plant	E	PEPP	
Pteris lidgatei	NCN	Plant	E	PEPP	D

Santalum haleakalae var. lanaiense	‘Iliahi	Plant	E		D
Schiedea diffusa ssp. diffusa	NCN	Plant	C	ROI	
Schiedea laui	NCN	Plant	E	PEPP	D
Schiedea lydgatei	NCN	Plant	E		D
Schiedea sarmentosa	NCN	Plant	E		D
Sesbania tomentosa	‘Ōhai	Plant	E		D
Silene alexandri	Catchfly	Plant	E	PEPP	D
Silene lanceolata	Catchfly	Plant	E		D
Spermolepis hawaiiensis	NCN	Plant	E		D
Stenogyne bifida	Mōhihi	Plant	E	PEPP	D
Vigna o-wahuensis	NCN	Plant	E		D
Zanthoxylum hawaiiense	A‘e	Plant	E		D

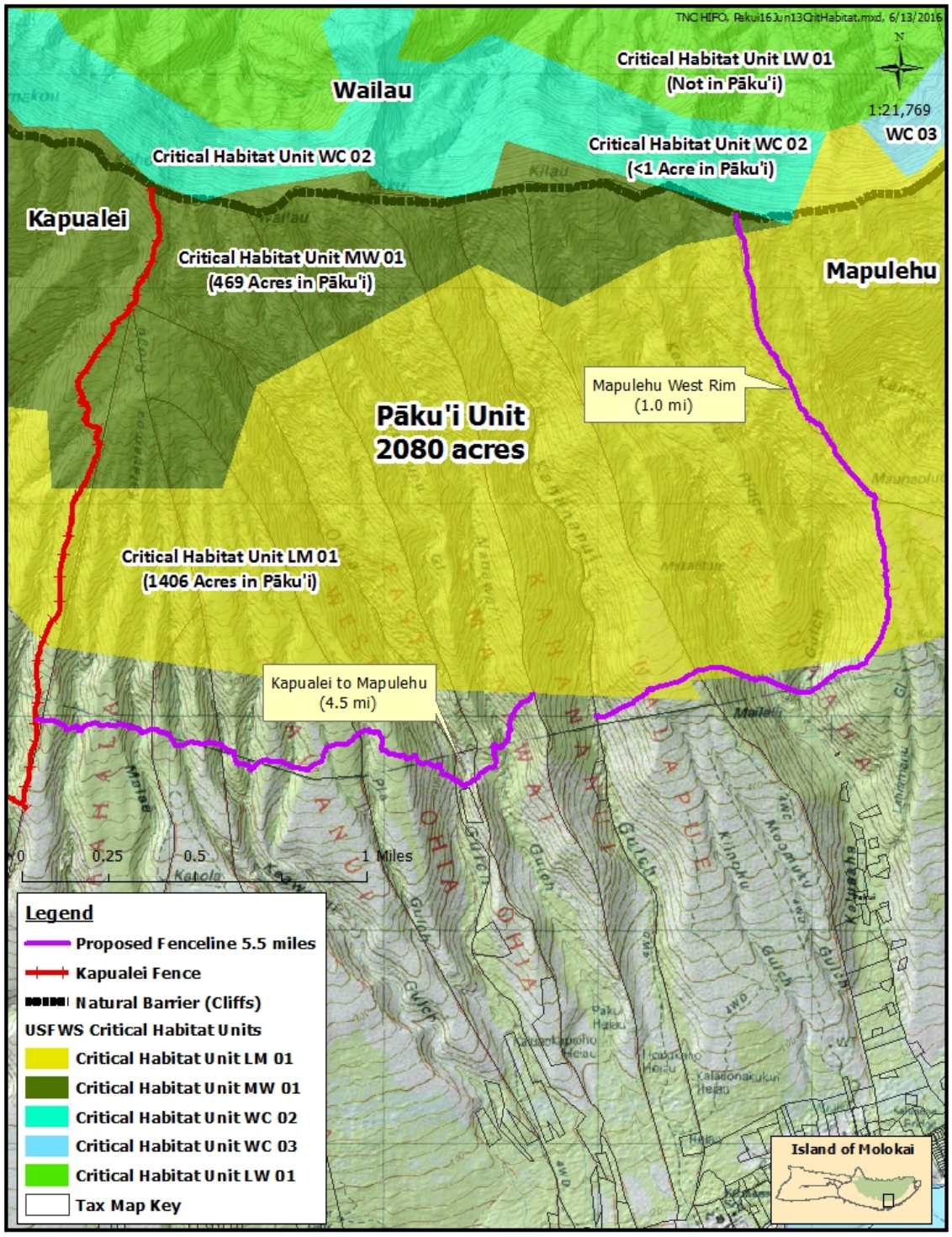
*Federal Status: Endangered (E); Threatened (T); Candidate (C); Species of Concern (SOC). Note: All Candidate species in Table 1 are proposed Endangered in the USFWS Multi-island listing package (USFWS 2015).

**PEPP Species: Plant Extinction Prevention Program species (PEPP); Potentially on PEPP List (POP); Rare on Island (ROI). Criteria for a PEPP species is <50 in the wild, in the world.

***Critical Habitat: Designated (D).

Flowering plants follow Wagner *et al.* 1999; pteridophytes follow Palmer 2003.

Map 3. Proposed Pākuʻi fence unit and USFWS critical habitat units (2016).



Archaeological Sites, Cultural Resources, Practices and Beliefs Identified
Keala Pono Archaeological Consulting, LLC prepared a comprehensive Cultural Impact Assessment (CIA) for the EMoWP's Pāku'i Watershed Project, which is attached as Appendix 1 and summarized below (Keala Pono 2016). The Pāku'i CIA provides valuable information on the cultural context of all ahupua'a within and near the project area, along with historical information concerning these ahupua'a, and interviews with cultural informants. The EMoWP also collaborated on a second cultural analysis of the project entitled, "The Traditional and Customary Practices Report of Mana'e, Moloka'i " (TCP) written by Akutagwa *et al.* (2016) for the 'Aha Kiole 'o Moloka'i and funded by the Office of Hawaiian Affairs. This analysis is attached as Appendix 2 and summarized below.

The TCP and the Pāku'i CIA are strong partners of one another. The TCP complements the Pāku'i CIA by providing:

- 44 interviews of Mana'e residents and kama'āina informants. These interviews provide considerable information on cultural resources and practices in Mana'e, as well as community opinion of the EMoWP's East Slope conservation efforts.
- Recognition that there is significant community support for the Pāku'i Project, and the EMoWP's East Slope conservation efforts.

In turn, the Pāku'i CIA complements the TCP by providing:

- A comprehensive inventory of cultural sites in the nine ahupua'a making up the Pāku'i project area.
- An in-depth review of archival information sourced from mo'olelo, Hawaiian language newspaper articles, ōlelo no'eau, maps, information on land use in traditional and historic times, and data from archaeological work on the project area.

Taken together, the TCP and Pāku'i CIA provide a comprehensive evaluation of the cultural consequences, both positive and negative, of the Pāku'i Project.

<u>Cultural Impact Assessment for the Proposed Pāku'i Fence Unit</u>
The Pāku'i CIA follows the requirements of a Cultural Impact Assessment as developed by the Hawai'i Office of Environmental Quality Control. As such, the report consists of archival information sourced from mo'olelo, Hawaiian language newspaper articles, ōlelo no'eau, maps, information on land use in traditional and historic times, and data from archaeological work. These sources discuss Hawaiian place names and their locations, cultural concepts pertaining to and the distribution of the native forests and upper elevations on the southeast slopes of East Moloka'i mountain range, evidence of relict vegetation from Polynesian plant introductions, and mo'olelo and other traditional Hawaiian accounts that reference the study area. Together, the historical and previously identified cultural resources within the project's boundaries and at lower elevations for the nine ahupua'a across which the fence will extend, provide additional context for assessing the significance of the Pāku'i project area. In addition, four ethnographic interviews were conducted with individuals who have strong ties to the area and are knowledgeable about the project area. Interviewees were William "Billy" Akutagawa, April Kealoha, Hanohano Naehu, and Russel Phifer. Pūlama Lima of Keala Pono Archaeological Consulting, LLC conducted the ethnographic interviews.

Ethnographic information revealed that the project lands are a culturally significant area where both natural and cultural resources occur (Keala Pono 2016). Natural resources in the uplands that were mentioned during interviews include water, maile, the white owl, and Hawaiian land snails. Cultural practices identified in the uplands include hunting and gathering, particularly of pepeiao (wood ear fungus, *Auricularia cornea*) in Kahananui. Cultural practices closer to the coast include gathering of limu and other ocean resources, hula dancing on heiau, and using specific spots as lookouts for fishing. A number of archaeological sites were also noted during the interviews, most of which are located near the coast. These sites included fishponds, several heiau, an ʻulu maika field, loʻi, stone walls, ahu, koʻa, and a graveyard behind Kilohana Elementary School. Closer to the project area, burial caves, house sites, and trails were noted. The wao akua (i.e., sacred realm of the gods often identified as the cloud forests) itself was also mentioned as a significant cultural resource.

From archival research, previously identified archaeological and cultural sites in the nine ahupuaʻa making up the project area were inventoried and described. Most of these sites exist outside of the project area and near the coast (Keala Pono 2016). Sites include fishponds, heiau, terrace complexes, rock mounds, c-shaped structures, and others. The numerous fishponds spanning the coast from Puaʻahala to Kaluaʻaha, as well as the complex of heiau in lower Manawai, Kahananui, and ʻUalapuʻe are well-known and significant sites in the area. Additionally, archival research identified an inventory of place names including many ʻili lele located in Wailau or Pelekunu that are associated with the nine ahupuaʻa or a chief from those ahupuaʻa. The Pākuʻi CIA notes that the arrangement of lands, with ʻili lele in windward ahupuaʻa associated with individual leeward ahupuaʻa while rare in Hawaiʻi, is more common on Molokaʻi, and likely enabled access to loʻi and other windward resources by groups from leeward ahupuaʻa (Keala Pono 2016).

Archival research also identified three undocumented cultural sites in or close by the project area consisting of two trails and a defensive site (i.e., fortress). The two trails exist in Puaʻahala and ʻUalapuʻe-Kaluaʻaha, and were identified from field notebooks and diary of Monsarrat. The Pākuʻi CIA notes that in the past, these trails likely connected to major and previously known trails in Wailau-Mapulehu and Pelekunu-Kamalō, and that the island likely supported a system or network of trails in the past to facilitate interaction between the windward and leeward ahupuaʻa (Keala Pono 2016). The need for trail systems to facilitate land travel between coasts may have been further emphasized by the island's long and narrow dimensions coupled with restricted access along the north coast during the winter months, as Kanepuʻu observes:

> Molokaʻi is a land of rough seas, especially worse on the Koʻolau side during the rainy months up to Makaliʻi or April, when it calms down. That is a better time for strangers to visit the Koʻolau side of Molokaʻi. In those six months…one could get some fish to eat, but when the rainy months come, the sea rises up against the cliffs…(Kanepuʻu 1867).

A third, previously undocumented site reported in the Pākuʻi CIA is the Pākuʻi fortress. The fortress is mentioned in historical accounts and is associated with named chiefs, recognized events and also served as a defensive location (Keala Pono 2016). While its location is unknown, it is believed to likely be in the vicinity of Pākuʻi peak along the East Molokaʻi mountain summit

where the ahupuaʻa of ʻUalapuʻe and Kaluaʻaha join. The Pākuʻi CIA does not recommend that the site be located, but that any activities near the summit proceed with caution (Keala Pono 2016). No fencing is proposed near this location, and the fencing that is proposed for the Pākuʻi project will limit ungulate access to all three of these previously undocumented sites, thereby, providing them protection from ungulate damage.

Two additional sites were discovered during reconnaissance of sections of the Pākuʻi fence route. A terrace and rock wall located on the west bank of ʻŌhiʻa Stream, and a rock wall segment in the west fork of Kaluaʻaha Stream, extending from the base of the valley. These sites, which were initially identified by the EMoWP during fence route surveys, will be protected from ungulate damage within the proposed fence. The site in ʻŌhiʻa occurs close enough to the proposed fence route that a 3 m buffer is recommended, and archaeological monitoring should be conducted during construction in this area. The rock wall segment in Kaluaʻaha is located approximately 30 m north of the proposed fence route. At this distance, the site will not be impacted by fence construction and, archaeological monitoring is not recommended for this area (Keala Pono 2016). The Pākuʻi CIA recommends historical research and/or archaeological surveys to further document both of these sites so they can be formally recorded and entered into the State's listing of archaeological sites.

The Pākuʻi CIA also notes that while the project area includes these five sites, it is also indirectly related with the coastal areas of the leeward ahupuaʻa since this is where a majority of the population lived and from which interaction with windward groups via the trails was likely to occur (Keala Pono 2016). The assessment points out that while the trails facilitated movement, the fortress site was designed to limit access and provide protection to Molokaʻi chiefs from the leeward region. Therefore, the Pākuʻi project area would have been important in the past in two very different ways. Ordinarily cultural sites and their associations reflect only one aspect of interaction, but in the project area, cultural sites were placed to facilitate and at the same time, limit access (Keala Pono 2016).

The Pākuʻi CIA's conclusions and recommendations identify the following direct and positive impacts to cultural and natural resources of the project area (page 168):

- Conservation and preservation of archaeological sites and traditional properties (named places)
- Protection of the native intact forest and native plant taxa that are not currently protected for animal intrusions
- Protection of native and Polynesian introduced species important to Hawaiian culture
- Reduced erosion of areas with limited plant growth and reduction in the corresponding transport of sediments through drainages, and limiting sedimentation along the coast and into the ocean
- Preservation of cultural practices that depend upon native plant taxa in the uplands of East Molokaʻi
- Water conservation as more moisture is held in the soils and translocated gradually down drainages and across slopes

Identified indirect and positive impacts include (page 168):

- Employment opportunities in building, maintaining, and improving the fenced area
- Establishment of management practices that would help sustain native forest in Molokaʻi and elsewhere in the Hawaiian Islands
- Providing opportunities to learn and share information among residents and The Nature Conservancy about the project area

Concerns identified during ethnographic interviews seen as negative impacts include (page 169):

- Limitation on access to the uplands for residents to engage in pig hunting for recreation and subsistence
- The efficacy of the proposed fence to achieve the positive impacts listed above
- Potential of increased water runoff and erosion during the period of fence construction
- Potential noise pollution caused by helicopters involved in the fence construction
- As yet unanticipated problems that the fence may produce

An additional concern identified during interviews is that the fence may encourage ungulates, particularly goats, to move laterally along the fence line across ahupuaʻa (Keala Pono 2016). While one interviewee felt that the direct result of the construction of the fence will result in destruction from cattle, potential limitation of recreational access to the uplands, and more flash floods and runoff, the other interviewees felt the fence will help with these problems over the entire area and not just along the fence line (2016). The one interviewee who seemed against the project seemed most concerned about the use of helicopters, which was a theme throughout his interview.

There were several recommendations offered in the interviews to mitigate potential impacts caused by the proposed fence (page 170):

- Block goats from going west to east
- Limit helicopter use during fence construction or refrain from using helicopters at all
- Educate people more about the history of the project lands

The Pākuʻi CIA reports that most of the interviewees generally support the project because of their concerns regarding loss of native forest, erosion, sedimentation, and protection of cultural sites in the area (Keala Pono 2016). In line with these findings, the assessment concludes with the following statement from one interviewee, which articulates the need to protect the uplands:

> Mountain, ocean, in our environment, everything connected. So the health of one directly affects the health of the other. So people that can separate all of these sections, that's western thinking. And we gotta get back to one more Hawaiian way of thinking, a more native way of thinking, for nature (Keala Pono 2016, page 170).

Traditional and Customary Practices Report for Manaʻe, Molokaʻi

The Traditional and Customary Practices Report for Manaʻe, Molokaʻi, written by Akutagawa *et al.* (2016) for the ʻAha Kiole o Molokaʻi and funded by the Office of Hawaiian Affairs, considers the EMoWP's entire proposed East Slope Management Area from the ahupuaʻa of Puaʻahala to Hālawa, as well as all 37 recognized ahupuaʻa in the Kona district and windward valleys in the Koʻolau district within the Manaʻe moku. Therefore, the conclusions and recommendations brought forth by the TCP encompass much more than the Pākuʻi Watershed Project, and aspects of the TCP relevant to the proposed project are summarized below.

The need for the TCP was recognized early in project planning for the East Slope during an initial meeting between the EMoWP and the ʻAha Kiole ʻo Molokaʻi on April 2, 2013. At this meeting the EMoWP's East Slope Watershed Start-Up Management Plan (Dunbar-Co 2013; here forth referred to as the East Slope Management Plan), which proposed the possibility of protecting Manaʻe's mauka native forests with a fence and subsequent ungulate and weed control, restoration, and monitoring, was first introduced to the ʻAha. The proposed project brought out strong reactions from some of the ʻAha members – both for and against the project. Subsequent meetings with the Manaʻe community in 2013 and the early part of 2014 also caused some community members to request additional planning that included the entire moku, and all of its ahupuaʻa, mauka to makai. The authors' original intent was that this planning effort would lead to the creation of a comprehensive community-based Subsistence and Ahupuaʻa Management Plan, which would complement the East Slope Management Plan and, ideally, the two would work together as an integrated mauka to makai natural resource management plan for Manaʻe (Akutagawa *et al.* 2016). However, time constraints and available resources resulted in the TCP representing a framework for such a plan.

Akutagawa *et al.* (2016) outline four primary objectives of the TCP:

a. Recognize and document the traditional and customary practices regularly exercised by the people of Manaʻe, East Molokaʻi.

b. Explain legal protections pertinent to these practices.

c. Produce a framework for a comprehensive community-based Subsistence and Ahupuaʻa Management Plan for the Manaʻe Moku, mauka to makai.

d. Summarize community recommendations for the East Slope Management Plan (January 2014 draft).

In order to accomplish their objectives, the authors interviewed 44 residents and kamaʻāina informants to document the traditional and customary practices in the Manaʻe moku, and gather manaʻo from key informants, including kamaʻāina and other experts, on best ways to protect these practices and resources. From these interviews, the authors' report that most informants consider subsistence hunting and gathering very important to their family, and highlight that every ahupuaʻa in Manaʻe was identified as having various cultural, religious and subsistence values (Akutagawa *et al.* 2016). Access within ahupuaʻa for subsistence and cultural practices was of primary importance to many interviewees (2016). A number of cultural sites in the moku

were also identified during interviews including fishponds, heiau, the sacred forest of Ka Ulu Kukui o Lanikaula, the wao akua, burial caves, trails, and loʻi kalo (2016). The authors note that the cultural sites identified in the TCP are not meant to be a comprehensive inventory, but rather to show that many such sites still exist throughout the moku and their use and protection is both necessary and important.

A core component of the TCP as it relates to the Pākuʻi Project are community recommendations on the EMoWP's proposed conservation work in Manaʻe (i.e the East Slope). During interviews, informants were asked their opinions on the East Slope Management Plan, and specifically whether or not they support the EMoWP's proposed fencing efforts, and why or why not. While the TCP reports that while a variety of answers were shared on where and how fence construction should proceed, a consensus of interviewees support the fence. The TCP provides the following conclusion on community support for the EMoWP's proposed conservation efforts in Manaʻe:

> Overall, the proposed fencing from Puaʻahala to Hālawa has substantial support by the kamaʻāina informants, as long as access for traditional and customary practices is ensured with the implementation of step-overs [gates], and additional management is included for the areas makai of the fenceline. They would also like to see mitigation efforts for unfenced areas and/or areas impacted by changed migration patterns. However, not every ahupuaʻa supports the fence…Thus, it is recommended that the fence be implemented, first and foremost, in those areas that support it. (Akutagawa *et al.* 2016, page 41-42).

Table 2, taken directly from the TCP and included below, shows general support for or against the EMoWP's proposed natural resource management efforts within the East Slope broken down by ahupuaʻa or ahupuaʻa cluster (Akutagawa *et al.* 2016, Table 5.2). Based on information received during interviews with residents and kamaʻāina informants of the nine ahupuaʻa that make up the proposed Pākuʻi project area (Puaʻahala, Kaʻamola, Keawa Nui, West ʻŌhiʻa, East ʻŌhiʻa, Manawai, Kahananui, ʻUalapuʻe, and Kaluaʻaha), the authors report that these ahupuaʻa are generally in support of the proposed project, including fencing, ungulate and weed control, restoration, and monitoring.

The TCP also provides an analysis of legal protections pertaining to traditional and customary practices in the moku. These protections were used to help frame community recommendations both for ahupuaʻa resource management in Manaʻe and for the East Slope Management Plan provided in the report. Despite adaptations to the East Slope Management Plan having taken place since the 2014 draft analyzed in the report, these recommendations are valuable, and have helped strengthen the EMoWP's understanding of cultural practices and values, and community wants and needs across the entire Manaʻe moku. Adaptations to the EMoWP's efforts based on community recommendations include focusing on one fence unit at a time (i.e., Pākuʻi) and installing step-overs at community recommended locations. A complete summary of community recommendations and initial feedback on them from the EMoWP is provided in Table 5.3 of the TCP (Chapter 5). Overarching themes of these recommendations are the desire of many residents to play active roles in the stewardship of their ahupuaʻa, as well as the independence, yet interconnectedness, of each ahupuaʻa. Interviewees also consistently identified the desire to

Table 2. General sentiment towards proposed fence by ahupuaʻa or ahupuaʻa cluster from Akutagawa *et al.* 2016, Chapter 5, Table 5.2.*

Ahupuaʻa	General Sentiment
Puaʻahala, Kaʻamola, Keawanui	Support the fence.
West ʻŌhiʻa, East ʻŌhiʻa, Manawai, Kahananui, ʻUalapuʻe	Support the fence.
Kaluaʻaha	Majority support the fence, some concern about access for subsistence practices.
Mapulehu, Pukoʻo, Kūpeke	Unknown (none interviewed).
ʻAhaʻino	Some against the fence, some support.
Honomuni, Kawaikapu, Kainalu, Pūniuʻōhua	Support the fence.
Waialua, Moanui, Kumimi	Some against the fence, especially if there is a corridor created through this area (the Pākaikai Corridor alternative). The main concern is the outmigration and spillover of ungulates into this open corridor that would foul important streams that residents rely on for both agriculture and domestic purposes.
Honouliwai, Honoulimaloʻo	Support the fence. They recommend go slow, see if the first fence works out and adjust management accordingly. Some concern about Pākaikai Corridor also because they are reliant on stream water for both agricultural and domestic use.
Puʻu o Hoku Ranch lands	Undecided.
Hālawa	Support the fence. Emphasized the need for all ahupuaʻa tenants to be informed.

* This table is only based on the 44 informants surveyed for this process.

see natural resource management extended to areas outside of fenced areas. These themes echo some of the conclusions and recommendations reported in the Pākuʻi CIA.

Consistent with these findings, comprehensive and inclusive solutions remain a central focus of what the Pākuʻi Project aims to accomplish and how. The Nature Conservancy and the EMoWP are committed to continuing to involve residents in collaborative approaches to resource protection work in the project area and continuing to work with residents from each of the ahupuaʻa that make up the project area to achieve supported outcomes.

IV. DISCUSSION OF THE ALTERNATIVES CONSIDERED

This environmental assessment considers the following project alternatives:

Alternative 1: Construct Pāku‘i contour fence, extending from the Kapualei Extension fence to the eastern boundary of Kalua‘aha, and the Kalua‘aha ridge fence along the eastern boundary of Kalua‘aha to the summit to protect approximately 2,080 acres of native watershed forest (preferred alternative; Map 1). Implement animal and weed control, monitoring and restoration efforts within the fenced area.

Alternative 2: No Action Alternative (Current management)

Under Alternative 2, no fences in the project area would be built. This Alternative assumes that programming, staffing, funding, and management would generally continue at their current levels and would focus on the near term. While ungulate control, in the form of periodic ground hunts, might take place, without a barrier fence these control efforts are believed to be inefficient, which could result in there being no ungulate control in the area without a fence. Likewise, periodic weed and rare plant surveys would likely continue; however, without a fence, weed control and rare plant restoration efforts are believed to have limited success and funding for these initiatives would be year-to-year.

It is recommended that the no action alternative not be pursued, as it implies acceptance of the status quo, which would result in the insidious degradation of Pāku‘i’s native forests and watershed uses, including potentially decreased quality and quantity of fresh water in the area and increased sedimentation of Moloka‘i’s south shore fringing reef. The Moloka‘i community highly values the native watershed and inshore reefs as essential resources to their livelihood, culture, and character of the island (The Community of Moloka‘i 1998, Members of the Moloka‘i Community 2008, County of Maui 2015, Akutagawa *et al*. 2016, Keala Pono 2016). The preferred alternative’s protection of approximately 2,080 acres of native forest through fencing, ungulate and weed control, restoration, and monitoring aligns with community values and wants as well as State and Federal environmental initiatives (Mitchell *et al.* 2015, DLNR 2008, 2009 and 2011, HRS Chapter 343, USFWS 2003 and 2015, Akutagawa *et al.* 2016, Keala Pono 2016).

Alternative Considered but Dropped from Further Analysis
During project development and public involvement, the topic below was brought forward. The EMoWP considered actions related to this topic, and these actions were ultimately eliminated from further consideration for the reasons provided.

Protect and restore the entire watershed, mauka to makai: During project development there was feedback by some that the EMoWP should protect and restore entire ahupua‘a, summit to sea, not just mauka watershed areas containing native forest. Those strongly in favor of this approach also wanted to see the EMoWP provide job training in conservation, as well as opportunities in traditional agriculture and education. However, the EMoWP does not have the capacity, funding or knowledge to restore entire ahupua‘a, nor to spearhead job training initiatives or opportunities in traditional agriculture and education. While the EMoWP is supportive of these efforts, the

primary mission of the Partnership is to protect the island's fresh water resources by protecting the native forests of Molokaʻi. Today, only 15% of Molokaʻi's native forests remain, which typically begin between 1,400 – 1,600 feet elevation and continue to the summit. The EMoWP encourages the health and protection of the entire ahupuaʻa and is supportive of initiatives that focus on lower watershed and coastal areas.

V. PROJECT DESCRIPTION OF PREFERRED ALTERNATIVE

General

As previously described, the Pākuʻi Unit's proposed southern boundary (contour) fence will extend approximately 4.5 miles from the Kapualei Extension fence to the eastern boundary of Kaluaʻaha. Construction of an approximately one mile fence along the eastern ridge of Kaluaʻaha will be the Unit's eastern boundary (Map 1). In total, the proposed fence will be approximately 5.5 miles in length, and will work in conjunction with steep cliffs and short sections (< 30 meters) of strategic fencing near the East Molokaʻi summit to protect approximately 2,080 acres of contiguous native Hawaiian watershed in the Conservation District and small sections of the Agricultural District.

Site Preparation

This fence route was selected based on the following considerations: the terrain; the location of the native forest edge; the location of rare and endangered species and archaeological sites; adjacent hunting areas; community recommendations; and cost. Additionally, the fence has been routed in impacted areas to the greatest degree possible in order to minimize disturbance to native vegetation during fence construction. Only vegetation that will hinder the construction of the fence will be removed. This may include both native and non-native vegetation; however, healthy native trees greater than 4 inches in diameter will be avoided. The fence corridor will be a maximum of 10 feet, and soil disturbance will be minimized.

There are two known archaeological sites within or near by the fencing corridor: a terrace and rock wall located on the west bank of ʻŌhiʻa Stream, and a rock wall segment in the west fork of Kaluaʻaha Stream, extending from the base of the valley (Keala Pono 2016). These sites, which were initially identified by the EMoWP during fence route surveys, will be protected from ungulate damage within the proposed fence. The site in ʻŌhiʻa occurs close enough to the proposed fence route that the Cultural Impact Assessment recommends a 3 m buffer, and archaeological monitoring during construction in this area. The rock wall segment in Kaluaʻaha is located approximately 30 m north of the proposed fence route, and at this distance, fence construction poses no danger to the site and archaeological monitoring is not recommended for this area (Keala Pono 2016). If other archaeological sites are encountered, they will be flagged and avoided. If cultural artifacts are found at any time during site preparation or installation, work will immediately cease and the appropriate authorities will be notified. The EMoWP has conducted biological surveys and has marked all known rare species locations. While the fence has been routed to avoid rare species, approximately half of the fence line is within critical habitat and thus extreme caution will be used during clearing and installation of all phases of the fence line (Map 3).

Camping
Due to the remote location of the project, fence contractor personnel will need to camp at the work site at intervals. The contractor hired and the weather conditions encountered will determine the duration of their stay. Camp locations, as well as landing zones used for the transportation of materials, will be carefully selected by the EMoWP to minimize clearing and disturbance to native plants, as well as the spread of invasive species. Areas already converted to non-native grass will be considered first. All human litter and waste will be removed from the work site at all stages of fence line installation.

Alien Plants and Animals
The purpose of this project is to protect valuable watershed and native habitat. The control of non-native plants and animals is a high priority. The fence contractor and the EMoWP will implement precautions to prevent the introduction of invasive species. Of particular concern is the newly identified pathogen, *Ceratocystis fimbriata*, also known as Rapid ʻŌhiʻa Death (ROD), which has killed large numbers of mature ʻōhiʻa trees (*Metrosideros polymorpha*) in forests and residential areas of Hawaiʻi Island. While no occurrences of ROD have been reported on Molokaʻi, this disease has the potential to kill ʻōhiʻa trees statewide and strict bio-sanitation protocols must be followed to prevent its introduction to uninfected areas. Due to the many unknowns surrounding ROD, a proactive approach will be taken and all tools, equipment, and materials including all cutting tools (e.g., chain saws, machetes, clippers), backpacks, boots, rain gear, chaps, gloves, etc. will be purchased new and remain on island for the duration of fence construction. All materials used for the project will remain site-specific and will not be used in other areas in the State, or on Molokaʻi. DOFAW requires that ROD protocols be included as contract and permit conditions. Additionally, all fence materials should be power washed prior to transport to the project area. Because there is no vehicular access to the project area, the introduction of pathogens via trucks is not a primary concern. The EMoWP reserves the right to inspect all gear prior to deployment to ensure cleanliness.

The fence contractor will also take precautions to prevent spreading alien plants already found at the project area by cleaning personal gear, equipment and materials on site in areas with highly invasive species before moving to a new forest site in the project area. Appropriate cleaning methods include: water and hose, brush, clean rag, knife-edge, and 70% isopropyl alcohol or 10% bleach solution. Additionally, the contractor will remove all human litter (including organic trash such as banana skins, orange peels, etc.) and waste at all stages of the fence line installation, and all tools, gear, and installation scrap upon completion of work. All decontamination protocol information will be included in contracts with any contractors.

Figure 3. A hog panel fence. The proposed fence would have an additional half panel attached above for an effective height of 7.5 feet.

Fence specifications
Given the Pākuʻi project area's remoteness, steep

terrain, and soil conditions the Corral Panel Fence type (i.e., hog panel fence) was selected as the best choice to ensure that feral ungulates of all age classes are excluded and that long-term fence maintenance needs are minimal (Figure 3). This fence type is one of six specified fence types recognized and in use by DOFAW.

The proposed fence will be constructed of hot dipped galvanized rigid hog panels measuring 5 foot x 16 foot with graduated spacing and up to 16 horizontal bars. Panels will be supported by galvanize coated T-posts 10 feet in height. T-posts will be spaced no more than eight feet apart and sunk into the ground a minimum of two feet. Each section of panel will be attached to at least three different T-posts. Panels will be attached to T-posts with 9-gauge wire with a minimum of five wires per post, and to each other with 9-gauge hog ring fasteners spaced no more than 18 inches apart at each seam. The fence must exclude pigs, goats and deer so an additional half-width of panel will be installed at the top to give the fence an effective height of 7.5 feet. The cut side of the half-width of panel will be installed so that any sharp wire ends are pointing down, in order to avoid injury to persons climbing the fence. Hog panels will be flush along the ground. In situations where the ground is uneven, the ground will first be graded to accommodate the panel. In the event that grading is not enough, panels may be cut to accommodate the shape of the terrain.

The outside of the fence will be continuously skirted along the base with an apron of 48 inches high tensile steel woven Bezinal coated hog wire mesh laid horizontally at the base of the upright panel, and attached so that the small box side of the wire overlaps the vertical fence by two rows of squares. The apron will be attached with hog ring fasteners for the entire length of the fence, with no more than a 24 inch distance between hog rings. The apron will be pinned to the ground with 24 inch deadman anchors to prevent animals from tunneling under the fence.

The fence will not continue across most streams in the project area, but rather, end on either side at waterfalls and ravines where animal traffic into the project area is naturally blocked. For streams where natural barriers do not exist near the fence route, crossings are required (Figure 4). Unless more effective alternatives are discovered, crossings will consist of a durable ungulate proof curtain installed across flowing stream sections and fencing across dry streambed sections. The curtain will consist of buoyant UV resistant weed mat or shade cloth with fine mesh, doubled up on edges and secured with grommets to prevent tearing, and weighted with weight socks sewn at water level and weights to keep the vertical portion of the curtain weighted to the water level. Aluminum clips along the top and plastic ("break-away") ties along the sides will attach the curtain to 10 foot anchor posts on either side of the streambed. Plastic ties allow the mesh curtain to break-away during heavy rainfall episodes. Hog panels will

Figure 4. A stream crossing in the EMoWP's Kamakou fence unit. "Break-away" ties run along the sides of the mesh curtain.

be used as fence material for all stream crossings (skirting may be necessary). Stream crossings will not alter streams in any way.

Step-over gates will be installed according to an approved specified design and at specific locations determined by the community and the EMoWP (Figure 5). The purpose of these gates is to provide access to the interior of the fence for continued use.

Figure 5. Step-over gate in the EMoWP's Kamakou fence unit allows for continued access to the interior of the fence.

Progression and Timeline

The project goal is to begin fence construction by the end of Fiscal Year 17 (June 2017). This construction start date is contingent on funding. Should necessary funding, permits and landowner commitments fall into place, once construction of the fence begins, it should be completed within three years.

i. Fence Corridor, Camp Site and Helicopter Landing Site Demarcation

The EMoWP will demarcate the fence construction corridor, campsites and helicopter landing sites for the fence contractor prior to fence construction.

ii. Fence Construction

The fence contractor will complete vegetation clearing along the fence corridor as the first action in fence construction. Fence installation will immediately follow the fence corridor clearing. Fencing material will be transported to the site by helicopter and construction will be done by hand. Due to the remote location, the fence construction crew will camp at the work site at intervals (See **Camping** under PROJECT DESCRIPTION OF PREFERRED ALTERNATIVE). The work will be weather-dependent and activity may not be continuous within the project time period.

iii. Final Fence Inspection

The fence will be inspected after construction and approved by DOFAW for completion.

iv. Fence Surveys and Maintenance

The fence will be regularly surveyed and repaired as needed. Fence maintenance will be a part of the natural resource management actions carried out within the project area on at least an annual schedule (TNC 2015). Breaks will be responded to immediately.

v. Management Efforts within the Fence

a. Ungulate Control

Ungulate control efforts will be developed over the first few years. Hunt sweeps and trapping will likely be the primary actions used to control ungulate numbers within the fence. If hunt sweeps and trapping are not effective, other methods will be used to ensure effective control. Once fence construction has been completed ungulate control activities will be undertaken.

b. Weed Control

Weed control efforts will prioritize establishing a priority weed list and implementing weed sweeps in the project area. Monitoring of invasive weeds will occur along the fence line and surrounding areas during routine maintenance inspections to assess plant regeneration (TNC 2015). Other weed control activities will occur throughout the fenced area to improve and maintain the integrity of the ecosystem. Invasive weeds such as cane tibouchina (*Tibouchina herbacea*), strawberry guava (*Psidium cattleianum*) and Koster's curse (*Clidemia hirta*) are established in the project area and will be a top management priority. Weed removal will be carried out using an Integrated Pest Management (IPM) approach with approved mechanical, chemical and/or other methods as appropriate and shown to be highly effective and in accordance with state and federal laws.

c. Restoration

Once feral ungulates have been removed from the fence unit, rare and somewhat less rare native plants and animals will be restored within the fence at appropriate locations. Restoration work will be done in partnership with State and Federal partners including MoPEPP, the Snail Extinction Prevention Program, the DLNR and USFWS.

d. Monitoring

Vegetation monitoring will occur within the fence through TNC's understory monitoring efforts (e.g., MUM), which provides an analysis of native vegetation health. Ungulate monitoring protocols will be put into place to track the decline of the resident ungulate population, and detect the presence or absence of ungulates throughout the fenced unit and in adjacent areas (TNC 2015).

vi. Outreach

To keep the community informed of the Pāku'i Project, the EMoWP will continue to communicate regularly with its landowner partners, the Mana'e

Mauka Working Group, and the ‘Aha Kiole ‘o Moloka‘i’s Mana‘e Moku. Additionally, bi-annual newsletters sent to every box holder on the island have updated residents on the project and will continue to until fence construction is complete. Opportunities for community participation in natural resource management efforts will be prioritized.

Funding Sources
Funding for the project will be actively sought once all permits have been received. Construction of the fence will likely be funded with support from the State of Hawai‘i. These State funds are annually provided by the State Legislature and administered by the DLNR-DOFAW. The fence may also be federally funded. Following the construction of the fence, funding for natural resource management actions will come from a combination of sources that fund the EMoWP such as, but not limited to, Maui County, The Nature Conservancy, and the DLNR-DOFAW.

VI. POTENTIAL ENVIRONMENTAL IMPACTS OF THE PROJECT

Implementation of the preferred alternative is not expected to have significant negative impacts on the environment, but, rather, is expected to improve native ecosystems, watershed health and water supply, reduce erosion, benefit rare plants and animals, and mitigate climate change. During the project’s multi-year public involvement process, partner and agency coordination, internal scoping, and comparisons with similar projects, the following areas of concern were identified as possible minor negative impacts.

Vegetation
Installation of the proposed new fences will require clearing non-native and common native vegetation along the fence corridor in a swath approximately 5’ wide and no more than 10’ wide. The amount of clearing required in a given area will vary depending on the terrain, amount of previous disturbance, and predominant vegetation type. Not all vegetation in the fence corridor needs to be cleared, only what obstructs construction of the fence. Trees greater than 6 inches in diameter will be avoided. The fence alignment has been routed along pre-existing animal trails and through non-native vegetation to the greatest degree feasible to avoid further disturbance. The alignment also avoids rare plants.

There will be a temporarily increased potential for accidental introductions of non-native species along the fence corridor due to the potential of propagule transport on clothes, shoes, equipment, and/or fencing materials. To eliminate or minimize this threat, fence contractor personnel and the EMoWP will be required to follow the decontamination protocols described above (See **Alien Plants and Animals** under PROJECT DESCRIPTION OF THE PREFERRED ALTERNATIVE). Ground disturbance from clearing the fence corridor might also favor colonizing weed species that already exist in the project area. In areas where highly invasive plant species occur, equipment will be cleaned on site in order to minimize spreading propagules to other areas along the fence route. Following construction, the EMoWP will control any weeds found along the fence (See **Weed Control** under PROJECT DESCRIPTION OF PREFERRED ALTERNATIVE).

Some community members have expressed concern that the construction of the proposed fence will cause feral animal impacts in areas below the fence to increase, particularly near residences. It is not anticipated that the proposed fence will result in a large increase in feral animal numbers or impacts below the fence because: 1) Surveys in the project area have determined that feral deer and goats primarily occur in open shrub and grassland areas below the native forest edge, and their movement patterns in the area are largely lateral (i.e. east – west, and vice versa); therefore, the proposed fence, which is largely positioned above where these animals inhabit and in line with their movement patterns, should not substantially change their numbers, movements, and thus, impacts in the area; and 2) The proposed fence may make hunting in the area easier by restricting feral pigs that are outside of the fence to lower elevation areas where they are easier to hunt, by providing a barrier to hunt against, and by preventing hunting dogs from being lost in the upper forest. Feral pig impacts below the proposed fence may increase once the fence is constructed during times of drought; however, the increased efficacy of hunting efforts below the fence could help reduce any potential rise in animal impacts, seasonal or otherwise. Furthermore, the overall benefit of this project to the health of the Pāku‘i watershed is believed to far outweigh these potential impacts - a sentiment shared by many community members (Akutagawa *et al.* 2016).

Wildlife

Construction of the fence is not expected to have direct negative impacts on native wildlife. As most of the required vegetation clearing will be in non-native forest and largely limited to understory ferns and shrubs, the chance that native bird nests will be damaged is minimal. Native snails may be on brush cleared for the fence; however, no brush will be removed from the area, and native snails are expected to survive and relocate to new sites from cut branches.

Historic Sites and Cultural Practices

Some community members expressed concern that the Project may impact Native Hawaiian cultural practices and historic sites. In order to analyze this potential impact the Pāku‘i CIA was developed. The Pāku‘i CIA identified five historic sites in or close by the project area (Keala Pono 2016), and determined that fence construction will not negatively impact these sites, but rather, protect them from ungulate damage within the proposed fence. A terrace and rock wall located on the west bank of ‘Ōhi‘a Stream occurs close enough to the proposed fence route that a 3 m buffer is recommended, and archaeological monitoring is recommended during construction in this area. The rock wall segment in Kalua‘aha, located approximately 30 m north of the proposed fence route, is far enough away that archaeological monitoring is not recommended for this area. Keala Pono recommends that a hired archaeologist further document both of these sites so they can be formally recorded and entered into the State’s listing of archaeological sites (2016).

Members of the Moloka‘i community exercise traditional access, gathering and other rights within the project area as recognized by law. Construction of the proposed fence will not alter these rights. Access to the project area will not change and step-over gates will be installed at community and EMoWP determined locations along the fence to provide continued access to the interior of the fence. As the intent of the fence is to protect and restore native natural resources, the long-term impact of the project on traditional and cultural practices is expected to be positive.

A large number of Mana‘e residents hunt to support their subsistence lifestyles (Akutagawa *et al.* 2016, Keala Pono 2016). These contemporary practices have strong cultural and traditional ties

and represent an important kuleana for many Manaʻe households. Today, community hunting above the Forest Reserve boundary line is focused to the east of the project area (i.e., east of Mapulehu Valley), with very little hunting taking place in the project area. Most community hunting in the nine ahupuaʻa that make up the project area is focused on deer and takes place at lower elevations below the proposed fence in the open shrublands and valley floors that the animals prefer to inhabit. As such, the proposed fence is not anticipated to negatively impact subsistence hunting in the project area. In contrast, the proposed fence may benefit hunting in the area by restricting pigs to lower elevation areas where they are easier to hunt, acting as a barrier to hunt animals against, and preventing hunting dogs from being lost in the upper forest. Additionally, for those Pākuʻi landowners who are interested, the project will allow the EMoWP to work with them to help make their lands more accessible to community hunting activities.

Economic
No significant economic impacts are foreseen by the project. Local term labor will be used for construction of the fence to the greatest degree possible, a short-term economic benefit. Volunteer community hunters will be recruited to help remove animals from the enclosed areas, and recovery of meat will be encouraged.

Soils
No adverse impacts to soils are expected. There may be some minor short-term erosion caused by clearing vegetation along the fence alignment and from the establishment of foot trails along the fence corridor. However, the net benefit from vegetation recovery after ungulates are removed from within the fence is expected to more than compensate for this short-term disturbance.

Noise
Small power machinery such as chainsaws, drills, generators, etc. will be required for fence construction. Helicopters will be used to ferry workers and materials to the project site. A Hughes 500 aircraft will be used exclusively for helicopter operations. This is the smallest aircraft available and is expected to be less obtrusive than the numerous tour aircraft that use the area. Helicopters will not fly over residences and their use will be limited to the greatest extent possible. Camping will also reduce the amount of helicopter noise by limiting the number of necessary flights. Power tool and helicopter operations will take place during daylight hours. The project site is very remote, approximately 1.3 miles from the highway and ¾ mile from the nearest residence, and the use of this equipment is not believed to cause significant noise impacts.

Visual
There will be no negative visual effect of the fence. The project site is very remote (see **Noise**). The existing Kamakou Boundary fence and the Kamalō/Kapualei fence are virtually invisible from the highway. To the trained eye, the fence location of the Kamalō/Kapualei fence (not the fence itself) built in 2003 was visible as the vegetation began to recover above the fence. The proposed fence is anticipated to have similar visual impacts.

Public Access
These forest management activities will not adversely affect community access to public and private lands in the project area because access to and within the project area will not change. Step-over gates will be installed along the proposed fence at community and EMoWP determined locations to provide continued access to the interior of the fence. On private lands,

the landowner grants access. Public lands in East ʻŌhiʻa and ʻUalapuʻe in the project area are part of the State of Hawaiʻi Molokaʻi Forest Reserve. Should the State acquire lands in Puaʻahala and attain sole ownership of the Conservation District lands in Kahananui, some of these lands will also become part of the Molokaʻi Forest Reserve. Forest Reserves are generally open to public access, so long as legal access points are available from adjacent lands, and may be closed or restricted in certain circumstances, such as for the protection of public safety. Rules regulating activities within Forest Reserves may be found in Chapter 13-104, HAR. Additionally, DOFAW may designate coastal areas in Puaʻahala including the Paialoa wetland as a Wildlife Sanctuary.

VII. MITIGATION OF POTENTIAL IMPACTS

Vegetation and Soil Disturbance
Native vegetation along the fence corridor will need to be cleared. Clearing the fence corridor and constructing the fence will cause short-term ground disturbance. Wherever possible, the fence alignment was chosen such that it follows pre-existing game trails and areas of non-native vegetation, and avoids woody vegetation in order to minimize and prevent disturbance to the greatest degree feasible. Only vegetation that impedes the construction of the fence needs to be cleared. The proposed fence corridor has been surveyed for rare and endangered species. None were located. Areas of native vegetation along the fence route will be left to regenerate with naturally occurring native plants. Vegetation along the fence corridor will be checked annually and invasive weeds will be removed using an Integrated Pest Management (IPM) approach with approved mechanical, chemical and/or other methods as appropriate and shown to be highly effective and in accordance with state and federal laws.

Alien Species Introduction
Clearing the fence corridor and constructing the fence will cause minimal and short-term ground disturbance. Ground disturbance and the transport of equipment and people will increase the potential for weed and pathogen introduction. To prevent and minimize the introduction and spread of non-native species in the project area, the EMoWP and all contractors will follow decontamination protocols described above (See **Alien Plants and Animals** under PROJECT DESCRIPTION OF THE PREFERRED ALTERNATIVE). Highly invasive species encountered along the route will require that equipment be cleaned on site so propagules are not spread to other areas along the fence. Monitoring vegetation recovery will occur as part of the EMoWP's routine natural resource management actions in the area (TNC 2015). All invasive weeds encountered along the fence will be removed using an Integrated Pest Management (IPM) approach with approved mechanical, chemical and/or other methods as appropriate and shown to be highly effective and in accordance with state and federal laws.

Cultural Access and Hunting
Because construction of the proposed fence might impede access in the area, step-over gates will be installed at community and EMoWP determined locations along the fence to ensure continued access to the interior of the fence. Additionally, the strength and rigidity of the proposed hog panel fence material will allow users to climb over it with relative ease. The intent of the project is to protect the area's native forests, which have a direct and profound link to Hawaiian culture and health, not to keep users out. The long-term impact of the project on traditional and cultural practices is expected to be positive.

Hunting is of vital importance to the Molokaʻi community, and initial project planning included aerial surveys with East Molokaʻi hunters to help identify and map important hunting areas and access routes in the East Slope. From these surveys, and subsequent interviews (by TNC, the ʻAha Kiole o Molokaʻi, Akutagawa *et al.* 2016, and Keala Pono 2016), it was determined that very little hunting takes place in the proposed fence area. The lack of hunting in the area is due to its steep, divided, and heavily vegetated terrain, which makes it difficult and dangerous to traverse and is also not favorable habitat for deer. In Manaʻe, community hunting within the Conservation District occurs primarily to the east of the project area. Hunting does occur below the project area in open grass and shrub lands where deer are prevalent, and in stream areas where pigs are more often found. It is possible that the proposed fence may benefit hunting in these adjacent, lower elevation areas by restricting pigs to lower elevation areas where they are easier to hunt, acting as a barrier to hunt deer, goats and pigs against, and preventing hunting dogs from being lost in the upper forest.

The EMoWP believes that community hunters are valuable partners in watershed conservation, not just by helping to control ungulates in watershed areas, but also because they are often very knowledgeable about the areas in which they hunt. For those Pākuʻi landowners who are interested, the project will also allow the EMoWP to work with them to help make their lands more accessible to community hunting activities.

During project development and public involvement the topic of constructing cabins near proposed fences in Manaʻe to aid in hunting and other forest management activities was brought forward. Feedback ranged widely from support to opposition. Those in support felt that cabins would increase opportunities for the community to access potential fenced and unfenced areas for hunting and other forest management activities such as fence maintenance and weed control. Those in opposition felt that cabins would not lead to greater community involvement in forest management activities, and raised concerns that cabins would increase access, which would increase the risk of weed introductions, garbage and vandalism (the old cabin in Kamalō was used as an example of vandalism). Some expressed that increased access would lead to increased maintenance needs of not just the facilities, but also of the greater area. There was also concern that cabins would introduce off-island visitors to these environmentally sensitive and culturally significant places. This Draft EA recommends greater discussion on the topic of constructing cabins in or near the Conservation District in Manaʻe so that all stakeholders can more fully understand and weigh the potential risks and benefits.

VIII. ANTICIPATED DETERMINATION

Based on all current information, the Pākuʻi Watershed Project is not expected to significantly alter the environment, in relation to the following criteria identified by the Hawaiʻi Administrative Rules § 11-200-12. It is therefore anticipated that an Environmental Impact Statement is not warranted and that the Hawaiʻi State Department of Land and Natural Resources (DLNR) will issue a Finding of No Significant Impact (FONSI). A final determination will be made by the DLNR after consideration of the comments on the draft EA.

IX. FINDINGS AND REASONS SUPPORTING THE ANTICIPATED DETERMINATION

Chapter 11-200-12, Hawaiʻi Administrative Rules, outlines those factors agencies must consider when determining whether an action has significant effect. The environmental impacts of the Pākuʻi Watershed Project have been evaluated in relation to these factors. The factors and the effects this project will have are listed:

1. **Involves an irrevocable commitment to loss or destruction of any natural or cultural resource.**

   The project will not result in the irrevocable loss or destruction of any natural or cultural resource, but rather, is expected to benefit the long-term protection of natural and cultural resources associated with healthy native forests and watersheds by protecting the area from damage by feral ungulates and invasive plants. Cultural sites identified within the project area will also benefit from protection from feral ungulates. This project will enhance the protection of the project area with minimal loss of common plants along the proposed fence lines and initiate more intensive management and monitoring of resources.

2. **Curtails the range of beneficial uses of the environment.**

   The Pākuʻi watershed area contains intact montane wet forest, lowland wet forest and lowland mesic forest, as well as a diverse collection of endemic plants. The area functions as an important watershed catchment and storage area for the entire southeast sector of the island, particularly the ʻUalapuʻe aquifer, which provides domestic water to most Manaʻe households through Maui County's water supply system. This project will strengthen rather than curtail these functions. Possible educational, cultural, and scientific uses will be enhanced by the completion of the project.

3. **Conflicts with the state's long-term environmental policies or goals and guidelines as expressed in Chapter 344, HRS, and any revisions thereof and amendments thereto, court decisions, or executive orders.**

   The project is in agreement with Chapter 344, HRS in that it shares the goal to conserve the area's natural resources "by safeguarding the State's unique natural environmental characteristics". Therefore, the protection of native montane wet, lowland wet, and lowland mesic forests, as well as watershed will, in effect, reduce the destruction of nonrenewable resources and is consistent with the state's long-term environmental policies.

4. **Substantially affects the economic, social welfare, or cultural practices of the community or state.**

   The project does not affect the economic, social welfare, or cultural practices of the community or state. Instead the project aims to benefit these aspects of the community by protecting native forests, watershed function, and cultural sites. Access to the area will not change and step-over gates will be installed at EMoWP and community-determined locations

along the fence to provided continued access to the interior of the fence. The project is not anticipated to negatively affect hunting as most hunting occurs below the proposed fence route.

The project's multi-year planning process has included considerable community input and engagement including: the formation of the Manaʻe Mauka Working Group (a community advisory group to the East Slope, which has met ten times and is updated quarterly), eleven community meetings done in partnership with the ʻAha Kiole ʻo Molokaʻi, informational packets and newsletters, over two dozen community helicopter trips, this draft Environmental Assessment, and the included Cultural Impact Assessment and Traditional and Customary Practices Report for Manaʻe, Molokaʻi. It should be noted that though project activities are exempt from requiring an environmental assessment, this draft EA has been prepared so that the community and decision makers have very detailed information about the Pākuʻi Watershed Project and the natural and cultural resources of the entire landscape.

5. **Substantially affects public health.**

   The project will not affect public health in any negative way. Potential positive outcomes include: improved water quality; more consistent water quantity; reduced potential for destructive flooding during heavy rain events; reduced harmful bacteria levels; and reduced potential of wildfire.

6. **Involves substantial secondary impacts, such as population change or effects on public facilities.**

   No adverse secondary effects are expected from this project. The steep terrain and remoteness of the project area negate impacts of population change or use of public facilities.

7. **Involves a substantial degradation of environmental quality.**

   The project does not involve the substantial degradation of environmental quality. Instead, the project is expected to benefit the long-term protection of environmental quality associated with healthy native forests and watersheds. The project requires the initial clearing of non-native or common native plants along the fence alignment, which may cause some short-term soil disturbance. However, this activity is necessary to protect the integrity of the ecosystem, and the long-term benefits to forest health and erosion reduction from fencing are believed to greatly outweigh these short-term impacts. Management practices are in place to minimize and prevent short-term impacts.

8. **Is individually limited but cumulatively has considerable effect upon environment or involves a commitment for larger actions.**

   The project has no commitment for larger actions and, cumulatively, is expected to have considerable benefit upon the environment in and adjacent to the project area. While this project is part of a larger vision of watershed conservation in East Molokaʻi, an incremental

approach to these efforts, starting with this Pāku‘i Project, is favored by the EMoWP, TNC, the ‘Aha Kiole ‘o Moloka‘i, and much of the Moloka‘i community (Akutagawa *et al.* 2016).

9. Substantially affects a rare, threatened or endangered species, or its habitat.

This project protects rare, threatened, and endangered species, their habitats, and the native ecosystems within the project area by addressing their primary threats. For a complete listing of all 68 rare species benefitting from the Pāku‘i Watershed Project, see Table 1.

10. Detrimentally affects air or water quality or ambient noise levels.

The project will have no negative effects on air or water quality. Long-term benefits to water quality are expected as a result of protecting native forests and watershed function in the project area. The use of helicopters to ferry construction materials and personnel to the project site may temporarily increase ambient noise levels; however, these flights will be limited to the greatest extent possible and they will not fly over residences. Noise impacts are believed to be minimal. At its closest, the project site is approximately ¾ mile away from the nearest residence.

11. Affects or is likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters.

The project will not negatively affect any environmentally sensitive area and is not expected to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, beach, geologically hazardous land, estuary or coastal waters. While the project is located in an environmentally sensitive area that includes fresh water streams and montane wet and lowland wet and mesic native forests, the intent of the project is to protect these habitats. Fence construction will result in a small footprint, with management practices in place to prevent any long-term damage to the native ecosystem. For most streams along the fence route the fence will not continue across them, but rather, end on either side at ravines or waterfalls where animal traffic into the area is naturally blocked. For streams where natural barriers do not exist along the fence route, crossings are required and will consist of a durable ungulate proof curtain installed across flowing stream sections and hog panel fencing across dry streambed sections unless more effective alternatives are discovered (See **Stream Crossings** under PROJECT DESCRIPTION OF PREFERRED ALTERNATIVE; Figure 4). Curtains will be installed such that they can break away during heavy rain events. Stream crossings will not alter streams.

12. Substantially affects scenic vistas and view planes identified in county or state plans or studies.

The project does not affect scenic vistas or view planes. The project site is remote, located approximately 1.3 miles from the coastal highway and approximately ¾ mile from the nearest residence. To the trained eye, the fence location (not the fence itself) may be visible from certain areas along the highway as vegetation recovers above the fence.

13. Requires substantial energy consumption.

Energy consumption for this project will not be substantial. Consumption will be short-term and restricted to the fuel required for helicopter flights and hand-held power machinery used in fence construction.

X. LIST OF PERMITS REQUIRED FOR THE PROJECT

Construction of the project requires a Site Plan Approval (SPA) from the Department of Land and Natural Resources. No other permits are anticipated at this time.

XI. EA PREPARATION

This draft Environmental Assessment is being prepared in consultation with the landowners in the project area and the East Molokaʻi Watershed Partnership members. This document and all supporting documents are available at the Molokaʻi Public Library and at the following link:
https://dlnr.hawaii.gov/ecosystems/files/2016/09/PakuiDraftEnvironmentalAssessment.pdf

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DRAFT ENVIRONMENTAL ASSESSMENT

Pāku‘i Watershed Project

The Nature Conservancy, Moloka‘i Program
acting for the benefit of the
East Moloka‘i Watershed Partnership

APPENDIX 1
Pāku‘i Cultural Impact Assessment

FINAL—Cultural Impact Assessment for the Proposed East Pāku‘i Fence Unit, East Slope of Moloka‘i

Prepared For:

The Nature Conservancy Moloka‘i Program
PO Box 220
Kualapu‘u, HI 96757

The Nature Conservancy
Protecting nature. Preserving life.™

January 2016

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FINAL—Cultural Impact Assessment for the Proposed East Pākuʻi Fence Unit, East Slope of Molokaʻi

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MANAGEMENT SUMMARY

At the request of The Nature Conservancy, Coordinator of the East Molokaʻi Watershed Partnership, Keala Pono Archaeological Consulting conducted a Cultural Impact Assessment for the Proposed Pākuʻi Watershed Protection Project-East Slope of Molokaʻi. The Pākuʻi Watershed Protection Project (the Pākuʻi Fence) proposes to fence the upper ahupuaʻa of Puaʻahala to Kaluaʻaha (as shown in the map) to protect the best remaining native forest of east Molokaʻi from the impacts of ungulates. Additionally, other management activities (e.g., weed control, animal control, resource monitoring) will occur above and below the fence to protect all resources from further degradation to both conservation and cultural uses. To ensure continued human access to the interior of the fence, climb over gates will be installed at locations along the fence at locations determined by the community and the East Molokaʻi Watershed Partnership.

The project area for this Cultural Impact Assessment includes the upper slopes of nine ahupuaʻa along the southeast portion of Molokaʻi: Puaʻahala, Kaʻamola, Keawa Nui, West ʻŌhiʻa, East ʻŌhiʻa, Manawai, Kahananui, ʻUalapuʻe and Kaluaʻaha. The purpose of the assessment was to identify known and potential historic or cultural properties that may be located on the parcels in anticipation of the proposed construction of a fence line that approximates the lower elevation boundary of the Molokaʻi Forest Preserve in this area. The Cultural Impact Assessment consists of a literature review and a series of formal interviews with key individuals from Molokaʻi. A limited archaeological reconnaissance of the project boundary was undertaken using both a helicopter and pedestrian survey.

Relatively little previous archaeological survey work and direct historical documentation has been conducted in the upper elevations and forests of east Molokaʻi. Yet, the forests and uplands are important domains in traditional Hawaiian culture and society. Thus, for this report a combination of direct and indirect information has been employed to reconstruct the cultural properties and their significance for the East Slope of the Pākuʻi Fence Project. These can be sorted into three domains. The first domain covers the traditional Hawaiian concepts that refer to ecological or environmental zones as they occur in the study area. The second domain covers the lands of the traditional Hawaiian ahupuaʻa for the study area and their resources within the project's boundaries that likely occurred there and accounts regarding them. The third domain covers the lands outside of the project's boundaries which are relevant because these lands belong to those ahupuaʻa which cross into the project area. This consists of the remainder of the ahupuaʻa that lie outside the lower boundary of the study area but within each of the nine ahupuaʻa that comprise the project.

A combination of sources provide the primary basis for evaluating the historical and cultural significance of the Pākuʻi Project. These sources discuss Hawaiian place names and their locations; cultural concepts pertaining to and the distribution of the forests and upper elevations and their distributions on the southeast slopes of the Molokaʻi Mountains; evidence of relict vegetation from Polynesian plant introductions; and moʻolelo and other traditional Hawaiian accounts that reference the study area. These will provide the primary basis for evaluating the historical and cultural significance of the Pākuʻi Project. The historical and previously identified cultural resources within the project's boundaries and at lower elevations for the nine ahupuaʻa across which the fence will extend provide additional context for assessing the significance of the project area. Particularly, these cultural resources provide information on the movement of people and resources from one location to another at different elevations and across ahupuaʻa in the study area.

A total of four ethnographic interviews were conducted with individuals knowledgeable about the project lands. The interviewees mentioned a variety of archaeological sites, including fishponds, several heiau, an ʻulu maika field, loʻi, stone walls, burial caves, house sites, trails, ahu, koʻa, a

graveyard near Kilohana School, and a site of human remains from a helicopter crash. The wao akua itself was also mentioned as a cultural resource. Artifacts such as ʻulu maika, lūheʻe, and glass bottles were also noted. Cultural practices that occur in the uplands consist of hunting and gathering, particularly gathering of pepeiao in Kahananui. Cultural practices closer to the coast include gathering of limu and other ocean resources, hula dancing on the heiau, and using specific high spots as lookouts for fishing.

Most of the interviewees generally support the project, because of their concerns dealing with the loss of native forest, erosion, sedimentation, and protection of cultural sites. One of the main concerns is that the fence may encourage animal movements laterally along the fence line across ahupuaʻa. While one interviewee felt that the direct result of the construction of the fence will result in destruction from cattle, potential limitation of recreational access to the uplands, and more flash floods and runoff, other interviewees felt the fence will help with these problems over the entire area and not just the fence line. Recommendations that were offered consist of removing invasive plants and replanting native species, blocking goats from going east to west, enforcing limited or no helicopter use during fence construction, and educating people more about the history of the project lands.

A limited archaeological reconnaissance identified two archaeological sites near the proposed fence. The two sites consist of three features: a terrace and two rock walls. They should be avoided during fence construction.

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INTRODUCTION

At the request of The Nature Conservancy, Coordinator of the East Molokaʻi Watershed Partnership (EMoWP), Keala Pono Archaeological Consulting conducted a Cultural Impact Assessment (CIA) for the Proposed Pākuʻi Watershed Protection Project on the East Slope of Molokaʻi. The Pākuʻi Watershed Protection Project (the Pākuʻi Fence) proposes to fence the upper ahupuaʻa of Puaʻahala to Kaluaʻaha to protect the best remaining native forest of east Molokaʻi from the impacts of ungulates. Additionally, other management activities (e.g., weed control, animal control, resource monitoring) will occur above and below the fence to protect all resources from further degradation to both conservation and cultural uses. To ensure continued human access to the interior of the fence, climb over gates will be installed at locations along the fence at locations determined by the community and the EMoWP.

The Cultural Impact Assessment project area includes the upper slopes of nine contiguous ahupuaʻa along the southeast portion of Molokaʻi: Puaʻahala, Kaʻamola, Keawa Nui, West ʻŌhiʻa, East ʻŌhiʻa, Manawai, Kahananui, ʻUalapuʻe and Kaluaʻaha (Figure 1). The assessment was designed to identify known and potential historic or cultural properties that may be located on the parcels in anticipation of the proposed construction of a fence that approximates the lower elevation boundary of the Molokaʻi Forest Preserve in this area. The CIA consists of a literature review, and a series of formal interviews with key individuals who may undertake traditional and customary practices; have knowledge about the area; and/or have insights into the benefits and impacts of the planned management actions. A limited archaeological reconnaissance of the project boundary was also completed, using both a helicopter and pedestrian survey.

This report will meet the requirements of a Cultural Impact Assessment as developed by the Hawaiʻi Office of Environmental Quality Control. As such it will review literature, maps, and previous studies, along with the interviews to assess the benefits and impacts of the proposed Pākuʻi Fence, and propose strategies and recommended actions to mitigate impacts on significant cultural resources and practices.

The report begins with a description of the project area using terms and concepts employed by archaeologists and ecologists for the islands of Hawaiʻi. This is followed by a culturally relevant environmental and ecological overview of the lands contained within and near to the project area. Next, we provide an overview that includes a description of the role that traditional land divisions (primarily ahupuaʻa and ʻili ʻāina) and upland, forested areas with water drainages played within traditional Hawaiian culture and society. Particular attention is paid to historical accounts of both the Wailau and Pelekunu Trail systems since it is likely that members of these nine leeward ahupuaʻa communities used these trails. Named ʻili, particularly lele ʻili associated with the nine ahupuaʻa, that show the establishment and occasionally the location of land units in Wailau and Pelekunu are detailed. Together with the trail systems they identify the historical and traditional role of the upper bounds of the East Molokaʻi Mountains in the interaction of Hawaiians from both windward to leeward areas through this zone and including the Pākuʻi study area. Among the interactions that likely connected leeward and windward ahupuaʻa on the east portion of Molokaʻi would have been the transport of goods and possibly labor. This reconstructed transport "system" could only have been sustained by the trail systems through the mountains. Previous archaeological and historic research on Molokaʻi and within the nine ahupuaʻa represented here are summarized and synthesized. An ethnographic survey of interviewees is then presented along with their accounts of the archaeology, culture, and history associated with the project area. This survey addresses concerns and issues these interviewees raised about the proposed project as well as benefits that may accompany the fencing of the uplands. Specific results of the literature review of the nine ahupuaʻa are summarized and recommendations are made in the final section. Hawaiian

words, flora and

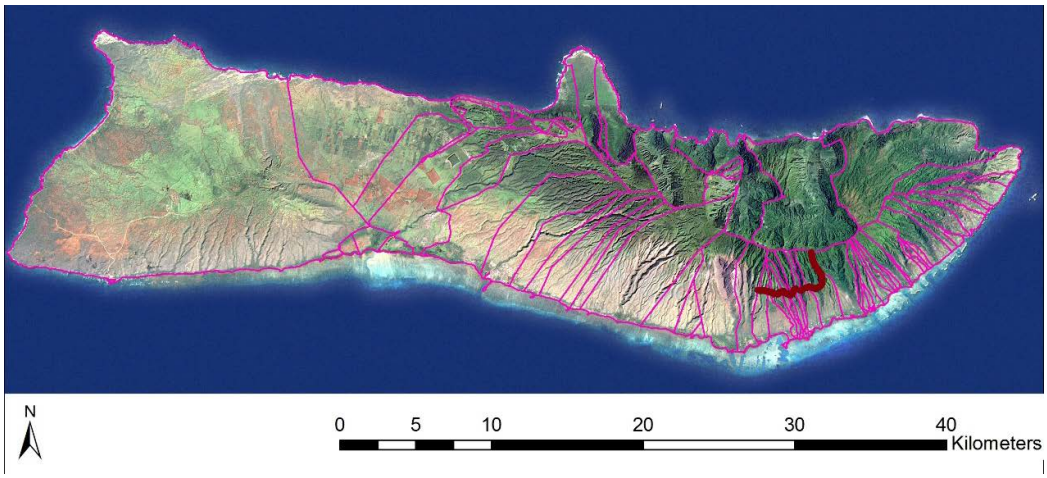


Figure 1. Map of Molokaʻi with ahupuaʻa outlined in pink and the proposed fence line in red.

fauna, and technical terms are defined in a glossary, and an index at the end of the report assists readers in finding specific information. Also included are appendices with documents relevant to the ethnographic survey, including full transcripts of the interviews.

Project Location and Environmental Description

The project area includes the upper elevation and forested zone of nine contiguous ahupuaʻa located along the southeast coast of Molokaʻi (Figure 2), extending on the east along the western boundary of the ahupuaʻa of Puaʻahala and to the west along the eastern boundary of the ahupuaʻa of Kaluaʻaha. Note that Kahananui Ahupuaʻa will not be fenced at this time but is included here, as it is encompassed within the projected fenced area. The makai or lower elevation boundary of the proposed fence is located near the approximate makai edge of the Molokaʻi Forest Reserve. This is roughly 3 km (1.9 mi.) from the coastline.

On its west boundary the fence will connect with an existing EMoWP fence (Kapualei East) that parallels the upper western ahupuaʻa boundary of Puaʻahala. The northern (upper elevation) boundary of the project area extends along the top of the Molokaʻi Mountain Range separating north (Koʻolau) and south (Kona) sections of the island. This boundary also matches the uppermost limits for five of the nine ahupuaʻa in the project area whose territories extended to the uppermost ridge line of the east Molokaʻi Mountain. This mountain represents the geological remnant of tertiary volcanic activity that has formed "asymmetrical shield-shaped domes elongated eastward and westward and about an ancient caldera" (Stearns and MacDonald 1947). The total area to be enclosed by the fence is 841.96 ha (2,080.52 ac).

The nine ahupuaʻa affected by the fence are located on the southeast coast of Molokaʻi and from west to east they are Puaʻahala, Kaʻamola, Keawa Nui, West ʻŌhiʻa, East ʻŌhiʻa, Manawai, Kahananui, ʻUalapuʻe, and Kaluaʻaha (see Figure 2). Puaʻahala is bordered by Wāwāiʻa Ahupuaʻa on the west and Kaluaʻaha is bordered by Mapulehu on the east. To the north the ahupuaʻa in the project area are bordered by Wailau Ahupuaʻa.

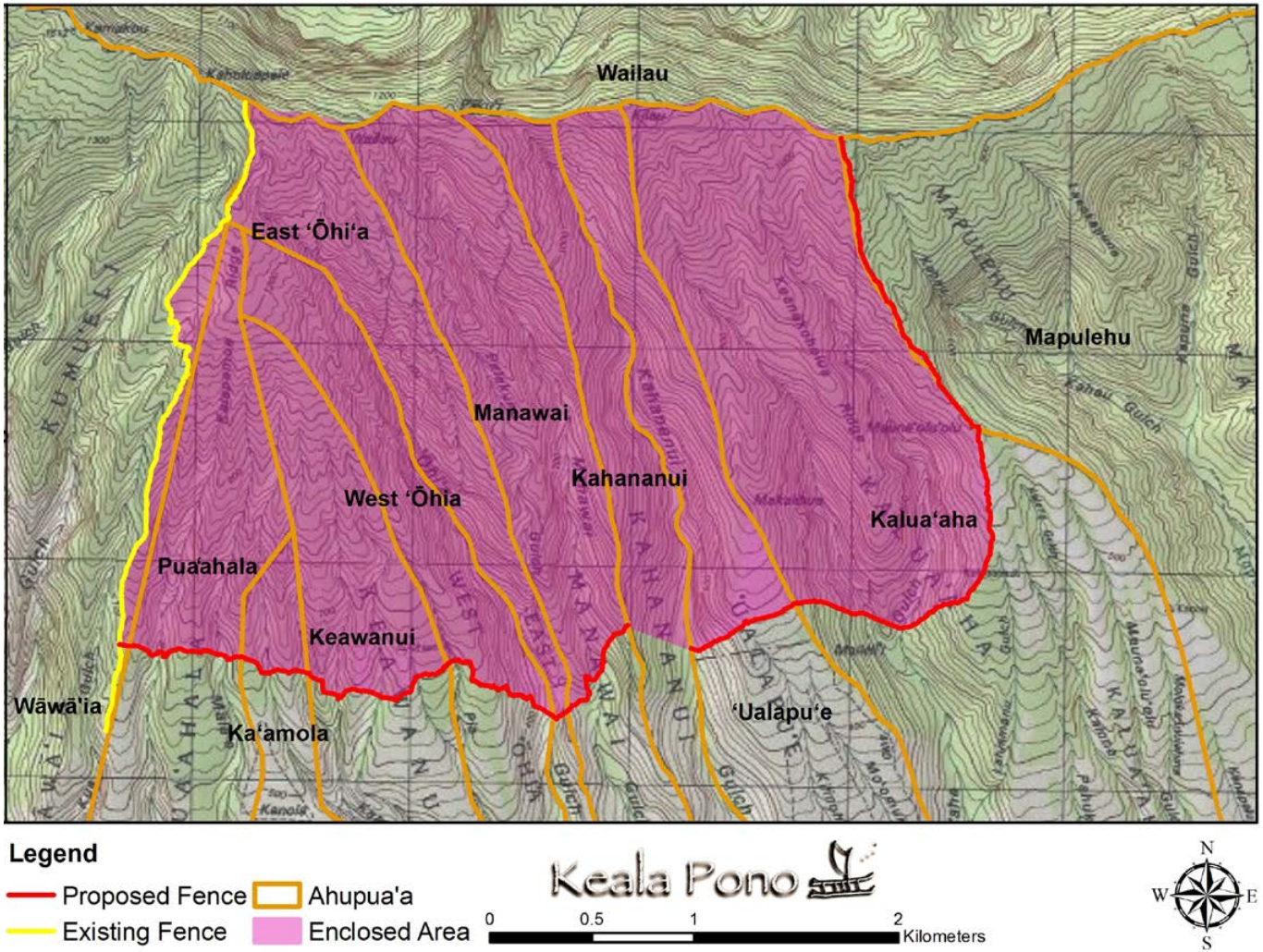


Figure 2. Map of Southeast Moloka‘i Mountain, an existing fence, and the Pāku‘i Fence project area.

Topography

East Molokaʻi extends to an elevation of 1,512 m (4,961 ft.) above sea level (asl) at Kamakou Peak. The project area is located further east along this same ridge system, and that area reaches its highest elevation at Pākuʻi peak 1,335 m (4,380 ft.) asl. Its geomorphology consists of a series of basaltic lava substrates. These substrates are named the East Molokaʻi volcanic series (Stearns and MacDonald 1957:9). The nine leeward ahupuaʻa whose upper elevations comprise the project area share a common physical structure. The upper elevational extent (ca. 4,000 ft. asl) is bounded by the top of the East Molokaʻi Mountain, oriented along a west to east axis. Below this are the slopes and drainages that lead down to the southern coast of the island, a distance of between 3 and 5.7 km (1.9–3.5 mi.). The southern coast of Molokaʻi supports an extensive and wide fringing reef and in some locations there has been considerable deposition of sediments of both marine and terrestrial sources that comprise the coastal plain. Each of the nine ahupuaʻa contains at least one major, named gulch. Not all of these gulches or the catchments they represent extend to the top of the East Molokaʻi Mountain. From west to east the named gulches are as follows: Kua (or ʻĀkani), Onihu (or Nihu, Puahala, or Kalihi), Mālaʻe, Keawa Nui, Pia, ʻŌhiʻa, Pelekunu, Manawai, Kahananui, Kunohu, Moʻomuku, Kaluaʻaha, Lahiamanu, Pahukaula, Kalona, Maunaʻoluʻolu, and Molokaʻinuiahina. Between these drainages there are extensive ridge lines and tops, again most are named, that extend down from the top of the East Molokaʻi Mountain. In its upper reaches the topography of the nine ahupuaʻa is quite steep. More moderate slopes occur from about 150–380 m (500–1,250 ft.) asl. The leeward coast occurs at about 15–23 m (50–75 ft.) asl. Along much of the coast and extending out onto the reef of these nine ahupuaʻa there are at least 15 fishponds that were built by Hawaiians.

Soils

The soils in the nine ahupuaʻa that are part of the Pākuʻi Fence project (Figure 3 and Table 1) fall into three groupings: 1. those along the coastal plain with little slope (less than 10% slope); 2. silty clay soils found on the slopes of the major streams and gulches (usually above 15% slope); and 3. a series of steeply sloping, rock dominated soils and outcrops, most at higher elevations including much of the Pākuʻi project area.

As illustrated in Table 1, a variety of distinct soil units characterizes each of the topographic settings found across the nine ahupuaʻa represented in the Pākuʻi Project. However, within the project area only a few of these soil units occur. The bulk of the area is assigned to Rough Mountainous Land (rRT), which is characterized by shallow soils usually no more than 20 cm (8 in.) in depth (Foote et al. 1972). There appears to be little alluvial deposition within the uppermost reaches of the gulches that cross the project area. This soil unit represents former pāhoehoe lava flows and typically occurs at higher elevations in the project, along the flank and back slope of the East Molokaʻi Mountain.

Two soil units associated with ridge and slope areas occur along the lower boundary of the project area. They are Niulii silty clay loam (NME), occurring discontinuously across Kaʻamola, West ʻŌhiʻa and East ʻŌhiʻa Ahupuaʻa; and Kahanui gravelly silty clay (KATD) distributed continuously across the boundary separating ʻUalapuʻe and Kahananui Ahupuaʻa (see Figure 3). Both soil units occur at mid-elevations in these ahupuaʻa and have moderate slopes (up to 20 to 30%). KATD may extend to as much as 152 cm (60 in.) below grade; NME is generally not more than 76 cm (30 in.) deep. Both are dominated by silty clays and occur in similar topographic settings of the back and side slopes of gulches. Neither offers much agricultural potential.

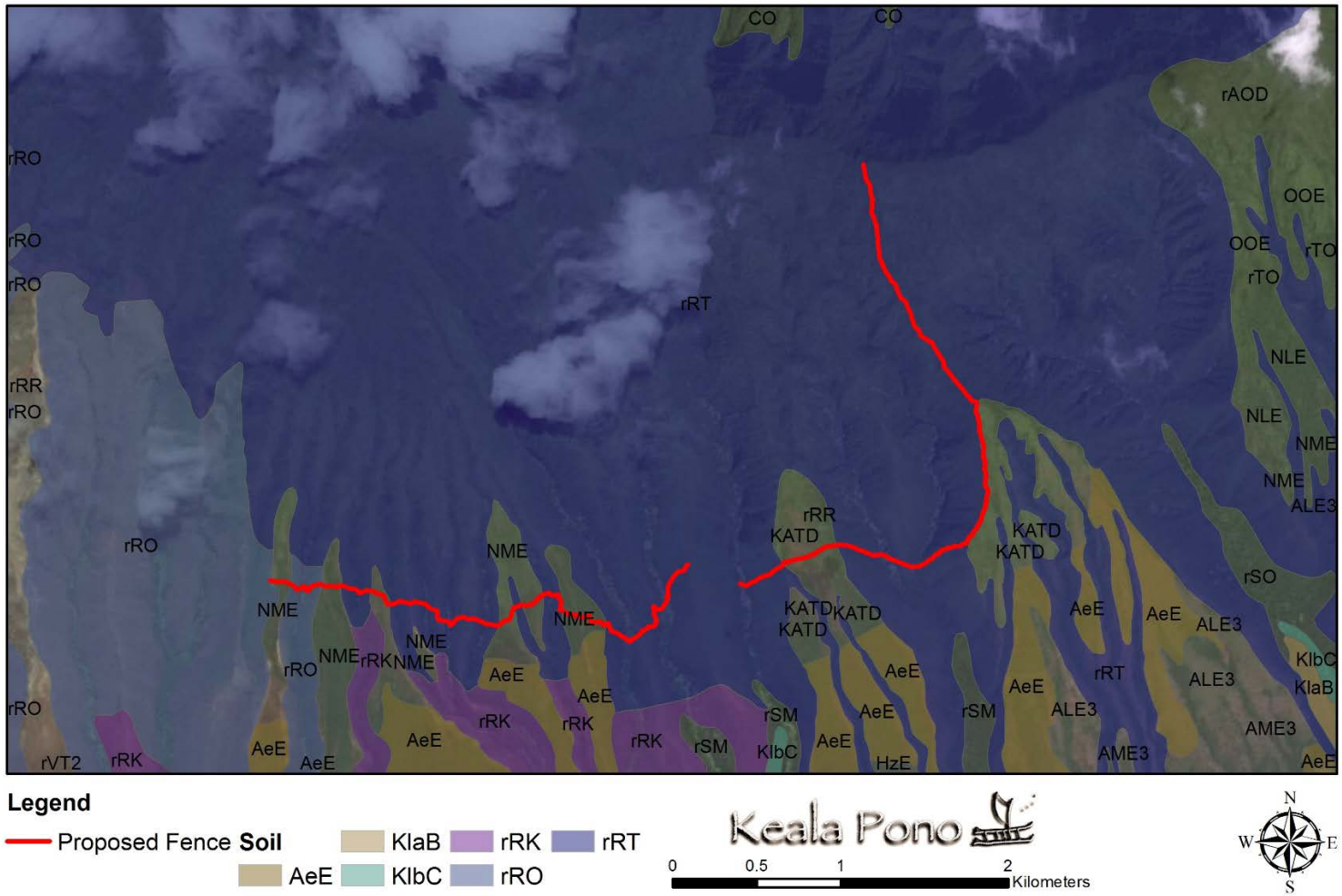


Figure 3. Map of Pāku‘i project area with major soil units represented.

Table 1. List of Soil Units Occurring in the Nine Ahupuaʻa of the Pākuʻi Project Area

Location		Map Unit Symbol	Map Unit Name	Elevation (ft.)	Landform
Coastal	Kaʻamola	JaC	Jaucas sand, 0 to 15 % slopes	0 to 1,140	Beaches, toeslope
		KIA	Kawaihapai, clay loam, moist, 0-2 % slopes	0 to 100	Drainageways on alluvial fans, drainageways on mountain slopes, toeslope
	Manawai	KlaB	Kawaihapai stony clay loam, moist, 2 to 6 % slopes	0 to 100	Drainageways on alluvial fans, drainageways on mountain slopes, toeslope
	Keawa Nui, West ʻŌhiʻa, Manawai	KlbC	Kawaihapai very stony clay loam, moist, 0 to 15 % slopes	0 to 200	Drainageways on alluvial fans, drainageways on mountain slopes, toeslope
		KMW	Kealia silt loam, 0 to 1 % slopes	0 to 260	Salt marshes, tidal flats
		MmA	Mala silty clay, 0 to 3 % slopes	0 to 100	Alluvial fans, footslope
		MmB	Mala silty clay, 3 to 7 % slopes	0 to 100	Alluvial fans, footslope
		MZ	Marsh	0 to 800	Marshes
		PoaB	Pulehu stony sandy loam, 0 to 7 % slopes	0 to 300	Alluvial fans, footslope
		PoB	Pulehu sandy loam, 2 to 6 % slopes	0 to 300	Alluvial fans, footslope
		PsA	Pulehu clay loam, 0 to 3 % slopes	0 to 300	Alluvial fans, footslope
Ridge and Slopes		AeE	Alaeloa silty clay, 15 to 35 % slopes	100 to 1,500	Mountains, Lower third of mountainflank, interfluve
		ALE3	Alaeloa silty clay, 15 to 35 % slopes, severely eroded	100 to 1,500	Backslope, Interfluve
		AME3	Alaeloa stony silty clay, 15 to 35 % slopes, severely eroded	100 to 1,500	Backslope, Interfluve
		HzE	Hoolehua silty clay, 15 to 35 % slopes	400 to 1,300	Toeslope, side slope, rise
		KATD	Kahanui gravelly silty clay, 3 to 20 % slopes	1,250 to 3,750	Backslope, slide slope
		NME	Niulii silty clay loam, medium textured variant, 7 to 30 % slopes	600 to 2,000	Backslope, side slope

Table 1. (cont.)

Location	Map Unit Symbol	Map Unit Name	Elevation (ft.)	Landform
Gulches and Uplands	rSM	Stony alluvial land	0 to 1000	Alluvial fans, footslope
	rRK	Rock land	0 to 6,000	Pāhoehoe lava flows, backslope, mountainflank, side slope
	rRO	Rock outcrop	0 to 10,000	backslope, mountainflank, side slope
	rRR	Rough broken land	0 to 4,000	Gulches, backslope, mountainflank, side slope
	rRT	Rough mountainous land	0 to 6,000	Gulches, backslope, mountainflank, side slope
	rVT2	Very stony land, eroded	0 to 1,500	Summit, mountaintop

Rainfall and Climate

Much of Molokaʻi is characterized by low annual rainfall. This is due to the island's relatively low elevation. Rainfall averages across the nine ahupuaʻa in the study area range from about 25–76 cm (10–30 in.) along the coast, up to 254+ cm (115 in.) over the upper slopes of the mountains (Figure 4) (Juvik and Juvik 1998:56; Giambelluca et al. 2013). Except along the coast which is characterized by the lowest rainfall totals, there is a marked seasonality to rainfall with more than half of the average rainfall occurring from November through February.

Vegetation

Native vegetation on Molokaʻi is strongly influenced by rainfall and elevation (Figure 5). On the southern side of the island grass and shrublands receiving less rainfall at lower elevations give way to dryland forest and shrubs, with mesic and wet forests at the uppermost slopes and at the top of the Molokaʻi Mountain. After Polynesian colonization, native vegetation at lower elevations and within drainages had been substantially altered. Since the early 19th century (and since Western contact) vegetation changes have become even more pronounced, often reaching farther inland and upslope. The plant communities that remain in relatively good health on Molokaʻi are Montane Wet, Montane Mesic, Lowland Wet, Lowland Mesic, and Wet Cliff. The native communties found in good health in the project area are Montane Wet, Lowland Wet, and Lowland Mesic.

Montane communities range from 460 m (1,500 ft.) to more than 1,530 m (5,000 ft.) asl and may be represented by bogs, grasslands, mixed communities, shrublands, and forests. Montane wet forests generally occur from 1,220–1,530 m (4,000–5,000 ft.) asl and thus have been limited to the uppermost reaches of the East Molokaʻi Mountain, primarily on the north slopes but perhaps extending along the south slopes near the summit of the mountain. Such forests are supported by more than 250 cm (100 in.) of rainfall distributed fairly evenly over the year and accompanied by recurrent cloud cover and fog (Wagner et al. 1990:102). For Molokaʻi these forests include the Metrosideros Montane Wet Forest. It is dominated by ʻōhiʻa lehua (*Metrosideros polymorpha*) and ʻōlapa (*Cheirodendron trigynum*).

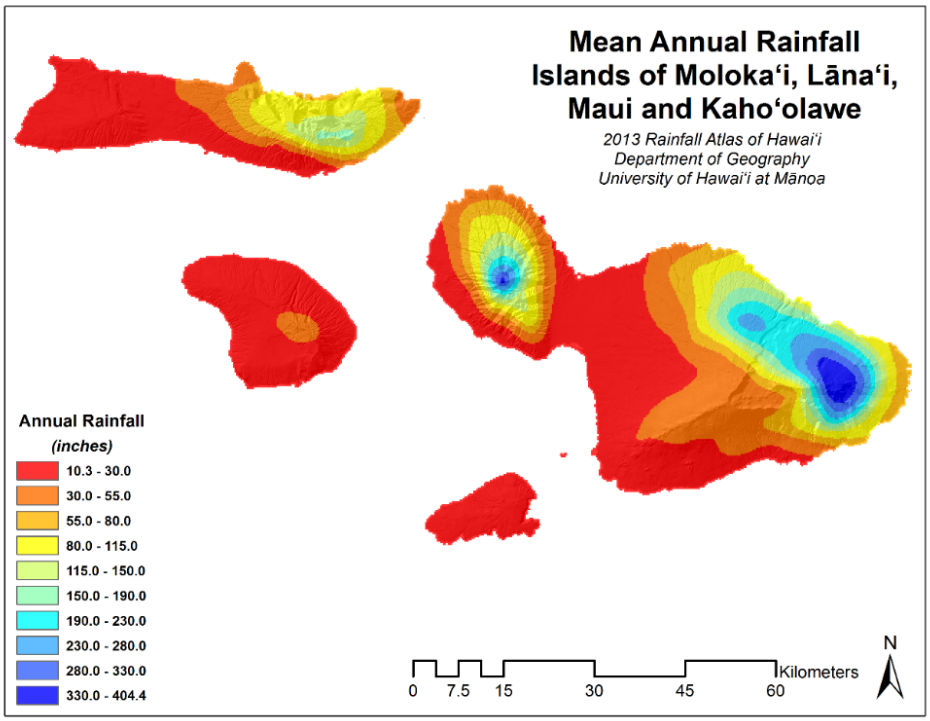


Figure 4. Annual rainfall for Molokaʻi , Maui, Lānaʻi, and Kahoʻolawe (Giambelluca et al. 2013).

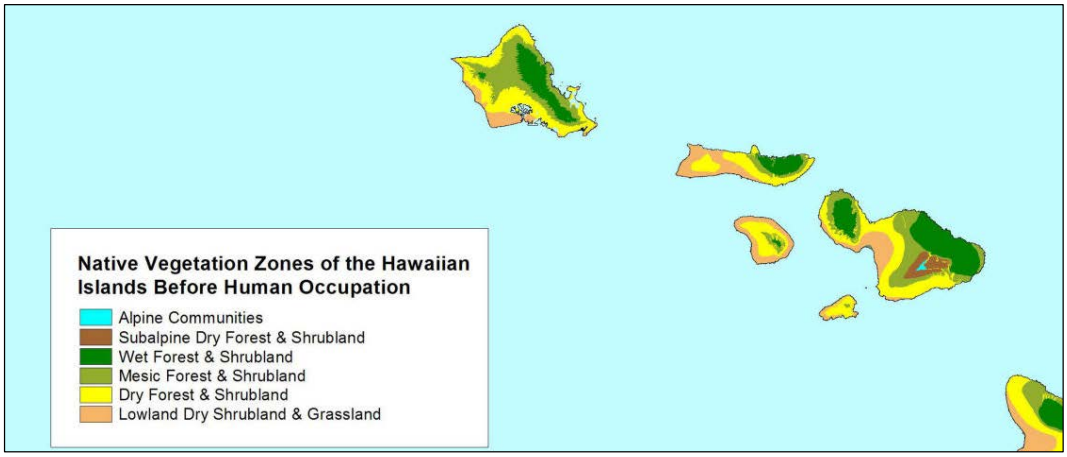


Figure 5. Native vegetation zones for Molokaʻi (Pratt and Gon in Juvik and Juvik 1998).

Other montane communities that may have been or are present in the upper elevations of southeast Moloka‘i include dry or mesic communities. Montane mesic forests are typically dominated by ‘ōhi‘a lehua (*Metrosideros polymorpha*) with a variety of other trees and shrubs that are found less often, Polynesian introductions that found their way into the mesic forest include kukui (*Aleurites moluccana*), the candlenut.

Dryland forest and shrublands, lowland mesic or dry systems, and montane mesic or dry systems once characterized the lower to middle elevations at 30–760 m (100–2,500 ft.) asl of leeward, south Moloka‘i. Rainfall is seasonal with dry summers and wetter winters, between 100–200 cm (40–80 in.) of annual rainfall. Few of these communities remain, because of the suitable soil and topography which had been converted to agriculture by Hawaiians prior to Western contact. Alien species dominate much of these lands today. Shrublands occur where forests could not develop, along ridges and steep slopes. On Moloka‘i at least three communities have been identified (*Leptecophylla/Dodonaea* Shrubland, *Osteomeles* Shrubland, and *Nehe* Shrubland). Each is characterized by a different dominant taxon or taxa. Shrublands dominated by pūkiawe (*Leptecophylla tameiameiae*) and ‘a‘ali‘i (*Dodonaea viscosa*) occur on leeward slopes with ‘ōhi‘a sometimes a co-dominant (Wagner et al. 1990:77–79). ‘Ūlei (*Osteomeles anthyllidifolia*) dominated shrubland may have occurred along ridge lines and those dominated by nehe (*Lipochaeta* spp.) would have been found in the lower valleys (Wagner et al. 1990).

Lowland dry communities of shrublands and grasslands can be found on all leeward coasts of the main islands, including Moloka‘i . The climate of this zone is distinctly seasonal with rainfall usually less than 102 cm (40 in.) per year. Today these lands are dominated by alien grasses. There was likely a *Heteropogon* Grassland, dominated by pili (*Heteropogon contortus*), which was probably maintained by regular natural and then human-induced fires. On Moloka‘i dry shrublands would have included the *Bidens* Shrubland, and *Sesbania* Shrubland (Wagner et al. 1990:71–72. Again, each of these is dominated or co-dominated by a single taxon, ‘a‘ali‘i (*Dodonaea viscosa*), ko‘oko‘olau (*Bidens* spp.), or ‘ōhai (*Sesbania tomentosa*) but with a number of other shrubs and grasses that co-occur on these sites. Lowland dry forests are found at higher elevations where there is greater rainfall and they occur as both open and closed canopies. These forests were among the most diverse of the native communities and supported a variety of trees, shrubs, grasses, and ferns. Of the six native dryland forests, four would have (or likely) occurred in leeward Moloka‘i: *Diospyros* Forest, *Nestegis/Diospyros* Forest, *Erythrina* Forest, and *Metrosideros* Dry Forest. The largest areas were likely covered by the *Metrosideros* variant, dominated by open canopy ‘ōhi‘a lehua *(Metrosideros polymorpha*), with a number of associated shrubs.

After the colonization of Hawai‘i by Polynesians toward the end of the first millennium AD, a number of changes in dryland forests and shrublands took place, in particular the loss of loulu palms, and in many areas the conversion of these forests to shrublands, likely maintained by fires and tree-felling. The introduction of Polynesian rats may have also contributed to the loss of seed and nut bearing vegetation (Athens et al. 2002). Likewise native shrublands were converted to grasslands or to shrublands dominated by one or more taxa (such as the *Dodonaea* Shrubland). Following Western contact in the late 18th century AD, remaining areas that supported a dryland forest were eradicated as lands were converted to grasslands and a number of exotic taxa were introduced. The trade in sandalwood (*Santalum* spp., ‘iliahi) specifically targeted these trees on all Hawaiian Islands where they occurred. Cattle as well as feral animals, particularly pig (*Sus scrofa*), goats (*Capra hircus*), and axis deer (*Axis axis*) have had an impact on the remaining areas of forest and shrublands. These areas have remained unforested or exotics have replaced much of the native taxa across these communities. A view of the southeast portion of Moloka‘i looking south to Lāna‘i displays this effect; mid elevation forests and shrublands are abruptly replaced by grasslands and shrublands (Figure 6).

Figure 6. Current vegetation of southeast Molokaʻi (photo by W. McElroy, July 29, 2015).

The project area is dominated by native systems with some non-native occurrences. However, below the project area, the landscape is dominated by non-native vegetation with a few instances of marsh or pond vegetation near the coast. Notably there are zones that support kukui (*Aleurites moluccana*), a Polynesian introduction. It is now recognized as a distinct plant community, the *Aleurites* Forest. Kukui has a spreading crown and is notable for its concentration in gulches and streams and for its light green foliage that makes it distinct from other tree taxa. The present distribution of this community may reflect areas where these trees were purposively planted and managed by Hawaiians.

Relict Kukui* (Aleurites moluccana) *Groves

Across virtually all of the middle to upper gulches in the nine Pākuʻi project area ahupuaʻa there are patches or groves of kukui (*Aleurites moluccana*). These may be regarded as having cultural importance inasmuch as the trees were introduced to Hawaiʻi by Polynesians, and trees were planted throughout the islands. The kukui trees in the gulches may or may not be historic in age, but they are a relict of former areas that would have been purposefully planted and to some extent managed by Hawaiians living in these areas. These groves are still visible today (e.g., Figure 7) and here we illustrate two examples of them.

The first examples are relict groves in Manawai and ʻUalapuʻe Gulches (Figure 8). The lower boundary of the Manawai grove coincides with the set of four heiau in the lower-middle portion of the drainage at about 90 m (300 ft.) asl. Both relict groves extend up their respective drainages and into the Pākuʻi Fence project area to an elevation of about 500 m (1,650 ft.) asl.

A second example of a relict grove occurs in upper Keawa Nui Ahupuaʻa where there are several stands of kukui in branches of Keawa Nui Gulch (Figure 9). The lower elevation boundary is at 180 m (600 ft.) asl. The stands extend into the Pākuʻi Fence project area and their upper elevation is 500 m (1650 ft.) asl.

Figure 7. Relict kukui grove in the vicinity of the proposed Pāku‘i Fence (photo by W. McElroy, July 29, 2015).

In both of these cases the relict kukui may reflect the former groves of these trees managed or cultivated in the gulches. Their distributions formerly could have been continuous in the sections where they occur. The upper elevation of these stands appears to reflect a rainfall and/or temperature parameter. The difference in the lower elevation boundary of 90 m asl seen in Manawai and ‘Ualapu‘e Gulches may reflect the purposeful planting of trees; elsewhere their lower boundary does not extend below about 180 m asl. The distribution of these kukui groves is geographically limited. They do not occur much farther west in the leeward region, likely the result of less rainfall at these elevations where it grows best. Kukui also diminishes and occurs in smaller stands farther to the east along the leeward coast. In most gulches the relict kukui groves extend into the Pāku‘i Fence project area. The relative abundance, then, of kukui in the project area ahupua‘a compared to elsewhere along the leeward slope appears to be the remnant of previously managed stands of this tree.

Kukui was an all purpose tree whose nuts produced oils that could be burned in stone lamps, or eaten after they were roasted. The unroasted nuts also had medicinal value as a purgative. Dyes could be made from both the nuts and inner bark of the tree. The bark also produces a gum that could be used to strengthen textiles such as kapa. The wood of the kukui was traditionally used for canoes and canoe parts. The foliage and smaller branches of kukui were also used as mulch in garden plots and in lo‘i.

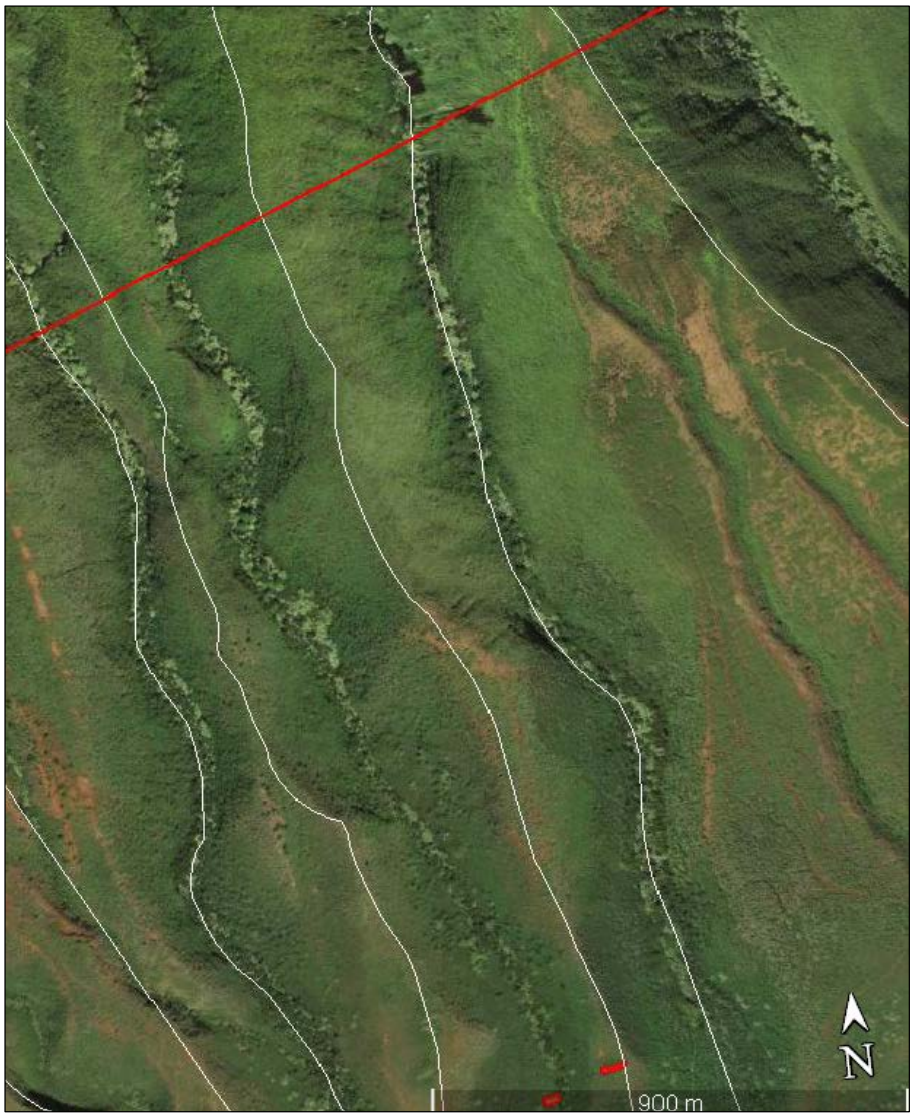


Figure 8. Relict kukui stands in Manawai and ʻUalapuʻe Gulches, with the heiau cluster in Manawai Ahupuaʻa illustrated in red at the lower boundary. The upper red line is the proposed Pākuʻi Fence, and ahupuaʻa boundaries are shown in white.

Figure 9. Relict kukui groves in Keawa Nui Gulch and its upper branches. The red line is the proposed Pāku‘i Fence, and ahupua‘a boundaries are shown in white.

Culturally Relevant Hawaiian Concepts for Lands, Forests, Drainages, and Uplands

Traditional Hawaiian society conceptualized and integrated natural and cultural domains across the lands of the archipelago. This conceptualization is different from the Western, natural science view in a number of ways. The oceans and skies were seen as distinct from but connected to the lands. Lands, and their physical properties and environments, were placed into a coherent classification by Hawaiians that reflected their inter-relatedness. The naming of and cultural attributes associated with lands highlight the attachments Hawaiians placed on the natural world (Maly and Maly 2005:10).

Native Hawaiian historians and other researchers (Kamakau 1976:8–9; Kanahele 2003; Malo 1951; Pogue 1978; Pukui and Ebert 1986) have identified an extensive list of terms and phrases that were applied to the physical environment, particularly to terrestrial landscapes (Table 2 and Figure 10). These categories include some with multiple meanings, and some more inclusive than others. Here we present three authorities—Pogue, Malo, and Kamakau—to show the overlap (and some differences) in their application of Hawaiian terms to different portions of the terrestrial

landscape.

Table 2. Hawaiian Terms and Their Descriptions for Landscape Zones Based on Elevation

		Concepts or Descriptions		
Hawaiian Terms	**Generalized Hawaiian Terms**	**Pogue (1978:10–11)**	**Malo (1951:16–17)**	**Kamakau (1976:8–9)**
wēkiu, kualono, pane poʻo, piko		peak	peaks or ridges forming summits	peak of mountain, hills of on top of kuahiwi
loaʻi pele, lua pele, luaʻi		craters on peak	rounded abysses are craters	round places on top of kuahiwi-craters
mauna, kua lono, kuahiwi	kuahiwi-mountain; mauna-entire mountain; high elevation in the middle of the island	high elevation in middle of island	mountains in island's center	above where forests grow
kua mauna, mauna, kahakua		below kuahiwi	mountainside below kuahiwi	highest places which cover over in fog and have great flanks [slopes] behind and in front, directly in front of or in back of summit, mountain top
kuamuamu, kuaheaia, kuahea		below mauna where scattered trees grow	below mauna where small trees grow	below kua mauna
wao, waonahele, waoʻēiwa, kuahiwi, wao lāʻau	kawao-inland regions	below kuahea	below kuahea where larger sized forest trees grow	makai of kuahea is kuahiwi proper, where small trees begin to grow, timberland mauka of wao koa
wao maʻukele, wao kele wao lipo, wao koa		below waoʻēiwa where tall trees grow; inland regions where koa can grow	below waoʻēiwa where monarchs of the forest grow	region where trees are tall; inland regions where koa can grow
waoʻēiwa				makai of wao lipo
wao maʻukele				makai of waoʻēiwa
wao akua		below wao maʻukele where fewer trees are found	below wao maʻukele where trees of smaller size grow	makai of wao lipo, makai of wao maʻukele
wao kanaka, mau		where tree fern (ʻamaʻuʻamaʻu) grows and man cultivates	below wao akua where men cultivate the land and fern grows	makai of wao akua, area where people cultivate
ʻamaʻu				makai of wao kanaka, the fern belt
āpaʻa, ʻilima,		below wao kanaka	below mau where land is hard, baked, or sterile	both terms refer to areas makai of ʻamaʻu, grasslands

‘ilima, wao ‘ilima	below āpa‘a	below āpa‘a

Table 2. (cont.)

		Concepts or Descriptions		
Hawaiian Terms	**Generalized Hawaiian Terms**	**Pogue (1978:10–11)**	**Malo (1951:16–17)**	**Kamakau (1976:8–9)**
pāhe‘e		below ilima	below ilima where land is slippery	makai of āpa‘a and ‘ilima, pili grass and ilima growths
kula	kula-plain, field, open country	below the pāhe‘e where people dwell	below pāhe‘e where there is open country, near to habitations of men	makai of pāhe‘e, open country
kahakai		beach along sea	below kula bordering the ocean	coast
kahaone, kalawa				sandy beach, curve of the seashore down to the water’s edge
‘ae kai				Water’s edge

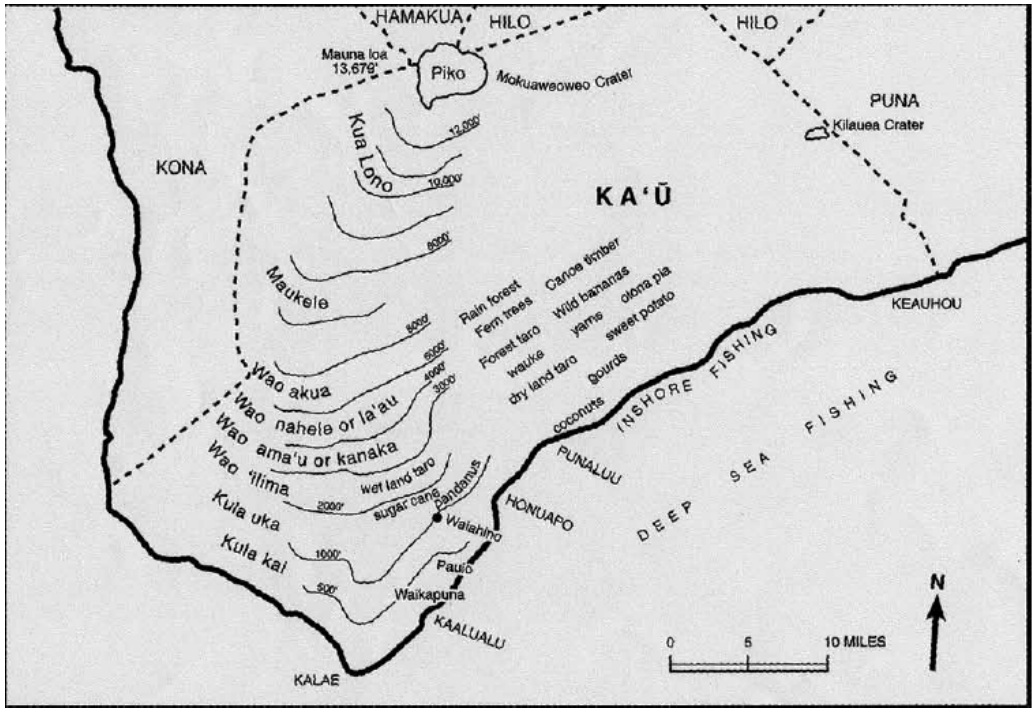


Figure 10. Hawaiian ecological zones (Mueller-Dombois 2007 adapted from Handy and Handy 1972).

In several places there are synonyms for the same zone or region, e.g., mountain peaks can be identified as wēkiu, kualono, pane poʻo, or piko. At least one of the terms, kuahiwi, appears to be used as a generalized region, above the treeline on the highest mountains; it could also be used specifically to refer to a distinct zone on a mountain. Some identical terms are applied to distinct zones by the different sources, e.g., waoʻēiwa. Of the authorities represented in Table 2, Kamakau clearly identifies more categories; Pogue and Malo present quite similar listings. This may reflect, in part, Pogue's reliance on Malo for his terms and their associated zones. Kamakau's listing does depart in one significant fashion from those of Pogue or Malo in terms of where wao maʻukele and waoʻēiwa are placed relative to kuahea. But what all of these listings share is the location of native Hawaiian terrestrial zones in relative terms, i.e., one zone is said to be below or above another. Most of the zones are also described in terms of vegetation (e.g., presence or absence, or kinds of) and geophysical aspects (e.g., mountain flanks), and/or climate (e.g., fog zone).

For southeast Molokaʻi, it is clear, with the exception of the subalpine zones, reflecting areas above the treeline, most of the ecological zones recognized by Hawaiians would find application here. Thus most of the areas of wao and below would be represented from the top of Molokaʻi Mountain to the shoreline. In particular for the project area proper, there would have been the following two zones: wao maʻukele and wao akua. It is possible that some portion of wao kanaka extended into the bounds of the project area, on the slopes and in the bottom of gulches.

The use of plant-based criteria for designating different ecological zones would have been known to individuals living in southeast Molokaʻi, including the role that forested zones played, materially, symbolically, and spiritually, among Hawaiians. Traditionally, forested lands at upper elevations, above the wao kanaka, were dedicated to Kū. These lands were not owned but rather their resources would have been shared by an entire community. Trees such as the ʻōhiʻa lehua were associated with gods and goddesses. Other trees that were used included ʻōlapa, lama, and kauila for weaponry and household implements. A number of plants and shrubs, such as hāpuʻu, ʻōlena, and pōpolo were used for healing. The spread of ʻōhiʻa ai and kukui provided food, oils, wood for construction, and mulch for gardens. A variety of ferns and vines were used as adornments for hula.

The following paragraphs further describe the mountain regions, as observed by Kamakau in the late 1800s:

> Heights in the center or toward the side of a land, or island, are called mauna, mountains, or kuahiwi, "ridge backs." The highest places, which cover over with fog and have great "flanks" behind and in front (kaha kua, kaha alo)-like Mauna Kea-are called mauna; the place below the summit, above where the forests grow is the kuahiwi. The peak of the mountain is called pane poʻo or piko; if there is a sharp point on the peak it is called puʻu pane poʻo; if there is no hill, puʻu, and the peak of the mountain spreads out like the roof of a house, the mountain is described as a kauhuhu mauna (house ridgepole mountain); and if there is a precipitous descent, kaolo [from the peak] to the kauhuhu mauna below this is called a kualo ("block"). If there are deep ravines (ʻalu haʻahaʻa) in the sides of the mountain it is called a kihi poʻohiwi mauna ("shoulder edge" mountain). A place that slopes down gradually (hamo iho ana) is called a hoʻokuʻu (a "letting down"); a sheer place is called a pali lele koaʻe (cliff where koaʻe birds soar), or a holo ("slide"), or a waihi (a "flowing down"). Rounded ridges that extend from the mountains or "ridge backs" or hills are called lapa or

kualapa or moʻo-and, if they are large, ʻolapalapa or ʻomoʻomoʻo. Depressions between lapa or moʻo are awawa, valleys.

Mountain Zones

Here are some names for [the zones of] the mountains-the mauna or kuahiwi. A mountain is called a kuahiwi, but mauna is the overall term for the whole mountain, and there are many names applied to one, according to its delineations (ʻano). The part directly in back and in front of the summit proper is called the kuamauna, mountaintop; below the kuamauna is the kuahea, and makai of the kuahea is the kuahiwi proper. This is where small trees begin to grow; it is the wao nahele. Makai of this region the trees are tall, and this is the wao lipo. Makai of the wao lipo is the wao ʻeiwa [ʻēiwa], and makai of that the wao maʻukele. Makai of the wao maʻukele is the wao akua, and makai of there the wao kanaka, the area that people cultivate. Makai of the wao kanaka is the ʻamaʻu, fern belt, and makai of the ʻamaʻu the ʻapaʻa, grasslands.

A solitary group of trees is a moku laʻau (a "stand" of trees) or an ulu laʻau, grove. Thickets that extend to the kuahiwi are ulunahele, wild growth. An area where koa trees suitable for canoes (koa waʻa) grow is a wao koa and mauka of there is a wao laʻau, timber land. These are dry forest growths from the ʻapaʻa up to the kuahiwi. The places that are "spongy" (naele) are found in the wao maʻukele, the wet forest.

Makai of the ʻapaʻa are the paheʻe [pili grass] and ʻilima growths and makai of them the kula, open country, and the ʻapoho hollows near to the habitations of men. Then comes the kahakai, coast, the kahaone, sandy beach, and the kalawa, the curve of the seashore-right down to the ʻae kai, the water's edge.

That is the way ka poʻe kahiko named the land from mountain peak to sea. [S.M. Kamakau (in *Ke Au Okoa*, November 4–11, 1869; Kamakau, 1976:8–9]

Hawaiian Concepts Regarding Land Divisions and Land Use: The Ahupuaʻa and ʻIli ʻĀina

A series of nested terms and concepts were regularly used by Hawaiians to designate and maintain social boundaries and to refer to groups at different scales. There was some overlap in the size of these units and changes in their composition, but generally they fell into the following categories. At the largest scale was the moku ʻāina (shortened to moku) that represented districts which covered large sections of lands. These were managed by aliʻi ʻai moku and in some cases one or more districts were ruled by aliʻi.

The ahupuaʻa represents the fundamental community scale unit or organization in traditional Hawaiian culture (Beamer 2014). Though often described as wedge-shaped sections of land extending from the coast (where they were broader) to the mountains (where they narrowed), and containing all of the resources that Hawaiians would need to support a community, this reflects an ideal. Additionally, it has been suggested that ahupuaʻa were autonomous from one another and largely endogamous, that is most individuals would have married from within the community (e.g., Earle 1977, 1978). More recently archaeologists and Native Hawaiian researchers have cast this model in question (Beamer 2014; Ladefoged and Graves 2006). Ahupuaʻa were not always wedge shaped, nor were they necessarily self-sufficient in resources (or of sufficient size to be so). Coastal lands may be limited, and there are ahupuaʻa that had no coastal access whatsoever (Gonschor and Beamer 2014). There are considerable differences in the areas contained within ahupuaʻa territories, although some of this may be due to resource differentials, with ahupuaʻa in leeward, more arid locations having larger territories than those in windward locations.

Nonetheless, the assumption of ahupuaʻa as self contained, resource sufficient territories is unlikely to be true in all cases. It would need to be established on a case by case basis.

Although not well recognized (but see Cachola-Abad 2000; Beamer 2007), Hawaiian language included at least two terms that refer to lands incorporating more than a single ahupuaʻa but less than a moku (or district). "'Okana" refers to a "district or subdistrict usually comprising several ahupuaʻa" (Pukui and Elbert 1974:281). "Kalana" refers to a "division of land smaller than a moku" (Pukui and Elbert 1974:121). In either case, these terms refer to multiple ahupuaʻa, likely contiguous, located within a given moku. These kinds of territories may have been formed for management purposes, reflect historical processes of territorial subdivision, or occurred where contiguous communities cooperated across their territorial boundaries.

Below the scale of ahupuaʻa was the ʻili ʻāina (or ʻili), a subdivision of the territory into named areas where groups of several or more families with ties to one another lived and worked, usually by farming. These lands were considered parts of the ahupuaʻa and from which the konohiki received tribute or taxes. The arrangement of ʻili was varied, with some representing smaller versions of ahupuaʻa (and in some cases may have been in the process of forming a "daughter" ahupuaʻa). In other cases ʻili were organized "horizontally," that is, across an ahupuaʻa, perpendicular to the slope of the land. There were also more complex arrangements of ʻili. They were not always contiguous; the same named ʻili might have had two or more distinct areas in which they occurred within a single ahupuaʻa or across ahupuaʻa. These are known as lele ʻili (or ʻili lele) and often the different ʻili locations had access to different kinds or qualities of resources. ʻIli kūpono, were nearly independent sections within an ahupuaʻa, whose residents paid tribute not to the konohiki of the ahupuaʻa but to the ruling chief (Pukui and Elbert 1986).

The Ahupuaʻa of the Pākuʻi Project Area

In the following section, the nine ahupuaʻa that are included in the project area are described with respect to their cultural boundaries from west to east within the Pākuʻi project area and are organized into five groups from west to east: 1. Puaʻahala, Kaʻamola, and Keawa Nui, 2. West and East ʻŌhiʻa 3. Manawai and Kahananui, 4. Ualapuʻe, and 5. Kaluaʻaha. Although not included here, it would appear that Kaluaʻaha could be associated with Mapulehu and Punaula Ahupuaʻa to the east of it. In several cases ahupuaʻa and other topographic features (e.g., gulches) share the same name (e.g., Puaʻahala Ahupuaʻa and Puaʻahala Gulch). This organization reflects the geographical position and the territorial boundaries of these nine ahupuaʻa. Documents consulted included historic registered maps showing ahupuaʻa boundaries and where available, boundary commission testimony and certificates.

Again the nine ahupuaʻa can be distinguished here, beginning in the west (Figure 11).

1. Puaʻahala Ahupuaʻa is a wedge-shaped unit whose western boundary with Wāwāʻia extends to a point at the top of several converging ridges at about the 1,060 m (3,500 ft.) elevation. Note that Wāwāʻia is labeled as a distinct ahupuaʻa in earlier maps (e.g., Monsarrat 1896) but is part of Kapualei Ahupuaʻa on later maps, such as the current USGS map. Various documentary sources can be consulted for its boundaries, including the Boundary Testimony offered for LCAw 11216 in Wāwāʻia that abutted Puaʻahala (Pease 1855) and later testimony offered by Pease (1873) on all of Wāwāʻia's boundaries; and Monsarrat's (1894) survey notes for all of Puaʻahala's boundaries. Note that these descriptions do not always agree with map locations, particularly at the upper, mauka boundary for Puaʻahala. Nihu (or on USGS maps, Kua) and Mālaʻe Gulches comprise the lower western and eastern boundaries of Puaʻahala, respectively. A third gulch, Onihu (at higher elevations known as Kalihi) or Puahala (on USGS maps) joins with Nihu/Kua Gulch where they

drain into Wāwāʻia. Several ridge lines and portions of ridges are named, along with the uppermost point separating Puaʻahala from Wāwāʻia. The westernmost boundary of Puaʻahala follows one of these ridge lines most of the way downslope; this boundary extends nearly but not completely up to the summit of the East Molokaʻi Mountain. The main named ridge is ʻĀkani, although Panini refers to the pali or cliff below another section of this same ridge line. The eastern Puaʻahala boundary branches off from the western ridge above ʻĀkani, following the Kalapamoa (or Kalepamoa) Ridge

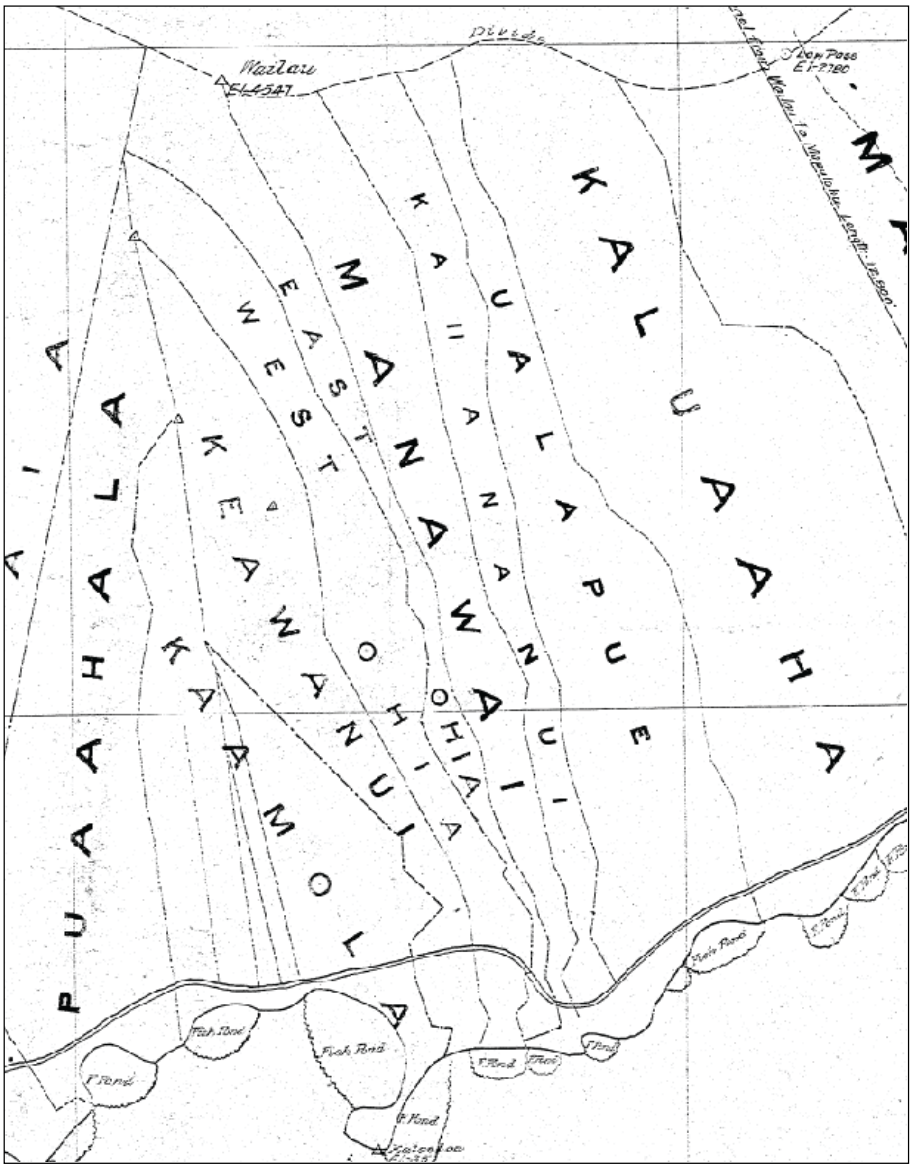


Figure 11. Map of Pākuʻi project ahupuaʻa, southeast Molokaʻi , showing ahupuaʻa boundaries and spatial relationships (Monsarrat 1896).

downslope, but then extending somewhat westward to the ridge line east of Mālaʻe Gulch and to a point known as Puʻuiki down to the coastline (Monsarrat 1894; 1896; USGS 1922, 1993).

2. Kaʻamola Ahupuaʻa is wider at the coast but narrows considerably at about 460 m (1,500 ft.) asl. On various maps (Monsarrat 1896; USGS 1922) its boundaries appear to be "cut out" from its two adjoining ahupuaʻa: Puaʻahala and Keawa Nui. The western boundary appears to be cut from the east boundary of Puaʻahala beginning at about 690 m (2,250 ft.) asl, and it follows the Kalapamoa Ridge farther downslope and then follows the west ridge above Mālaʻe Gulch. Its eastern boundary, which begins at about 490 m (1,600 ft.) asl, appears to be cut out of Keawa Nui near the point known as Kanola and then follows the western ridge above Keawa Nui Gulch. At about 60 m (200 ft.) asl, the east boundary zigzags, first to the southwest, then south, then southeast, and then again to the south where it meets Kalaeloa Point.
3. Keawa Nui Ahupuaʻa is an irregularly shaped territory: narrow near the coast, wider about half way to the mauka boundary, defined as the Kalapamoa Survey Point (Monsarrat 1896) but also as Kamoa (USGS 1922). The west boundary is as described previously for the east boundary of Kaʻamola. On both of Monsarrat's maps (1896a, 1896b) there is an ʻili boundary line that extends downslope on the broad Kaʻamola ridge top and incorporates the Keawa Nui Fishpond. Keawa Nui Gulch drains near the western boundary of the ahupuaʻa; the Pia Ridge to the west of Pia Gulch serves as the eastern boundary of this territory. Both Keawa Nui and Kaʻamola Ahupuaʻa end in their higher elevations short of the top of the mountain, and below the uppermost point of Puaʻahala Ahupuaʻa. The area of the coast assigned to Keawa Nui is extremely narrow, not more than about 100 m (330 ft.) wide.
4. West ʻŌhiʻa Ahupuaʻa is also narrow and irregularly shaped but its eastern boundary extends farther upslope (than does Keawa Nui or Kaʻamola) at the point, approximately 1,220 m (4,000 ft.) asl, where the boundary separating Puaʻahala and Keawa Nui occurs (Monsarrat 1896). The western boundary of this territory follows the stream and drainage bottom of ʻŌhiʻa Gulch (Monsarrat 1915) to its uppermost reaches where the boundary crosses the drainage and joins the Puaʻahala boundary on Kalapamoa Ridge, above the uppermost boundary for Keawa Nui Ahupuaʻa (Monsarrat 1986; USGS 1922, 1993).
5. East ʻŌhiʻa is also a narrow and irregularly shaped territory that widens somewhat at the mauka end. Both the western and eastern boundaries of East ʻŌhiʻa converge near or at the summit of the East Molokaʻi Mountain (Monsarrat 1896; USGS 1922) at about 1,430 m (4,700 ft.) asl. Maps (USGS 1922, 1993, but also Monsarrat 1895, 1896) show the mauka boundary for East ʻŌhiʻa at the crest of the East Molokaʻi Mountain. There are differences among sources for the named point where the converging western and eastern boundaries of East ʻŌhiʻa meet with the eastern boundary of Wāwāʻia and the southern boundary of Wailau at the mountain crest. The name of the point is given as Honolua (Pease 1855) during a boundary settlement for Wāwāʻia but it is also identified as Kaholoapele (Kaholo o Pele) on a historic map (Monsarrat 1895) and on the Mapulehu section of the 1922 USGS map. Wall (1918) also adopted Monsarrat's location of Kaholoapele where the three ahupuaʻa join. By the 1993 version of the USGS map, Kaholo o Pele has been moved farther west along the crest of the East Molokaʻi Mountain. All maps and documents agree that the upper most mauka boundaries for Puaʻahala, Kaʻamola, Keawa Nui, and West ʻŌhiʻa all converge downslope of the crest. Only the boundaries of Wailau, Wāwāʻia, and East ʻŌhiʻa join at the mountain top. East ʻŌhiʻa has an eastern boundary that reaches to the top of the East Molokaʻi Mountain at nearly 1,520 m

(5,000 ft.) asl (USGS 1922) at a survey point known as Wailau. Downslope from this eastern boundary, it follows a ridge known as Ninihua on the west side of the Pelekunu drainage, although one map (USGS 1922) shows the boundary on the east side of Pelekunu Gulch. This ridge line continues downslope to about 90 m (300 ft.) asl where it joins the coastal plain. The makai boundary of East ʻŌhiʻa does not extend completely to the coast, although it does incorporate the west slope of the lowermost Manawai Gulch, but falls about 80 m (250 ft.) short of it with the western boundary of Manawai extending into this area (USGS 1922; Meyer 1938; Monsarrat 1897).

6. Manawai Ahupuaʻa has a mauka boundary that extends across the top of the East Molokaʻi Mountain. The upper part of Pelekunu Gulch extends into the western side of Manawai but joins ʻŌhi'a Gulch at about the 370 m (1,200 ft.) elevation. Manawai Gulch runs through the middle of this ahupuaʻa from near the summit to the coast thus presenting one of the larger stream catchments in this area. Much of the eastern boundary of Manawai is located on the ridge line separating Manawai Gulch on the west with Kahananui Gulch on the east based upon early (Monsarrat 1890) and later (Wall 1917; USGS 1922, 1993; Meyer 1938; Whitehouse 1938) maps. The ridge line separating Manawai and Kahanaui is known as Pawela and is nearer to the coast where two heiau occur. The sizeable coastal plain fronting Manawai allows for Pūhāloa or Puʻuhaloa Fishpond, which was built into this plain on the east side of Manawai and it also encompasses the fishpond known as Wehelauʻulu or Wahieulu to the west.
7. Kahananui Ahupuaʻa has a mauka boundary that reaches the top of the ridge of the Molokaʻi Mountain, in line with the ahupuaʻa of Manawai and East ʻŌhiʻa. The west boundary includes the point known as Pākuʻi, the highest peak in the project area at 1,335 m asl (4,380 ft.), which is shared with the ahupuaʻa of Manawai. On the east, the ahupuaʻa boundary extends down a ridge line to about 910 m (3,000 ft.) asl where it joins the upper drainage of Kahananui Stream. The east boundary follows the entire course of this stream down to the coast where it joins with Manawai Stream at about 20 m (70 ft.) asl. Like Manawai there is a substantial coastal plain fronting the makai portion of Kahananui along with a portion of the Pūhāloa Fishpond.
8. ʻUalapuʻe Ahupuaʻa has mauka boundaries that reach the top of the ridge of the East Molokaʻi Mountain. Its western boundary tracks the Kahananui Stream, as described above. Much of the upper eastern portion of this ahupuaʻa is composed of ridges and steep slopes on the east side of Manawai Stream and Gulch to about 210 m (700 ft.) asl. The lower part of ʻUalapuʻe is drained by two streams: Kiʻinohu (or Kunohu) and Moʻomuku that begin at about 200 m (650 ft.) asl. The lower portion of Moʻomuku is located on the boundary between ʻUalapuʻe and Kaluaʻaha Ahupuaʻa. The upper eastern boundary begins near the point known as Kīlau and extends down a series of ridge lines above Kaluaʻaha Gulch. There are two named points along this ridge: Makalihua and Maileliʻi (USGS 1922, 1993). ʻUalapuʻe has one of the largest coastal plains among the nine ahupuaʻa considered here and includes two fishponds and a named coastal spring.
9. Kaluaʻaha Ahupuaʻa is one of the largest of the project area's ahupuaʻa. It borders Mapulehu on the east. At least five gulches with separate drainages flow through or within Kaluaʻaha, not including the lower portion of Moʻomuku. The largest gulch, also named Kaluaʻaha, has at least two major upper branches that extend to the East Molokaʻi Mountain. The ridge line between these two branches is known as Keanakoholua (USGS 1922, 1993). The east boundary of Kaluaʻaha follows the west ridge line of Mōmokuhoʻokuʻi (or Maunaoluolu on the 1922 USGS map) above the

> Mapulehu drainage catchment (Aholo 1879) until it reaches the upper portion of the easternmost gulch in Kaluaʻaha, Molokaʻinuiahina, at about 610 m (2,000 ft.) asl. There is a named point, Mailelu (USGS 1922), along this ridge at about 730 m (2,400 ft.) asl (USGS 1922). Four smaller gulches are found along the east side of Kaluaʻaha: Pahukauila, Kalona, Maunaʻoluʻolu, and Molokaʻinuiahina (USGS 1993). The coastal plain narrows across Kaluaʻaha but at least three fishponds were established along the coast of this ahupuaʻa. Its easternmost boundary extends to the center of the coastline side of Niaupala Fishpond but it wrapped around the eastern side of the fishpond thus incorporating all of it within Kaluaʻaha.

Based on a methodology developed for Kohala on Hawaiʻi Island (see Ladefoged and Graves 2006; Ladefoged et al. 2008; Ferriola 2015), a sequence of ahupuaʻa territorial development could be proposed, based on the locations and intersections of mauka (upper) boundaries and shared naming conventions. The rationale for this reconstruction follows from the assumption that lands on the main Hawaiian Islands were first occupied by smaller groups that originally could have claimed or identified larger territories for their communities. This would have had the net effect of greater spacing between the original communities. Such a sequence is not a necessary outcome for all ahupuaʻa on all of the main islands. But based on several observations or relations among territorial boundaries, such a sequence may be plausibly reconstructed in some areas. The purpose of these reconstructions is heuristic—they may identify historically related communities that formed serially over time and in which larger community territories were subdivided into successively smaller territories as populations grew and as more land and ocean were put into production.

Ahupuaʻa that share names, as for instance West and East ʻŌhiʻa, were likely a single original unit, ʻŌhiʻa. Ahupuaʻa boundaries that extend from the coastline to the upper south crest of the East Molokaʻi Mountain were likely earlier than those boundaries that do not reach the full extent. They generally "branch off" or intersect at a lower point along the mauka end of a boundary that extends across the entire landscape. The boundaries of Puaʻahala, Kaʻamola, and Keawa Nui exhibit this relation on one or both sides of the ahupuaʻa territory. Boundaries that are formed along a single drainage that extends for much of the length of an ahupuaʻa likely separated an original territory that incorporated the entire catchment of the drainage. The separation of the contiguous territories comprising ʻUalapuʻe and Kahananui is bounded along a single stream, And in some instances, ahupuaʻa boundaries appear to be "cut out" of an original larger territory. Kaʻamola would fit this criterion—portions of it appear to have been cut out of the original Puaʻahala and Keawa Nui Ahupuaʻa territories.

The five westernmost ahupuaʻa of Puaʻahala, Kaʻamola, Keawa Nui, and West and East ʻŌhiʻa were likely part of a much larger, original land unit (Figure 12, top yellow). Within this group, mauka ahupuaʻa boundaries extend to the very top of the Molokaʻi Mountain only in East ʻŌhiʻa, suggesting this marks the original territorial boundary for that area.

The other three ahupuaʻa of Kaʻamola, Keawa Nui, and West ʻŌhiʻa are characterized by mauka boundaries that "branch" off of neighboring territories. Within this group, Keawa Nui and West ʻŌhiʻa branch at successively higher elevations and would have been established next (Figure 12, center yellow).

Finally, Kaʻamola has the "lowest" branch and hence was likely the latest of the ahupuaʻa to be established (Figure 12, bottom).

An original ahupuaʻa territory could also be constructed for both Kahananui and ʻUalapuʻe (Figure 12, top blue) since they are characterized by a joint boundary that follows the Kahananui Gulch

and Stream (see USGS 1993) through virtually all of the uplands, to the uppermost mauka boundary with the Molokaʻi Mountain summit. Elsewhere, ridge lines were used to establish mauka-makai boundaries, particularly in upper elevations. Only the five easternmost ahupuaʻa have mauka boundaries that extend completely to the ridge or mountain tops dividing the northern and southern portions of east Molokaʻi.

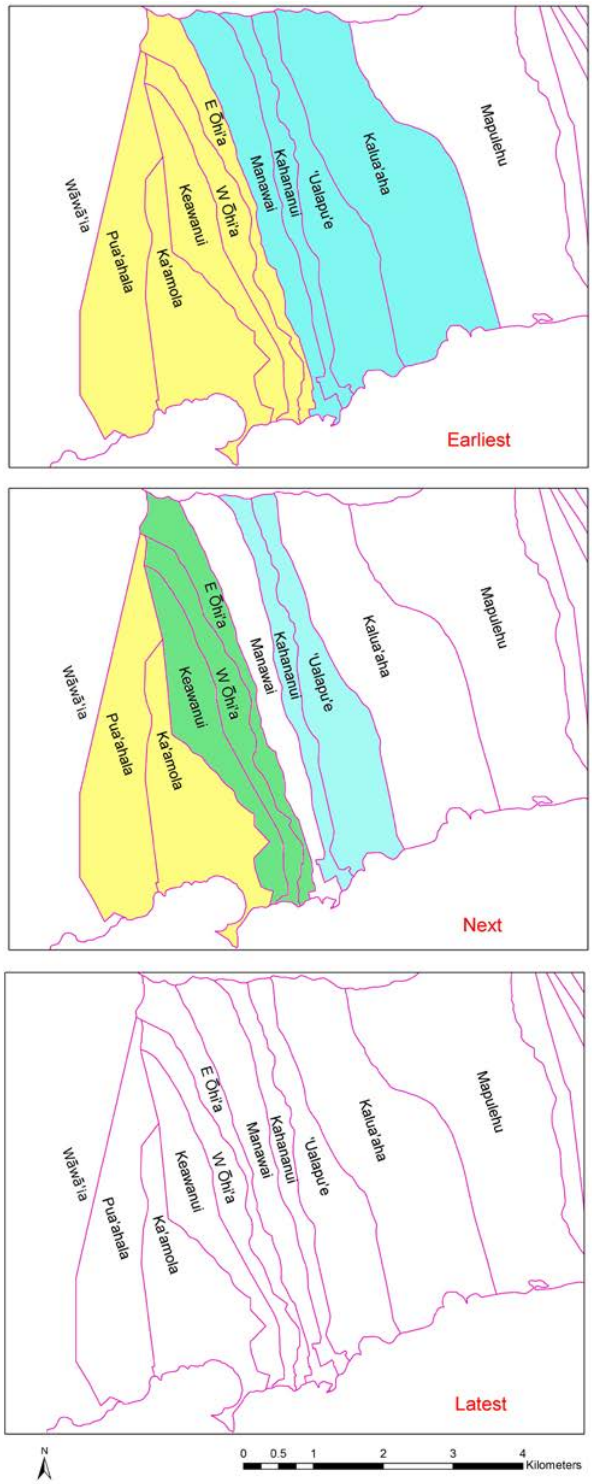


Figure 12. Likely sequence of ahupua‘a development for the westernmost land divisions in the project area. The highlighted ahupua‘a would have been a single unit at that point in time.

LITERATURE REVIEW

This section of the report presents background information as a means to provide a context through which one can examine the cultural and historical significance of the project lands. In the attempt to record and preserve both the tangible (e.g., traditional and historic archaeological sites) and intangible (e.g., moʻolelo, ʻōlelo noʻeau) culture, this research assists in the discussion of anticipated finds and the cultural and historical significance of the lands included in the Pākuʻi project area. Research was conducted at the Hawaiʻi State Library, the University of Hawaiʻi at Mānoa libraries, the SHPD library, and through online databases such as Waihona ʻĀina, Kīpuka (Office of Hawaiian Affairs), Ulukau, AVAKonohiki, and the State of Hawaiʻi Department of Accounting and General Services (DAGS) website. Historical maps, archaeological reports, historical photographs, Māhele data, early visitor accounts, and historical reference books were among the materials examined.

Sections of this literature review include place names, wind names, moʻolelo, a review of archaeological studies and cultural sites, historic maps, Māhele data, and early visitor's accounts and other historic data for the nine ahupuaʻa.

Cultural and Historic Accounts that Refer to the Nine Ahupuaʻa of the South Slope of the East Molokaʻi Fence Line Area

In this section, place names, winds, moʻolelo, and ʻōlelo noʻeau are considered. Together they provide valuable contextual information for the Pākuʻi project area.

Place Names

Place names for the nine ahupuaʻa of the Pākuʻi project area are presented in Table 3. They include names of community land divisions, or ahupuaʻa; multi-family lands (ʻili ʻāina, lele ʻili); heiau or other ritual sites; named lands, or wahi pana; fishponds; and various natural landforms that likely served as landmarks, including ridges, streams, gulches, mountain tops, springs, and coastlines. There are nearly 250 names presented here alphabetically and these doubtless do not exhaust the total. Sources consulted for these names include historical and contemporary maps, all land award indices, a portion of the related testimonies, and archaeological and historical reports.

In addition to their literal meanings, which often reflect the setting or events, or individuals associated with them, place names serve as toponyms. As Thorton (1997:209) notes "Places names are…. [i]nteresting…because they intersect three fundamental domains of cultural analysis: language, thought, and the environment." They can record and preserve aspects of history, not only by their associated archaeological or material remains but also through the events and stories said to be associated with a given place (Basso 1988). Place names inform not only on the structure and content of the physical environment but also how it is perceived, conceptualized, classified, and utilized (Thornton 1997:209). By virtue of their physical nature, they are applied to locations on the landscape and serve to promote and prompt mental maps, especially when other place names associated with other locations provide relational, hierarchical, or directional information (Basso 1994). Thus, place names can be a spatial means for remembering or memorializing events, people, or other kinds of things on a landscape. It may be possible to reconstruct or identify aspects of traditional Hawaiian land use and social organization from these names.

Additional insight for the Kaʻamola and Puaʻahala place names comes from Malia Akutagawa in an interview with kumu hula and Hawaiian scholar John Kaʻimikaua:

Ka‘amola means “the movement of the ‘anae (mature mullet) as they spawn.” The adjoining ahupua‘a is named Pua‘ahala which means literally “the passing of the

Table 3. Place Names Associated with the Nine Project Ahupua‘a

Place Name	Description	Location	Notes	Source*
‘Ai‘īlio	‘ili	‘Ualapu‘e	LCAw 9102 to Kaauhaukini: “Ualapue ili o Aiilio.. Apana 2. Kula...”	IN 686; AB 8:51
Akani	ridge line	Pua‘ahala	Associated with ahupua‘a boundary between Pua‘ahala and Wāwā‘ia.	Monsarrat1896a
‘Apahekili, ‘Apakahekili	‘ili	Manawai	LCAw 4175 to Kaluau: “Manowai [sic] ili Apahekili.” Also written Apakahekili (q.v). Claim no. 4175 by Kaluau: “Ma ka ili aina o Apakahekili ma Manawai” (NT 6:108). Witten Apahekili in AB 8:46. Also claim no. 8102 by Hapuku (FT; NT 6:108); claim no. 9104 by Kahakane (NT 6:103).	NT 6:108, 103; AB 8:46
‘Aweoweonui, ‘Aweoweanui	‘ili	Manawai	LCAw 4175B to Luaaka: “Manawai ili o Aweoweonui…”	FT: V-06-S-05
East ‘Ōh‘ia	ahupua‘a	East ‘Ōh‘ia	Paired with West ‘Ōhi‘a Ahupua‘a among a set that includes Ka‘amola, Keawa Nui, and Pua‘ahala.	Summers 1971: 111, Monsarrat 1896a, Wall 1917, USGS 1922, 1993
Ha‘alulu	‘ili	‘Ōhi‘a	LCAw 4936 to Kahoowaha: “Ohia ili o Haalulu.”	IN 682, 1097; AB 8:54; TMK: 5-6-006:-19
Hakawai	‘ili	Kalua‘aha	Claim no. 5196 by Kawelo: “in ili Hakawai, Kaluaaha. Pahale fenced...” TMK 5711:1. Also claim no. 8106 by Haena (TMK 5711:por.5) and claim no. 4092 by Kaluna (TMK 5711:por.5).	TMK: 5-7-011:001
Halawa	‘ili	Keawa Nui	Claim no. 11085 (137-B) to Kekoowai.	
Hale o Lono	heiau	Kalua‘aha	Site 186, also known as Pahu Kauila heiau. See description under this entry.	Summers 1971:124–125
Halekoki, Halepoki	‘ili lele	Located in Wailau but assigned to ‘Ualapu‘e	Identified as such in Summers 1971.	Monsarrat n.d.: 90; Summers 1971:121
Halemahana	loko kuapā	‘Ualapu‘e	Summers “Site 184...This small loko kuapa, 3.3 acres in area, was used commercially in 1901. Cobb listed the pond as ‘nameless.’ The name, Halemahana, was given by Stokes. It had two mākāhā in its 725 ft. wall. The pond is now destroyed.”	Summers 1971:121; Cobb 1902

Haleokona	ʻili lele	Located in Wailau but assigned to Kaluaʻaha		Summers 1971:123; Monsarrat n.d: 90–91

Table 3. (cont.)

Place Name	Description	Location	Notes	Source*
Haleokona	ʻili lele	Located in Wailau but assigned to Kaluaʻaha		Summers 1971:123; Monsarrat n.d.: 90–91
Halulukuapohaku	ʻili	ʻŌhiʻa	LCA claim no. 5187 to Kaluau.	NT v6:115
Haole	ʻili	ʻUalapuʻe	LCA Claim no. 5020 to Paele.	NT v6: 63
Hīnau	loko kuapā	Kaʻamola	Same as Keawa Nui or Mikimiki Fishpond.	Summers 1971:108
Hōkūkano	ridge line	Kahananui, Manawai	Boundary between two ahupuaʻa.	Monsarrat 1890; Wall 1917
Hōkūkano, Kahōkūkano	heiau	Kahananui, Manawai	Site 177. Four terraces following ridge, with walls on two uppermost. On boundary between two ahupuaʻa.	Summers 1971; Monsarrat 1890; USGS 1922; Whitehouse 1938
Honolua	peak	In upper Wailau at top of Molokaʻi Mountains; boundary point of Wāwāʻia, West ʻŌhiʻa, East ʻŌhiʻa	LCAw 11216 ʻĀpana 13 notes of survey: "thence following mt range of hills to the peak called Honolua. From thence, S7°45' W passing down a certain ravine…"	LCAw11216 ʻĀpana 13;
Hoʻokupualiʻi	ʻili	ʻUalapuʻe	LCAw 3821 to Puupuu: "Aina no Puupuu, Ualapue ili Hookupualii..." Also claim no. 4098.	FT: v6--S-04
Hoʻomaniha	ʻili	Kaʻamola	Claim no. 4829 by Kapu (LCA 240V) .	FT 25v6; NT 132v6
Huahuaʻi	ʻili	ʻUalapuʻe	Claim no. 4194 by Kuluwaimaka: in ili Huahuai, Ualapue. 1. Kalo. 2. Kula.	FT v6:16
Hualele	heiau	Keawa Nui	Site 164, located on the isthmus between Keawa Nui and Mikiawa Ponds; destroyed by sea.	Summers 1971:108
ʻIlikea	ʻili	Keawa Nui	LCA 4821 to Kikoikoi, 3 ac., 218 fathoms.	IN 674; AB 181v7; 649v7; FT 24v6; TMK: 5-6-004:008
ʻĪnaʻimanu	ʻili	ʻUalapuʻe	Claim no. 3678 by Muolo: "in ili Inaimanu, Ual[apue]. 1. Kalo. 2. Kula." See also Kaakaulua.	FT 6:17; NT 6:103
Kaakaulua	ʻili	ʻUalapuʻe	Claim no. 3678 by Muolo: "o Kaakaulua ka inoa o koʻu wahi ili aina. Ua moe aku koʻu wahi ili aina mai kahakai a hala loa i kuahiwi." But in FT 6:17, this claim is placed "in ili Inaimanu"	NR 7:33

with no mention of Kaakaulua.

Table 3. (cont.)

Place Name	Description	Location	Notes	Source*
Kaʻakeke (Kahua Maika o)	ʻulu maika game field	ʻUalapuʻe, but also associated with Kaluaʻaha and Kahananui	Site 183. Kahua maika of Kaʻakeke, ʻUalapuʻe. Located between Kaluaʻaha and Kahananui...It went in a straight line to Kahananui Stream, south of the road (a distance of about 1,000 yards).	Summers 1971:121
Kaʻakeke	ʻili	ʻUalapuʻe	Claim no. 4618 by Pohuehue: "koʻu ili aina o Kaakeke ka inoa."	NR 7:12
Kaʻamola, Kamola	ahupuaʻa	Kaʻamola	Refer to Soehren 2003:128 for land ownership history; misspelt "Kamola" in IN 672; Coulter 1935:147; Kaʻamola had a lele in Pelekunu.	MB 84, 128, 129, 174,213; IN 668; Summers 1971:104, 179
Kaʻamola	fishpond	Kaʻamola	A variant name for Mikiawa pond (see below).	Summers 1971
Kaʻepa	ʻili	ʻUalapuʻe	Claim no. 3823 by Pala: "na aina e pili ana ma na aoao o koʻu ili aina...o Kaepa ma kekahi aoao..."	NR 7:49
Kahakahana	heiau	Manawai	Site 172, consists of several paved enclosures with a small circular walled in section.	Summers 1971:113; Stokes n.d.b.:49
Kahanaiohua	ʻili	Keawa Nui	LCA 4823 to Kaailepo.	NR122v7, NT119v6
Kahananui	ahupuaʻa	Kahananui		Montsarrat 1890; Wall 1917; USGS 1922, 1993
Kahananui	gulch, stream	Kahananui, ʻUalapuʻe	Boundary between two ahupuaʻa located on this stream.	Monsarrat 1896; USGS 1922, 1993
Kahaunani	ʻili	Manawai	LCAw 4175 to Kaluau 1: "Aina o Kaluau 1 Kahaunani..."	IN:678
Kahoʻolulu	heiau	East or West ʻŌhiʻa	Identified by Stokes but not seen. No site number given to this heiau.	Summers 1971:112; Stokes n.d.a:2
Kahokukano	heiau	Manawai, Kahananui	Site 177, also known as Hōkūkano.	Summers 1971: 116–119; Stokes n.d.a:5; Thrum 1909b:53; Summers 1974:47
Kaholo a Pele	ridge, point, peak	In upper Wailau and/or Wāwāʻia at top of East Molokaʻi Mountain	The ridge line in or adjacent to ahupuaʻa of Wāwāʻia or Wailau. This named point on the Monsarrat map occurs as the mauka junction of Wāwāʻia and East ʻŌhiʻa. USGS maps put it to the west of this junction.	Monsarrat 1895; USGS 1922, 1993
Kahuwa	ʻili lele	Wailau Ahupuaʻa but assigned to Kaluaʻaha	One of 9 named locations within Wailau that was a lele ʻili.	Summers 1971:123; Monsarrat n.d.:90–91

Table 3. (cont.)

Place Name	Description	Location	Notes	Source*
Kaikupa	ʻili	Keawa Nui	LCAw 4090 to Kauakahi: "Maloko o ka ili o Kaikupa, Keawa Nui..."	IN 674; AB 646v7, 257v8; FT 23v6; TMK: 5-6-006:021
Kalanonakukui	ʻili	Ualapue	LCA Claim no. 3821 to Puupuu.	NT
Kaliani	ʻili	West ʻŌhia	LCA Claim no. 5194 to Keili.	NT
Kāināʻohe	loko kuapā	Kaʻamola	Site 169, loko kuapā with area of 17 ac., one wall measuring 1,770 ft., two mākāhā; also misspelt "Kenaohi."	Summers 1971:104; USGS 1952; Wall 1917
Kainui, Kaimi	ʻili	Puaʻahala	LCAw 146B to Kahaule: "Apana 1. Pahale ma Puahala ili Kainui."	AB 5:728; FT 6:31; NT 6:133; TMK: 2-6-005:014
Kaikupa	ʻili	Keawa Nui	LCA 40909 to Kauakahi, 1 ac., 354 fathoms; LCA 11085 to Kewainui.	IN 674; 648v7; FT24vc, FT267v15
Kakawai	ʻili	Kaluaʻaha	Claim no. 5196 by Kawelo: "in ili Hakawai, Kaluaaha. Pahale fenced..." TMK: 5-7-011:001. Also claim no. 8106 by Haena (TMK: 5-7-011:por.5) and claim no. 4092 by Kaluna (TMK: 5-7-011:por.5).	AB
Kalaekoe	ʻili	ʻŌhiʻa	LCA 4821.B to Papaiku, 4.60 ac.	IN 682
Kalaeloa	survey triangulation point	Kaʻamola		Monsarrat 1896; Wall 1917
Kalaeloa	coastal point	Kaʻamola	Along the east side of Kalaeloa Harbor.	USGS 1922, 1952
Kalaeloa Harbor	landing	Kaʻamola	Kalaeloa is the "largest and best protected harbor along this coast, but its use is limited by a 7-foot bar across the entrance."	Pease 1855; USGS 1952; USCP 1933:53
Kālaikoʻi	ʻili	ʻŌhʻia	LCAw 4821B to Paipaiku: "Ohia ili Kalaikoi...Apana 1..."	AB 8:48; NT 6:131; TMK: 5-6-004:031
Kalalani	ʻili	ʻŌhʻia	Claim no. 5194 by Keili: "in ili Kalalani" (FT 6:22); "ma Kalalani, Ohia" (FT 15:269).	NR 7:163; FT 6:22, 15:269; TMK 5-6-004:011
Kalapamoa	survey triangulation point	Puaʻahala, Keawa Nui, West ʻŌhiʻa		Monsarrat 1896a
Kalapamoa	ridge or peak, boundary point	Kaʻamola, Puaʻahala	Mauka and north boundary of Keawa Nui ahupuaʻa.	Keppeler 1925-26b; Monsarrat 1896a; USGS 1922, 1952; BC 212 (2:122)

Table 3. (cont.)

Place Name	Description	Location	Notes	Source*
Kalauonakukui, Kalanonakukui	ʻili	ʻUalapuʻe	Claim no 3821 by Puupuu: "land in ili Kalauonakukui." Also claims no. 6516 by Wailiilii, 4170 by Kaupe, 3975 by Hulihae.	FT 6:14: IN 686
Kalauonākukui, Kalua o Nakukui	heiau	Kahananui, ʻUalapuʻe	Site 181, just north of the cemetery and near the boundary of ʻUalapuʻe; measures approximately 125 ft. by 85 ft. The walls on the south and west were still standing in 1962. Stokes did not list this heiau. Elev. about 225 ft.	Summers 1971:119; USGS 1922, 1952; Thrum 1909a:40
Kalaunonokukui	heiau	Kahananui, Ualapue	Site 182, near boundary between two ahupuaʻa.	Summers 1971
Kalawaha, Kalawahu	ʻili	ʻUalapuʻe	Claim no. 4192 by Kaheaka: "in ili Kalawaha, Ualapue. w. Kalo. 2. Kula." Also LCA 3916 to Nahoaai.	FT 6:16; NT 6:100; NR 7:103
Kaloko	ʻili	ʻUalapuʻe	LCAw 3975 to Hulihae: "Aina no Hulihae Ualapue ili Kaloko."	AB 6:445, 7:637
Kalona	gulch, stream	Kaluaʻaha		USGS 1992, 1993
Kalanonakukui	ʻili	ʻUalapuʻe	LCA Claim by Kaule.	
Kaluaʻaha	ahupuaʻa	Kaluaʻaha	Also known as a place of refuge.	Summers 1971: 123; USGS 1922, 1993
Kaluaʻaha	gulch, stream	Kaluaʻaha		USGS 1922, 1993
Kaluaʻaha	loko kuapā	Kaluaʻaha	Site 188.	Summer 1971:125–126; Cobb 1902
Kaluaʻaha	puʻuhonua	Kaluaʻaha	Kamakau (1964:19) identified Kamehameha I as ruler who established its status as a refuge. There are other accounts that place its origins earlier in time.	Summers 1971:123
Kaluaʻaha	survey triangulation point	Kaluaʻaha	Elevation of 1,798 ft.	Monsarrat 1896; Wall 1917; USGS 1922
Kaluaʻaha Church	church	Kaluaʻaha		Wall 1971; USGS 1922
Kaluaaui	ʻili	Manawai	LCA Calim no. 3751 to Uaiaholo.	NT
Kaluaelepau, Kaluaolepau, Kaluaelepuu	ʻili	Manawai	LCAw 3667 to Manukani: "Maloko o ka ili o Kaluaolepau, Manawai..." Also LCA to 4970, Written Kaluaoolepau in NT.	IN:678, IN:285
Kaluakapiʻioho	heiau	Manawai	Site 175, lcoated on west bank stream that forms Manawai Gulch.	USGS 1922; Summers 1971: 113-115; Stokes n.d.a: 3–4

Table 3. (cont.)

Place Name	Description	Location	Notes	Source*
Kaluaokapahu or Kaluaelepau	ʻili	Manawai	LCAw 4097 to Kuaana: "Manowai [sic] ili o Kaluaokapahu..."; LCAw 3667 to Manukani: "Maloko o ka ili o Kaluaolepau, Manawai..."	IN:678
Kaluaui, Kaluouia, Kaluaowi	ʻili	Manawai	LCAw 3751 to Waiaholo: "Maloko o ka ili o Kaluaui, Manawai..." Written "Kaluouia" in NR 7:40, "Kaluaowi" in NT 6:107.	AB 7:642
Kamāpuna, Mapuna	ʻili	ʻUalapuʻe	LCAw 3793C to Paele 3: "Loi no Paele 3, ili Kamapuna, Ualapue..." Also claim no. 3837 by Paele 4 "in ili Kamapuna" (FT) and claim no. 3823 by Pala (NR :49). Written "Mapuna" in NR.	AB 6:498; FT 6:14; NR 7:49, 52
Kamoa, Komoa	peak, boundary point	Keawa Nui	Peak of Keawa Nui Ahupuaʻa; see also Kalapamoa.	Monsarrat 1895; USGS 1922
Kamohoaliʻi, Kamohoali	ʻili	ʻUalapuʻe	LCAw 4078 to Kaheiau: "he wahi ili aina koʻu o Kamohoalii ka inoa..." Misspelt "Kamohoali" (q.v.) in IN and AB.	NR 7:76. IN, AB
Kanakapaio	ʻili lele	Located in Wailau but assigned to Kaluaʻaha		Summers 1971:123
Kaniuelua	ʻili	ʻUalapuʻe	Claim no 4204 by Ku: "Ili Kaniuelua, Ualapue. 1. kalo. 2. Kula. 3. Pahale." TMK 5601:12.	FT 6:15; TMK 5601:12
Kanipuukala, Kanikuakala, Kanipuakala	LCA	Said to be located in Pelekunu, variously assigned.	Monsarrat (1888a:91) assigns this to Kaʻamola.	FT: V-06-S-08
Kanola	boundary point	Kaʻamola	Possible boundary point at about 1,500 ft. elevation.	USGS 1922, 1952
Kaʻopeahina	loko kuapā	Kaluaʻaha	Site 190.	Summers 1971: 127; Wall 1917; USGS 1922
Kapaʻakohekili	ʻili	Manawai	Claim no. 9104 by Kahahane.	IN 678; (NT) TMK: 5-6-004:39
Kapiʻioho, Kapiioha	ʻili	Manawai	Claim no. 8908 by Kahiapaiole: "Ma ka ili o Kapiioho ma Manawai."	IN 678, 1282
Kapiʻioho	heiau	Manawai	Alternate name for Kaluakapiʻioho Heiau.	Summers 1971:113
Kapīpā, Kapapa	ʻili	Manawai	Claim no. 5092 by Kapono [LCAw 136B]: "Ma ka ili o Kapipa ma Manawai..." Also CA 4762 to Kapano.	FT V-06-S-05

Table 3. (cont.)

Place Name	Description	Location	Notes	Source*
Kauhuhu	‘ili	‘Ōhi‘a	LCAw 5001B to Namakaelua: “ma ka ili o Kauhuhu i Ohia...Apana 1. Kalo...”	IN 682; AB 7:512; TMK: 5-6-004:por. 52
Kaukeanu	‘ili	‘Ualapu‘e	Claim no. 3975 by Hulihee “in ili Kaukeanu” and claim no. 5147 by Kaiu.	FT 6:16,17
Kaulu	‘ili	Manawai	LCAw 5187 to Kaluau 3: “he loi ma ka ili o Kaulu ma Manawai.” Also LCAw 4185, 5136.	NT; TMK: 5-6-004:040
Kaulu	‘ili	‘Ōhi‘a	LCA claim no. 5187 to Kaluau.	NT
Kaulukukui	‘ili	‘Ualapu‘e	LCAw 4170 to Kaupe: “Aina no Kaupe. Ualapue ili aina Kaulukukui...” Also LCAw 3975 to Hulihae.	IN 686; AB 6:446, 7:637
Kaunahiko‘oku, Unahiko‘okū	loko ‘umeki	East ‘Ōh‘ia	Site 165, loko ‘umeki fishpond consisting of 13.5 ac., with 11 lanes along 2,000 ft. exterior wall. Platforms built on either side of lanes.	Summers 1971:108; Kallstrom 2016a
Kawailoa	lele ‘ili	Located in Wailau but claimed by Kalua‘aha		Summers 1971:123
Ke Ana o Hina	cave or rock shelter	Kalua‘aha	Site 191, Cave of Hina.	Summers 1971:127
Keanakoholua	ridge	Kalua‘aha		USGS 1922, 1993
Keawa Nui, Keawanui	ahupua‘a	Keawa Nui	“Keawa Nui” in Pukui et al. (1974). Retained by Hinau at the Māhele, LCA 2715, consisting of 537 acres; Keawa Nui has a lele in Wailau Valley, LCA 2715.	MB 115; IN 674; AB 615v10; FT 23v6; *Ka Hae Hawaii*, Dec. 15, 1858:p.147; *Ka Nupepa Kuokoa*, Oct. 11, 1862:p.3; *Ka Nupepa Kuokoa*, Mar. 1, 1862:p. 3; *Ka Nupepa Kuokoa*, Sep. 19, 1868:p.4; Pukui et al. 1974:104–105
Keawa Nui, Keawanui	gulch, stream	Keawa Nui	“Keawa Nui” in Pukui et al. (1974). Rises at 2,500 ft. elevation, ends at about 90 ft. elevation 2,000 ft. from shore.	USGS 1922, 1952; Pukui et al. 1974:104–105
Keawa Nui, Keawanui	loko kuapā	Ka‘amola, Keawa Nui	“Keawa Nui” in Pukui et al. (1974). Site 163, loko kuapā fishpond with area of 54.5 ac.; built around 1500 AD, before the time of Kiha-a-Pi‘ilani, and has been in continual use since then; also known as Mikimiki or Hinau Pond.	Monsarrat 1896; Wall 1917; USGS 1922, 1952; Summers 1971:108; Pukui et al. 1974:104–105

Table 3. (cont.)

Place Name	Description	Location	Notes	Source*
Kekalawa, Kekalama	ʻili	ʻUalapuʻe	Claim no. 3823 by Pala: "claim in ili Kekalawa, Ualapue." Also, LCA 3792-D to Kawelo.	FT 6:14
Keliʻiolono, Keluolono	ʻili	Kaʻamola	LCA 9991 to Lolo.	IN: 1329AB 754v8; FT 25v6; TMK: 5-6-005:030
Kenolu	ʻili	ʻUalapuʻe	LCAw 3823 to Pala: "Aina no Pala Ualapue ili Kenolu."	IN 686; AB 6:448, IN 686, TMK: 5-6-002:016
Kiʻinohu	gulch, stream	ʻUalapuʻe	Rises at 1,750 ft. elevation, ends at about 50 ft., 15,000 ft. from the shore.	USGS 1922, 1952, 1993
Kīlau	peak, point ridge	Kaluaʻaha, ʻUalapuʻe, Wailau	The mauka corner of ʻUalapuʻe/Kaluaʻaha/Wailau, on the rim of Wailau Valley. Elev. 4,080 ft.	USGS 1952, 1993; Wall 1918
Kīloa	ʻili lele	located in Pelekunu but claimed by Kaʻamola	Located along with three other lele ʻili on the kona side of Pelekunu as shown in Wall's map. It was large in size, at least 40 ha with loʻi along Kaweea Stream.	Summers 1971:104, 179; Monsarrat 1895; Summers 1974:111
Kilohana	peak	ʻUalapuʻe, Wailau	"Summit of the mountain separating ʻUala-puʻe and Wai-lau." Perhaps the same as Kīlau (q.v.), or the 3,800 ft. peak at the corner of Kahananui/ʻUalapuʻe, between Pākuʻi and Kīlau.	PEM 111
Kōlea	coastal point	Kaʻamola, Puaʻahala	Along coast between two fishponds, near ahupuaʻa boundary.	Wall 1917
Kua	ridge	Wāwāʻia, Puaʻahala	Serves as an upper boundary between two ahupuaʻa.	Monsarrat 1896; USGS 1922, 1993
Kuahuai	ʻili	ʻUalapuʻe	LCA Claim no. 4194 to Kuhuwaimaka.	NT
Kuaimamaki	ʻili	ʻUalapuʻe	Claim no. 3966 by Hanakahi: "in ili Kuaimamaki, Ualapue." Also LCA 3975 to Kaulowaa.	FT 6:15; NT 6:98
Kuapōhaku, Halulukuapokaku	ʻili	ʻŌhʻia	Claim no. 4899:4 by Kalaimaika: "Pahale ma Kuapohaku i Ohia." Not awarded. Claim no. 5187 by Kaluau: "He pa ma ka ili o Halulukuapohaku i Ohia." Not awarded.	NT 6:109, 114
Kuhuiohapuu	ʻili	Kaluaʻaha	LCA Claim no. to Nawaa.	NT
Kukaiole	ʻili	Manawai	LCAw 4683 to Leimakani: "Maloko o ka ili o Kukaiole, Manawai."	IN 1083

Table 3. (cont.)

Place Name	Description	Location	Notes	Source*
Kukee	‘ili	‘Ualapu‘e	LCA Claim no. 4196 to Kamoku.	NT
Kukui	‘ili	Keawa Nui	LCAw 3902 to Napahi: “Keawanui ili o Kukui.”	IN 674; AB 259v8; FT 23v6; NT 117v6; TMK: 5-6-004:058
Kukui, Kukuikona, Kukuikomo	‘ili	Manawai	LCAw 4095 to Kahoohalahala: “Manawai ili o Kukui kona [sic] Molokai...” (AB); “in ili Kukuikono” (FT;) “ma ka ili o Kukuikomo ma Manawai” (NT); “o Kukuikomo ka inoa” (NR).	AB; FT; NT; NR
Kukui	heiau	East ‘Ōhi‘a	Site 169, described by Stokes as collection of enclosures and low platforms, identified as a possible agricultural heiau. 170 ft. long by 120 ft. wide.	Summers 1971:111–12; Stokes n.d.a.:2; USGS 1922
Kukuikomo	‘ili	Manawai	LCA Claim no. 4095 to Kahoowahala.	NT
Kukuipūhō, Kukuipuhoo, Kukuipoho	‘ili	Manawai	LCAw 5135 to Kekipi: “Manowai [sic] ili o Kukuipuhoo...” (AB); “in ili Kukuipuho” (FT); “Ma ka ili o Kukuipoho” (NT).	AB; FT; NT; IN 678, 1107
Kūlani	‘ili	‘Ualapu‘e	LCAw 4177 to Kualualu: “Apana 1. Kula maloko o ka ili o Kulani.”	AB 7:635
Kumu, Kunuu, Kenuu	‘ili	Keawa Nui	LCAw 4187C to Uluhani: “Keawanui ili Kunuu...” also LCA 4187B to Nakoholua TMK 5-6-006:por.025. Misspelt “Kumu.”	AB 183v7; FT 24:6; NT 118v6
Kumukahalau, Kumakahalau	‘ili	Keawa Nui	LCAw 138B to Kawainui: “Maloko o ka ili o Kumukahalau, Keawanui.” TMK 5604:10. Written “Kumakahalau” in FT.	AB 648v7; FT 24v6; NT 117:6
Kumukoa	heiau	Manawai	Alternate name for Kaluakapi‘ioho Heiau.	Summers 1971:113
Kumunui	‘ili	‘Ualapu‘e	LCAw 3837 to Paele 4: “[Ap.1] Loi no Paele 4, ili Kumunui, Ualapue...[Ap.2] Aina no Paele 4, Ualapue ili Kumunui.”	AB 6:499,770
Kupa, Makupa	‘ili	‘Ualapu‘e	LCAw 3792 to Koenakaia: “Aina no Koenakaia, Ualapue ili Kupa...” Written “Makupa” in NT 6:104. Also LCAw 3792B in Kupa 2, 5147 to Kaiu.	IN 686; AB 6:451
Ku‘ula	coastal location	Ka‘amola	Coastal location to the west of Kaina‘ohe Fishpond.	Wall 1917

Table 3. (cont.)

Place Name	Description	Location	Notes	Source*
Lahiamanu	gulch, stream	Kaluaʻaha	upper branch stream of Kaluaaha Gulch.	USGS 1922; 1993
Lanihale	ʻili	Kaʻamola	LCA award 8936 to Kuheleoa, 4.46 ac.	IN 282
Laupala	ʻili	Puaʻahala	LCAw 4609 to Piapia: "Mau aina ma Puahala ili Laupala...Apana 1. Loi."	IN 683; AB 5:730; TMK: 5-6-007:004
Loʻipūnāwai	spring	ʻUalapuʻe	Famous spring, associated with moʻolelo.	Summers 1971:121; Evans 1938; USGS 1993
Loʻipūnāwai	ʻili	ʻUalapuʻe	Claim no. 5147 by Kaiu: "in ili Loipunawai." Also LCAw 10505 to Kaholowaa.	AB 6:447
Loʻiwai	ʻili	Puaʻahala	LCAw 3797 to Lokomaikai: "Maloko o ka ahupuaa o Puahala...Apana 1. Kula maloko o ka ili o Loiwai."	IN 683; AB 3:786; TMK: 5-6-007:06x
Luaʻipuʻupuʻu	ʻili	Kahananui	Claim no. 4056 by Kamauoha: "claim lies in ili Luaipuupuu, Kahananui. Kula.	FT: V-06-S-01
Mahilika	loko kuapā	ʻUalapuʻe	Site 189.	Summers 1971:127; Cobb 1902
Maiʻi	ʻili	ʻUalapuʻe	Claim no. 3982 by Hilo: "ma ka ili o Maii" (NT).	NT; IN 686; AB 6:451
Maileliʻi	point, boundary	ʻUalapuʻe, Kaluaʻaha	A point on the ʻUalapuʻe/Kaluaʻaha boundary, elev. 2,295 ft.	USGS 1922, 1952, 1993
Makalihua	heiau	Puaʻahala	Site 159. Mālaʻe Heiau is not listed by Stokes or Thrum.	Summers 1971:104; USGS 1922, 1993; TMK: 5-6-006:002
Makea	ʻili lele	Wailau but claimed by Kahananui Ahupuaʻa	A plot of land located near the coast along Wailau Stream.	Summers 1971:215
Makupa	ʻili	ʻUalapuʻe	LCA Claim no. 3792 to Koenakia.	NT
Mālaʻe	gulch, stream	Puaʻahala, Kaʻamola	Rises at 3,300 ft. elev., ends at 100 ft. elev. at Mālaʻe Heiau.	USGS 1922, 1993
Mālaʻe	heiau	Manawai	Site 171, described as destroyed by Stokes.	Summers 1971:113
Malua	ʻili	Kaʻamola	LCA 89131 awarded to Keke, 2.6 ac.	IN:668, 1283
Malukou	gulch, stream	Manawai		USGS 1922

Table 3. (cont.)

Place Name	Description	Location	Notes	Source*
Malukou	heiau	Manawai	Site 171, said to be destroyed.	Summers 1971:113; Monsarrat n.d.:2
Mamokai	ʻili	ʻUalapuʻe	LCA Claim no. 3823 to Pala.	NT
Manawai	ahupuaʻa	Manawai		Summers 1971: Wall 1917; USGS 1922
Manawai	survey triangulation point	Manawai		Monsarrat 1896; Wall 1917; USGS 1922
Manawai	gulch, stream	Manawai		USGS 1993
Manu	ʻili lele	Wailau Ahupuaʻa but assigned to Kaluaʻaha		Monsarrat n.d.:90–91; Summers 1971:123
Manua	gulch, stream	Kaʻamola	Mauka of Kāināʻohe Fishpond.	Wall 1917
Manuia, Manua	survey triangulation point	East ʻŌhʻia, Manawai, Pelekunu		Monsarrat 1894
Mapa	ridge line	Kamalō Ahupuaʻa, East Molokaʻi Mountain	Located on the far east edge of the mountain ridge line boundary separating Kamalō from Pelekunu and perhaps part of former trail.	Monsarrat 1895
Mapaa	point		Reverend Hitchcock built a house here to escape the heat. May be variant of Mapa.	USGS 1922, 1993
Mauleule	ʻili	ʻUalapuʻe	LCA Claim no. 8105 to Hakuole.	NT
Maunaoluau	stream, gulch	Kaluaʻaha		USGS 1922, 1993
Maunaʻoluʻolu	point	Kaluaʻaha, Mapulehu	Serves as a boundary between two ahupuaʻa.	Summers 1971:105
Mikiawa	loko ʻume iki	Kaʻamola	Site 162, a loko ʻume iki with area of approx. 44 ac.; Belonged Kaʻamola Ahupuaʻa, but was used by people of Keawa Nui when tide coming in, and Kaʻamola used the pond at ebb tide. Also known as Kaʻamola Pond.	Summers 1971:105–108
Mikimiki	loko kuapā	Keawa Nui	Also known as Keawanui or Hinau Pond, Site 163	Summers 1971:108
Moho	ʻili	ʻUalapuʻe	Claim no. 3916 by Nahoaai: "in ili Moho, Ualapue. 1. Kalo. 2. Kula. 3. Kula."	FT 6:15; NT 6:97
Molokaʻinuiahina	gulch, stream	Puaʻahala		USGS 1922; 1993

Table 3. (cont.)

Place Name	Description	Location	Notes	Source*
Moʻoʻiki, Moʻoahi	ʻili	ʻUalapuʻe	LCAw 4209 to Kauhikoakoa: "aina no Kauhi, Ualapue ili Mo[o]iki."	FT: V-06-S-05
Mookahi	ʻili	ʻUalapuʻe	LCAw 3792D to Paele: "Apana 1. Aina no Paele 2 Ualapue, ili Mookahi...Apana 3. Loi no Paele 2 ili Mookahi, Ualapue..."	FT:V-06-S-01
Moʻoloa	ʻili	Puaʻahala	LCAw 4924 to Kaioha: "Ili Mooloa, Puahala...Apana 1. Loi..." TMK 5607:5.	IN 683; AB 5:729; TMK 5607:5
Moʻomuku, Moʻomukau	stream, gulch	Kaluaʻaha		USGS 1922
Naloiekolu	ʻili	ʻUalapuʻe	LCA Claim no. 4170 to Kaupe.	NT
Namanu	ʻili	ʻUalapuʻe	LCA Claim no. 3678 to Muolo.	NT
Nāmoʻo, Namao	ʻili	Kaluaʻaha	Claim no. 3985 by Halulu: "Namoo the ili consists of three parts...." Also claim no. 4177 by Kualualu,. 4618 by Pohuehue, 2375 by Kauhimauna, and 5014 by Kahakumakaliilii.	FT 6:1,13,15; NT 6:70,94,104
Namoo, Namoku	ʻili	ʻUalapuʻe	LCA Claim no. 4618 to Pohuehue.	NT
Namokae	ʻili	ʻUalapuʻe	LCA Claim no. 5147 to Kaiu; Also LCA 5184 to Kekuhe.	NT
Naniuelue	ʻili	ʻUalapuʻe	LCA Claim no. 4204 to Ku.	NT
Naulu	ʻili	ʻUalapuʻe	LCA Claim no. 4078 to Puupuu.	NT
Niaʻupala	loko kuapā	Kaluaʻaha and Mapulehu	Site 192.	Summers 1971:127–128; Wall 1917
Ninihua	ridge	Manawai and East ʻŌhiʻa	Located on ahupuaʻa boundary.	Monsarrat n.d., 1896
Ninihua	ʻili	Manawai	LCA 4899 to Kalamaikai [sic; Kalamaika in AB, NR, NT, FT]: "Manawai ili Ninihua..."	AB; NR; NT; FT; IN 256
Nihu	gulch	Puaʻahala, Wāwāʻia	Gulch that serves as a boundary between two ahupuaʻa.	Monsarrat 1888: 94, 1895
ʻOhaipilo	ʻili	Keawa Nui	LCAw 5193 to Kaiamoku: "Keawanui ili o Ohaipilo..."	IN 674, 1110; AB 258v8; FT 22v6; IN 252; TMK: 5-6-004:009
ʻŌhiʻa	gulch, stream	West' ŌhiʻaEast ʻŌhiʻa		USGS 1922, 1993
ʻŌhiʻa	ʻili lele	Located in Wailau but assigned to Kaluaʻaha Ahupuaʻa		Monsarrat n.d.: 90–91; Summers 1971:123

Table 3. (cont.)

Place Name	Description	Location	Notes	Source*
‘Ōhi‘a	pu‘u	Keawa Nui	Elevation 2,163 ft.	Wall 1917; Coulter 1935:152
‘Ōhi‘anui	survey triangulation point	Keawa Nui		Monsarrat 1896
‘Ōhi‘apepepe, ‘Ōhi‘apipepe	‘ili	Manawai	Claim no. 8906 by Kuhoe: “in ili Ohiapepepe, Manawai.” Misspelt “Ohiapipepe” in AB and IN.	IN 256, 678
Ohouli	‘ili	Kalua‘aha	LCAw 3837 to Paele 4: “Ili o Ohouli, Kaluaaha.”	AB 7:203.
Onahikoko	loko ‘ume iki	East ‘Ōh‘ia	Site 165. Alternate name for Kaunahiko‘oku Fishpond.	Summers 1971:109–110
Onihu, Oniho, Nihu	gulch	Wāwā‘ia, Pua‘ahala	Upper part of gulch forms boundary between Wāwā‘ia and Pua‘ahala; also called Kalihi, Nihu, or Oniho.	LCAw 11216 ‘Āpana 13; Monsarrat 1988a: 113, 1888b:94.
Pa‘a, Kapaa	‘ili	Keawa Nui	Claim no. 11085 by Kekoowai: “in ili Paa, Keawanui...” Written “ka Paa” in NT.	NR 50v7; FT 23v6; NT 116v6; TMK 5604:3; IN:674, AB 179v7
Pa‘akea	‘ili	‘Ōhi‘a	LCA 10110 to Maalahia, 2 ac., 5 fathoms.	IN 682
Pa‘ala‘ala, Pa‘alaea	‘ili	Keawa Nui	LCAw 3824 to Pahupu: “he wahi ili aina o Paalaala iloko...o Keawanui.” LCA 4187-B to Koahookano. Also spelled Paalaea.	IN: 674; FT 24v6; NT 117v6
Paehala or Paihala	‘ili lele	Located in Wailau section of Hālawa Ahupua‘a but assigned to Keawa Nui or Kalua‘aha Ahupua‘a	Located adjacent to Wailau Stream; illustrated on historic maps.	Summers 1971:123; Monsarrat n.d..: 90–91, 1894, 1895
Pahu Kauila	heiau	Kalua‘aha	Site 186, also known as Hale o Lono Heiau. Located near the front of Pahu Kauila Gulch, about 2,200 ft. from the coast. Stokes described it as a platform and pavement separted by a high wall. It was not a luakini heiau.	Summers 1971:124–125
Pahukauila	gulch, stream	Kahua‘aha		USGS 1922
Pahukauila	‘ili	Kalua‘aha	Claim no. 10501B by Ninihua: “in ili Pahukauila...” Also claim no. 240C by Kaalele, claim no. 4058 by Kaiue, claim no. 4086 by Kamakahuia, claim no. 3754 by Aukai, and several more.	NT

Table 3. (cont.)

Place Name	Description	Location	Notes	Source*
Pahukauila	boundary point	Kaluaʻaha	A hill between the shore and Momokuhookui Ridge on the Kaluaʻaha/Mapulehu boundary.	BC 49 (1:42); BCT 1:140
Pahuokama	ʻili	Kaluaʻaha	LCA Claim no. 5196 by Kawelo, 8904 by Kila and 8907 by Kaiakea.	NT
Paialoa	loko kuapā	Puaʻahala	Site 104. "Paialoa Pond...was 35 acres in area in 1901. The wall of this loko kuapa is approximately 2200 ft. long. Joining it on the W is the wall of Kalokoiki Pond (Site 157)."	Summers 1971:104; Wall 1917; USGS 1952
Pākuʻi	heiau	Kahananui and Manawai	Site 178, on the boundary between the two ahupuaʻa and north of Kahokukano Heiau (Site 177).	Summers 1971:119; Monsarrat 1895; USGS 1922; Stokes n.d.a.:4; Thrum 1909a:40; Kamakau 1961:22; Pukui 1974:176
Pākuʻi	point, boundary	Manawai, Wailau, Kahananui		Monsarrat 1895; USGS 1922, 1993
Palapai	ʻili	Kahananui	Claim no. 9104 by Kahakane: "he wahi pahale iloko o ka ili o Palapai ke ahupuaa o Kahananui."	IN:271
Panini	cliff	Puaʻahala, Wāwāʻia	Pali serving as ahupuaʻa boundary. LCAw 11216 ʻĀpana 13.	Monsarrat 1895; Monsarrat 1888a: 94
Papaʻiliʻili, Papaliilii	lolo ʻume iki	Kaʻamola	Site 161. Fishpond west of Keawanui Fishpond; a loko ʻume iki with area of 6.5 ac., now completely destroyed; also spelled "Papailiilii."	Keppeler 1925-26b; Summers 1971:105; TMK: 5-6-006
Pāpōhaku	ʻili	ʻŌhiʻa	LCAw 10109 to Mose: "ma ka ili o Papohaku i Ohia Komohana..." Also LCAw 4682:2 to Luia: "Ohia ili o Papohaku..."	IN 682, 1083; AB 7:513, 8:52; TMK: 5-6-006:por. 27
Puu Kuka	ʻili	ʻUalapuʻe	LCA Claim no. 10505-B to Kaulowaa.	NT
Pawela	ridge	Manawai, Kahananui	Ridge line that serves as ahupuaʻa boundary.	Monsarrat 1890; Wall 1917
Pelekunu - Kamalō	trail	Pelekunu, extending to Kamalō and possibly to Kaluaʻaha	People from Pelekunu were said to travel over the trail to Kaluaʻaha for prayer service.	Hitchcock 1836 (in Summers 1971:179)
Pelekunu	gulch, stream	East ʻŌhiʻa, Manawai		USGS 1922, 1993

Table 3. (cont.)

Place Name	Description	Location	Notes	Source*
Pepeiaoloa or Pepeaoloa	ʻili lele	Located in in the eastern portion of Wailau but assigned to East ʻŌhiʻa	One of 16 ʻili located in Wailau but whose "title" belonged to another ahupuaʻa, in this case East ʻŌhiʻa. Summers (1971:215) illustrates the named plot as near the coast adjacent to Kahawaiʻiki Stream.	Summers 1971: 109; Monsarrat 1895
Pia	gulch, stream	Keawa Nui and West ʻŌhiʻa	Serves as a boundary between two ahupuaʻa.	Wall 1917; USGS 1922, 1993
Pia	ridge	Keaw Nui and West ʻŌhiʻa	Serves as a boundary between two ahupuaʻa.	Monsarrat 1896
Piliamoo	ʻili	Keawa Nui	LCA 4187-B to Kahookano.	FT23v6, FT116v6, FT165v15, FT273v15
Pōhākea	ʻili	ʻŌhiʻa	LCAw 10110 to Maalohia: "in ili Pohakea, Ohia. Kula" (FT). "Ma ka ili o Pohakea ma Ohia" (NT). Misspelt "Paakea" in IN and AB 8:257.	FT 6:23; NT 6:115
Pohakuloa	ʻili	Manawai	LCAw 4201 to Kahola: "Aina ma Manawai ma ka ili Pohakuloa..." Also LCAw 4762.	IN 256; NR
Pōhakumauleule	ʻili	ʻUalapuʻe	LCA 8105 to Hakuole, 3 ac., 605 fathoms.	
Puaʻahala, Puahala, Puuahala	gulch, stream	Puaʻahala		Monsarrat 1896; USGS 1922, 1993
Puhalawai	ʻili	Manawai	LCA 4985 to Keaki, 2 ac., 794 fathoms.	IN 686
Pohakoi	point	Puaʻahala	Located on or near coastal plain on west side.	Monsarrat 1896; Monsarrat 1888:94
Pokuhakuloa	ʻili	Manawai	LCA Claim no. 4185 to Kaluau 2; also LCA 4200 to Kahola.	NT
Puʻepuʻe	ʻili	Kaluaʻaha	Claim no. 134B & 5013B by Kamakahi: "his claim, Puepue by name, lying in Kaluaaha."	IN 683; AB 7:519
Pūhalawai, Puhalou, Puuhalo	ʻili	Manawai	LCAw 4985 to Keaki: "Maloko o ka ili o Puhalawai..." Written "Puhalou" in FT 6:20, "Puuhalo" in NT 6:108.	FT 6:20; NT 6:108; USGS 1922; TMK: 5-6-004:024
Pūhāloa	loko kuapā	Manawai, Kahananui	Site 179.	Summers 1971:119; Monsarrat 1890; Evans 1938; USGS 1922; Summers 1974:192
Puuhanau	ʻili	ʻUalapuʻe	LCA Claim no. 3792-C to Paele 2.	NT

Table 3. (cont.)

Place Name	Description	Location	Notes	Source*
Pukalaino	ʻili	Puaʻahala	LCAw 5026B to Makalehua: "Maloko o ka ili o Pukalaino, Puaahala...Apana 1. Aina kalo..."	IN 678; TMK: 5-6-007:003
Puʻuahala	ahupuaʻa	Puaʻahala	Returned by Kaaiawaawa at the Māhele, retained by Aupuni. Frequently written "Puahala." The lele of Wawaolepe in Pelekunu Valley (TMK: 5-9-008:017).	IN 683
Puʻuiki	point	Puaʻahala, Kaʻamola	On ridge, mauka within Forest Reserve boundary.	Monsarrat n.d.;USGS 1952; MB 82, 213; TMK: 5-9-008:017; TMK: 5-9-008:012
Puukalaino or Pukalāʻino				Keppeler 1925–26b; Monsarrat 1896a; Wall 1917
Puʻukuhe	heiau	ʻUalapuʻe	No site number given; identified but not seen by Stokes.	Summers 1971:123; Monsarrat n.d..:6
Puʻukuha, Puʻukaha	ʻili	ʻUalapuʻe	LCA Claim no. 4196 to Keanui, and 4204 to Ku.	NT
Puʻukula	ʻili	ʻUalapuʻe	LCA Claim no. 3666 to Hakuole.	NT
Puʻulena	ʻili lele	Located in Wailau but assigned to Kaluaʻaha		Summers 1971:123; Monsarrat n.d..: 90–91, 1894; 1895
Puʻu ʻŌlelo	gulch, stream	Puaʻahala		Monsarrat n.d.: 9–91; Summers 1971:123
Puʻu ʻŌlelo	heiau	Manawai	Site 174. Main feature is a platform facing the ocean.	Summers 1971:113; Stokes n.d.a:3
Puwainui	ʻili	Kaluaʻaha	LCA Claim no. 8901 to Kaheana.	NT
ʻUalapuʻe	ahupuaʻa	ʻUalapuʻe	Described as being a "good land, one filled with taro patches and also a pond" (Kanepuu 1867b).	Summers 1971:113
ʻUalapuʻe	loko kuapā	ʻUalapuʻe	Site 185.	Summers 1971: 121; Monsarrat 1890, 1896; Wall 1917; USGS 1922
Uhanau	ʻili	ʻUalapuʻe	Claim 3840 to Paaluhi, 3 ac.	Summers 1971:121–122; USGS 1922, 1993
Upelele	ʻili lele	Located in Wailau but assigned to Kaluaʻaha		Monsarrat n.d.:90–91; Summers 1971:123
Waiauwia	heiau	Kahananui	Site 180.	Summers 1971:119; Stokes n.d.a:6
Waiehu	point	Located in Wailau but assigned to Kahananui	A fishing right was located along Waiehu Point, on the northwest end of Wailau.	

Table 3. (cont.)

Place Name	Description	Location	Notes	Source*
Waikakulu	ʻili	Kahananui	Claim no. 3792E by Kahananui: "in ili Waikakulu, Kahananui...kula." Not awarded.	Monsarrat n.d.: 85; Summers 1871:119
Wailau	ʻili	Kaʻamola	Claim no. 4820 by Kumulaua.	Monsarrat 1895; TMK: 5-6-005:032
Wailau	survey triangulation point	East and West ʻŌhiʻa	This is also represented as a name for a topographical location.	Monsarrat 1895
Wailau - Mapulehu	trail	Named after Wailau but it extended across Mapulehu Ahupuaʻa as well	Site 201. It is illustrated on a historic map extending across and down a ridge line in Mapulehu.	Mouritz 1855; Monsarrat 1896; Summers 1971:134–35; USGS 1922
Waipahi	ʻili lele	Located in Pelekunu but assigned to Puaʻahala		Mouritz 1855
Waipoki, Waipahu	ʻili	Kaʻamola	LCA award 4822 to Naili; LCA award 4820 to Kamulaua	818v4, FT264v15
Wāwaepōʻele, Wāwaeolepe	ʻili lele	Located in Pelekunu but claimed by Kaluaʻaha	Claim no. 4206 by Kukae: "in ili Wawaepoele." Also claim no. 4196 by Keaanui. This was a large plot of land, adjacent to the lele ʻili of Kīloa and more than 40 ha in size with loʻi along Kaweea Stream.	Summers 1971:104, 179; Monsarrat n.d.:202–203; Monsarrat 1984
Wehelauʻulu, Wahieulu	loko kuapā	Manawai	Site 170, a fishpond with an area of 8 ac.. Exterior wall of 1,770 ft. with three mākāhā. Walls now destroyed but visible on aerial images.	Summers 1971:112–113; Kallstrom 2016a
West Ōhʻia	ahupuaʻa	West ʻŌhiʻa	Also referred to as ʻŌhiʻa nui.	USGS 1993; Summers 1971:108

*AB Awards Book (Hawaiian Kingdom 1855); FT Foreign Testimony (Hawaiian Kingdom 1855); IN Indices of Awards (Hawaii Territory 1929); MB Māhele Book (Hawaiian Kingdom 1848); NT Native Testimony (Hawaiian Kingdom 1846–1853); NR Native Register (Hawaiian Kingdom 1846–1848a)

> pig." When tribute was made to the konohiki (chief's land agent) for the blessings of the land, the people placed upon the ahu (stone heap) a pig and other foods of the land and sea. In times when a pig could not be procured, it was substituted with the ʻaholehole fish. Kumu John Kaʻimikaua shared with me these ancient names. He explained that these names connote the presence of fertile waters. Both the mullet and the ʻaholehole are known for their preference for the sweet and cooling waters that seep along the shore from freshwater springs that mix with the sea. The springs are fed by a network of lava tubes that connect the lush northern valley of Pelekunu to the south shore. (Akutagawa 2011)

The inventory of place names listed in Table 3, while substantial, likely does not include all of the names that were assigned to locations within the nine ahupuaʻa associated with the Pākuʻi project area. Many, but not all of the foreign or native testimonies for land awards, were examined. These records generally identify the names of ʻili for properties that are being claimed within a given ahupuaʻa. Nonetheless, we have compiled a substantial sample or portion of those named places that populated the landscape.

Ahupuaʻa Names

All nine ahupuaʻa have names that identify their territorial boundaries and simultaneously refer to the Hawaiian communities that once resided within these boundaries. Boundaries were fixed using topographical and natural features according to Handy and Handy (1972:48). These nine ahupuaʻa have boundaries that extend inland or mauka, although not all reach the crest of the East Molokaʻi Mountain. Nonetheless, all of these ahupuaʻa extend into the Molokaʻi Forest Reserve and their upper elevation sections would be enclosed by the proposed Pākuʻi Fence. The territories of all nine ahupuaʻa include at least one major drainage (or gulch as they are referred to), likely a major source of surface water. This is a practice that was followed generally throughout the islands (Handy and Handy 1972:49).

All of the names applied to the nine ahupuaʻa also have other referents, either a gulch or stream and/or an associated loko kuapā fishpond that takes the same name as the ahupuaʻa within which it is located (Table 4). Some of the gulches form boundaries, particularly between contiguous ahupuaʻa that appear to have once been joined as a single territory (e.g., West and East ʻŌhiʻa are separated by the ʻŌhiʻa Gulch). As Handy and Handy (1972:48) note, "Topographical and other natural features—ridges, outcropping rocks, a stream channel, sometimes a tree would give the line and angles of defined [ahupuaʻa] areas." The naming of loko kuapā fishponds with the same name applied to their associated ahupuaʻa suggests that these ponds may have been built soon after distinct ahupuaʻa were established. Alternatively, fishpond names may reflect those assigned to coastal lands occupied earlier and which were applied to their respective ahupuaʻa. The periphery of a few fishponds also forms a portion of the coastal boundary for their related ahupuaʻa. The assignment of ahupuaʻa names to gulches and to their associated streams as well as fishponds highlights the potential linkage these names have with important resources linked to food production and other essential human requirements. All of the gulches that share names with their ahupuaʻa extend into the current forest (or where it likely occurred in the past) on the south slope of the East Molokaʻi Mountain. Thus both ahupuaʻa and gulches or streams that flow through these territories are linked to their uplands, the areas of wao akua and wao maʻukele.

ʻIli ʻĀina Names

The largest category of named places that we have recorded for the nine project area ahupuaʻa refer to ʻili ("strips"). ʻIli were the most permanent land units in Hawaiʻi and were identified with the families that lived there and improved the land in some fashion. For the nine project area ahupuaʻa there were more than 125 distinct names associated with ʻili (see Table 3), comprising roughly one-half of all of the place names. There were different forms that ʻili could take. For this study there are two for which we have documentary information: ʻili paʻa and ʻili lele. A third category, ʻili kūpono (lands that could not be alienated in terms of assignment and which were generally reserved for konohiki or aliʻi). Summers (1971:214) suggests that the large land award in East ʻŌhiʻa was an ʻili kūpono. Since this land was eventually taken by the government, it may be that she was referring to West ʻŌhiʻa, which was claimed in its entirety by Helehua.

ʻIli were typically identified in the Māhele records through claimant testimonies for distinct plots of land. Unfortunately, no such testimonies were needed for the land grants made to chiefs or the

lands that were retained by the Hawaiian government, and so the largest areas of these ahupuaʻa lack ʻili

Table 4. Pākuʻi Project Area Ahupuaʻa Names and Translations

Ahupuaʻa Name	Literal Translation	Source	Other Referents
Puaʻahala	"passing pig" or "clump of pandanus roots"	Pukui et al. 1974:190	Puaʻahala also refers to the gulch and stream whose west ridge line forms a portion of the western boundary of Puaʻahala with Wāwāʻia Ahupuaʻa.
Kaʻamola	"loose, unsteady"	Pukui et al. 1974:60	Kaʻamola is a variant name for the Mikiawa Fishpond located on the coast of Kaʻamola Ahupuaʻa at Kalaeloa Point.
Keawa Nui	"big Keawa," "large milkfish," or "large harbor"	Pukui et al. 1974:104–105	Keawa Nui refers to a gulch and stream that forms the western boundary of Keawa Nui Ahupuaʻa with Kaʻamola. It is also one of the names (along with Mikimiki and Hinau) applied to a loko kuapā fishpond that is along the coastline of Kaʻamola.
ʻŌhiʻa	"ʻōhiʻa tree"	Pukui et al. 1974:168	ʻŌhiʻa refers to a gulch and stream that separate West and East ʻŌhiʻa Ahupuaʻa and which extends to the East Molokaʻi Mountain. It also refers to a puʻu or hill top in Keawa Nui.
Manawai	"water branch"	Pukui et al. 1974:144	Manawai refers to a gulch and stream that extend from the East Molokaʻi Mountain to the coast in the middle of Manawai Ahupuaʻa. Manawai is also the name of an ʻili ʻāina in ʻUalapuʻe Ahupuaʻa.
Kahananui	"the great work"	Pukui et al. 1974:63	Kahananui refers to a gulch and stream that extend from the East Molokaʻi Mountain to the coast and the eastern boundary of Kahananui Ahupuaʻa.
ʻUalapuʻe	"hilled sweet potatoes"	Pukui et al. 1974:214	ʻUalapuʻe refers to a loko kuapā fishpond on the coast of ʻUalapuʻe Ahupuaʻa.
Kaluaʻaha	"the gathering pit"	Pukui et al. 1974:78	Kaluaʻaha refers to a gulch and stream that extend from the East Molokaʻi Mountain to the coast in the middle of Kaluaʻaha Ahupuaʻa. Kaluaʻaha also is the name of a loko kuapā fishpond at the coast of this ahupuaʻa.

names, unless there were claims made for portions of these lands during the Land Commission hearings. This would account for the relatively smaller number of ʻili names associated with several of the ahupuaʻa that had large or entire sections awarded to chiefs. This included Puaʻahala, Kaʻamola, Keawa Nui, and West ʻŌhiʻa. It is unclear if ʻili names were given to the forested uplands of wao akua and wao maʻukele (and possibly wao kanaka) within individual ahupuaʻa, since these lands were generally accessible by members of the entire community.

As subsections of ahupuaʻa and given their role as locational indicators of improved or cultivated lands during the Māhele, ʻili ʻāina represent areas associated with sets of families or households. As the vast majority of the land claims awarded were for properties near the coast, it is unlikely that many of the named ʻili would have extended into the forested zone associated with the project area. There was an LCA award (4056) to Kamauoha that was identified as kula land in the ʻili of Luaipuupuu in Kahananui Ahupuaʻa. A second LCA award (4821-B) was made to Paipaiku in the ʻili of Kalaekoe of East ʻŌhiʻa Ahupuaʻa. Both of these awards occurred just below the Forest Reserve (Figure 13). There were other awards that mention kula lands, and which may have extended inland and upslope, as well.

ʻIli Lele

A number of the place names included here apply to locations outside the nine project area ahupuaʻa. They have been listed in Table 3 because of their association with the project area. These places are all identified as ʻili lele, or named sections of land holdings that are discontiguous within an ahupuaʻa or which may be completely placed within a separate ahupuaʻa. It is also possible that named plots identified as ʻili lele are portions of ʻili kūpono, those land sections whose "title" was vested in a family who was not required to provide tribute to the konohiki of the ahupuaʻa in which they were situated. According to Summers (1971:213) the families or individuals who had ʻili lele that were not also ʻili kūpono lands "…paid tribute to the *ahupuaʻa* or *ʻili kupono* to which they belonged."

There are at least 16 named ʻili lele located in Wailau and Pelekunu Ahupuaʻa and which were assigned to the following project area ahupuaʻa: Puaʻahala, Kaʻamola, Keawa Nui, East ʻŌhiʻa, Kahananui, ʻUalapuʻe, and Kaluaʻaha (see Table 3). There were several other ʻili lele identified whose names could no longer be recalled or which had not been previously recorded. Kaluaʻaha Ahupuaʻa had as many as nine ʻili lele assigned to it but which were located in Wailau. A number of other ahupuaʻa along the southeastern coast of Molokaʻi also had ʻili lele in one or more of the windward ahupuaʻa of Wailau, Pelekunu, and Waikolu. Summers (1971:215) illustrates a number of the named ʻili lele located in Wailau and the ahupuaʻa to which they were assigned (Figure 14). There were no ʻili lele associated with the southwestern ahupuaʻa of Molokaʻi. And there were no ʻili lele assigned to any of the Koʻolau District ahupuaʻa (i.e., neither Wailau or Pelekunu Ahupuaʻa laid claim to lands in the Kona District ahupuaʻa).

The significance here of ʻili lele properties outside of their assigned ahupuaʻa is that they provided windward resources to residents of the leeward region of Molokaʻi. Some of these plots were substantial in size, well over 40 ha (99 ac.) and occasionally as much as 70 ha (173 ac.). Many plots had access to streams or other surface water necessary for irrigated agriculture, although one can see the two ʻili lele in the upper reaches of Wailau Valley that belonged to Mapulehu. It is likely that ʻili lele offered specific plant cultivation or possessed other properties that made them desirable. ʻIli lele located near to the coast could have been accessed via canoe by their stewards who lived elsewhere. That is individuals could have traveled by ocean from leeward ahupuaʻa to either Wailau or Pelekunu for the purposes of accessing their ʻili lele. Many historical accounts relate that difficulty in fishing off the windward coasts while accessing the windward valleys by sea "…was none too safe a one even in the smoothest of weather…" (Cooke 1949). Kanepuu makes a similar observation:

> Molokai is a land of rough seas, especially worse on the Koolau side during the rainy months up to Makalii or April when it calms down. That is the better time for strangers to visit the Koolau side of Molokai. In those six months…one could get some fish to eat, but when the rainy months come, the sea rises up against the cliffs. … (Kanepuu 1867a)

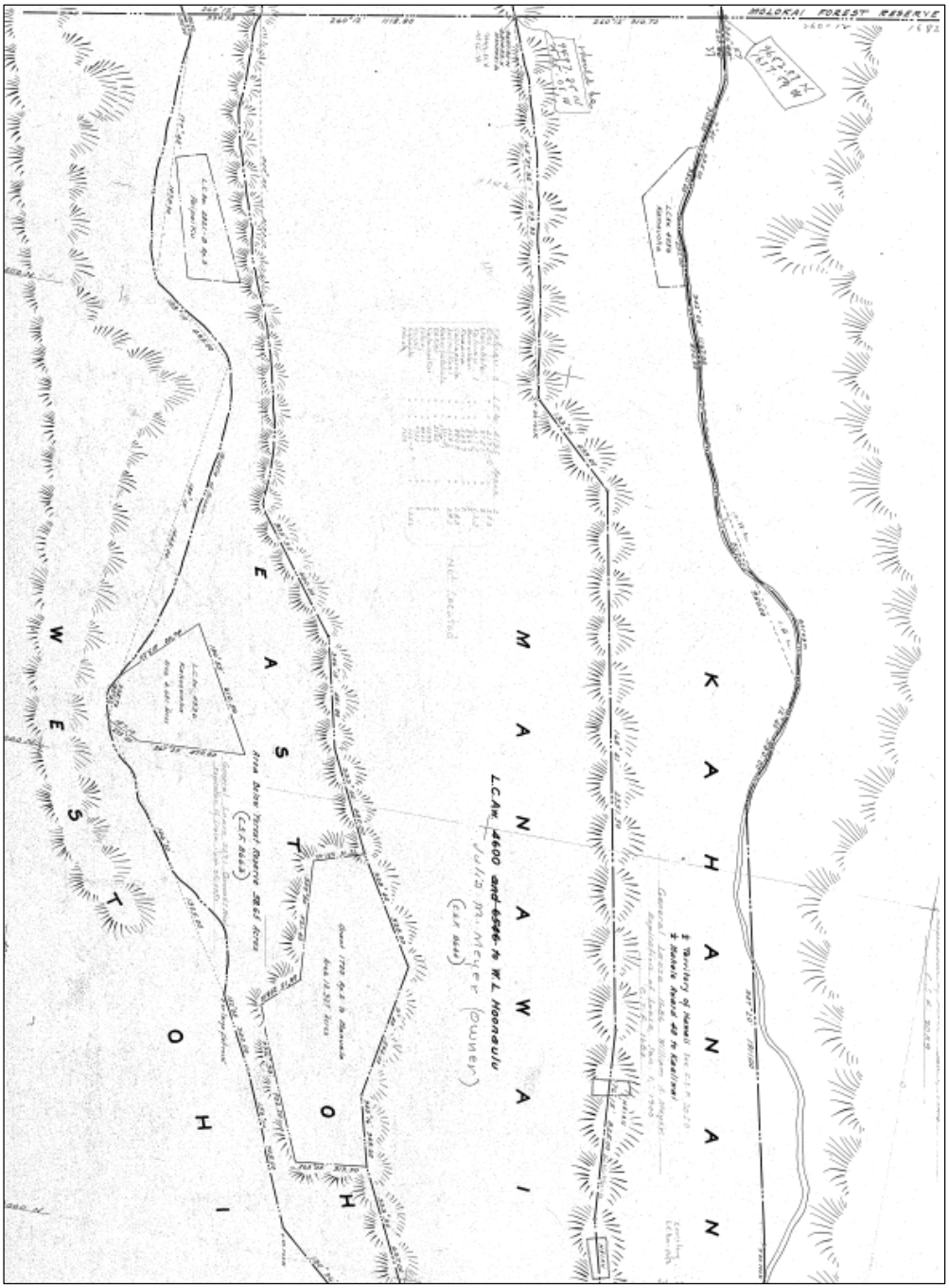
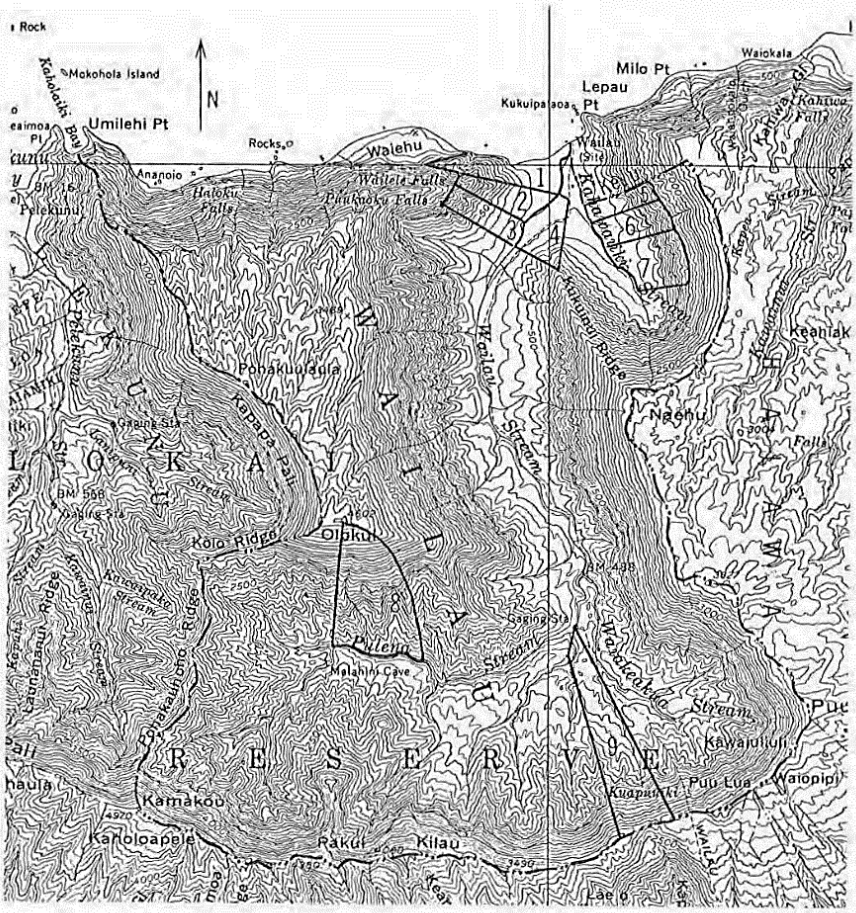


Figure 13. Map of East ʻŌhiʻa, Manawai, and Kahananui Ahupuaʻa showing locations of two LCA awards near the Forest Reserve (Evans 1938).



1 KU'ELE, *LELE* OF KUPEKO
2 MAKEA, *LELE* OF KAHANANUI
3 AHIKI, *LELE* OF HONOMUNI
4 KUKUINUI, *LELE* OF AHA'INO
5 PEPEAOLOA, *LELE* OF E 'OHI'A
6 KAHIWA, *LELE* OF MAPULEHU
7 *LELE* OF KEAWANUI (UNNAMED)
8 'OHU AND HANAHANAPUNI, *LELE* OF MAPULEHU
9 'ELEKELE AND KEKUMU, *LELE* OF MAPULEHU

(Adapted from Topographic Map of Molokai, 1952; Scale 1:62500)

Figure 14. 'Ili lele located in Wailau and the ahupua'a to which they belonged (Summers 1971:215).

Trails

A network of trails cut across a number of contiguous ahupuaʻa on Molokaʻi; a number of these are identified by Summers (1971), although not always treated as "cultural sites." Trails are noted or illustrated among several of Monsarrat's field notebooks and diary (see, for example, Monsarrat 1888a, 1888b, 1890). The discovery of trails is not unexpected; they have been identified elsewhere (Apple 1965), along the coastlines particularly on Hawaiʻi and Maui Islands. The Ala Loa (Mills 2002) and Ala Kahakahai (Dunbar 1997) are well documented. Less so are the trail networks extending from makai to mauka along ahupuaʻa boundaries or located near inland resources (Kaschko 1973; Ladefoged and Graves 2011).

Perhaps to compensate for the difficulty in traversing the ocean between the leeward and windward ahupuaʻa, there were two major named trails on Molokaʻi linking the southeast Kona ahupuaʻa of Mapulehu and Kamalō to the Koʻolau ahupuaʻa of Wailau and Pelekunu, respectively (see Summers 1971:134–136, 178, 179). Curtis (1994) notes that north-south oriented trails would have been more efficient even in good weather. Molokaʻi is 64 km (40 mi.) long east to west, whereas it is only 16 km (10 mi.) across north to south. Other trails on Molokaʻi are noted by Summers (1971:62, 83, 84, 185) that would have linked Kalaupapa or Waikolu Ahupuaʻa on the Koʻolau side of the island with southern or western ahupuaʻa on the Kona side.

The Wailau to Mapulehu Trail (Site 275) is perhaps the best documented on Molokaʻi. It was mapped as early as the mid-19th century for the Mapulehu section (Mourtiz 1855, see Figure 15). Summers (1971:135–136) reproduces an earlier account by Kane (1912) of walking the entire length of this trail beginning at the coast in Mapulehu, crossing the crest of the East Molokaʻi Mountain, and ending at the coast of Wailau, a distance of about 16 km (10 mi.). Monsarrat mapped the Mapulehu section of the trail (1896). This trail, in its entirety, is also shown on the 1922 USGS topographic map of Mapulehu and is illustrated here (Figure 16).

The Pelekunu to Kamalō Trail is described briefly by Summers (1971:179) as well as a lava tube tunnel that was said to extend from upper Pelekunu Stream beneath the East Molokaʻi Mountain to upper Kamalō Stream (Summers 1971:98). This trail is also shown on the 1922 USGS topographic map (Figure 17).

There was a third trail that linked the inland portions of Wailau and Pelekunu (Site 277) and whose end points were on the cross-island trails (Summers 1971:178).

The trails that crossed the East Molokaʻi Mountain were steep along the upper slopes, especially on the windward side. Descriptions speak of the difficulty in crossing sections of the trails (Kane 1912, as reprinted in Summers 1971:135–136). And yet residents from Pelekunu were said by Reverend Hitchcock (1836) to make the trip to Mapulehu to attend Sunday church services (Summers 1971:179). During the early 19th century Kaluaʻaha was the site of the first protestant church on Molokaʻi, built in 1832. It served as the center of congregational activity for the island during the 19th century. The Kamalō-Pelekunu Trail was likely the main access route, with the crest of the mountain serving as the pathway linking Kamalō and Kaluaʻaha.

While neither of these trails extend into the nine ahupuaʻa of the project area, they do cross from the south to the north across the East Molokaʻi Mountain and thus represent one way in which forested uplands were accessed and traversed. It is also possible that the crest of the East Molokaʻi Mountain that extended from the Kamalō-Pelekunu Trail to the Mapulehu-Wailau Trail may have served as means for travelers from various southeastern leeward ahupuaʻa to connect with one or the other of these trails.

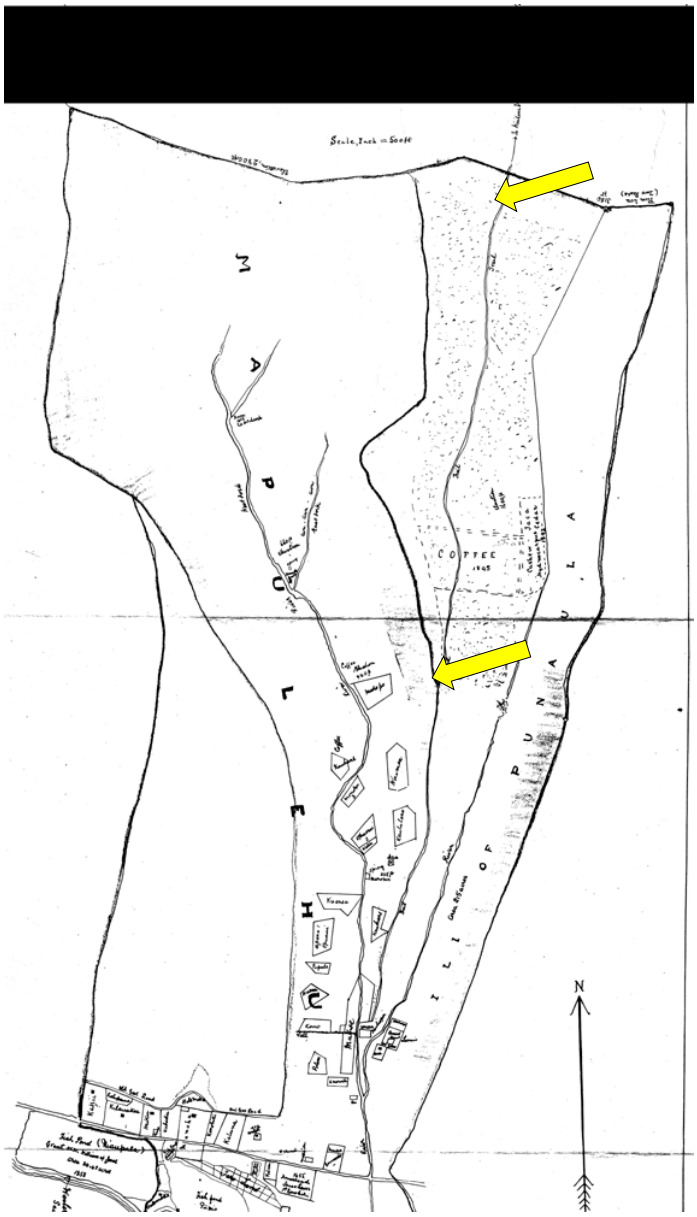


Figure 15. Early map of Mapulehu Ahupua‘a including its section of the Wailau-Mapulehu Trail, marked with yellow arrows (Mourtiz 1855).

Figure 16. Map of Mapulehu-Wailau Trail, highlighted in red (USGS 1922).

Okala
Mokolea
Leimaopapio Pt
Huelo
Ku Kaiwaa Pt
Laeo Kapahu Pt
Mokumana
Waimene
Kapailoa
Anapuhi
Kaupu Bay
Kaeaiki Pt
Kaeaimoa Pt
Kaeaiki Bay
Kaeaiki Landing
Kaeaiki Ridge
Kaeaiki Stream
Kaeaiki Gulch
Kaeaiki Spur
Kaeaiki Trail
Kaeaiki Cabin
Kaeaiki Pasture
Kaeaiki Fence
Kaeaiki Road
Kaeaiki Bridge
Kaeaiki Water Tank
Kaeaiki Windmill
Kaeaiki Corral
Kaeaiki Shed
Kaeaiki Barn
Kaeaiki Garden
Kaeaiki Orchard
Kaeaiki Spring
Kaeaiki Pond
Kaeaiki Reservoir
Kaeaiki Dam
Kaeaiki Weir
Kaeaiki Flume
Kaeaiki Pipeline
Kaeaiki Valve
Kaeaiki Meter
Kaeaiki Gate
Kaeaiki Fence Line
Kaeaiki Property Line
Kaeaiki Boundary
Kaeaiki Survey Point
Kaeaiki Benchmark
Kaeaiki Elevation
Kaeaiki Contour
Kaeaiki Slope
Kaeaiki Ridge
Kaeaiki Valley
Kaeaiki Canyon
Kaeaiki Gulch
Kaeaiki Stream

The significance of the two cross-island trails and the ʻili lele that are identified for the nine project area ahupuaʻa, is thus: the forested uplands on both the north and south side of the East Molokaʻi Mountain would have provided access and potentially additional pathways which would have taken travelers across the area where the Pākuʻi Fence will be built. This would have been a means for transporting crops grown in the ʻili lele of Wailau or Pelekunu to the ahupuaʻa of southeastern Molokaʻi. Other forms of interaction and exchange may well have taken place through the named trails and other trails extending up along the ridge lines of the southeastern slope of the East Molokaʻi Mountain.

Topographic Landmarks

Hawaiian place names index a variety of physical features and landmarks. These comprise the third largest category of names in Table 3, totaling nearly 50 labels. Every primary drainage—gulch and stream—was named, and in several instances secondary or upper branches of a stream were named. This is not surprising given the importance of fresh, surface water for drinking, cultivation, and other human needs. A number of ridges are named, together with points along ridge lines. These place names create a series of locations that in some instances follow ahupuaʻa boundaries and thus appear to have served as boundary markers between contiguous territories. These series of named, linked ridge line locations, whether they lie on boundaries or not, may also have functioned as trails or pathways leading from the coast to the uplands. In a number of instances named topographic features occur within the East Molokaʻi Forest Reserve or near where the forest line likely began in the past. Several of the points are located on the crest of the East Molokaʻi Mountain (e.g., Pākuʻi, Kīlau, Honolua) and there are at least two of these named ridge tops where ahupuaʻa boundaries converge. Honolua, a ridge line that extends downslope towards Wailau, approximates the locations of the ahupuaʻa boundaries for East ʻŌhiʻa, Wāwāʻia, and Wailau. The point at the top of the East Molokaʻi Mountain known as Pākuʻi demarcates the uppermost boundaries of Manawai, Kahananui, and Wailau.

There are fewer named, natural coastal landmarks along the south shores of Molokaʻi. But if named fishponds are added to these, then the coast is well populated with named locations or features. In a few instances coastal landmarks approximate ahupuaʻa boundaries as well. Kalaeloa is a coastal point that is near the boundary between Kaʻamola and Keawa Nui Ahupuaʻa. Kuʻula and Kaleo designate coastal locations on either side of the Puaʻahala and Kaʻamola Ahupuaʻa boundary.

Whether these named topographic features identify boundaries, pathways, or stream drainages, many are oriented in a makai to mauka fashion linking areas of lower elevations to upper elevations. They help to illustrate how named places were not designated in isolation from other places, but rather they functioned as a system of landmarks designed to demarcate communities, identify potential pathways, and show where fresh water in streams originated.

Named Cultural Sites

Traditional Hawaiian constructed features dominate the list of cultural sites identified in the nine project area ahupuaʻa. They fall largely into two classes: fishponds and heiau (or other ritual sites). They also cluster along or near the coastline. Fishponds were built in a nearly continuous line along this stretch of the coast. From west to east they are: Paialoa (Puaʻahala Ahupuaʻa), Kāināʻohe (Kaʻamola Ahupuaʻa), Papaʻiliʻili (Kaʻamola Ahupuaʻa) Mikiawa (Kaʻamola Ahupuaʻa), Keawa Nui (Mikimiki or Hinau-Keawa Nui Ahupuaʻa), Kaunahikoʻoku (Onahikona-West ʻŌhiʻa Ahupuaʻa), unknown pond (West ʻŌhiʻa Ahupuaʻa), Wehelauulu (Manawai Ahupuaʻa), Kaluakapiʻioho (Kapiʻioho-Manawai Ahupuaʻa), Pūhāloa (Manawai Ahupuaʻa), Halemahana (ʻUalapuʻe Ahupuaʻa), ʻUalapuʻe (ʻUalapuʻe Ahupuaʻa), Kaluaʻaha (Kaluaʻaha

Ahupuaʻa), Mahilika (Kaluaʻaha Ahupuaʻa), Kaʻopeʻahina (Kaluaʻaha Ahupuaʻa), and Niaupala (Kaluaʻaha Ahupuaʻa). In a few instances the boundaries of fishponds demarcate ahupuaʻa boundaries (e.g., Kaʻamola Pond separating Kaʻamola and Keawa Nui). In at least one case, the Niaupala Pond, it extends across the boundary between two ahupuaʻa, Kaluaʻaha and Mapulehu, but was assigned to one of these two, Kaluaʻaha in this case.

Fifteen heiau, most of them with distinctive names, are located along this section of the southeast Molokaʻi coast. Many have been preserved. Several are located on or near ahupuaʻa boundaries (e.g., Mālaʻe Heiau separating Puaʻahala and Kaʻamola). In the case of Manawai and Kahananui, two large, prominent heiau (Pākuʻi and Kahokukano) are situated on the ridge line which also is the ahupuaʻa boundary. Elsewhere heiau are located in or near to the lower portions of the primary gulches. Several of these heiau are of substantial size (e.g., Site 167 in Keawa Nui and Kahokukano Heiau).

Besides fishponds and heiau, one other traditionally constructed, named cultural site within the nine ahupuaʻa is a playing field for ʻulu maika. In addition, three other cultural sites which are not constructed but are natural features include a cave named for Hina and two separate springs.

Winds

Moses Nakuina, in his version of the moʻolelo of Pakaʻa and Kuapakaʻa, writes that the winds named Waikaloa and Pohakupukupu are of Kaʻamola. Nakuina gives the name of the wind for Kalaeloa as the Heakai. Kuapakaʻa is told by his father, Pakaʻa, to recite the winds of Maui and Molokaʻi in an effort to get Keawenuiaʻumi and his men to land on Molokaʻi. Among the winds spoken of are those of Kaʻamola.

O Waikaloa ka makani,	Waikaloa is the wind
Puupapai, Puuanahulu, Kaamola,	At Puʻupāpaʻi, Puʻuanahulu, Kaʻamola,
Kau makani koo waa o Molokai,	The wind that buffets the canoes of Molokaʻi,
Makaolehua Kaluaʻaha,	Makaolehua at Kaluaʻaha,
Na puu lolo i Mapulehu,	The Puʻu-lolo at Mapulehu,
Puu makani Ahaino,	Puʻu-makani at ʻAhaʻino,
He pakaikai ka makani no Waialua e pa nei	Pakaikai is the wind that blows at Waialua,
Hoolua iho la ma Halawa…	Hoʻolua is at Hālawa…
(Nakuina 1991:69)	(Nakuina 1990:56)

After naming the many winds of Hālawa Valley in the same chant, Kuapakaʻa tells of these winds, including those for Kaʻamola and Kalaeloa:

He ekahanui ko Kamalo,	Ekahanui is of Kamalō,
He akani ko Wawaia,	Akani is of Wāwāʻia,
He pohakupukupu ko Kaamola,	Pohakupukupu is of Kaʻamola,
He heakai ko Kalaeloa,	Heakai is of Kalaeloa,
He makaolehua ko Ualapuʻe,	Makaolehua is of Ualapuʻe,
He kipukaholo ko Kaluaʻaha,	Kipukaholo is of Kaluaʻaha,
He waikoloa ko Mapulehu…	Waikōloa is of Mapulehu…
(Nakuina 1991:70)	(Nakuina 1990:56-7)

Reppun adds, "And so even now, when a rainbow spans the valley of Mapulehu, they say to 'look out for the waiakoloa'- a furious storm of rain and wind which sometimes comes suddenly down the valley" (1951:2).

S.P. Kuapuu's telling of the moʻolelo of Pakaʻa appeared in the Hawaiian language newspaper *Ka Hae Hawaii* in 1861. Kuapuu lists the Waikaloa as the wind of Kaʻamola.

> O Waikaloa ka makani,
> Puuapapai, Puuanahulu, Kaamola,
> He pakaikai ka makani no Waialua e pa nei,
> Hoolua iho la ma Halawa…

In Fornander's version of the same story, Kaʻamola's wind is listed as the Puupapai:

> He puupapai ko Kaamola,
> He pakaikai ko Wailua,
> He hoolua ko Halawa. (1918-1919:101)

> The puupapai is of Kaamola,
> The paikaika is of Wailua,
> The hoolua is of Halawa. (1918-1919:100)

Moʻolelo

Several important moʻolelo are associated with the project lands. The epic romance of Lāʻieikawai mentions Keawa Nui, Kaluaʻaha, and Kaʻamola, while a birthing story involving a woman named Keala takes place in ʻŌhiʻa.

The Hawaiian Romance of Lāʻieikawai

Martha Beckwith translated the moʻolelo of Lāʻieikawai from Haleole's lengthy 1863 version. According to Kroeber, Haleole published the story so that "there might abide in the Hawaiian people the love of their ancestors and their country" (1921:80). In speaking of Haleole's telling, Kroeber said that it was "the longest and in many ways the greatest piece of Polynesian literature preserved" (Haleole 1921:80). The part of the story that tells of Lāʻieikawai's travels through Molokaʻi, and her stay at Keawa Nui, is reproduced here in its entirety so as to present a context of time and place. Also mentioned is Kaʻamola, the place where Hulumaniani, the prophet following her, stayed before departing for Maui.

> …He [Hulumaniani, a prophet of Kauai who was following Laieikawai and her grandmother, Waka] went first clear to the top of Waialala, right above Kalaupapa. Arrived there, he clearly saw the rainbow arching over Malelewaa, over a sharp ridge difficult to reach; there, in truth, was Laieikawai hidden, she and her grandmother, as Kapukaihaoa [a priest of Kukaniloko, Oʻahu] had commanded Waka in the vision.
>
> For as the seer was sailing over the ocean, Kapukaihaoa had foreknowledge of what the prophet was doing, therefore he told Waka in a vision to carry Laieikawai away where she could not be found.
>
> After the seer left Waialala he went to Waikolu right below Malelewaa. Sure enough, there was the rainbow arching where he could not go. Then he considered for some time how to reach the place to see the person he was seeking and offer the sacrifice he had prepared, but he could not reach it.
>
> On the day when the seer went to Waikolu, the same night, came the command of Kapukaihaoa to Laieikawai in a dream, and when she awoke, it was a dream. Then Laieikawai roused her grandmother, and the grandmother awoke and asked her grandchild why she had roused her.

The grandchild said to her: “Kapukaihaoa has come to me in a dream and said that you should bear me away at once to Hawaii and make our home in Paliuli; there we two shall dwell; so he told me, and I awoke and wakened you.”

As Laieikawai was speaking to her grandmother, the same vision came to Waka. Then they both arose at dawn and went as they had both been directed by Kapukaihaoa in a vision.

They left the place, went to Keawanui, to the place called Kaleloa [Kalaeloa], and there they met a man who was getting his canoe ready to sail for Lanai. When they met the canoe man, Waka said: “Will you let us get into the canoe with you, and take us to the place where you intend to go?”

Said the canoe man: “I will take you both with me in the canoe; the only trouble is I have no mate to paddle the canoe.”

And as the man spoke this word, “a mate to paddle the canoe,” Laieikawai drew aside the veil that covered her face because of her grandmother's wish completely to conceal her grandchild from being seen by anyone as they went on their way to Paliuli; but her grandchild thought otherwise.

When Laieikawai uncovered her face which her grandmother had concealed, the grandmother shook her head at her grandchild to forbid her showing it, lest the grandchild's beauty become thereafter nothing but a common thing.

Now, as Laieikawai uncovered her face, the canoe man saw that Laieikawai rivaled in beauty all the daughters of the chiefs round about Molokai and Lanai. And lo! the man was pierced through with longing for the person he had seen.

Therefore the man entreated the grandmother and said: “Unloosen the veil from your grandchild's face, for I see that use is more beautiful than all the daughters of the chiefs round about Molokai and Lanai.”

The grandmother said: “I do not uncover her because she wishes to conceal herself.”

At this answer of Waka to the paddler’s entreaties, Laieikawai revealed herself fully, for she heard Waka say that she wished to conceal herself, when she had not wanted to at all.

And when the paddlers saw Laieikawai clearly, desire came to him afresh. Then the thought sprang up within him to go and spread the news around Molokai of this person whom he longed after.

Then the paddler said to Laieikawai and her companion, “Where are you! live here in this house; everything within is yours, not a single thing is withholden from you in the house; inside and outside you two are masters of this place.”

When the canoe man had spoken thus, Laieikawai said, “Our host, shall you be gone long? for it looks from your charge as if you were to be away for good.”

Said the host, “O daughter, not so; I shall not forsake you; but I must look for a mate to paddle you both to Lanai.”

And at these words, Waka said to their host, “If that is the reason for your going away, leaving us in charge of everything in your house, then let me say, we can help you paddle.”

The man was displeased at these words of Waka to him.

He said to the strangers, “Let me not think of asking you to paddle the canoe; for I hold you to be persons of some importance.”

Now it was not the man’s intention to look for a mate to paddle the canoe with him, but as he had already determined, so now he vowed within him to go and spread around Molokai the news about Laieikawai.

When they had done speaking the paddler left them and went away as he had vowed.

As he went he came first to Kaluaaha and slept at Halawa, and here and on the way there he proclaimed, as he had vowed, the beauty of Laieikawai.

The next day, in the morning, he found a canoe sailing to Kalaupapa, got on board and went first to Pelekunu and Wailau; afterwards he came to Waikolu, where the seer was staying.

When he got to Waikolu the seer had already gone to Kalaupapa, but this man only stayed to spread the news of Laieikawai’s arrival.

When he reached Kalaupapa, behold! a company had assembled for boxing; he stood outside the crowd and cried with a loud voice: “O ye men of the people, husbandmen, laborers, tillers of the soil; O ye chiefs, priests, soothsayers, all the men of rank in the household of the chief! All manner of men have I behalf on my way hither; I have seen the high and the low, men and women; low chiefs, the kaukaualii, men and women; high chiefs, the niaupio, and the ohi; but never have I beheld anyone to compare with this one whom I have seen; and I declare to you that she is more beautiful than any of the daughters of the chiefs on Molokai or even in this assembly.”

Now when he shouted, he could not be heard, for his voice was smothered in the clamor of the crowd and the noise of the onset.

And wishing his words to be heard aright, he advanced in the midst of the throng, stood before the assembly, and held up the border of his garment and repeated the words he had just spoken.

Now the high chief of Molokai heard his voice plainly, so the chief quieted the crowd and listened to what the stranger was shouting about, for as he looked at the man he saw that his face was full of joy and gladness.

At the chief’s command the man was summoned before the chief and he asked, “What news do you proclaim aloud with glad face before the assembly?”

Then the man told why he shouted and why his face was glad in the presence of the chief: “In the early morning yesterday while I was working over the canoe, intending to sail to Lanai, a certain woman came with her daughter, but I could not see plainly the daughter’s face. But while we were talking the girl unveiled her face. Behold! I saw a girl of incomparable beauty who rivaled all the daughters of the chiefs of Molokai.”

When the chief heard these words, he said, “If she is as good looking as my daughter, then she is beautiful indeed.”

At this saying of the chief, the man begged that the chiefs be shown to him, and Kaulaailehua, the daughter of the chief, was brought thither. Said the man, “Your daughter must be in four points more beautiful than she is to compare with that other.”

Replied the chief, “She must be beautiful indeed that you scorn our beauty here, who is the handsomest girl in Molokai.”

Then the man said fearlessly to the chief, “Of my judgement of beauty I can speak with confidence.”

As the man was talking with the chief, the seer remained listening to the conversation; it just came to him that this was the one whom he was seeking.

So the seer moved slowly toward him, got near, and seized the man by the arm, and drew him quietly after him.

When they were alone, the seer asked the man directly, “Did you know that girl before about whom you were telling the chief?”

The man denied it and said, “No; I had never seen her before; this was the very first time; she was a stranger to me.”

So the seer thought that this must be the person he was seeking, and he questioned the man closely where they were living, and the man told him exactly.

After the talk, he took everything that he had prepared for sacrifice when they should meet and departed.

Chapter III

When the seer set out after meeting that man, he went first up Kawela; there he saw the rainbow arching over the place which the man had described to him; so he was sure that this was the person he was following.

He went to Kaamola, the district adjoining Keawanui, where Laieikawai and her companion were awaiting the paddler. By this time it was very dark; he could not see the sign he saw from Kawela; but the seer slept there that night, thinking that at daybreak he would see the person he was seeking.

That night, while the seer was sleeping at Kaamola, then came the command of Kapukaihaoa to Laieikawai in a dream, just as he had directed them at Malelewaa.

At dawn they found a canoe sailing to Lanai, got on board, and went and lived for some time at Maunalei.

After Laieikawai and her company had left Kalaeloa, at daybreak, the seer arose and saw that clouds and falling rain obscured the sea between Molokai and Lanai with a thick veil of fog and mist.

Three days the veil of mist hid the sea, and on the fourth day the seer’s stay at Kaamola, in the very early morning, he saw an end of the rainbow standing right above Maunalei.

> Now the seer regretted deeply not finding the person he was seeking; nevertheless he was not discouraged into dropping the quest.
>
> About 10 days passed at Molokai before he saw the end of the rainbow standing over Haleakala; he left Molokai, went first to Haleakala, to the fire pit, but did not see the person he was seeking… (2006:68–71)

Beckwith (2006) included the Hawaiian passages as well:

> …Ia hele ana hiki mua keia i Waialala maluna pono ae o Kalaupapa; ia ianei malaila, ike maopopo aku la oia e pio ana ke anuenue iluna o Malelewaa, ma kahi nihinihi hiki ole ke heleia. Aia nae malaila kahi i hunaia ai o Laieikawai, oia a me kona kupunawahine, e like me ke kauoha mau a Kapukaihaoa ia Waka ma ka hihio.
>
> No ka mea, i ka Makaula e holo mai ana ma ka moana, ua ike mua e aku o Kapukaihaoa i ka Makaula, a me kana mau hana, nolaila oia i olelo mau ai ia Waka ma ka hihio e ahai mua ia Laieikawai ma kahi hiki ole ke loaa.
>
> I ka Makaula i haalele ai ia Waialala, hiki aku keia ma Waikolu ilalo pono o Malelewaa, aia nae e pio ana ke anuenue i kahi hiki ole ia ia ke hele aku; aka, ua noonoo ka Makaula i kekahi manawa, i wahi e hiki ai e ike i kana mea e ukali nei, a waiho aku i kana kanaenae i hoomakaukau mua ai, aole nae e hiki.
>
> I kela la a ka Makaula i hiki ai ma Waikolu, ia po iho, hiki mua ke kauoha a Kapukaihaoa ia Laieikawai ma ka moeuhane, a puoho ae la oia, he moeuhane. Alaila, hoala aku la o Laieikawai i kona kupunawahine, a ala ae la, ninau aku la ke kupunawahine i kana moopuna i ke kumu o ka hoala ana.
>
> Hai mai la ka moopuna, "Ua hiki mai o Kapukaihaoa i o'u nei ma ka moeuhane, e olelo mai ana, e ahai loa oe ia'u i Hawaii a hoonoho ma Paliuli, a malaila kaua e noho ai, pela mai nei oia ia'u, a puoho wale ae la wau la, hoala aku la ia oe."
>
> Ia Laieikawai nae e kamailio ana i ke kupunawahine, hiki iho la ka hihio ma o Waka la, a ua like me ka ka moopuna e olelo ana, ia manawa, ala ae la laua i ke wanaao a hele aku la e like me ke kuhikuhi a Kapukaihaoa ia laua ma ka moeuhane.
>
> Haalele laua ia wahi, hiki aku laua ma Keawanui, kahi i kapaia o Kaleloa, a malaila laua i halawai ai me ke kanaka e hoomakaukau ana i ka waa e holo ai i Lanai. La laua i halawai aku ai me ka mea waa, olelo aku la o Waka, "E ae anei oe ia maua e kau pu aku me oe ma ko waa, a holo aku i kau wahi i manao ai e holo?"
>
> Olelo mai la ka mea waa, "Ke ae nei wau e kau pu olua me a'u ma ka waa, aka hookahi no hewa, o ko'u kokoolua ole e hiki ai ka waa."
>
> Ia manawa a ka mea waa i hoopuka ai i keia olelo "i kokoolua" hoewaa, wehe ae la o Laieikawai i kona mau maka i uhiia i ka aahu kapa, mamuli o ka makemake o ke kupunawahine e huna loa i kana moopuna me ka ike oleia mai e na mea e ae a hiki i ko laua hiki ana i Paliuli, aka, aole pela ko ka moopuna manao.
>
> I ka manawa nae a Laieikawai i hoike ai i kona mau maka mai kona hunaia ana e kona kupunawahine, lululi ae la ke poo o ke kupunawahine, aole a hoike kana moopuna ia ia iho, no ka mea, e lilo auanei ka nani o kana moopuna i mea pakuwa wale.

I ka manawa nae a Laieikawai i wehe ae ai i kona mau maka, ike aku la ka mea waa i ka oi kelakela o ko Laieikawai helehelena mamua o na kaikamahine kaukaualii o Molokai a puni, a me Lanai. Aia hoi, ua hookuiia mai ka mea waa e kona iini nui no kana mea e ike nei.

A no keia mea, noi aku la ka mea waa i ke kupunawahine, me ka olelo aku, "E kuu loa ae oe i na maka o ko moopuna mai kona hoopulouia ana, no ka mea, ke ike nei wau ua oi aku ka maikai o kau milimili, mamua o na kaikamahine kaukaualii o Molokai nei a me Lanai."

I mai la ke kupunawahine. "Aole e hiki ia'u ke wehe ae ia ia, no ka mea, o kona makemake no ka huna ia ia iho."

A no keia olelo a Waka i ka mea waa mamuli o kana noi, alaila, hoike pau loa ae la o Laieikawai ia ia mai kona hunaia ana, no ka mea, ua lohe aku la o Laieikawai i ka olelo a kona kupunawahine, o Laieikawai no ka makemake e huna ia ia; aka, ua, makemake ole keia e huna.

A no ka ike maopopo loa ana aku o ka mea waa ia Laieikawai, alaila, he nuhou ia i ka mea waa. Alaila, kupu ae la ka manao ano e iloko ona, e hele e hookaulana ia Molokai apuni, no keia mea ana e iini nei.

Alaila, olelo aku la ua mea waa nei ia Laieikawai ma, "Auhea olua, e noho olua i ka hale nei, na olua na mea a pau oloko, aole kekahi mea e koe o ka hale nei ia olua, o olua maloko a mawaho o keia wahi."

A no ka hoopuka ana o ka mea waa i keia olelo, alaila, olelo aku la o Laieikawai, "E ke kamaaina o maua, e hele loa ana anei oe? No ka mea, ke ike lea nei maua i kou kauoha honua ana, me he mea la e hele loa ana oe?"

I aku la ke kamaaina, "E ke kaikamahine, aole pela, aole au e haalele ana ia oula; aka, i manao ae nei au e huli i kokoolua no'u e hoe aku ai ia olua a pae i Lanai."

A no keia olelo a ka mea waa, i aku la o Waka i ke kamaaina o laua nei, "Ina o ke kumu ia o kou hele ana i kauoha honua ai oe i na mea a pau o kou hale ia maua; alaila, ke i aku nei wau, he hiki ia maua ke kokua ia oe ma ka hoe ana."

A ike ka mea waa he mea kaumaha keia olelo a Waka imua ona.

Olelo aku la oia imua o na malahini, "Aole o'u manao e hoounauna aku ia olua e kokua mai ia'u ma ka hoe pu ana i ka waa, no ka mea, he mea nui olua na'u."

Aka, aole pela ka manao o ka mea waa e huli i kokoolua hoe waa pu me ia, no ka mea, ua hooholo mua oia i kana olelo hooholo iloko ona, e hele e kukala aku ia Laieikawai apuni o Molokai.

A pau ke kamailio ana a lakou i keia mau olelo, haalele iho la ka mea waa ia laua nei, a hele aku la e like me ka olelo hooholo mua iloko ona.

Ia hele ana, ma Kaluaaha kona hiki mua ana, a moe aku oia i Halawa, a ma keia hele ana a ia nei, ua kukala aku oia i ka maikai o Laieikawai e like me kona manao paa.

A ma kekahi la ae, i ke kakahiaka nui, loaa ia ia ka waa e holo ana i Kalaupapa, kau aku la oia maluna o ka waa, hiki mua oia i Pelekunu, a me Wailau, a mahope hiki i Waikolu kahi a ka Makaula e noho ana.

Ia ia nae i hiki aku ai i Waikolu, ua hala mua aku ua Makaula nei i Kalaupapa, aka, o ka hana mau a ua wahi kanaka nei, ke kukala hele no Laieikawai.

A hiki keia i Kalaupapa, aia hoi, he aha mokomoko e akoakoa ana ku aku la oia mawaho o ka aha, a kahea aku la me ka leo nui, "E ka hu, e na makaainana, e ka lopakuakea, lopahoopiliwale, e na'lii, na Kahuna, na kilo, na aialo, ua ike au i na mea a pau ma keia hele ana mai nei a'u, ua ike i na mea nui, na mea liilii, na kane, na wahine, na kaukaualii kane, na kaukaualii wahine, ka niaupio, ke ohi, aole wau i ike i kekahi oi o lakou e like me ka'u mea i ike ai, a ke olelo nei au, oia ka oi mamua o na kaikamahine kaukaualii o Molokai nei apuni, a me keia aha no hoi."

Ia manawa nae a ia nei e kahea nei, aole i lohe pono mai ka aha, no ka mea, ua uhiia kona leo e ka haukamumu leo o ka aha, a me ka nene no ka hoouka kaua.

A no ko ianei manao i lohe ponoia mai kana olelo, oi pono loa aku la ia iwaena o ke anaina, ku iho la oia imua o ka aha, a kuehu ae la oia i ka lepa o kona aahu, a hai hou ae la i ka olelo ana i olelo mua ai.

Iloko o keia manawa, lohe pono loa aku la ke Alii nui o Molokai i keia leo, alaila hooki ae la ke alii i ka aha, i loheia aku ai ka olelo a keia kanaka malahini e kuhea nei; no ka mea, iloko o ko ke alii ike ana aku i ua wahi kanaka nei, ua hoopihaia kona mau maka i ka olioli, me ke ano pihoihoi.

Kaheaia aku la ua wahi kanaka nei mamuli o ke kauoha a ke alii, a hele mai la imua o ke alii, a ninau aku la, "Heaha kou mea e nui nei kou leo imua o ka aha, me ka maka olioli?"

Alaila, hai mai la kela i ke kumu o kona kahea ana, a me kona olioli imua o ke alii. "Ma ke kakahiakanui o ka la i nehinei, e lawelawe ana wau i ka waa no ka manao e holo i Lanai, hoea mai ana keia wahine me ke kaikamahine, aole nae au i ike lea i ke ano o ua kaikamahine la. Aka, iloko o ko maua wa kamailio, hoopuka mai la ke kaikamahine i kona mau maka mai kona hunaia ana, aia hoi, ike aku la wau he kaikamahine maikai, i oi aku mamua o na kaikamahine alii o Molokai nei."

A lohe ke alii i keia olelo, ninau aku la, "Ina ua like kona maikai me kuu kaikamahine nei la, alaila, ua nani io."

A no keia ninau a ke alii, noi aku la ua wahi kanaka nei e hoikeia mai ke kaikamahine alii imua ona, a laweia mai la o Kaulaailehua ke kaikamahine a ke alii.

I aku la ua wahi kanaka nei, "E ke alii! oianei la, eha kikoo i koe o ko iala maikai ia ianei, alaila, like aku me kela." I mai la ke alii, "E! nani io aku la, ke hoole ae nei oe i ka makou maikai e ike nei, no ka mea, o ko Molokai oi no keia."

Alaila, olelo aku la kahi kanaka i ke alii me ka wiwo ole, "No ko'u ike i ka maikai, ko'u mea no ia i olelo kaena ai."

Ia manawa a kahi kanaka e kamailio ana me ke alii, e noho ana ka Makaula ia manawa e hoolohe ana i ke ano o ke kamailio ana, aka, ua haupu honua ae ka Makaula, me he mea la o kana mea e ukali nei.

A no keia mea, neenee loa aku la ka Makaula a kokoke, paa aku la ma ka lima o kahi kanaka, a huki malu aku la ia ia.

Ia laua ma kahi kaawale, ninau pono aku la ka Makaula i ua wahi kanaka nei, "Ua ike no anei oe i kela kaikamahine mamua au e kamailio nei i ke alii?"

Hoole aku la ua wahi kanaka nei, me ka i aku, "Aole au i ike mamua, akahi no wau a ike, a he mea malahini ia i ko'u mau maka."

A no keia mea, manao ae la ka Makaula, o kana mea i imi mai ai, me ka ninau pono aku i kahi i noho ai, a hai ponoia mai la.

A pau ka laua kamailio ana, lawe ae la oia i na mea ana i hoomakaukau ai i mohai no ka manawa e halawai aku ai, a hele aku la.

MOKUNA III

Ia hele ana o ka Makaula mahope iho o ko laua halawai ana me kahi kanaka, hiki mua keia iluna o Kawela; nana aku la oia, e pio ana ke anuenue i kahi a ua wahi kanaka nei i olelo ai ia ia; alaila, hoomaopopo lea iho la ka Makaula o kana mea no e ukali nei.

A hiki keia i Kaamola ka aina e pili pu la me Keawanui, kahi hoi a Laieikawai ma e kali nei i ka mea waa, ia manawa, ua poeleele loa iho la, ua hiki ole ia ia ke ike aku i ka mea ana i ike ai iluna o Kawela, aka, ua moe ka Makaula malaila ia po, me ka manao i kakahiaka e ike ai i kana mea e imi nei.

I kela po a ka Makaula e moe la i Kaamola, aia hoi, ua hiki ka olelo kauoha a Kapukaihaoa ia Laieikawai ma ka moeuhane, e like me ke kuhikuhi ia laua iloko o ko laua mau la ma Malelewaa.

Ia wanaao ana ae, loaa ia laua ka waa e holo ai i Lanai, a kau laua malaila a holo aku la, a ma Maunalei ko laua wahi i noho ai i kekahi mau la.

Ia Laieikawai ma i haalele ai ia Kalaeloa ia kakahiaka, ala ae la ka Makaula, e ku ana ka punohu i ka moana, a me ka ua koko, aia nae, ua uhi paapuia ka moana i ka noe a me ke awa, mawaena o Molokai, a me Lanai.

Ekolu mau la o ka uhi paapu ana o keia noe i ka moana, a i ka eha o ko ka Makaula mau la ma Kaamola, i ke kakahiaka nui, ike aku la oia e ku ana ka onohi iluna pono o Maunalei; aka, ua nui loa ka minamina o ka Makaula no ke halawai ole me kana mea e imi nei, aole nae oia i pauaho a hooki i kona manaopaa.

Ua aneane e hala na la he umi ia ia ma Molokai, ike hou aku la oia e ku ana ka punohu iluna o Haleakala; haalele keia ia Molokai, hiki mua oia iluna o Haleakala ma kela lua pele, aole nae oia i ike i kana mea e imi nei… (Beckwith 2006:227–231)

According to King Kalākaua, the "Story of Laieikawai" comes from the 14th century (1990:455). His telling is a very condensed version of Haleole's, just previous. The part of the story containing the travels of Lāʻieikawai with her grandmother, Waka, to Keawa Nui is excerpted below.

…In a dream Waka had been directed by Kapukaihaoa to remove Laieikawai to some securer place, and had accordingly taken her to Malelewaa, a secluded spot on the north side of Molokai.

> Following the rainbow, the prophet arrived in the evening at Waikolu, just below Malelewaa; but that night Waka was again advised in a dream to remove at once to the island of Hawaii and dwell with her ward at Paliuli. They departed at dawn, and at Keawanui met a man getting his canoe ready to sail to Lanai, and engaged passage; but before they could embark Laieikawai accidentally removed the veil which Waka compelled her to wear, and the man was amazed at her beauty.
>
> Instead of starting for Lanai, he invited Waka and her ward to remain at his house until he could secure the services of another rower, and then started around the island, proclaiming to every group of people the great beauty of Laieikawai.
>
> A great crowd had assembled at Kalaupapa to witness a boxing-match, and there the man extolled the beauty of the girl in the presence of the high chief and the prophet in search of her. Not doubting that the girl described was the one he was in quest of, the prophet proceeded to Kawela and saw the rainbow over Hawanui. That night he arrived at Kaamola, the land adjoining, and went to rest, for he had journeyed far and was very weary.
>
> Meanwhile Waka, again warned in a dream, obtained a canoe and sailed across the channel to Lanai, landing at Maunalei. Three days of rain and fog followed, and on the fourth the prophet saw the rainbow over Maunalei. It did not remain there, however. Ten days later he discerned something peculiar in the high peak of Haleakala, on the island of Maui. He proceeded thither, but found nothing but fog and rain… (1990:458)

‘Ōhi‘a and the Birth of Keala’s Daughter

Keala and Kāwika were a young couple expecting their first child. They lived happily at Kalaeloa Harbor at Keawa Nui. Keala asked Kāwika to go for a canoe ride, however, he said they should go at another time because the winds and pounding surf of ‘Ikuwā can rise unexpectedly. Keala understood but made Kāwika promise that they would go soon. Kāwika invited his fishing friend Kuamu to join them on their canoe ride. When it came time to step into the canoe, the unborn baby kicked and Keala reassured the baby that it would be a pleasant voyage.

The three headed east and before they got to the fishpond called Pūhāloa, Keala suddenly asked Kāwika to turn into the cove, even insisting the gods had instructed her to lead the voyage. Kāwika dismissed her request to stop, however Kuamu was hesitant, believing they should stop, especially if the gods directed Keala. Kāwika was not convinced until Kuamu asked if the cove was the one with the young moi fish. They caught some fish and Keala then suggested they move on to the next spot.

As night fell, Keala said that they must turn into the cove to share fish with the people there and offer some fish at the heiau. So they turned into the cove and Kāwika and Kuamu shared the fish and went to the heiau to pay respects.

Alone, Keala lit a fire and began to cook some fish. She then heard a whining sound, and looked up to see mana, or kupua dogs. Throwing them the fish, she felt the first strong contraction. She abandoned the fire and a kupua dog brought her a piece of fish, as she was hungry. She told the dogs to go to Hōkūkano Heiau to fetch her husband, and they ran off.

A man appeared and asked Keala if he could help. Keala explained the situation and asked the man to fetch her kahu, or nurse, Līloa, who lived at Kala‘e. Keala failed to realize that she was talking to Ka‘ohele, Moloka‘i’s fastest runner.

Kāwika and Kuamu returned and helped Keala walk up and down the beach to relieve some of the pain. Then Kaʻohele arrived with Līloa on his back. A baby girl was delivered and named ʻŌhiʻakea which means, "the pale mountain apple" because she was born where the stream of ʻŌhiʻa Gulch met the sea (Ne 1992:11–4).

ʻŌlelo Noʻeau

In 1983, Mary Kawena Pukui published a volume of close to 3,000 ʻōlelo noʻeau that she collected throughout the islands. The introductory chapter reminds us that if we know these proverbs and wise sayings well, then we will know Hawaiʻi well (Pukui 1983). Only one ʻōlelo noʻeau was found for the project ahupuaʻa, and this was for ʻUalapuʻe:

> Pohāpohā i ke keiki o Kaʻakēkē.
>
> *Smacked by the land of Kaʻakēkē.*
>
> Kaʻakēkē was a *maika*-rolling field at Ualapuʻe, Molokaʻi, where champions often met in ancient days. Said in admiration of any Molokaʻi lad outstanding in sports. (Pukui 1983:293)

Previous Archaeology

The nine ahupuaʻa of the Pākuʻi project area include a wide expanse of coastline with fringing reef, and a series of small primary drainages, a few of which extend to the summit of the East Molokaʻi Mountain. The topography of the region is steep and dissected above the coastal plain (Figure 18). Twelve archaeological or archival, projects have been conducted within the vicinity of the nine ahupuaʻa associated with the study area (Figure 19 and Table 5). The most comprehensive of these is a compilation of Molokaʻi sites and associated moʻolelo by Summers (1971). The sites she described and maps she published are summarized or contained in their entirety here. For the heiau listed, Summers (1971) relied almost exclusively on the unpublished report by Stokes (1909) for the Bishop Museum.

Dunbar (1983) completed a National Register of Historic Places (NRHP) nomination form for what was to be a discontiguous archaeological district that would have included two fishponds and six heiau (five of which are located in the nine ahupuaʻa of the Pākuʻi project area). Again, her description of heiau largely followed the reporting provided by Stokes (1909). With the exception of the report by Estioko-Griffin (1987) the remainder of the reports identify relatively few sites and are generally associated with but one or two of the nine ahupuaʻa. These include a literature review and survey of Keawa Nui and Kaʻamola, and a survey of a 5 acre parcel in Kaluaʻaha Ahupuaʻa by Barrera (1974, 1983); a survey in Puaʻahala Ahupuaʻa near Mālaʻe Heiau (McCoy and Nakamura 1993); a survey at Keahola Point in Kaʻamola (Tulchin et al. 2002); a survey of a parcel in East ʻŌhiʻa (McIntosh and Cleghorn 2001); a survey of ʻUalapuʻe Ahupuaʻa (Moore and Kennedy 1994); a monitoring project in Kaluaʻaha adjacent to the highway (Athens 1985); and a field inspection of a portion of the coastal region (Lee-Greig 2010).

Archaeological Research

A number of previously published papers and reports on the archaeology of Molokaʻi can be used to establish a context for this report and its focus on the nine ahupuaʻa of the Pākuʻi project area. These can be broadly organized by their emphasis on: chronology, agricultural and aquacultural studies, settlement patterns, ritual and ceremonial sites, and lithic resources and characterization studies. The Hālawa Valley dune site was investigated by Bishop Museum archaeologists (Kirch 1975), who discovered a series of stratified deposits, the earliest of which was dated to between AD 600–700. Additional dates from upper deposits at the site suggested continuous occupation

into the historic, post-European contact period. This site, along with several others in Hawai‘i, were assigned to the Colonization or Developmental Periods, documenting the arrival to Hawai‘i by its Polynesian ancestors. Subsequently Weisler (1989) inventoried all of the 48 radiocarbon dates from Moloka‘i with the goal of refining the island’s pre-contact chronology. He continued to use the earliest date from Hālawa to estimate the colonization of the island by Polynesians and was able to identify two sites, in addition to Hālawa that appeared to be occupied in the following Developmental Period, (AD 600–1100). This included one date from a site in Kalama‘ula Ahupua‘a on the leeward, south facing region of the island. There were seven dates for the period between AD 1100–1400, and these suggested the expansion of groups throughout the southeastern portion of the island, and the development of the first aquacultural features (Weisler 1989:126). Dryland farming on the leeward

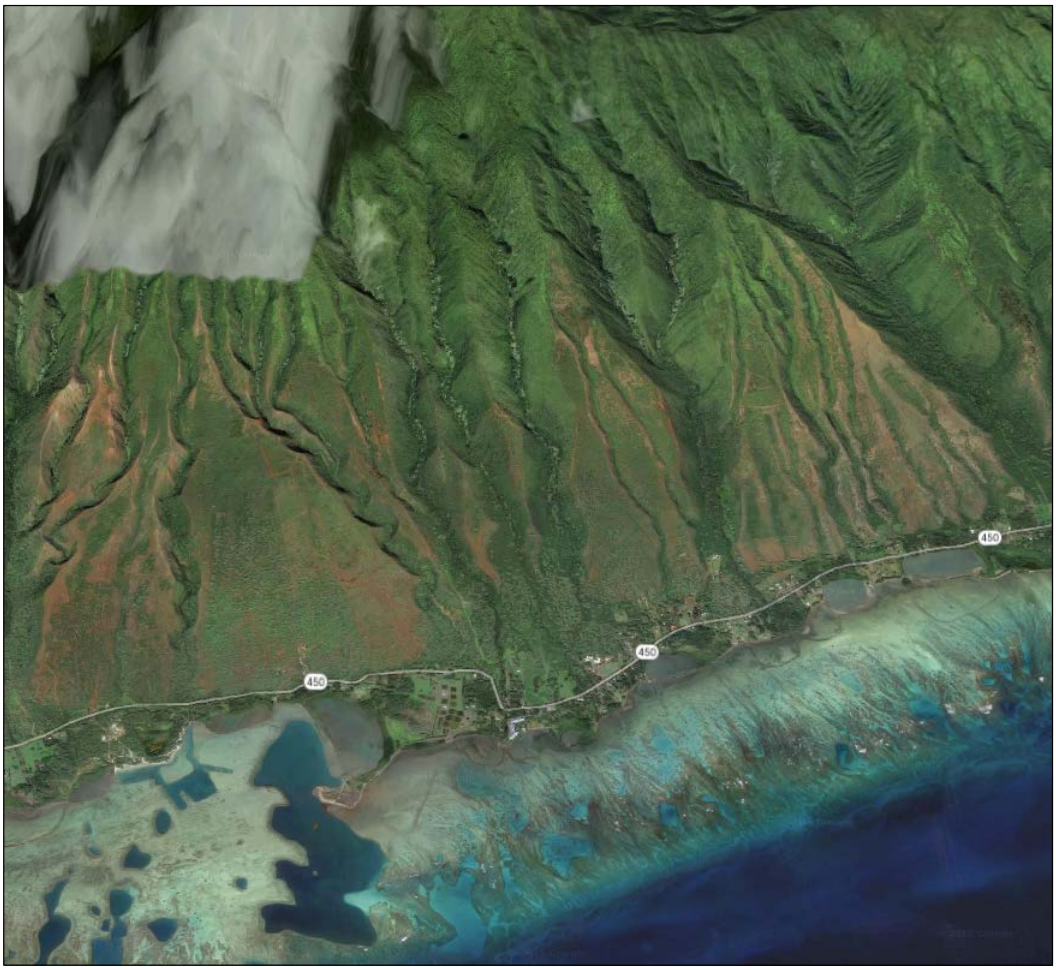


Figure 18. Aerial photograph of topography and coastline of Pāku‘i project area showing major gulches.

coast was established by the end of the 13th century. During the later Expansion Period, AD 1400–1650, permanent occupations occurred throughout the leeward region, along the coast as well as

inland. After AD 1650, population along the leeward coasts continued to expand, with the potential cultivation of some upland areas. Recent advances in radiocarbon dating protocol (e.g., the use of identified short lived plant taxa) for analysis and the advent of U-Th dating of corals have improved the reliability of the Moloka‘i chronology (McCoy 2007b; Kirch and McCoy 2007; Weisler et al. 2006). Due to these recent advances, the initial period of Polynesian colonization was recalculated to around AD 800–1200 (McCoy 2007b), and most recently Weisler (2015) has dated a kukui nutshell fragment to AD 690–895.

Understanding the development of traditional agricultural practices on Moloka‘i was substantially advanced through recent field research in Wailau (McElroy 2007, 2012) and Kalaupapa (Kirch 2002; McCoy 2007a), two contrastive environments. For Wailau, McElroy established the sequence of the irrigated agricultural foundation and expansion at the front of the valley. The earliest evidence, on

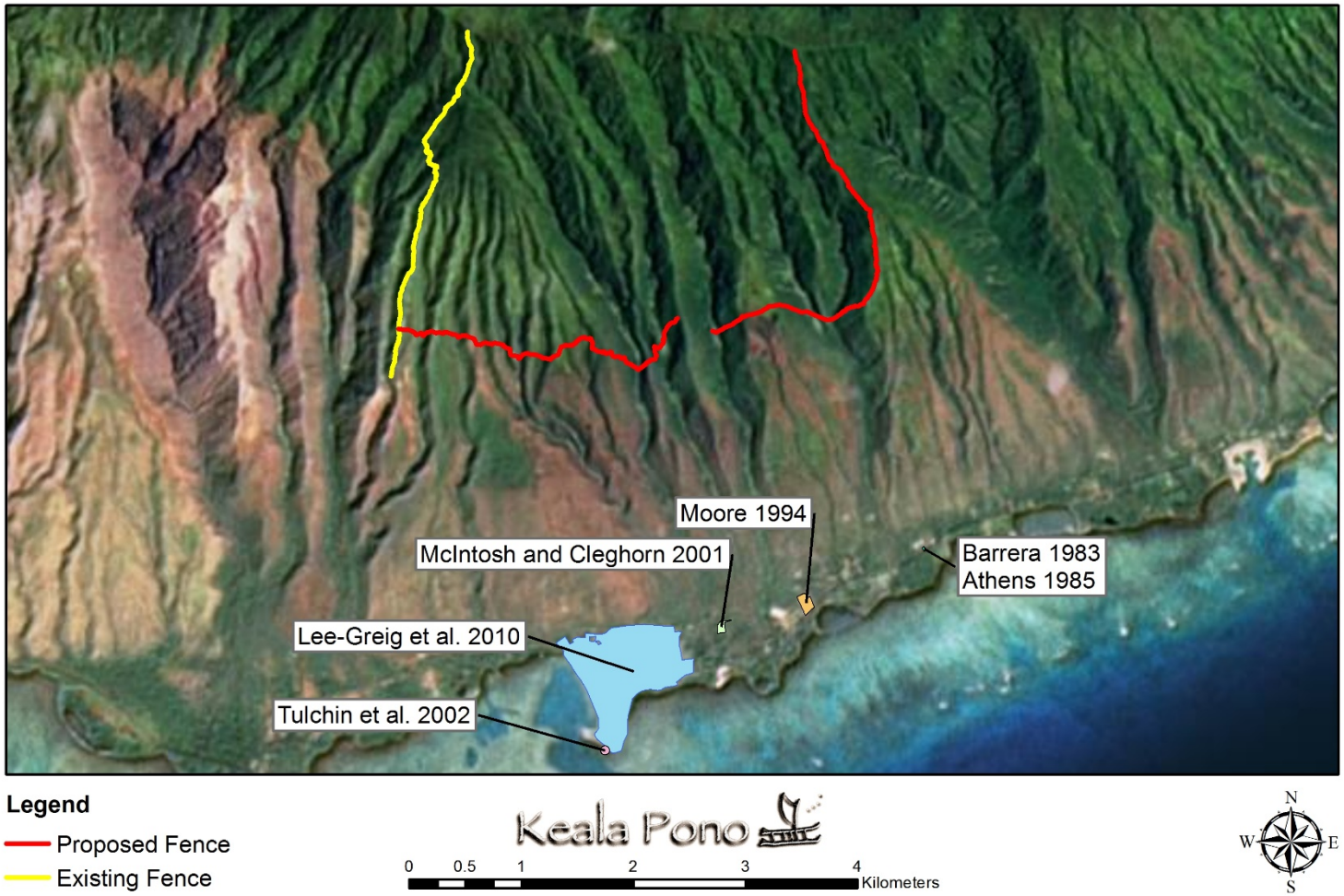


Figure 19. Previous archaeological studies in the project ahupua‘a that could be located on a map.

Table 5. Previous Archaeological Work within the Nine Project Ahupuaʻa

Author and Year	Location	Work Completed	Findings
Stokes 1909	Puaʻahala, Kaʻamola, Keawa Nui, West Ōhiʻa, East Ōhiʻa, Manawai, Kahananui, ʻUalapuʻe, and Kaluaʻaha Ahupuaʻa	Islandwide Survey to Locate and Describe Heiau	Listed 18 heiau for the nine ahupuaʻa.
Summers 1971	Puaʻahala, Kaʻamola, Keawa Nui, West Ōhiʻa, East Ōhiʻa, Manawai, Kahananui, ʻUalapuʻe, and Kaluaʻaha Ahupuaʻa	Compiled Information from Prior Surveys	Recorded 19 heiau, 16 fishponds, a spring, a cave, a water source, and an ʻulu maika playing field.
Barrera 1974	Keawa Nui and Kaʻamola Ahupuaʻa	Archival Survey of Bishop Museum Resources	Identified two sites: a fishpond and a heiau (destroyed).
Barrera 1983	Kaluaʻaha Ahupuaʻa	Archaeological Survey	Recorded Site 50-60-05-531, a complex of several features including stone mounds and a midden deposit.
Dunbar 1983	Keawa Nui, East ʻŌhiʻa, Manawai, ʻUalapuʻe Ahupuaʻa	Archaeological Description and Synthesis	Recorded seven sites: two fishponds and five heiau are described for nomination to the NRHP.
Athens 1985	Kaluaʻaha Ahupuaʻa	Archaeological Monitoring	Recovered traditional artifacts and identified an imu at Site 50-60-05-531.
Estioko-Griffin 1987	Kaʻamola, Keawa Nui, West ʻŌhiʻa, Kaluaʻaha, Kahananui, Manawai, ʻUalapuʻe, Kaluaʻaha, and Puaʻahala Ahupuaʻa	Compilation Based on Historical Resources	Described six fishponds.
McCoy and Nakamura 1993	Puaʻahala Ahupuaʻa	Archaeological Survey	Recorded 12 sites: a heiau; rectangular C- and U-shaped enclosures; terraces; boulder alignments; mounds; and a possible burial associated with a heiau.
Moore and Kennedy 1994	ʻUalapuʻe Ahupuaʻa	Archaeological Inventory Survey and Test Excavations	Identified several features, including four platforms; two enclosures, a stone wall, and a stone alignment.
McIntosh and Cleghorn 2001	East ʻŌhiʻa Ahupuaʻa	Archaeological Inventory Survey and Test Excavations	Recorded a stone wall 40 m in length, as well as shell midden.
Tulchin et al. 2002	Kaʻamola Ahupuaʻa, Kalaeloa or "Kaʻamola Point"	Archaeological Inventory Survey	No significant historic properties and no cultural deposits.
Lee-Greig 2010	Keawa Nui and Kaʻamola Ahupuaʻa	Field Inspection	No pre-contact or significant historic era cultural materials and/or architecture.

identified short lived taxa from beneath terrace retaining walls, came from two to three distinct complexes and was dated to about AD 1150–1250. Expansion of irrigated fields in Wailau continued through the 16th–17th centuries and plots in several complexes appear to have been subdivided into smaller parcels, perhaps indicative of agricultural intensification. In Kalaupapa, McCoy (2005, 2007a, McCoy and Hartshorn 2007) documented the early development of its dryland field system to AD 1400–1550, while Kirch (2002) obtained even earlier dates from the area at a habitation site.

Expansion of the Kalaupapa Field System occurred after AD 1600, along with some evidence that new field border walls were placed between existing walls, suggestive of intensification after AD 1650. These findings are congruent with recent studies of irrigated and dryland agriculture in Kohala of Hawai‘i Island (Field and Graves 2008; Kirch et al. 2012; Ladefoged and Graves 2008; McCoy and Graves 2012; McCoy et al. 2013). Kurashima and Kirch (2011), employing a geospatial methodology developed by Ladefoged et al (2007, 2011), modeled the location and distribution of dryland and irrigated agriculture on Moloka‘i. This predictive modeling presents archaeologists with the opportunity to test and refine it against new finds or with data that have greater spatial resolution than that used in the model.

The development of aquaculture in Hawai‘i through the construction of fishponds and various sorts and fish traps was studied by Kikuchi (1976) and at about the same time, he inventoried the surviving fishponds of Hawai‘i (Apple and Kikuchi 1975). Kelly (1989:87–89) used oral traditions that identified fishponds with paramount leaders whose genealogy had been reconstructed. She estimated the construction of three fishponds on Maui and O‘ahu to between the 16th and 17th centuries (Kelly 1989:88). ‘Ōhi‘apilo Pond located on the southern shores of Kalama‘ula Ahupua‘a on Moloka‘i was the focus of archaeological testing and coring. Several pieces of un-weathered coral *(Pocillipora* sp.) were collected from the interior of one of its walls for radiocarbon dating. Coral pieces collected from the wall dated to AD 1660–1950, most likely after the mid-17th century. Both traditional and archaeological dates, then, generally bracket fishpond construction on Moloka‘i as well as the other main islands to about the same interval, perhaps beginning in the early 16th century and likely continuing through the late 18th century, which is when Kamehameha is said to have constructed a fishpond in North Kohala (Tomonari-Tuggle 1988).

The study of heiau in Hawai‘i was the focus of most early archaeological surveys and reports (Thrum 1907, 1908a, 1908b; Bennett 1931; McAllister 1933; Stokes 1991). Descriptions, Hawaiian names, and maps were produced as part of these studies, not to be eclipsed until Kolb’s research on Maui (1992, 1994, 1999) and Kirch’s (1990) treatment of Moloka‘i heiau in comparative perspective. A number of findings suggested the role of heiau in not only organizing ritual practices, but also as a means of expressing political authority and managing resource production and distribution. Because of their cultural importance to Hawaiians, heiau have received increased protection and preservation (Cachola-Abad 1996). The siting of heiau on or near ahupua‘a boundaries (Mulrooney and Ladefoged 2005; McCoy et al. 2011) and their concentration in certain locations (Kirch et al. 2013) on topographic features, or in geographic areas (Kikiloi 2013; McCoy et al. 2009), have been explored recently by archaeologists. Phillips et al. (2015) employed geospatial analyses to analyze the heiau from the upland area of the Leeward Kohala Field System in terms of the sequence of distinct or overlapping view planes and view sheds as construction of these structures expanded over a period of 300–400 years. Kirch et al. (2013) examined the orientation of heiau in terms of various astronomical features.

Weisler, in several papers, examined lithic technology and used petrographic and geochemical analyses to source the locations of volcanic glass and adze quality basalt on Moloka‘i (Dye et al. 1985; Weisler 2011; Weisler et al. 2015). These studies demonstrate the transport of lithic

resources from locations where they were procured to other areas of the islands where tools were incorporated into the lives of residents for woodwork or for cutting and scraping other materials.

Colonized by the end of the first millennium AD by Polynesians, the Hawaiian Islands presented a combination of similar and contrastive lands from which cultural developments occurred. It is likely coastal areas were targeted for early occupations, particularly those where wetland or irrigated agriculture could be easily established because of high rainfall and/or the proximity of surface water provided by streams and springs. Molokaʻi has pronounced leeward and windward regions that constrain the nature of agricultural practices that can be employed. The role of ritual as indicated by the construction of heiau dedicated to the gods was well enshrined on Molokaʻi as it was on the other main islands. Although the extent to which aquaculture could be developed varied amongst the islands, Molokaʻi, like Oʻahu and Kauaʻi, had extensive coastal areas converted to fishponds and fish traps. The potential is high for future archaeological research on Molokaʻi to contribute to the reconstruction of Hawaiian history both at the scale of the archipelago and across and among the communities and polities that developed on the island itself.

Cultural and Historical Sites of Molokaʻi: Puaʻahala, Kaʻamola, Keawa Nui, West ʻŌhiʻa, East ʻŌhiʻa, Manawai, Kahananui, ʻUalapuʻe, and Kaluaʻaha Ahupuaʻa

Catherine Summers compiled a survey of Molokaʻi sites from various sources including unpublished materials in the Bishop Museum, a survey conducted by John Stokes (1909, 1911), oral history interviews conducted by Mary Kawena Pukui kept in the Bishop Museum, old Hawaiian newspaper stories, and published books, among other sources. In what follows, the 32 sites that Summers describes and which fall into one or more of the nine ahupuaʻa included in the Pākuʻi project area are included in their entirety. Other historic properties and sites identified more recently but not previously identified by Summers will be placed within their associated ahupuaʻa and described therein. Much of the description and most of the sources used by Summers are reported verbatim here with occasional corrections of spelling and of grammar to improve clarity. Figure 20 illustrates the sites described by Summers and located in the ahupuaʻa of Kaʻamola. Keawa Nui, West ʻŌhiʻa, East ʻŌhiʻa, Manawai, Kahananui, ʻUalapuʻe, and Kaluaʻaha. Only sites from Puaʻahala are not shown on the accompanying figure.

In addition to the research conducted by Summers and Stokes, several historical maps from the late 19th century depict a variety of constructed features, most of them located along the southeast coastline. These include a number of named and unnamed fishponds, all of which correspond to the sites listed here. Note the close correspondence between Summers' site map (see Figure 20) and the map drawn by Wall (1917) of the same stretch of coastline (Figure 21). This map is based on an even earlier map by Monsarrat (1894). In a few instances, locations where taro was cultivated are depicted on late 19th century maps, and occasionally on later maps from the 20th century walled taro plots are identified.

Several historical maps depict a number of stone walls that appear to be traditionally constructed. Where these walls match land award boundaries from the late 19th century we will note them in the listing of sites for each ahupuaʻa. In a few instances stone walls visible on the historic maps correspond to ahupuaʻa boundaries. In at least one case the boundary wall separating two ahupuaʻa continues without break to a fishpond wall. Again, we will treat these as archaeological and describe them. This is not intended to be an exhaustive record of all such walls that would be considered "historic" but rather is designed to illustrate that as late as the mid-20th century some of these walls still were in place. Two of the archaeological reports identify freestanding walls on the surface that appear to align with land award boundaries.

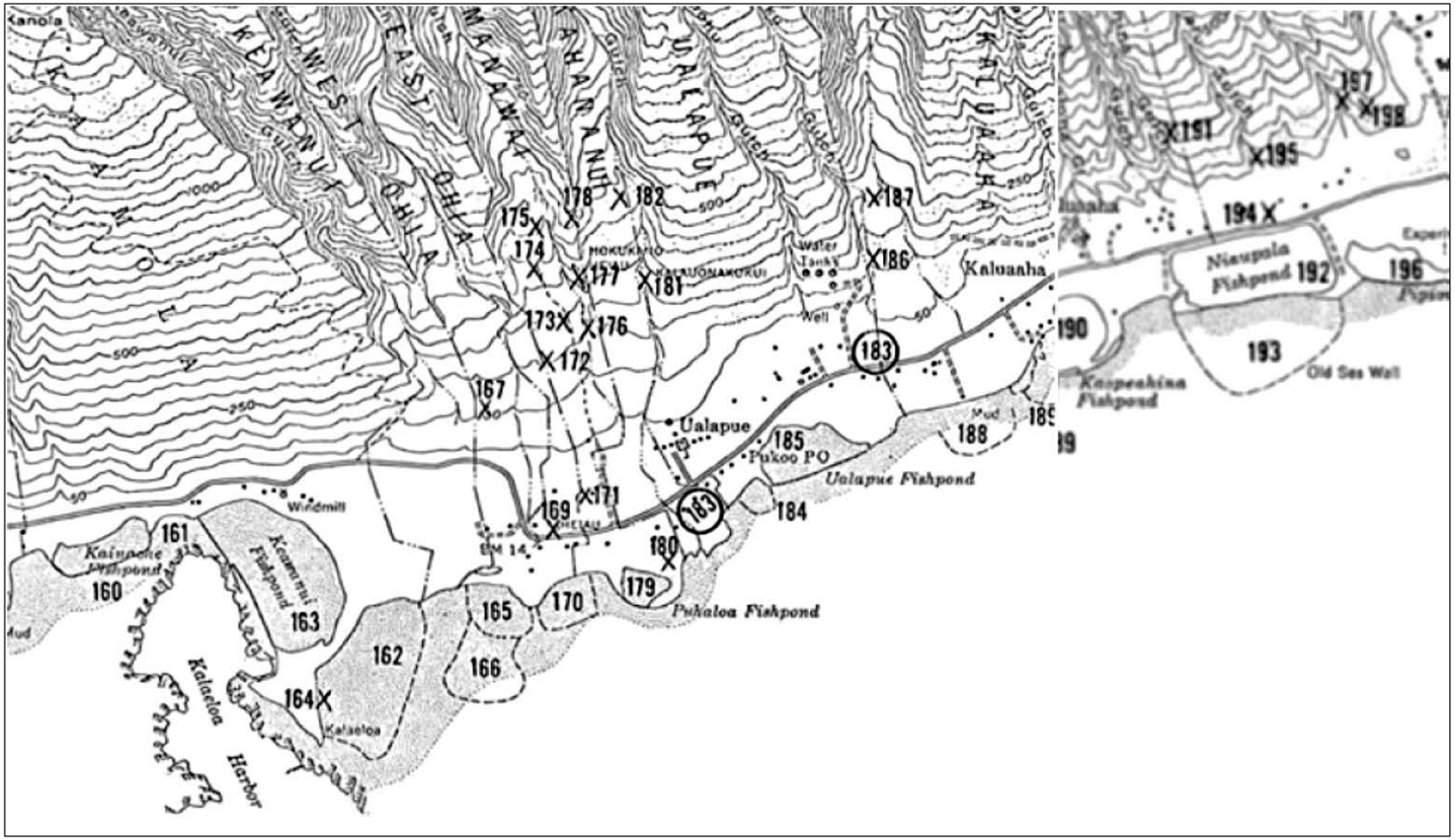


Figure 20. Map showing locations of sites from Ka‘amola to Kalua‘aha (Sites 160 to 190). Adapted from Kamalo Quadrangle Map, USGS 1952. Published in Summers 1971:105, 124.

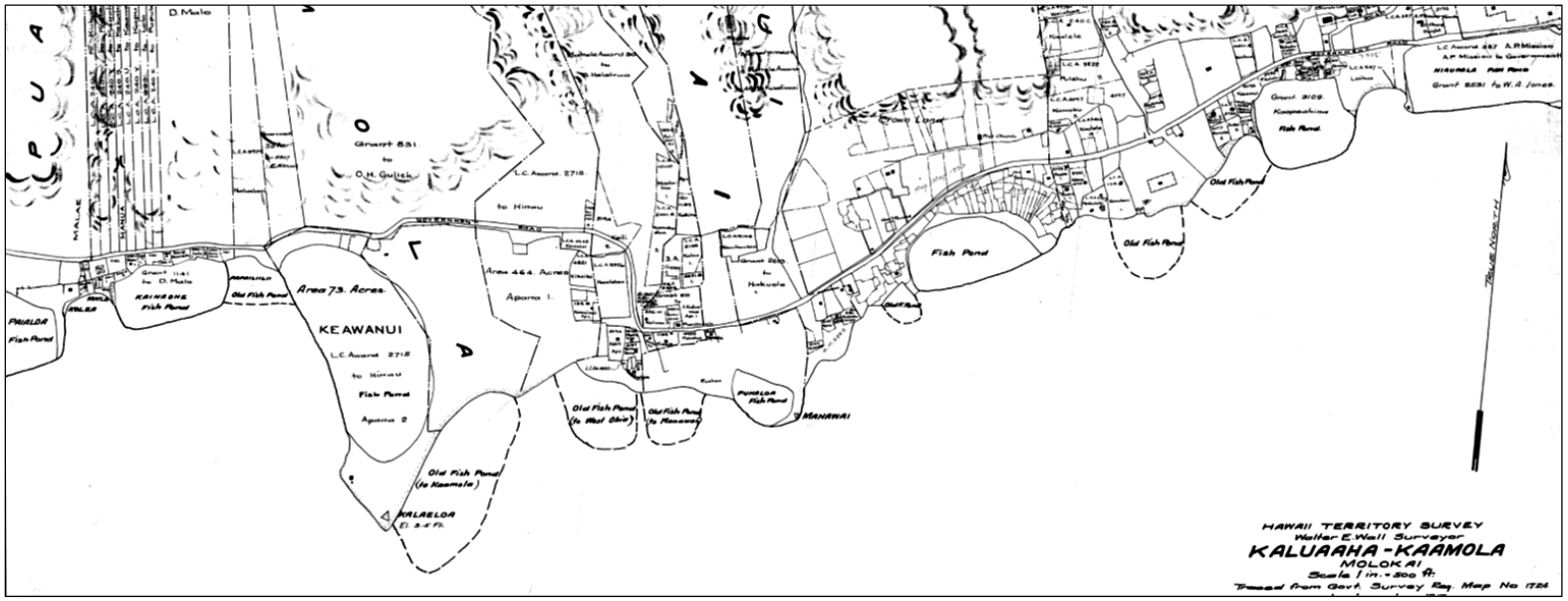


Figure 21. Map showing fishponds from Pua‘ahala to Kalua‘aha along the southeast Moloka‘i coast (Wall 1971). Compare to Figure 18 that shows a rendering from the 1952 USGS map of the same area.

Pua‘ahala Ahupua‘a

The ahupua‘a of Pua‘ahala is just west of Ka‘amola and is the westernmost of the nine ahupua‘a included in this report. It totals 334 ha (825 ac.) in area, inclusive of fishponds (Figure 22). It forms a fairly narrow wedge of land with a coastline of about 890 m (2900 ft.). In addition to Summers' listing of two historical sites, 12 well-preserved archaeological sites have been documented, although it was thought that these sites "constitute what is probably only a small percentage of the actual number of sites in the ahupua‘a of Pua‘ahala" (McCoy and Nakamura 1993:16). Very few sites were recorded below the 30–45 m (100–150 ft.) elevation, probably "due in large part to modern land use practices, which are inferred to have removed all visible traces of earlier human activity around the former Paialoa fishpond" (McCoy and Nakamura 1993). The sites recorded include a historic enclosure, two terrace complexes, two rock mounds, two c-shaped structures, and two rectangular enclosures. Also recorded, but previously known, was the Māla‘e Heiau (Site 159), which was interpreted as possibly "an example of an ahupua‘a boundary temple" since it is "located very close to the Pua‘ahala-Ka‘amola ahupua‘a boundary" (McCoy and Nakamura 1993:13).

Relatively few archaeological or historical sites are documented in Pua‘ahala. During the Māhele much of the land for this ahupua‘a was first "unassigned." Later there were fewer than ten Land Commission Awards made, most near the coast. These claims were typically for parcels that had taro lo‘i and/or houses. One ‘ili lele for Pua‘ahala was assigned in Pelekunu.

Site 158. Paialoa Fishpond

Paialoa, "Long wall", was 14 ha (35 ac.) in area when it was surveyed in 1901 (Cobb 1902:430). It is a loko kuapā fishpond, with an outer wall on the reef extending well beyond the immediate coastal plain and is approximately 670 m (2,200 ft.) in length. Abutting it on the west is the wall of Kalokoiki Fishpond (Site 157) located in Wāwā‘ia Ahupua‘a. The inner border of this pond appears to have been cut into the coastline at nearly a right angle. In 1963 the seaward wall was damaged and the pond was filed with mud. Paialoa Fishpond can be seen in Figure 23.

Site 159. Māla‘e Heiau

The site of this heiau is shown on a USGS Topographic Map (1922) just inland from the road (Figure 24). It cannot be seen on the 1949 aerial photographs, likely because it is located in the bottom of the Māla‘e Gulch under a thicket of trees. This site is not listed by either Stokes or Thrum. While technically located in Pua‘ahala, Māla‘e Heiau was thought by McCoy and Nakamura to be an "*ahupua‘a* boundary temple" as it sits near the border between Ka‘amola and Pua‘ahala (1993:16). This heiau was described as being "a paved, two-tiered stepped platform," though McCoy and Nakamura did not take and measurements or photographs (1993).

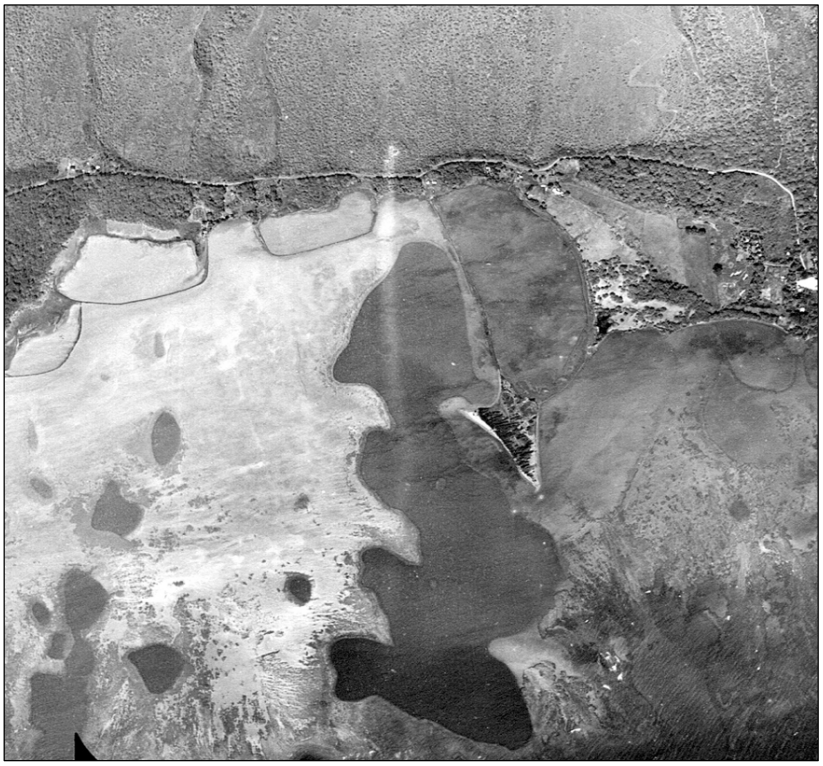


Figure 22. Aerial view of Pua‘ahala, Ka‘amola and Keawa Nui Fishponds: Paialoa, Kāinā‘ohe, Papa‘ili‘ili, Keawa Nui, Unnamed (State Archives).

Figure 23. Ka Hale o Kai‘a e Noho Ai. In the foreground are the following fishponds: Pūhāloa (Site 179) and Wehelau‘ulu (Site 170) in Manawai Ahupua‘a, Kaunahiko‘oku (Site 165) in West ‘Ōhi‘a Ahupua‘a, Keawa Nui (Site 163) in Keawa Nui Ahupua‘a, Kaina‘ohe (Site 160) and Paialoa (Site 158) Pua‘ahala Ahupua‘a, and Kalokoiki (Site 157) in Wāwā‘ia Ahupua‘a. Photo credit by R. Wenkam 1960, illustrated in Summers 1971:14.

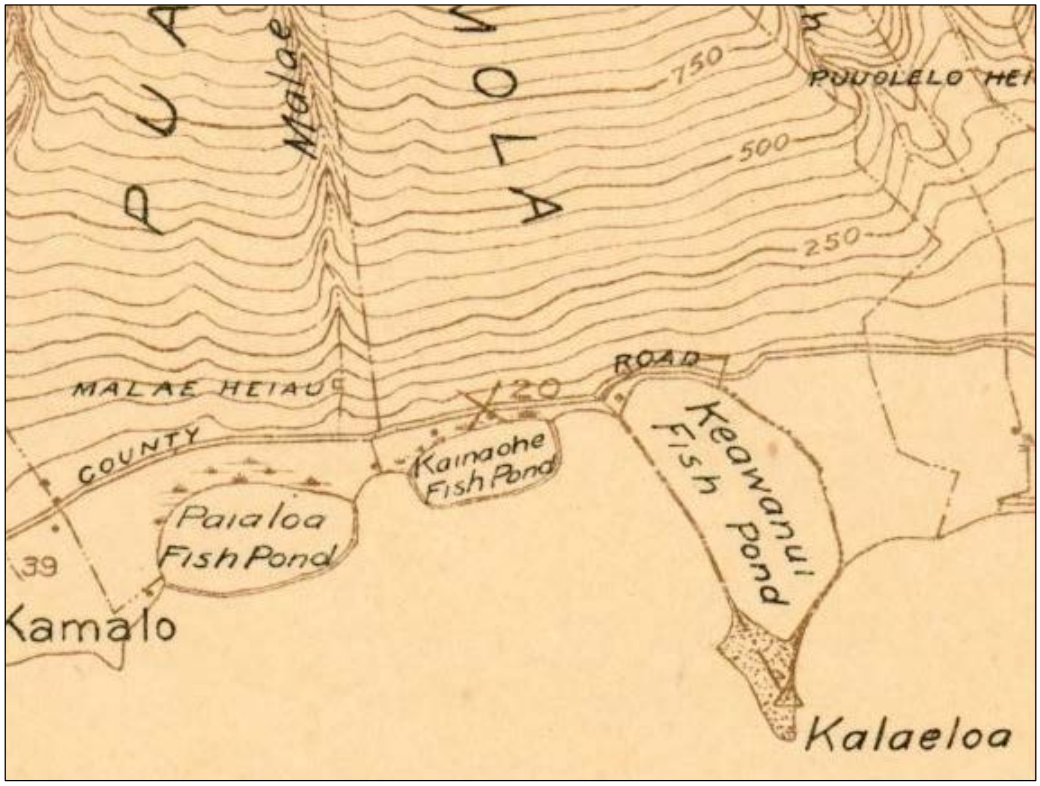


Figure 24. Location of Māla‘e Heiau, Pua‘ahala Ahupua‘a, from 1922 USGS Topographic Map.

Ka‘amola Ahupua‘a

A wedged shaped territory bounded on either side by Pua‘ahala and Keawa Nui, the uppermost boundary of Ka‘amola intersects the eastern border of Pua‘ahala. This ahupua‘a has a wide coastline, more than 2.7 km (8,900 ft.) and totals approximately 600 ha (1483 ac.) in area, inclusive of fishponds. Formerly, the ahupua‘a was divided into at least six sections (possibly ‘ili ‘āina). Ka‘amola had a ‘ili lele, known as Kīloa, in Pelekunu; this plot had an area of at least 52 ha (126 ac.). Kanepuu writes:

> This place is composed of six small pieces of land but is known wholly as Ka‘amola. Near where the western boundary adjoins Pua‘ahala is a pond [Kaina‘ohe Pond, Site 160]. There are taro patches and the sea comes in a good way. It is not very level land. Close to the government road, about one chain [21.12 m] away come the level lands used as taro patches. Most of the land is covered by thorny weeds on both sides of the main highway. A plain stretches unbroken from the mountain to the road. (Kanepuu 1867b)

Keawa Nui Fishpond (Site 163) and Kalaeloa Point once were a part of Ka‘amola. They are said to have been assigned to the ahupua‘a of Keawa Nui in the early part of the 16th century (see Site 163).

Site 160. Kāinā‘ohe Fishpond

Located in Ka‘amola Ahupua‘a, Kāinā‘ohe is a loko kuapā with an area of 6.87 ha (17 ac.). It lies adjacent to the west of Papa‘ili‘ili Pond, sharing a common wall (Figure 25). The wall of this fishpond was constructed mostly of basalt rock but has some coral fill. The wall included two mākāhā, one at the eastern bend and the other in the middle of the south wall (Summers 1971:104). According to Cobb, the wall was broken but the pond was being used commercially in 1901 (1902:430). The wall may have been rebuilt after 1901 since Summers writes that "the pond was being used in 1957 and its wall was intact" (1971:104). In 1960, however, "a tsunami destroyed portions of the wall, which had not been repaired by 1962" (Summers 1971).

Site 161. Papa‘ili‘ili Fishpond

In some sources, Papa‘ili‘ili is spelled "Papa‘ili‘ili‘i" (e.g., maps by Monsarrat 1896 and Wall 1917). This alternate spelling would give the name a completely different meaning. This pond was a 2.6 ha (6.5 ac.) loko ‘ume iki with an outermost wall of eight lanes (Figure 26). Such ponds are a form of fish traps; they have lanes leading into and out of the pond through the outer wall. This pond had three lanes leading out, while five ran inward, and two were closed. The lanes were to allow fish outside of the pond to swim in for capture. This fishpond is "now completely destroyed" (Summers 1971:105). Loko ‘ume iki were only built on Moloka‘i and Lāna‘i (Wyban 1992:102).

Site 162. Mikiawa or Ka‘amola Fishpond

Mikiawa, also known as Ka‘amola Fishpond, was a loko ‘ume iki that Dunn (n.d.) estimated to be about 17.8 ha (44 ac., Figure 27). Submerged during the highest tides, the walls incorporated a series of lanes leading both in and out. The wall of Mikiawa Fishpond had 26 lanes, 16 ran in and 10 ran outward. These lanes were given names, some describing attributes of that lane.

> …Ka‘oakaiki (opening of low water)…was probably used at low tide. The name O‘ae‘ae (opening at rise of tide) indicates that the lane was used at high tide. (Dunn n.d.:102–103)

As the current ebbed and flowed with the changing tide fish would swim through the lanes and be caught with dip nets. A description of this fishing technique is given by Emma Beckley:

> …often a woman would sit with a net that covered the opening of the channel. The fish swam into the lane against the current caused by the changing tide. Feeling a jerk in the net, the woman would lift it, remove the captured fish, and place it in a gourd. She would then replace the net and repeat the process. It was said that two people could fish at opposite sides of the entrance; as one net was down, the other was up. (in Wyban 1992:102)

According to Land Commission testimony, the rights to Mikiawa Fishpond were determined by the flow of the tide.

> The way the fish are caught. When the net is put down and turned outward, the fish belong to Keawanui. When the sea ebbs, the net is turned inward, and the fish belong to Ka‘amola. (LCA 2715 in Summers 1971:105)

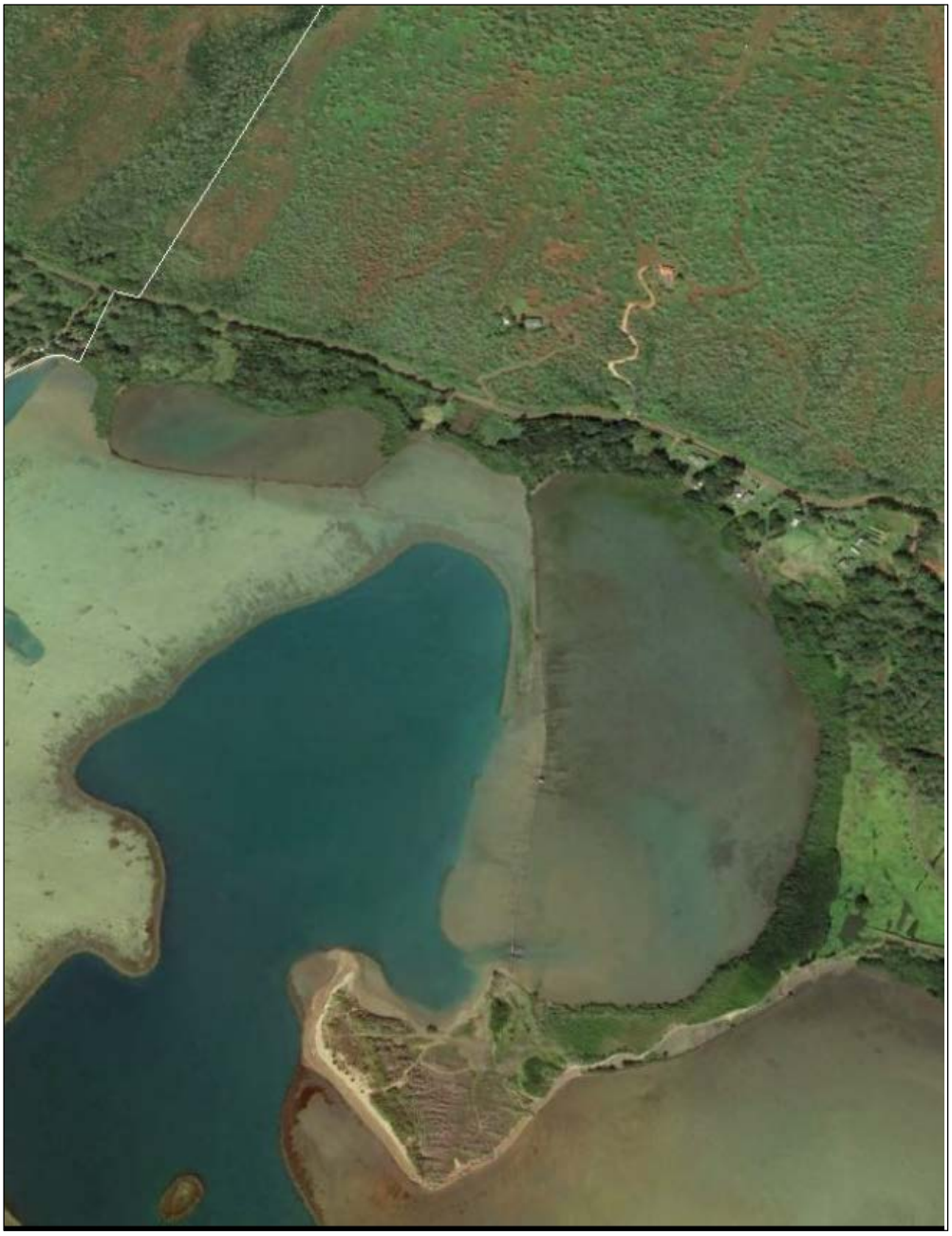
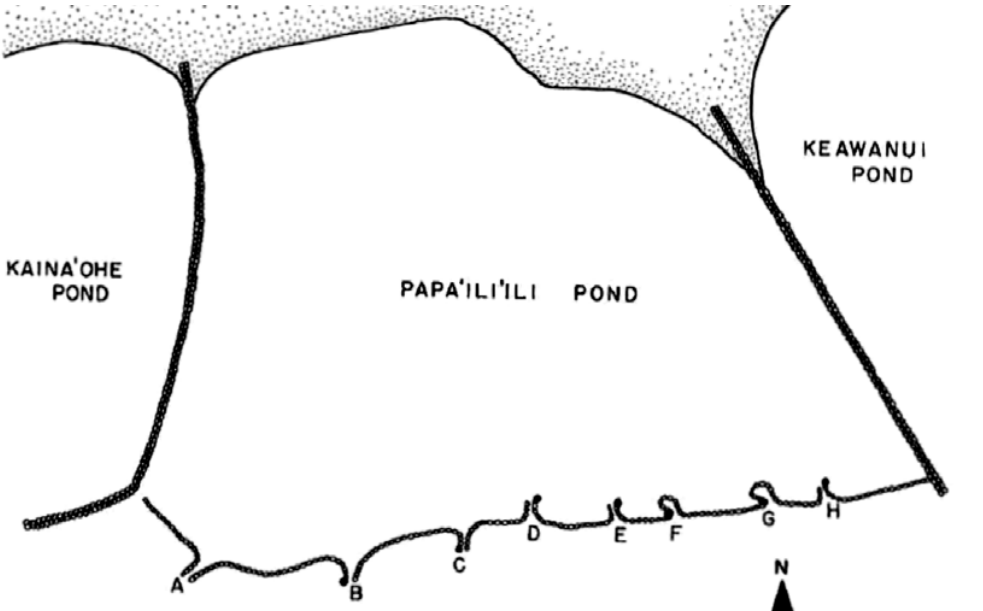


Figure 25. Kāinā‘ohe and Keawa Nui Fishponds, with Papa‘ili‘ili Fish Trap located between their two walls. Kalaeloa Point is located at the bottom of the image.



FEATURE*	NO.	LENGTHS OF LANE WALLS		WIDTH OR DIAM. OF LANE OPENING		PLATFORM
		W (ft)	E (ft)	AT WALL (ft)	AT END (ft)	
OLO	A	28	31		4	
	B		24.4		3.6	W SIDE, 6 FT WIDE
	C		25.5		2	W SIDE
OLI	D		24			E SIDE
	E		12.6	9		E SIDE
CLI	F		16.8	3	12.6	W SIDE
	G		16	2.6	14**	W SIDE
OLI	H	21.6				E SIDE

(Stokes, n.d.d:24)

*OLO - Open lane, outward-leading
OLI - Open lane, inward-leading
CLI - Closed lane, inward-leading

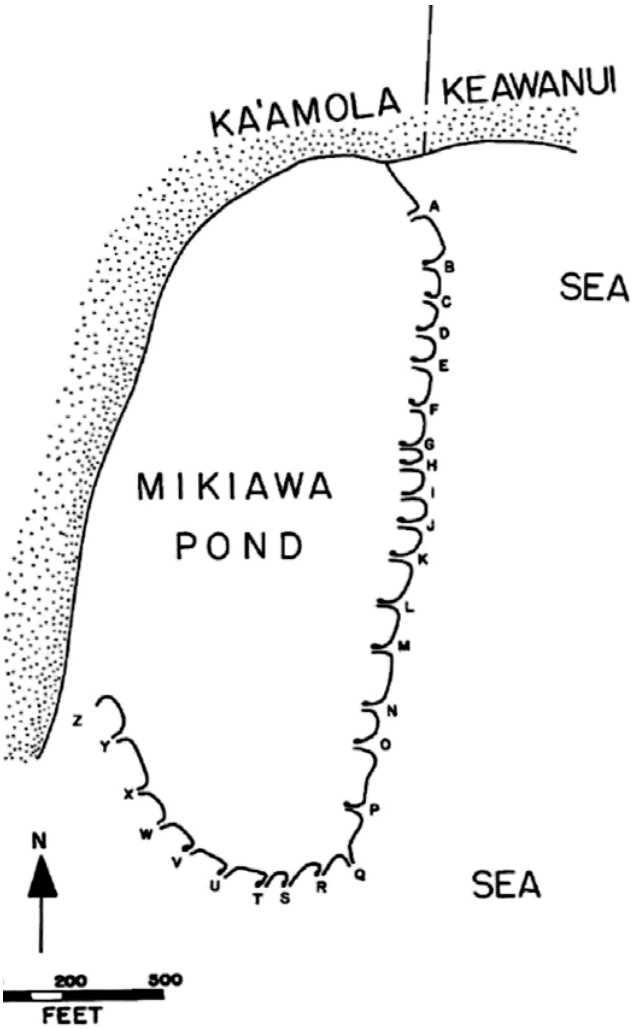
**1.4 ft deep

Figure 26. Plan view of Papa‘ili‘ili Fishpond (Site 161), Ka‘amola Ahupua‘a and neighboring fishponds Kaina‘ohe and Keawa Nui. Also shown are measures of wall lengths and widths of lane openings depicted in the figure. Plan view drawing by Stokes 1909, as illustrated in Summers 1971:106.

Stokes gave more details concerning fishing rights attached to Mikiawa Fishpond:

> Sometimes one person had a prior right to fish at a certain inward and a certain outward opening, both of which bore the same name, and other persons might use the same openings in the proprietor’s absence. (Stokes 1911 in Summers 1971:108)

An informant also told Stokes that “Lohelohe, an ali‘i, built Mikiawa, and the fishpond Mikimiki” (Summers 1971).



FEATURE*	NO.	LENGTHS OF LANE WALLS		WIDTH OF LANE OPENING AT	
		N** (ft)	S** (ft)	WALL (ft)	END (ft)
OLI	A	28	36	15.5	6
	B	40.5	36.5	18	6
	C	38	38.5	12	7.5
	D	45.5	43.5	21	6.5
	E	37.6	39	15	6.5
	F	49	50	12	7
	G	62.5	58		5.5
	H	69	69.5	20.6	6
	I	73	65	30.3	6
	J	62	61	29.5	6
	K	61.5	57.7	27.7	5
	L	70.7	65.4	30.4	7
	M	64	60.5	30	5.6
	N	61	50	30.5	5.7
	O	56.3	53.5	27.4	5.2
	P	61	47.3	36	5
OLO	Q	37.7	35	23.2	4.5
	R	38	32	23.4	4.5
	S	41.6	36.7	25.5	4
	T	50.6	40	22	4.5
	U	47.7	36	25.2	5.5
	V	42	37.6	19.2	5
	W	40	32	26	(BROKEN)
	X	34.3	36	18.8	(BROKEN)
	Y	40.5		26	
	Z				

*OLI - Open lane, inward-leading
OLO - Open lane, outward-leading
**Essentially the N and S walls, although they are actually the right and left wal
†*KUMAKAKI'I* was a god of fishponds

Figure 27. Mikiawa Pond (Site 162), Ka‘amola Ahupua‘a. Plan view drawing by Stokes (1909) as illustrated in Summers (1971:106).

Keawa Nui Ahupua‘a

Keawa Nui Ahupua‘a is an irregularly shaped territory that appears to have been “cut out of” Ka‘amola to the west. The two eastern and western boundaries join at the mauka boundary. Keawa Nui had a ‘ili lele, whose name is Paekuku in Wailau. This parcel is shown on a map of Pelekunu and Wailau Ahupua‘a (Monsarrat 1894). There are at least ten named ‘ili for Keawa Nui recorded in the land records; most are associated with lo‘i kalo and/or hale. Prior to the 16th century, Keawa Nui Fishpond and Kalaeloa were a part of Ka‘amola. (see Site 163). At the Māhele there continued to be disputes over who should be awarded land and the Keawa Nui Fishpond that lie along the boundary with Ka‘amola. The Heakai is the wind of Kalaeloa, the point of land between Keawa Nui (Site 163) and Mikiawa (Site 162) Fishponds.

Site 163. Keawa Nui Fishpond

This Fishpond has also been known as Mikimiki Fishpond (Kahaulelio 1902) and Hinau Fishpond (Cobb 1902:430) (Figure 28). One possible explanation for it being referred to as Hinau Fishpond is that the Land Commission Award indicating that the pond went to Hinau (LCA 2715), who was the konohiki of Keawa Nui. Recorded by Barrera as Site A13-1 (1974:91) and by Summers as Site 163 (1971:108), Keawa Nui is a loko kuapā type of pond (fishpond constructed by building a wall on a reef) with an area of approximately 22 ha (54.5 ac.). The fishpond presently has three mākāhā, however two of these are post-1937. The story regarding why the pond is controlled by Keawa Nui when it is located in Kaʻamola is given in the Māhele Land Tenure section of this report that follows.

According to Beckwith, the prophet Lanikaula went to Lānaʻi and killed off all but about forty of the akua there who were of the Pahulu family. These forty that remained came over to Molokaʻi from Lānaʻi and "Ke-awa-nui was the first fishpond they built on Molokai" (1970:108).

Stokes was told in 1909, however, that Mikimiki (Keawa Nui) was built by an aliʻi named Lohelohe (Stokes 1911 in Summers 1971:108).

Carol Wyban shared a story told to her by Zelie Sherwood and Laura Smith, kamaʻāina of Molokaʻi, about a moʻo that was encouraged to move its residence from another fishpond that was being developed into Keawa Nui Fishpond.

> Pūkoʻo was in the process of being dredged by developers who intended to build a cloverleaf harbor. Machinery operators were thwarted by numerous problems with the dredging of the pond until they called upon a seer, Hattie Domingo. After studying the site Hattie stated that the pond was the residence of a *moʻo.* She asked to be left alone at the pond, where she spoke to the *moʻo.* A few days later Hattie explored the pond and found that the *moʻo* had left it and had relocated to Keawanui fishpond. According to Hattie the *moʻo* was Kihawahine, *ʻaumakua* of Zelie's family. Later attempts to develop Keawanui fishpond also were thwarted and developers eventually left the fishpond. (Wyban 1992:131)

More recently an inventory survey was conducted on Kalaeloa Point between Keawa Nui and Mikiawa Fishponds. The specific area surveyed was within a 60 m (200 ft.) diameter circle located toward the end of the point, as well as a "30 ft. swath along the access road to the project area" (Tulchin et al. 2002:i). The archaeologists noted a "lack of any significant surface historic properties" (Tulchin et al. 2002:19). They also excavated two test units "in close proximity to each other" (Tulchin et al. 2002). Ultimately, the results of both the survey and the excavations "indicated a lack of any significant surface or subsurface historic properties" (Tulchin et al. 2002:26).

Site 164. Hualele Heiau

The heiau was located on the isthmus between Keawa Nui and Mikiawa Fishponds. From the point at Kalaeloa it would bear 206 °, at a distance of 30 m (100 ft.) Stokes was told about this heiau and shown its location. Apparently, the erosion of the point had already destroyed it by the time Stokes visited in 1909. This heiau was recorded by Barrera as site A13-5 (1974:91) and by Summers as Site 164 (1971:108). The isthmus and peninsula of Kalaeloa have been built up of sea sand by the currents, and a small amount of soil has formed. A possible change in the current has since removed the soil, and according to the statement by Stokes (n.d.a:2) has demolished the heiau.

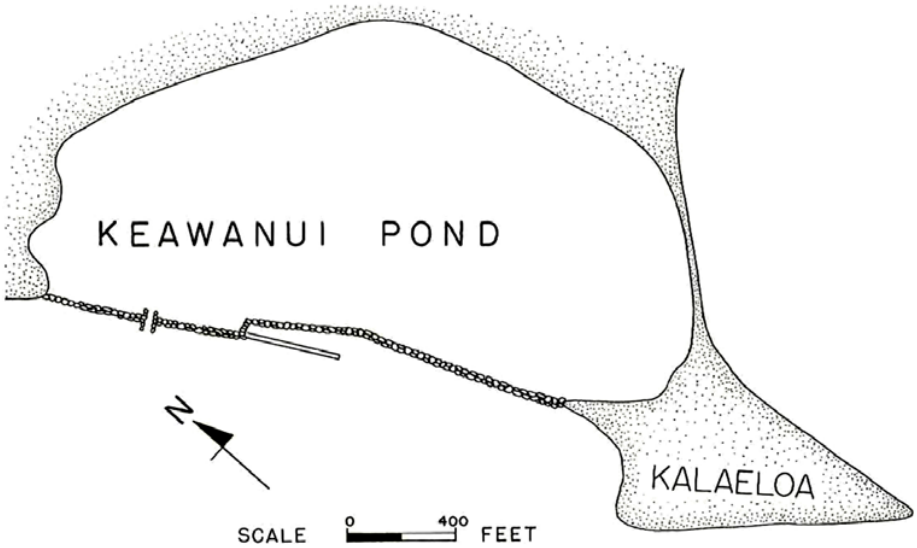


Figure 28. Keawa Nui Fishpond (Site 163), Keawa Nui Ahupuaʻa, also known as Mikimiki or Hinau Fishpond, and Kalaeloa Point. Plan view drawing by Evans (1937) as illustrated in Summers (1971:109).

West and East ʻŌhiʻa

These two adjoining land sections were formerly known as a single ahupuaʻa of ʻŌhiʻa. West ʻŌhiʻa is sometimes referred to as ʻŌhiʻanui or ʻŌhiʻa 1 and is 142 ha (353 ac.) in size. The boundary between these two ahupuaʻa runs along ʻŌhiʻa Stream, forming irregular shapes for both territories. Likely East ʻŌhiʻa was subdivided from the original single, larger unit and its total area is 135.5 ha (335 ac.). The land of East ʻŌhiʻa did not extend to the sea; it went only to just south of the present road. The area between it and the sea was a part of Manawai Ahupuaʻa. East ʻŌhiʻa had a distant lele in Wailau called Pepeiaoloa. There is a place name in Wailau, known as Apaeoloa, just inland from the coast and within the section of Hālawa Ahupuaʻa that extends into Wailau Valley. This is likely the lele of East ʻŌhiʻa.

Site 165 Kaunahikoʻoku or Onahikoko Fishpond

Kaunahikoʻoku, "upright fish scales," was a loko ʻume iki having an area of 5 ha (13.5 ac.) according to Stokes (n.d.b:35). The fishpond is now destroyed; only traces of the foundation remain (see Figure 23). There were 11 lanes along the 610 m (2,000 ft.) wall. The two on the eastern side went inward and had platforms on their northern walls. The other nine, located on the southern and western sides, went outward and had platforms on their western walls (Figure 29). Stokes (n.d.b:35) gave the name of the fishpond as Kaunahikooku; Dunn (n.d.) called it Onahikoko.

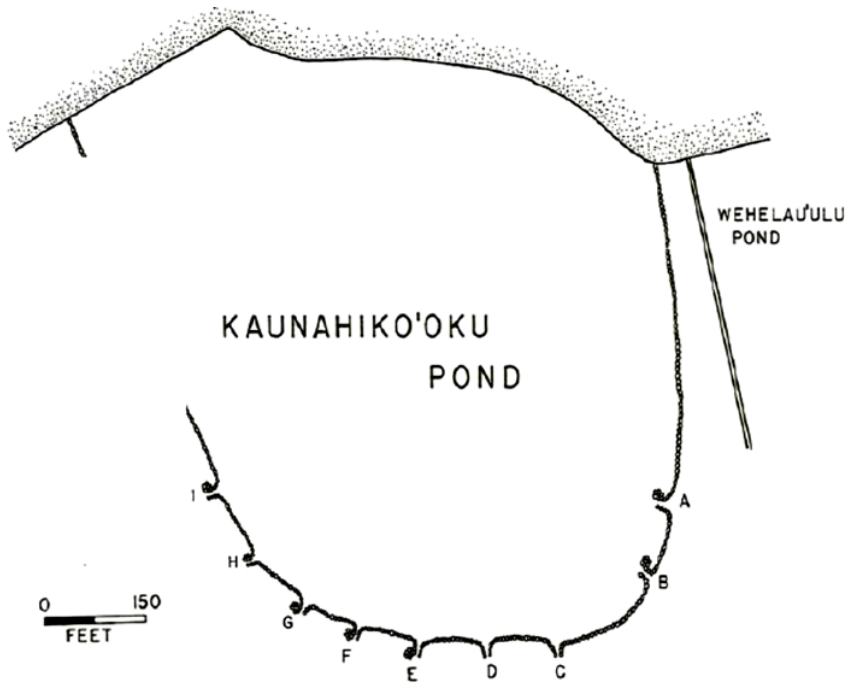


Figure 29. Kaunahiko'oku Fishpond. Plan by Stokes (1909) as illustrated in Summers (1971).

Site 166. Unnamed Fishpond

Aerial photographs show the foundations of a fishpond that was attached to the southern and southwestern portion of Kaunahiko'oku Fishpond's wall (Site 165). According to Dunn (n.d.), no old maps show this pond; " ... the name and ownership of which is lost in antiquity . . . This was presumably a government pond."

Site 167. Heiau

This heiau is located between the stream and the boundary line of Keawa Nui, at an elevation of about 30 m (100 ft.) above sea level (Figure 30). From Kalaeloa it bears 208° 55' 30"; 1,410 m (4,640 ft.) According to Stokes:

> This enclosure was called by the local natives an animal pound, not a heiau. The main part is roughly rectangular in plan, measuring 125 ft each way. It is enclosed by walls 5.5 ft high and thick, and contains the remains of other walls of platforms ... Outside the southern wall the ground dipped sharply, and here a terrace of waterworn stones has been built up against the foot of the wall ... The terrace is 9 ft high, 11 wide and 150 ft long [Fig. 50]…Along the foot of its retaining wall are six or more small, semi-circular cleared s paces which have been cultivated. They are protected on the outside by stones, loosely piled…The ground outside has also been cleared for cultivation. The size of the terrace and the care with which it has been built makes me believe that this place was originally a heiau, but its use abandoned long before the numerous other heiau in the neighborhood." (Stokes n.d.a:2)

Figure 30. Retaining wall of terrace at heiau in West ‘Ōhi‘a, Site 167. This wall is 3 m (11 ft.) high and the terrace is 45 m (150 ft.) long. Photo by Stokes (1909) as illustrated in Summers (1971).

When the structure was seen in 1959, it appeared to be in a condition similar to that described by Stokes. A platform in the southeast corner of the main portion of the heiau measured approximately 24 x 24 m (80 x 80 ft.) It was bounded on the north by a wall whose western section was deteriorated.

Site 168. Possible Heiau

Located about 180 m (600 ft.) south of Site 167, this possible heiau is a large, rambling structure on which traces of platforms still remained in 1959. Some coral was found among the stones. North of this structure 91 m (300 ft.) there is a basin-like depression lined with small, waterworn stones. It is 15 m (50 ft.) long, 4.5 m (15 ft.) wide, and 4.5 m (5 ft.) deep.

Site 169. Kukui Heiau

Located in East ‘Ōhi‘a on the low ground, this heiau (Figure 31) bears 120°24’ from the datum point at Manawai A; 550 m (1,805 ft.). Stokes described this site as:

> ... a collection of enclosures and low platforms of irregular shape . Though pointed out as an agricultural heiau site, there was nothing in the construction or location of the place to warrant such identification. The length was 170 feet and the width 120 feet, and the general direction north and south. (Stokes n.d.a:2)

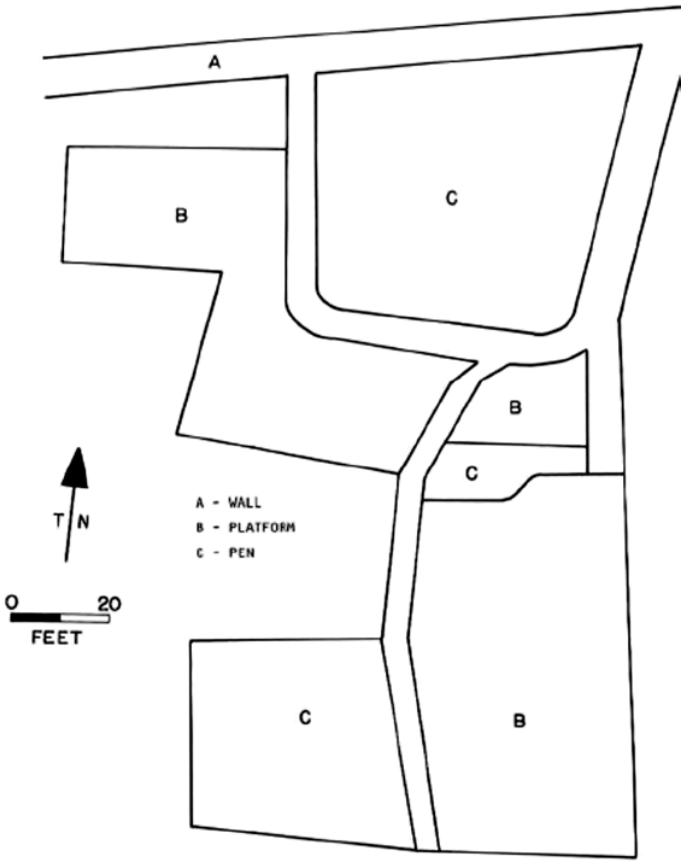


Figure 31. Kukui Heiau, East ʻŌhiʻa, mapped by Stokes (1909) as illustrated in Summers (1971).

Kahoʻolulu Heiau

All that was found for this heiau is as follows: "…Said to be in ʻŌhiʻa, Molokai. Not seen" (Stokes, n.d.a:2).

Manawai Ahupuaʻa

Manawai Ahupuaʻa is a characterized by a long relatively narrow territory that extends from the coast to the top of the East Molokaʻi Mountain. It has an area of 219 ha (543 ac.) and its makai-mauka boundaries are located on the two ridge lines that form the watershed of Manawai Gulch. Despite the significant array of cultural sites that are documented here, there has been no recent archaeological work in this ahupuaʻa. There are at least four major heiau and two fishponds located in Manawai; the heiau are clustered together on the eastern ridge line and the adjacent valley floor (Figure 32).

Figure 32. Aerial photograph of four major heiau located in Manawai Ahupuaʻa on or near the ahupuaʻa boundary with Kahananui.

Site 170. Wehelauʻulu Fishpond

This loko kuapā has an area of 3.24 ha (8 ac.). The 0.54 km (1,770 ft.) wall was square-shaped, beginning on the coastline of West ʻŌhiʻa and extending into Manawai A. There were three mākāhā in the south wall. The walls are now completely destroyed, although the foundations may be still visible. The fishpond was listed as "Nameless old pond" by Cobb although he recorded it as being in ʻŌhiʻa 1 (1902:430). Stokes gave its name as "Wehelauulu" (n.d.d). Kallstrom (2016a) provides an alternate spelling, Wahieulu, based on Native Hawaiian testimony that was part of the Ahupuaʻa Boundary Commission for Manawai.

Site 171. Malukou Heiau

From the datum point of Manawai this feature bore 146 °2 1 22"; at a distance of 0.56 km (1,850 ft.). Stokes (n.d. a:2) reported, "Heiau entirely destroyed."

Site 172. Kahakahana Heiau

From the datum point of Kalaeloa A this site bears 211° 36' 30"; a distance of 1.70 km (5,570 ft.). The structure is approximately 26 m (85 ft.) from east to west, and 20 m (65 ft.) north to south. It consists of several paved enclosures and small, circular, walled-in areas. On the south side is an enclosure that is lower than the main structure. Some coral was found on the pavements in 1962. Stokes referred to this site as being:

> …a place for worship to kapa gods, and for making sacred kapas. Used for kapa before *'ai noa* [1819]." He also said it was used before the time of Kumuko'a and mentioned the gods Ku and Hina as being connected with it. (n.d.b:49)

Site 173. "Wet Stones"

Located north of Kahakahana Heiau (Site 172), these stones are a short distance west of the jeep road just prior to entering the gate. The "wet stones" are two large, fairly flat boulders adjoining one another. Under the western portion of the boulders, there is a cavity about 1.2 m (4 ft.) long, .9 m (3 ft.) wide, and .3 m (1 ft.) deep. In the past, water was always found in this cavity. In 1962 there was water during the wet season, but during the dry season the dirt was only damp. The Hawaiians are said to have used this place for obtaining their drinking water. On top of the boulders, stones have been placed as if to shade the cavity. These stones have "always been there." To the west of this site is a house site.

Site 174. Pu'u 'Ōlelo Heiau

Located on rising ground in the middle of the valley, this heiau (Figure 33) bears 205° 6'30" from the datum point of Kalaeloa A*;* at a distance of 1.95 km (6,400 ft.). Stokes described the heiau as follows:

> The main feature is a platform facing the sea on the south. The ground inclines to the north, and here an extension of the main platform is enclosed on the west, north and east by a small section of heavy wall, There are numerous pits or excavations in the pavement of the platform the presence of which it is difficult to explain. They are not quite regular in size. Nor is their order of arrangement regular; they are accurately plotted on the plan East of the main platform is an enclosed pavement, open on the south. The enclosing walls are small. The two structures are joined by a causeway of loose stones, now much disturbed, at their nearest southern corners built almost entirely of water [worn] stones. (Stokes n.d.a:3)

Site 175. Kaluakapi'ioho, Papi'ioho, or Kumukoa Heiau

Located on the east side of Manawai Valley this heiau is on the west bank of the stream bed. From Kalaeloa A it bears 203° 6' 30"; 2,100 m (6,900 ft.). Stokes wrote a detailed description of this heiau (Figure 34) and the probable bases for its several names:

> A combination of platform and walls somewhat suggestive of Puu Olelo heiau [Site 174], from which it is about 600 feet distant. The most striking feature is the retaining wall of the eastern end. The surface of the valley declines in general to the south. The stream bed of Manawai is on the east side of the valley, adjoining the ridge. Between this and the western ridge is a stretch of valley bottom about 500 feet wide. It might have been expected that the builder would have chosen suitable ground about 200 feet to the west. The reason for the actual selection will perhaps be found in the desire to build something

large and

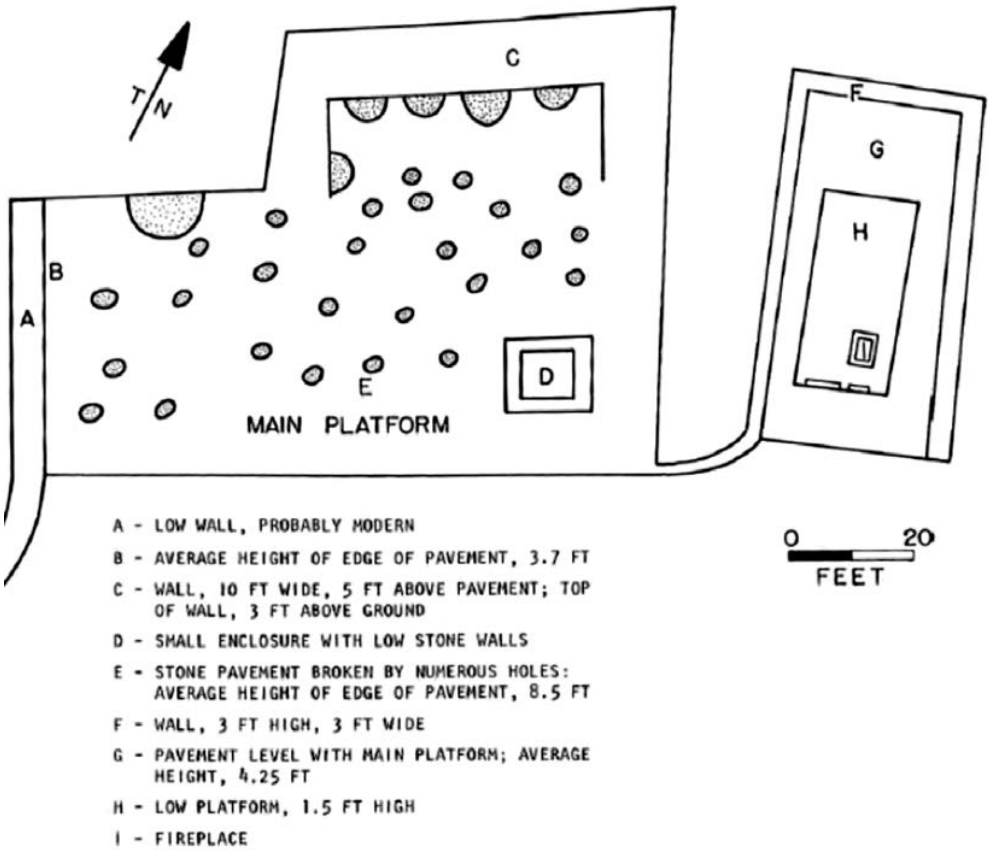


Figure 33. Puʻu ʻŌlelo Heiau, plan by Stokes (1909) as illustrated in Summers (1971).

impressive and this effect was obtained…At the southeast corner, the retaining wall was originally 36 feet high and at the northeast corner, 26 feet. On the south side, the least height is 8 feet. It might be mentioned that the upper part of the eastern retaining wall was almost vertical originally for from 6 to 9 feet , but below this level the slope was one horizontal to two vertical.

At the western end of the southern face, the stones are piled up loosely, not carefully laid as in other parts of the heiau. They seemed, however, to have been piled up in crescentic form. The large boulders forming the horns of the crescent were probably placed by Nature. On the north, a terrace adjoins the main platform, and is itself bounded on the west, north and east by walls (3 to 5 feet wide). The pavement of the terrace, which is a foot higher than that of the main platform, is composed of small stones, in which there is much soil. (The terrace is 54 feet west to east, and 24 feet north to south.) On the main platform, however, the present pavement is composed of the same large water-worn stones as are in the retaining walls. It was probably finished off with smaller stones originally, and these, as usual, sifted down out of sight among the larger stones. At about the middle of the western half of this pavement is a fire place which measures inside 1.8

by 1.5 feet and is 1.4 feet deep. It is curbed with four thin stones, 5 inches wide, which are placed on edge. The main platform is 96 feet west to east, and 33 feet south to north.

Figure 34. Eastern retaining wall of Kaluakapiʻioho Heiau (Site 175). The wall is 11 m (36 ft.) high at the southern corner and 8 m (26 ft.) high on the northern corner. Photo by Stokes (1909) as illustrated in Summers (1971).

Time and weather seemed to have been the main disturbing elements at this heiau. There is practically no sign of vandalism. On this account, I was surprised to find no trace of house platforms and other details of internal heiau arrangement. Concerning the name; in the list given me by Mr. Thrum, he had the name Kumukoʻa noted for this heiau. The name given by local natives is Kapiioho or Kaluakapiioho, the former probably being an abbreviation. Kapiioho is, locally, said to have been a *kahuna kilokilo* (seer), and was buried at Pakui [Site 178] on the ridge overlooking Kaluakapiioho heiau. A king of Oahu called Kapiioho was defeated and killed at the famous battle of Kawela [Site 139], some eight miles to the west. As the Oahuan survivors hurriedly fled in their canoes, the body of Kapiioho was probably taken and offered in sacrifice at some Molokai heiau. Thus, a suggestion of the origin of the name Kapiioho for this heiau is found. However, prior to such sacrifice, it probably had another name. Kumukoʻa was not the king of Molokai, though he may have been a chief of the district where the heiau is. He was a contemporary of Kapiioho of Oahu, and no doubt contributed to his defeat). (n.d.a:3, 4)

Site 176. Unnamed Heiau

A heiau is reported to be located in a kukui tree grove to the east of the jeep road that heads up towards the Molokaʻi Mountain and south of the ridge that separates Manawai and Kahananui. It is said to be a rambling structure in which kukui trees are growing (Summers 1971). This would place it below both Kahokukano and Pākuʻi Heiau to the west of the ridge line but east of Manawai Gulch.

Site 177. Kahokukano Heiau

This heiau is located on the ridge line on the boundary between Manawai and Kahananui. From Kalaeloa A it bears 209° 20’ 30”; a distance of 2 km (6,590 ft.). Stokes described this structure (Figure 35) in detail:

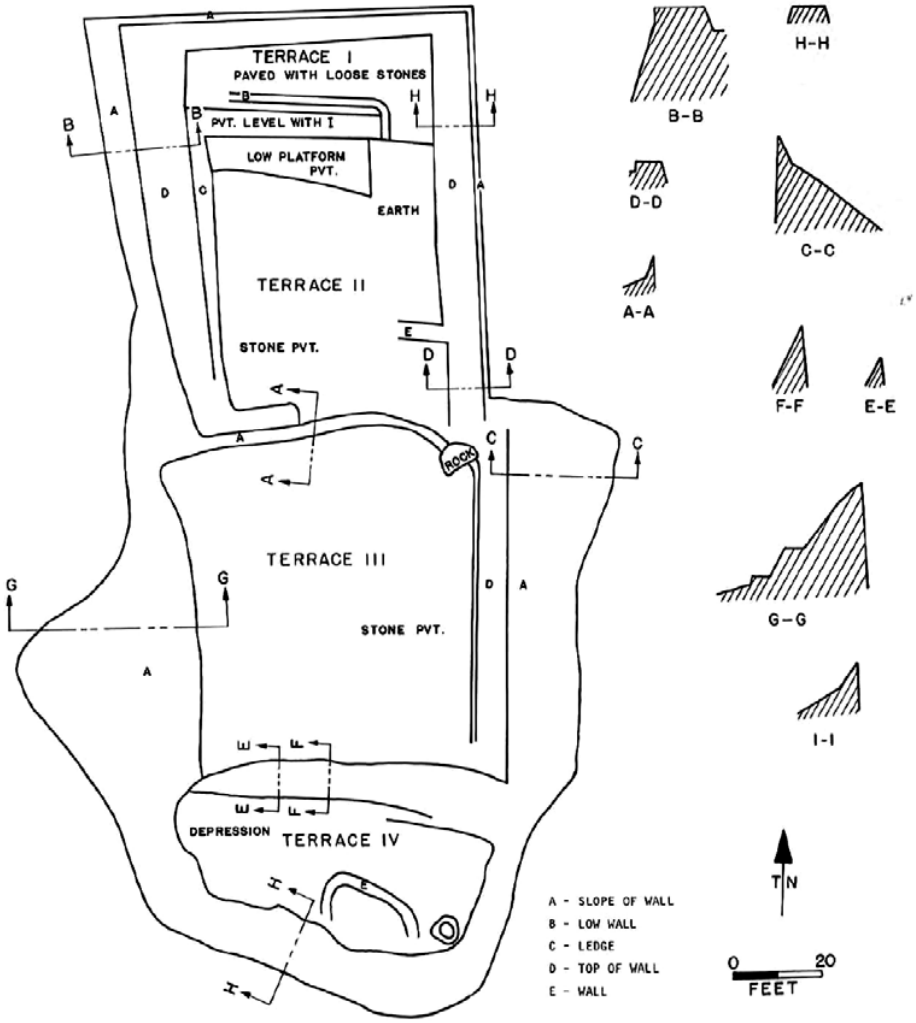


Figure 35. Kahokukano Heiau at the Manawai and Kahananui Ahupua‘a boundary, plan view map by Stokes (1909) as illustrated in Summers (1971:117).

> A structure of four terraces following down the ridge. The two upper terraces are protected by walls on the west, north and east, and the latter wall continues along the third terrace. All the other sides are open. The lines of this heiau are very difficult to follow because of the condition of the west, south and part of the east retaining walls [see Figure 36] The stones for the most part seem to have been loosely piled and not laid, but I would not care to make such as statement unless an extended investigation were made The heiau has been part of a cattle range for many years, and the animals may be responsible for the present condition. As well as can be judged, the entrance was on the east, up the incline between the third and fourth terraces. Access to the second terrace from the third, was probably obtained by using the top of the broad Hall on the east, or possibly over the large rock used in the retaining wall between the two terraces. The tops of the walls were also probably used to pass from the second to the first terrace. The pavements of the terraces are mostly of large stones, many of them waterworn. In some portions the earth is found, particularly towards the northern borders of the floors, where grading was probably done. Connected with the heiau were the names of Kaohele, a famous warrior and athlete, and Kumuko, a name of a Molokai chief, son of Keaweikekahialii of Hawaii and his Molokai wife Kanealae. (Stokes n.d.a:5)

The following information concerning the heiau was given by Thrum:

> ... credited to the Menehunes for its construction ... said to be a fish heiau in which sacrifices were offered. Mauka of it is a pond that used to be used for fish for a quartette of chiefs, Kumekoa [Kumuko 'a], Halai, Mulehu and Kalaniahiikapaa, who lived at the heiau with one, Kaohele, a famous runner, as their guard and protector. (Thrum 1909b:S3)

This heiau is well preserved and is an excellent example of a ritual site located along the boundary between two ahupuaʻa (Figures 36 and 37). It, along with Pākuʻi Heiau, just upslope from it on the same boundary, would have served the groups in both ahupuaʻa.

Figure 36. Photograph of retaining wall of Kahokukano Heiau, Manawai and Kahananui Ahupuaʻa, Summers (1931:118).

Figure 37. Recent photograph of Kahokukano Heiau showing condition of retaining walls at this site (photo from Google Earth).

Site 178. Pākuʻi Heiau

Located on the ridge that serves as the boundary between Manawai and Kahananui, this heiau (Figure 38) is north of Kahokukano Heiau. From the datum at Kalaeloa A it bears 205° 42'; a distance of 2,200 m (7,225 ft.) Stokes reported:

> The base of this structure might be described as an earthen terrace faced with retaining walls of stone. The ridge which the terrace spans declines to the south. The plan and cross-section are complete enough to require no special description. This heiau had a remarkable command of the surrounding country. While called a heiau by the local people, no one was able to designate its class. One man said that it was the grave of Kapiioho, a seer [see Site 175]. (Stokes n.d.a:4)

According to Thrum (1909a:40), the heiau was "…of *luakini* class,…traditional Menehune construction and *puuhonua* character; dedicated to Hina . Destroyed in the time of Kamehameha I." Thrum mentioned a heiau in Manawai "…said to have been built and occupied by Pakui, still to be seen" (Fornander 1916–1917:1). He likely was referring to Pākuʻi Heiau, although the structure appears to have been constructed before Pakui's reign.

Site 179. Pūhāloa Fishpond

This loko kuapā was 2 ha (6 ac.) in area. The wall was approximately 380 m (1,245 ft.) long. Pūhāloa, "Long Hollow" was being used in 1901 (Cobb 1902:430). In 1949 the eastern part of the fishpond was filled in and that portion of the wall was in ruins. The western side was also filled in, but the wall was still standing. The wall in the center was still intact. This fishpond appears in Figure 39; compare this to the earlier photograph, Figure 23.

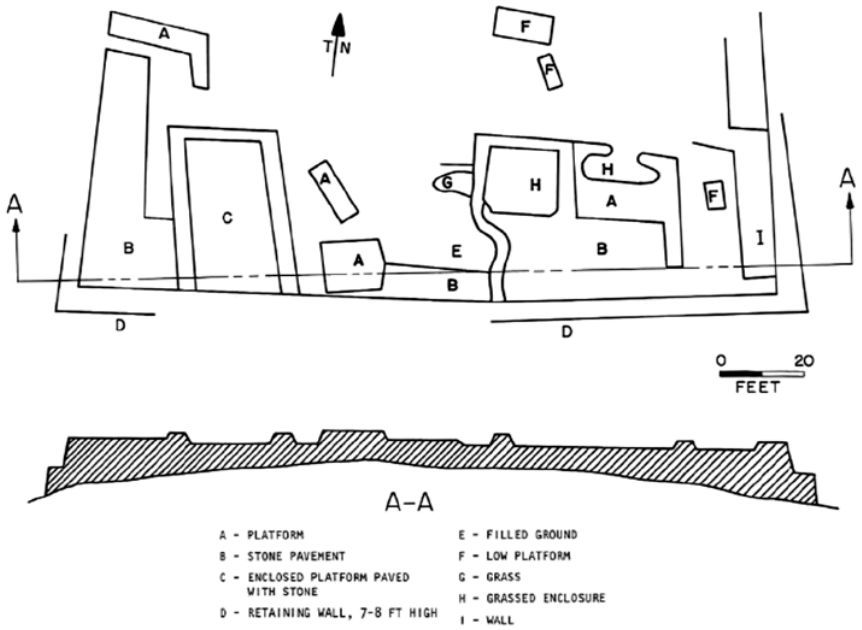


Figure 38. Plan view of Pāku‘i Heiau, (Site 178) Manawai and Kahananui Ahupua‘a, Stokes (1909), as illustrated in Summers (1971:120).

Figure 39. Photograph of Pūhāloa Fishpond, Manawai Ahupua‘a.

Kahananui Ahupuaʻa

This long, narrow ahupuaʻa shares a boundary with Manawai on its west side along a major ridge line where at least two heiau are located. It is 126 ha (312 ac.) in area. To the east, the ahupuaʻa boundary is located on Kahananui Stream separating it from ʻUalapuʻe Ahupuaʻa. Towards the top of the slope near the East Molokaʻi Mountain the boundary is located on a small ridge line extending south from the summit. Summers' listing of sites remains the primary archaeological source for Kahananui. It has a limited coastline with no associated fishponds.

Site 180. Waiauwia Heiau

Located 120 m (400 ft.) from the ocean, Waiauwia Heiau bears 180° 7'; at a distance of 190 m (625 ft.) from the datum point of Manawai A. Now destroyed, Stokes (n.d.a:6) observed, "…Lines indefinite, probably a platform originally."

Site 181. Kalauonakukui Heiau

Located just north of the Kahananui cemetery and near the boundary of ʻUalapuʻe, this structure measures approximately 38 m (125 ft.) east to west and 26 m (85 ft.) north to south. The walls on the south and west were still standing in 1962. Thrum (1909a:40) described Kalauonakukui Heiau as, "...80 feet by 100 feet, with walls 6 feet high. Of [or assigned to the] husbandry class." Stokes did not record this heiau.

Site 182. Kalauonokukui Heiau

This heiau is located in the valley that marks the boundary between Kahananui and ʻUalapuʻe. From the datum site at Kalaeloa A the heiau bears 209° 40' 30"; at a distance of 2,360 m (7,755 ft.). Stokes (n.d.a:6) described it as "an irregular shaped enclosure whose lines have been destroyed by later cultivation. A point of interest is the height of the south wall, 8 ft." This heiau was still in place as recently as 1970.

ʻUalapuʻe Ahupuaʻa

This ahupuaʻa, which likely was originally joined with Kahananui Ahupuaʻa to the west, extends to the summit of the East Molokaʻi Mountain. It has a relatively wide expanse along the coast and narrows towards the mauka end. It ranks fourth in size among the nine ahupuaʻa with a total of 284 ha (704 ac.). The land is described as being "…a good land, one filled with taro patches and also a pond" (Kanepuu 1867b). This is reinforced by historic maps that show a taro-growing area just inland from ʻUalapuʻe Fishpond (Figure 40). Distinct taro loʻi are illustrated on more recent maps (Figure 41). ʻUalapuʻe had an ʻili lele placed in Wailau called Halekoki or Halepoki (Monsarrat 1888a:90). This may be the same as Halepoki (McElroy 2012:138) a location with taro loʻi. South of the road there is spring called Loʻipunawai that Cooke described as follows: "Famous spring about which there are many legends. In seeking this spring many people would die of thirst, or after finding it they would drink too much and die as a result" (1949:152). Immediately adjacent there were a series of loʻi placed between the spring and ʻUalapuʻe Fishpond (see Dunn 1956).

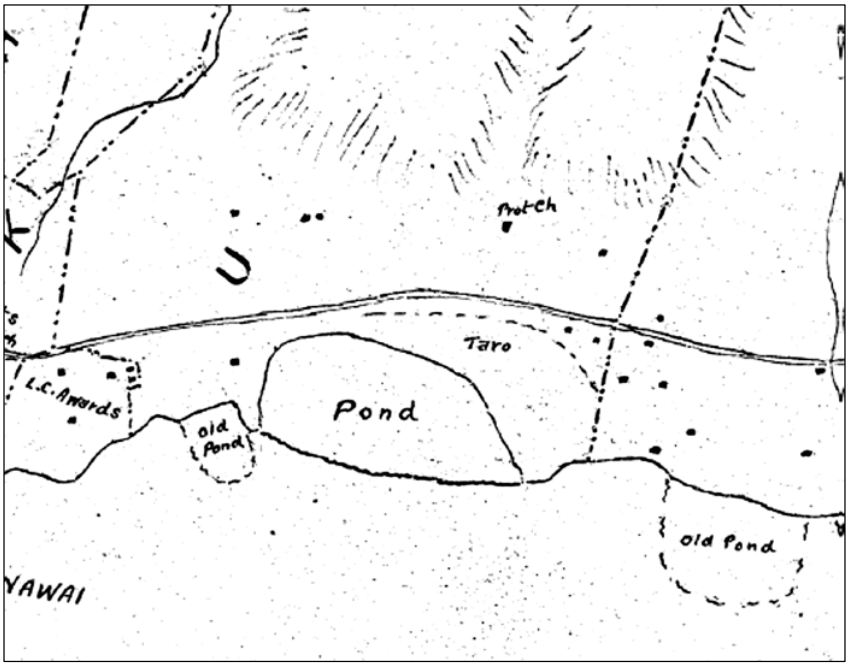


Figure 40. Map of coastal ‘Ualapu‘e showing large section of irrigated taro fields just inland from ‘Ualapu‘e Fishpond (Monsarrat 1896).

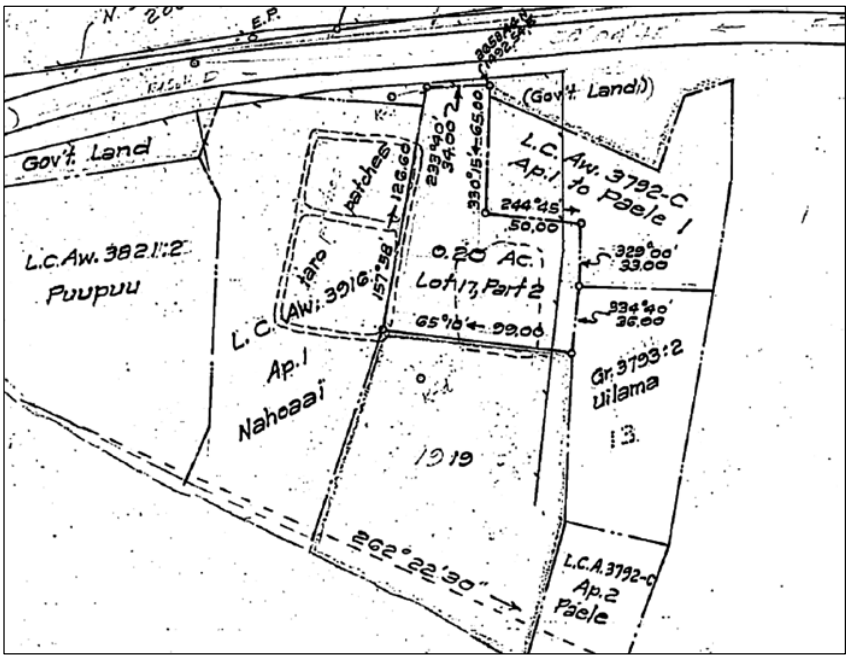


Figure 41. Map of coastal ‘Ualapu‘e showing taro patches with walls (Dunn 1956).

Site 183. Kahua Maika Ka'akeke

According to local residents, this game field is located between Kalua'aha and Kahananui. The kahua maika began at the point where there is a stone wall extending directly inland in a straight line to Kahananui Stream, a distance of about 900 m (3,000 ft.). The course was said to be a straight groove-like ditch, with no stakes on either side. It was a hard course on which to win, as the 'ulu maika stone had to be rolled up on to the other side of stream. The kahua maika is now filled in.

Kanepuu said of Ka'akeke:

> Here ['Ualapu'e] lies the famous maika rolling field, Ka'akeke and for this field came the proud boast, "Pohapoha keiki o Ka'akeke (The lads of Ka'akeke make resounding noises)…Perhaps because they were such strong maika throwers" (1867b). In the olden days, the chiefs gathered at Ka'akeke. Kamehameha I visited it in 1812. He had evidently been there before, as I said: "…the king sailed to Molokai to see again the *maika* field Kaakeke" (1959: 106). Kamakau mentioned a spring at Ka'akeke : "It is said, however that the stump of one tree was left by the spring at the *maika* ground of Ka akeke, and that people and animals were poisoned by drinking the water there; hence that spring at 'Ualapu'e was filled in *(kanu'ia).*" (1964:130)

Site 184. Halemahana Fishpond

This small loko kuapā (Figure 42) is only 1.3 ha (3.3 ac.) in area, but was still in use in the early 20th century (Cobb, 1902:430). The pond had two mākāhā along its 220 m (725 ft.) outer wall. The name, Halemahana, was recorded by Stokes (n.d.c:37). The pond is now destroyed.

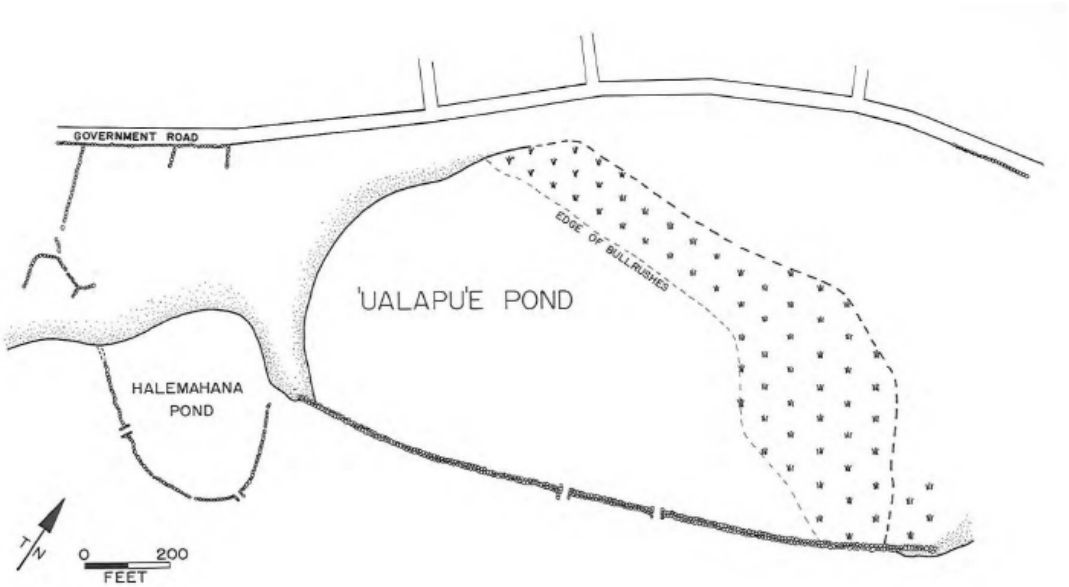


Figure 42. Halemahana (Site 184) and 'Ualapu'e Fishpond (Site 185). Plan view drawing by Evans (1937) as illustrated in Summers (1971:122).

Site 185. ʻUalapuʻe Fishpond

A loko kuapā of 13.6 ha (22.25 ac., see Figure 42) originally, this pond had only approximately 6.1 ha (15 ac.) that were clear of all bull rushes and silt in 1957 (Dunn n.d.). This pond supported on outer wall that was 480 m (1,575 ft.) in length and had two mākāhā in it. This wall was 1.2 m (4 ft.) high on the ocean side and 2.4–5.8 m (8–19 ft.) wide. The outer wall was constructed of basalt with some coral fill. ʻUalapuʻe was used commercially in 1901 (Cobb 1902:430) and was in production almost continually until 1960, when a tsunami damaged the wall considerably and destroyed the two mākāhā. ʻUalapuʻe was one of the ponds that was noted for the "fatness" of its mullet in the 19th century (Kahaulelio 1902a). In 1959 it was considered "…one of the best fishponds on Molokai because there are several fresh water springs in the pond which seem to benefit the raising of mullet and clams" (Apo 1959).

Puʻukuhe Heiau

The name was recorded by Stokes (n.d.a:6) but the heiau was not visited by him.

Ahupuaʻa Boundary Wall: ʻUalapuʻe and Manawai

Historic maps (Dunn 1956; Evans 1938; King 1933) of the Manawai and Kahananui coastline depict land parcels, fishponds, the main road, and the ahupuaʻa boundary between these two territories. Evans (1938) illustrates the boundary at the coast as extending from the east wall of Pūhāloa Fishpond and connecting with a stone wall that runs up to the road and then turns west. King (1933) has a more detailed illustration (Figure 43) that identifies the wall as the boundary between the two ahupuaʻa, and again it connects with the east wall of the Pūhāloa Fishpond. A section of the boundary is represented as a double wall that extends northward to the main road (Figure 44). As recently as 1956 this wall was still standing.

Ahupuaʻa Boundary Wall: ʻUalapuʻe and Kaluaʻaha

There is another ahupuaʻa boundary wall depicted on a historic map (Figure 45). The wall identified as a "kuauna" lies directly on the ahupuaʻa boundary as it is depicted on other historic maps (Monsarrat 1896; Wall 1917). Kuauna is the term for "the bank or border of a taro patch" (Pukui and Ebert 1986:171). The Monsarrat map from 1896 shows an area labeled as taro adjacent to this boundary wall on the ʻUalapuʻe side. On the Kaluaʻaha side of the boundary there are depicted a number of stone wall enclosures, some of which appear to match with LCA boundaries.

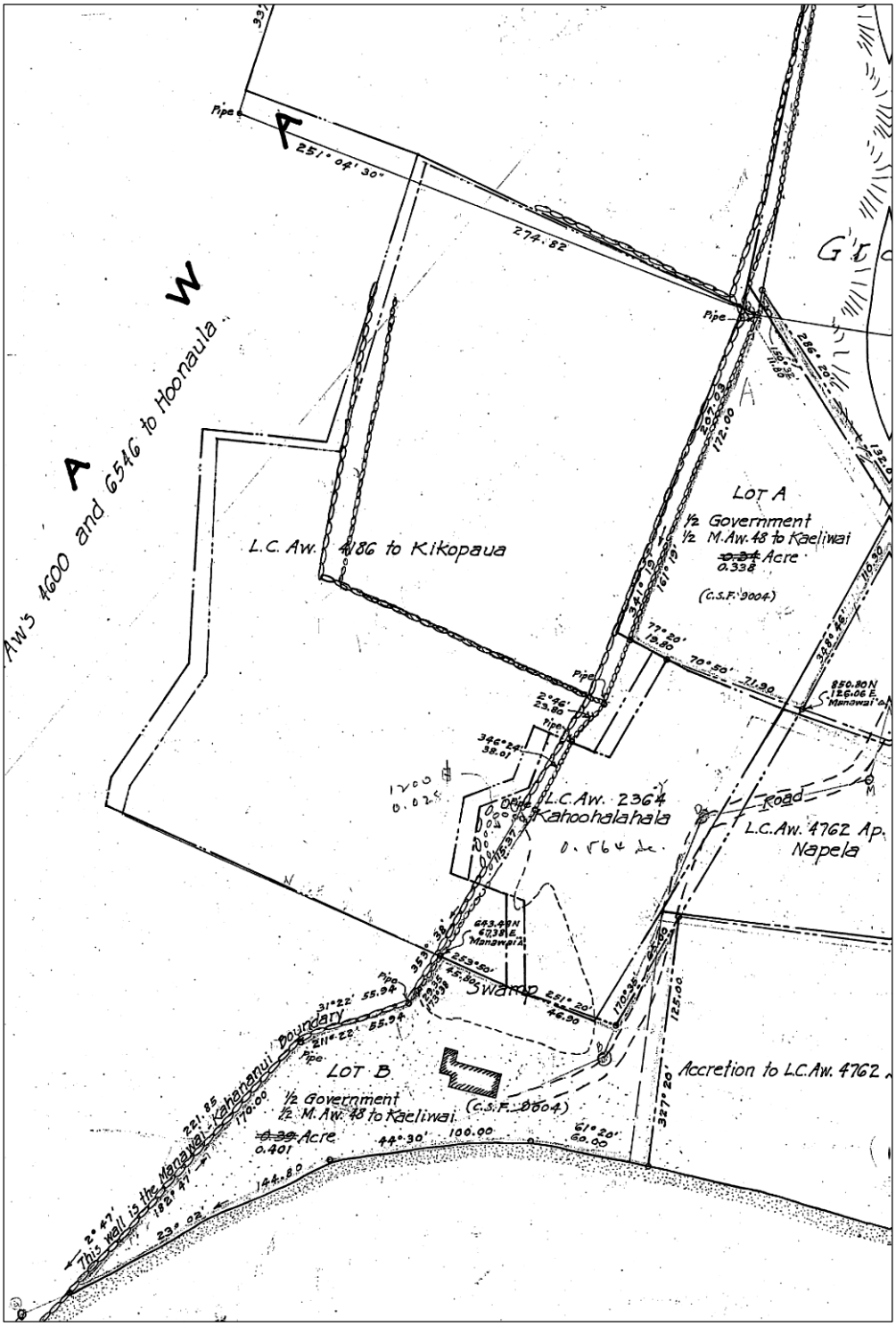


Figure 43. Map of ‘Ualapu‘e coast showing boundary wall between Manawai and ‘Ualapu‘e Ahupua‘a (King 1931).

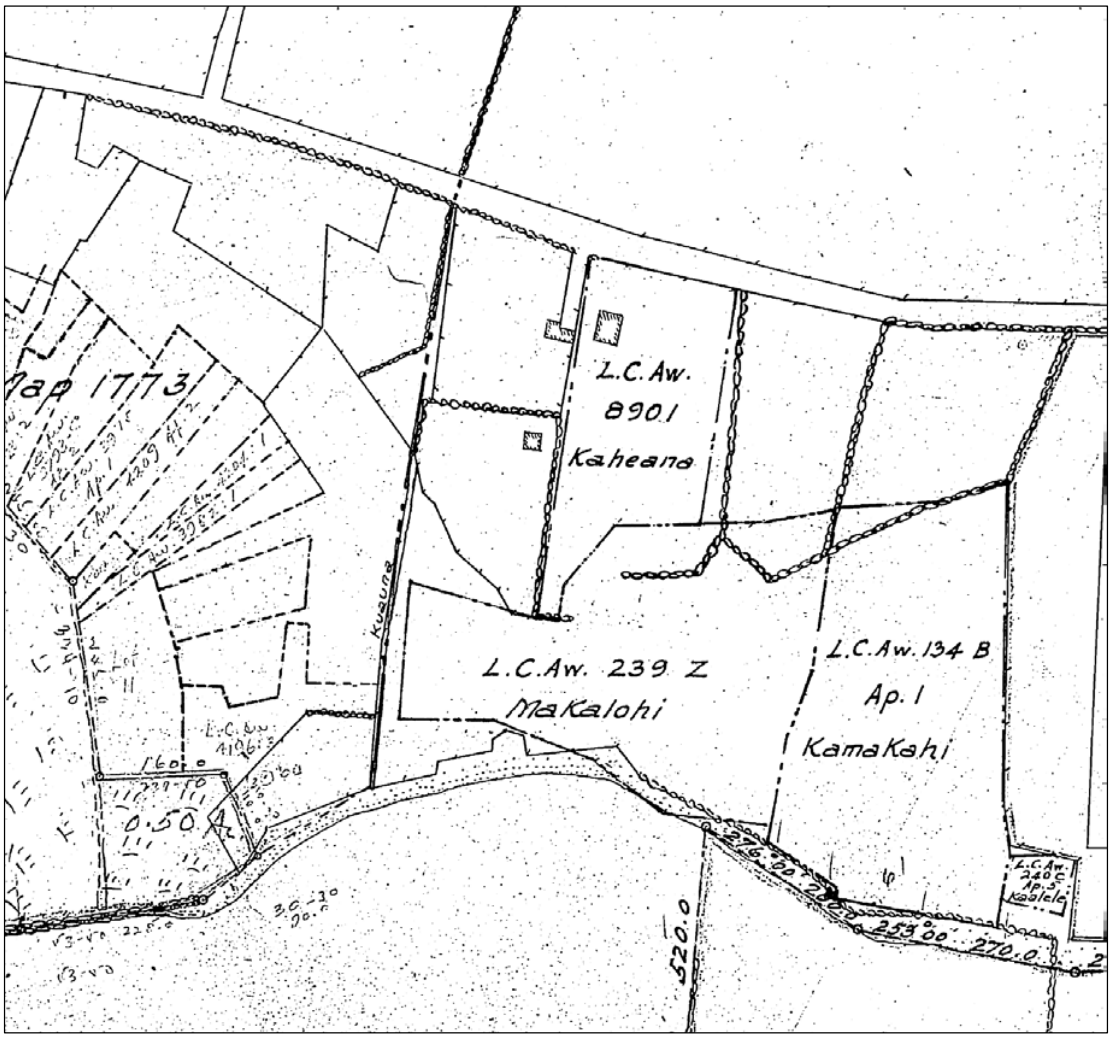


Figure 44. Map of coastal ‘Ualapu‘e showing extant stone walls of LCA properties and ahupua‘a boundary between ‘Ualapu‘e and Kalua‘aha (Evans 1937).

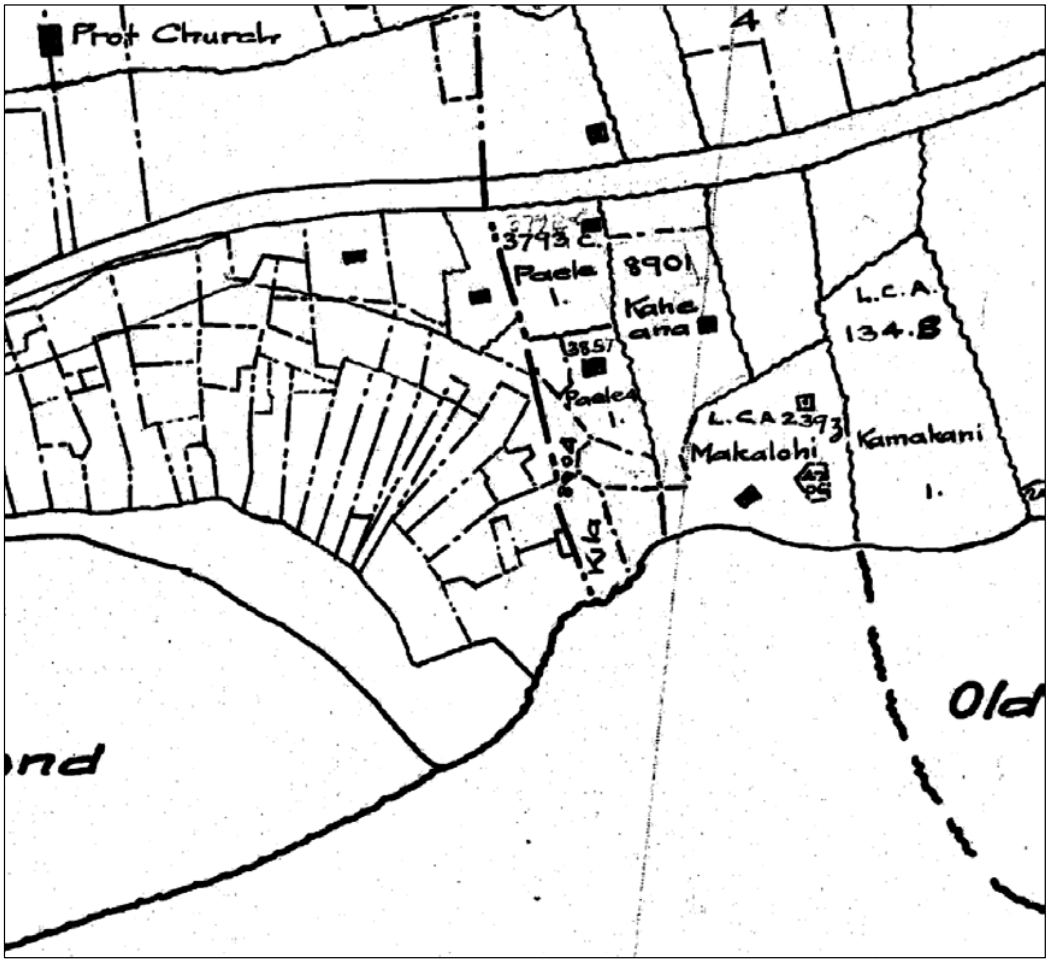


Figure 45. Map of coastal ‘Ualapu‘e and Kalua‘aha showing ahupua‘a boundary and surrounding land awards (Wall 1917). Compare this to Evans (1937).

Kalua‘aha Ahupua‘a

This large ahupua‘a of 586 ha (1,450 ac.), shares its eastern boundary with Mapulehu. It is one of the few ahupua‘a in the project area that contained multiple primary drainages. Its main drainage, Kalua‘aha Gulch, branches into two secondary drainages about midway up the slope to the East Moloka‘i Mountain. These branches extend the catchment area to just below the summit.

In addition to serving as an ahupua‘a, Kalua‘aha was previously a pu‘uhonua, a place of refuge. Pogue wrote of it more than 100 years ago:

> ... certain lands were set apart on these islands and called Sacred Earth *(pu‘uhonua).* Such were Ka-lua-aha and Mapu-lehu on Molokai. In the time of Kamehameha the First some people came from Hawaii and landed on Molokai. Some were killed, but others ran through the brush and hid for fear of death and others still ran to Ka-lua-aha and entered

> that place and escaped. They were not killed, they were not punished because this was a place of Sacred Earth. (Pogue n.d.:32)

According to Kamakau (1964:19) Kamehameha I made Kaluaʻaha a puʻuhonua because it was one of the lands belonging to his favorite wife, Kaʻahumanu. There are references to Kaluaʻaha as being a puʻuhonua before Kamehameha's time. It was to this place and the safety it would provide that Kaohele was running when he was killed by a sling stone. Another account said that the chiefs Kumuka, Halai, Mulehu, and Kalaniahiʻikapaʻa "…fled to Kaluaaha and hid…" when they were attacked by a force from Hawaiʻi (Thrum 1909b:49).

Other accounts suggest the members of the community at Kaluaʻaha were opposed to those from Hawaiʻi Island living along their shores. They were forced to move inland, to the kula zone, to live. When allowed to fish, they were required to share the catch with Kamehameha's followers from Hawaiʻi Island. Here is an account of what happened next:

> You have heard the saying, "O Molokaʻi i ka pule oʻo" or Molokai of the potent prayers. That is not what happened. The Hawaiian people were poisoned by the *ʻauhuhu.* These followers of Kamehameha did not eat poi made of taro. They ate sweet potatoes. One day a command come from Kamehameha to make a big feast for his subjects…. Molokai people resented the tasking of these shores, here, by those people. These people assured Kamehameha "Yes, we can do it." [Then]…they went and got some *ʻauhuhu* [a poison made from a local fish]...and pounded it, [and]they mixed [it] with the sweet potatoes. The people of Hawaii, in eating it, all died, except the steward…was spared for [in order to tell] Kamehameha. "Harken, O Chief, all of our people are dead. They sickened." It wasn't sickness. They were poisoned by the people of Molokai…That's how the Molokai people returned to dwell on the shore, here to this day. (Stokes n.d. in Summers 1971:123–124)

Monsarrat (1888a:90–91) reported that Kaluaʻaha Ahupuaʻa is said to have had a number of lele ʻili in Wailau Ahupuaʻa, on the windward side of the island. These included the places known as Haleokona, Kahuwa, Kanakapaio, Kawailoa, Manu, ʻŌhiʻa, Paehala, Puʻulena, and Upelele, along with plots located on the stream. It is possible that Kahuwa corresponds to Kahiwa an area of loʻi on the east side of Wailau Valley alongside Kahawaiʻiki Stream.

Two archaeological surveys or monitoring projects have been conducted in Kaluaʻaha (Athens 1985; Barrera 1983). Both projects were done in the same area: the Kaluaʻaha Estates Subdivision, located east of Kaluaʻaha Stream and just north of the main road. Barrera's map (1983:2) of the property shows two sides of a stone wall enclosure with several features within its interior, at least two midden deposits, a surface scatter of ceramics, and four mounds. The complex was given a site number: 50-60-05-531. While fragments of glass and ceramics attest to the historic period occupation of this complex, several traditional Hawaiian materials and objects were also found: a piece of volcanic glass, charcoal, marine shell, and ash deposits in two of the middens that were excavated. Athens' (1985) report is a follow up to Barrera's initial work and after the site had been grubbed, i.e., cleared of surface materials. Athens recovered a number of traditional Hawaiian materials as well: volcanic glass flakes, polished adze flakes (likely for re-sharpening) and adze fragments. He also encountered a large earth oven or imu location. Although Athens recommended additional excavations within the large midden area, estimated to be more than 130 m^2 (1,400 $ft.^2$), there was apparently no further archaeological work at the site. Nonetheless, based on the materials recovered this was likely a habitation complex just inland from Kaʻopeahina Fishpond.

Site 186. Hale o Lono or Pahu Kauila Heiau

Located at the mouth of a gulch along the west side of Kalua‘aha, this heiau (Figure 46) is 670 m (2,200 ft.) from the sea. From Manawai A it bears 212° 37’; for a distance of 1,560 m (5,125 ft.) East of the heiau is a gulch called Pahukauila. Stokes wrote of this site in 1909:

> The site has been somewhat disturbed in later times, but a curious feature is the western half. This in the main consists of a stone platform and a stone pavement, both on the same level, but divided by a high wall. Probably originally, the wall continued around the northern end of the platform, leaving the western and southern borders open. The ground declines to the west and the south, so that such borders are from 3 to 5 feet above the ground. The local information gathered was to the effect that this heiau was only used for prayers, not human sacrifice, and that another name for it was Pahu Kauila. (Stokes n.d.a:6)

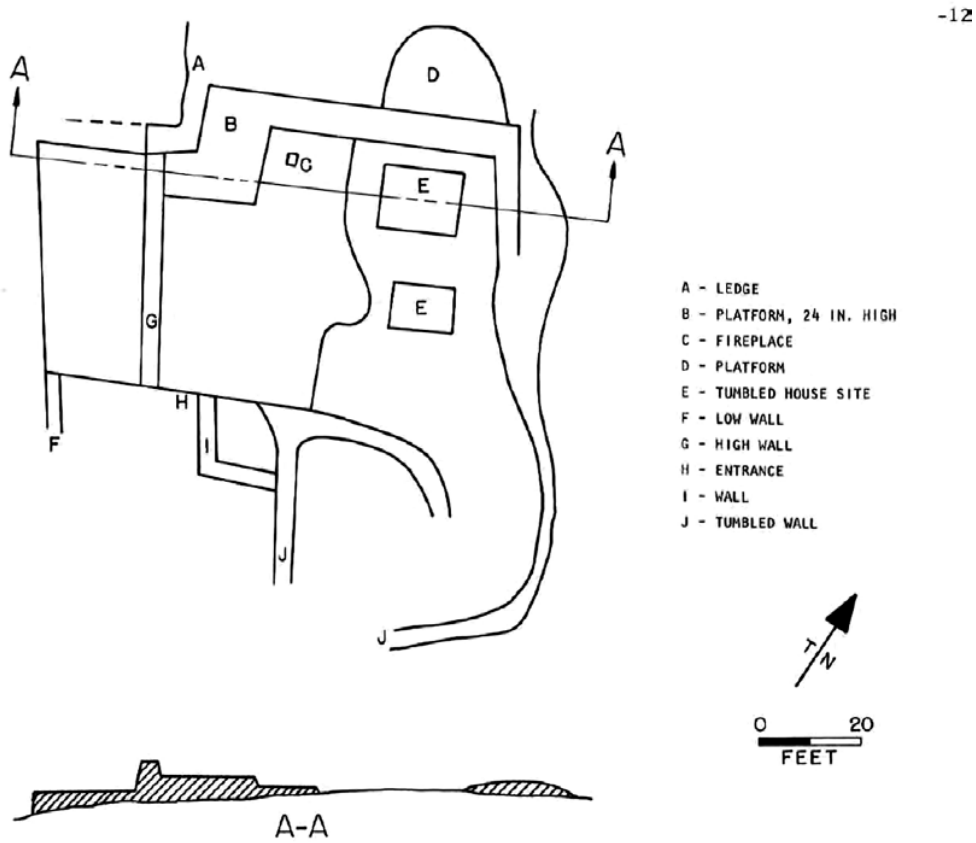


Figure 46. Plan and cross section of Hale o Lono or Pahu Kauila Heiau (Site 186). Plan by Stokes (1909), illustrated by Summers (1971:125).

Site 187. Unnamed Heiau

This heiau is located in the valley, 305 m (1,000 ft.) to the north of Hale o Lono Heiau (Site 186). From Manawai A it bears 205° 25' 30"; at a distance of 1,790 m (5,870 ft.) According to Stokes:

> The structure is an enclosure measuring approximately 100 by 50 feet. Inside the enclosure adjoining the northern wall, is a platform, approximately 40 by 18 feet. On its northern side it is 4.7 feet high. Extending from the western portion of the north wall is an irregular enclosure about 40 by 40 feet. This place was described as *kahi ho'olulu o na mahi'ai,* (resting place of the farmers). The site indicates a heiau. (Stokes n.d.a:6, n.d.f)

Site 188. Kalua'aha Fishpond

This loko kuapā (Figure 47) was 5.3 ha (13 ac.) in area (Dunn n.d.). There were four mākāhā along the 640 m (2,110 ft.) wall. In 1901 the fishpond was being used commercially (Cobb 1902:430). The wall is now destroyed; only the foundations remain. According to Dunn (n.d.) Kalua'aha Pond "...has always been considered a government pond."

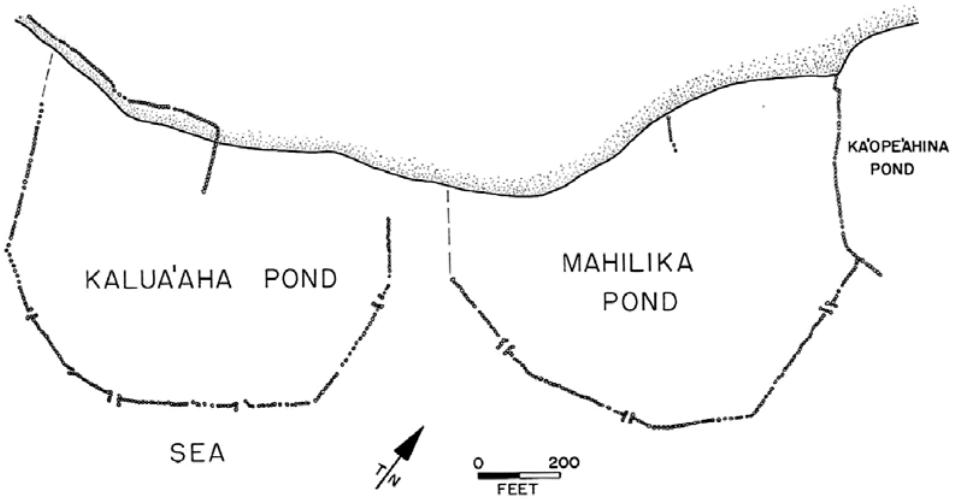


Figure 47. Plan of Kalua'aha and Mahilika Fishponds (Sites 188 and 189, respectively) in Kalua'aha Ahupua'a. The western portion of Ka'ope'ahina is visible in the far right. Plan view by Evans (1937) as illustrated in Summers (1971:126).

Site 189. Mahilika Fishpond

This loko kuapā (see Figure 47) was 5.4 ha (13.3 ac.) in area (Dunn, n.d.). There were three mākāhā in the 540 m (1,760 ft.) wall. In 1901 the fishpond was in use for commercial purposes (Cobb 1902:430). The wall is now destroyed; only the foundations remain.

Site 190 Ka‘opeahina Fishpond

This loko kuapā has an area of 8.3 ha (20.5 ac.); the wall is approximately 540 m (1,770 ft.) long. Since 1933, three tsunamis have severely damaged the wall of this fishpond and each time it has been rebuilt by the present owner. The eastern portion was rebuilt in 1960 with stones brought from "up mauka". This portion of the wall is now 1.8–2.1 m (6–7 ft.) wide and 1.5 m (5 ft.) high. The western portion of the wall has not been as severely damaged by the tsunamis and it is probably near its original form. It is .9–1.2 m (3–4 ft.) wide and 1.5–2.4 m (5–8 ft.) high. In 1962 there was a cemented mākāhā in the eastern wall, which was 1.2 m (4 ft.) wide, with a metal grating on the ocean side of the opening, but prior to 1960 there was no mākāhā. According to Wight

> Rex [Hitchcock] never had a *makaha* at Kalua‘aha and all the fish were spawned in his pond. He never had many fish to eat because it probably is necessary for the sea water to go in and out in abundance to give food or make the food in the pond grow faster. The taste of Kalua‘aha fish good but not in a class with that of Kupeke [Site 206]. (Wight 1956)

Ka‘opeahina Fishpond was used commercially in the early 20th century and was still being used as late as 1960. It was stocked with mullet and ‘āholehole in 1962. Summers (1971:127) opined that the fishpond was probably named after D. Kaopeahina, the person to whom it was awarded by the Land Commission. Alternatively, there is a place name reference to "ka‘ ope a Hina" (Hina's bundle) in Pukui et al. (1974:87).

Site 191. Keana o Hina

Keana o Hina or "The cave of Hina", is located beneath a projecting ledge of lava on the eastern slope of Moloka‘inuiahina Gulch (Figure 48). It is a shallow cave, measuring approximately 5.5 m (18 ft.) in length, 1.2 m (4 ft.) in depth, and .9 m (3 ft.) at maximum height. According to Stokes:

> The people of Molokai claim that when you have seen this spot, then you have seen the whole of Molokainui a Hina, the mother of Molokai lived. She bathed in a pool in front of her cave. Before bathing, she prayed and this made the water come down and fill the pool. The pool was screened with maidenhair fern. On a platform of flat rocks above the pool, she dried herself and rested. When her hair was dry she returned to her cave. In front of the cave was a kukui tree. (Stokes n.d. in Summers 1971:127)

It is customary to pay respects to Keana o Hina with a gift, usually a lei, and also for the visitor to wear a ti leaf around his neck for protection. In the past, the navel cords of infants were hidden in the cave (Cooke, 1949:152).

Site 192. Ni‘aupala Fishpond

This loko kuapā is 13.6 ha (33.6 ac.) in area. It has a wall approximately 600 m (1,975 ft.) long. The fishpond is beginning to fill on the western side. Wight described the pond as being:

> …what the Hawaiians called head alone, *poo wale no* ... The fish shiny, skinny, big head, no body and always slim crop and always thin. (Wight 1956)

Ni‘aupala was used commercially in 1901 (Cobb 1902:430) and continued in use through 1957. It was badly damaged during the 1960 tsunami. The pond is also known as “Jones’ pond,” William Ap. Jones having been awarded it by Grant 2531.

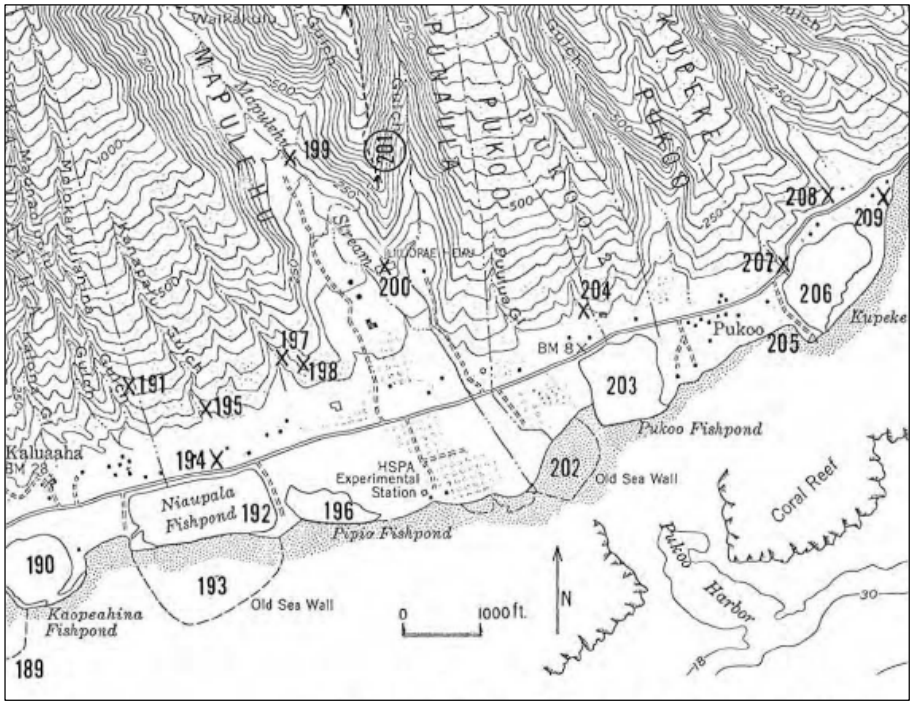


Figure 48. Map showing locations of sites from Kalua‘aha to Kupeke (Sites 189 to 209). Adapted from 1952 USGS Halawa Quadrangle map as illustrated in Summers (1971:124).

Site 193. Unnamed Fishpond

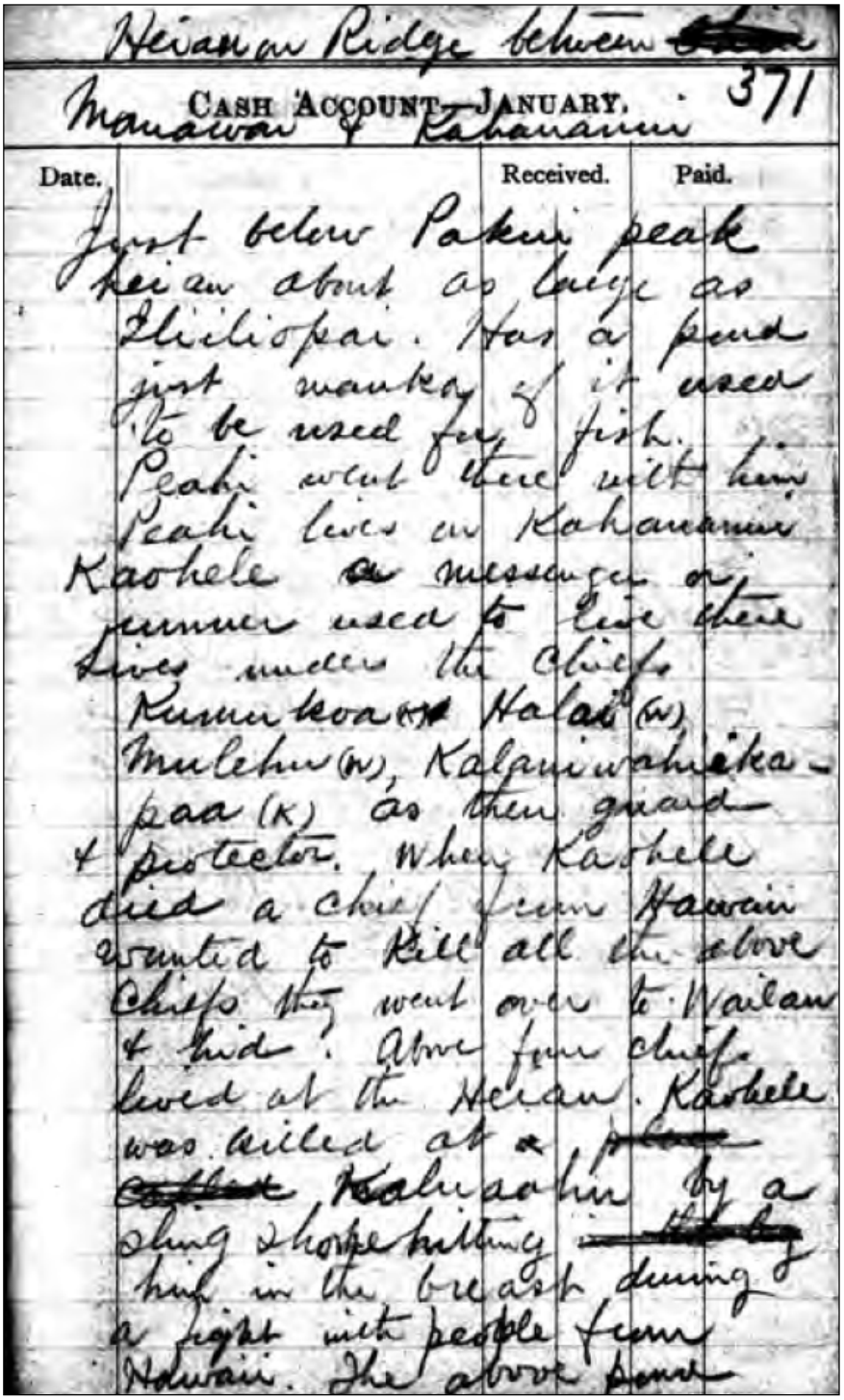
There are traces of an unnamed loko kuapā adjoining the seaward wall of Ni‘aupala Fishpond (Site 192) and extending out across the reef. The foundations of this fishpond show up on aerial photographs from the mid-20th century. The fishpond wall was approximately 920 m (3,025 ft. in length. There was at least one mākāhā still visible in the early 1970s. The pond has been long destroyed as no claim was made for the pond at the time of the Land Commission hearings, and it does not appear on any of the old maps, (e.g., Wall 1917). Monsarrat (1980:64) does depict the outline of this fishpond in his field notes, but did not include it on the final map.

New or Not Previously Recorded Cultural Sites

There are three cultural sites we have identified, not well-documented and not previously treated as separate cultural sites. They are all placed within the boundaries of the Pāku‘i project area. None of them has been located on the ground; we know of them from oral traditions and from field notes taken by Monsarrat in the late 19th century.

Pāku‘i Peak Fortress

There are two accounts of a fortress or a stronghold in the vicinity of Pāku‘i Peak, a portion of the East Moloka‘i Mountain Summit. The first of these accounts was recorded by Monsarrat in his diary (Figure 49).



Heiau on Ridge between ~~[illegible]~~

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Manawai & Kahananui

Date.		Received.	Paid.

Just below Pakui peak
Heiau about as large as
Eliliopai. Has a pond
just mauka of it used
to be used for fish.
Peahi went there with him
Peahi lives in Kahananui
Kaohele ~~a~~ messenger or
runner used to live there
lives under the chiefs
Kumukoa (K) Halai (K)
Mulehu (K), Kalaniwahieka-
paa (K) as their guard
& protector. When Kaohele
died a chief from Hawaii
wanted to kill all the above
chiefs they went over to Wailau
& hid. Above four chiefs
lived at the Heiau. Kaohele
was killed at a ~~place~~
~~called~~ Kalusaohia by a
sling shot hitting ~~[illegible]~~
him in the breast during
a fight with people from
Hawaii. The above ~~[illegible]~~

Figure 49. Page from Monsarrat's field diary (1888a.) describing Pāku'i Heiau on the Manawai-Kahananui Ridge.

Its frame of reference is the large heiau, Pāku‘i paired with Kahokukano Heiau on the ridge separating Manawai and Kahananui Ahupua‘a. Although it appears to suggest the heiau is located at Pāku‘i Peak, it is clear by the context the referent is Pāku‘i Heiau.

> Heiau on Ridge between Manawai and Kahananui
>
> Just below Pakui Peak, [a] heiau about as large as Iliiliopai [‘Ili‘iliōpae]. Has a pond just mauka of it used to be used for fish. Peahi went there with him [Kahalekapu]. Peahi lives in Kahananui [‘Ualapu‘e]. Kaohele a messenger or runner used to live there. Lives under the chiefs Kumukoa (k), Halai (w), Mulehu (w), Kalauiwahikapaa (k) as their guard and protector. When Kaohele died a chief from Hawaii wanted to kill all the above chiefs. They went over to Wailau and hid. Above four chiefs lived at the heiau. Kaohele was killed at Kaluaaha by a sling stone hitting him in the breast during a fight with people from Hawaii. (Monsarrat, on consultation with Kahalekapu, his kama‘āina source on Pelekunu, Wailau, and Halawa, 1888a:371.)

Previously, Monsarrat had related the story of ‘Ili‘ili‘ōpae Heiau, and its construction and chief, Kaohele (Figure 50).

> Heiau at Mapulehu
>
> Called Iliiliopoi [‘Ili‘ili‘ōpae] in Mapulehu Valley at the foot of a ridge on which the trail to Wailau runs up. Built by Kupa an old chief. Was cut by stream, used to run further to the West. East end now standing, said end was rebuilt or repaired by Kaohele, a high chief and warrior. He lived on top of a high peak back of Ohianui called Pakui, overlooking Wailau and Pelekunu Valleys (with his warriors). People from Hawaii climbed up on [the] peak from north side, drove him out and killed him. (Monsarrat 1888a., citing Kikoi of Puko‘o)

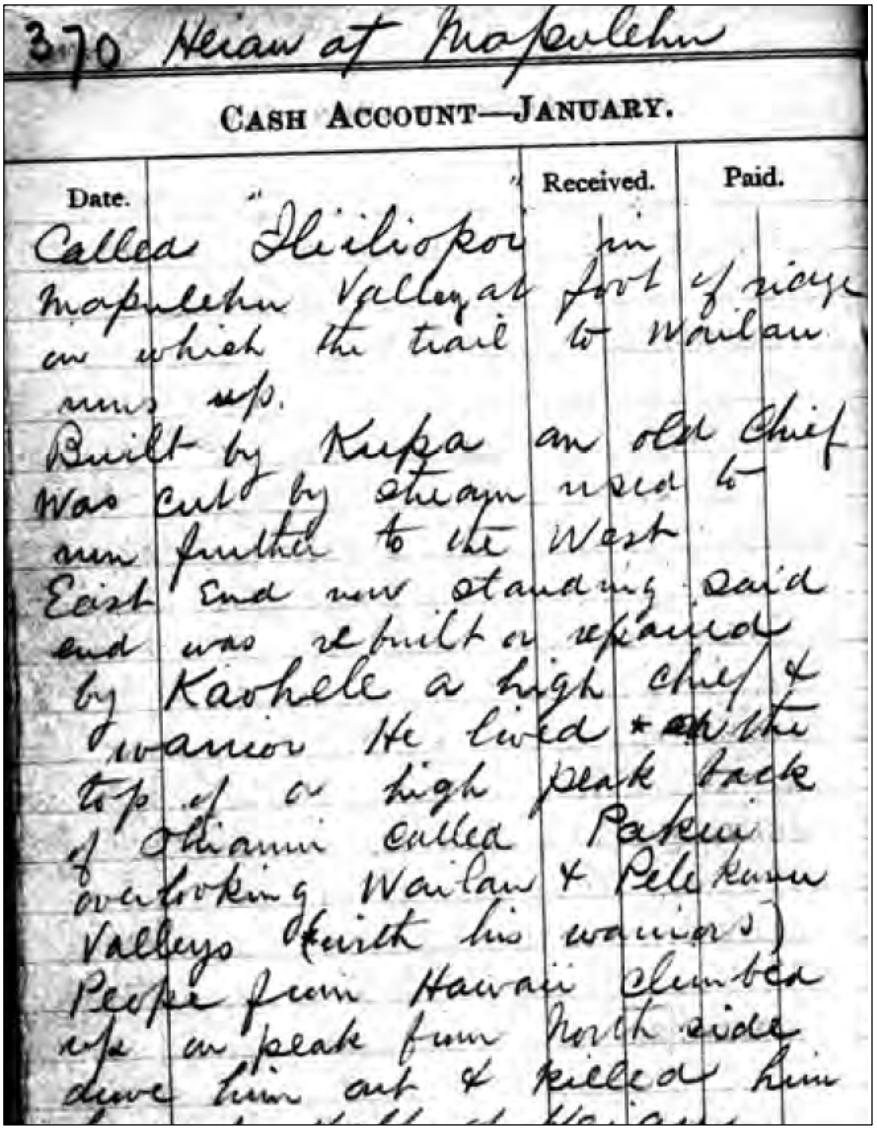
The second account comes from Kamakau who identified Pāku‘i as a pu‘ukaua, or fortress. Kiha-a-Pi‘ilani, in trying to escape from Lono-a-Pi‘ilani on Maui:

> …fled in secret to Molokai. The fortress *[pu‘ukaua]* of Paku‘i, above Hananui [Kahananui] and ‘Ualapuni [‘Ualapu‘e], was surrounded. Kiha escaped with his life by leaping from the fortress into a kukui tree and went to Lanai. His life was saved by leaping from the fortress of Paku‘i and fleeing to Lanai. (Kamakau 1961:22)

Although the accounts differ somewhat, both agree that there was a fortress or refuge at the summit of the East Moloka‘i Mountain in the vicinity of Pāku‘i Peak. This fortress is named in the accounts of two chiefs who fled or moved to it in order to escape their enemies.

This cultural site would be located within (or more likely just outside the boundaries of) the Pāku‘i project area. “The heiau was built by forming a line of people from the shore to the heiau site and passing stones from one to the other. There could not be small fish enough + caught to give each man at work a single fish a day[,] but it could be done by giving each one a small shrimp. The above from + old man by the name of Kahalekapu who was born at Pelekunu and has lived for years at Halawa” (Monsarrat 1888a:372).

But there is at least one other fortress whose location has been placed on at the top of Ka‘apahu Peak (Cartwright n.d.a in Summers 1971:100) at the upper, mauka boundary of Kamalō Ahupua‘a. While no structures or walls have been identified on Ka‘apahu Peak, there were a number of sling stones found near the peak. They were similar to those found at another pu‘ukaua in Kawela, Site 140 (Summers 1971:92–93). This fortress was not located on the mountain summit but on a steep ridge separating the east and west Kawela gulches, with stone walls situated along its edge and two walls perpendicular to these about 25 m (75 ft.) apart.


370 Heiau at Mapulehu

CASH ACCOUNT—JANUARY.

Date.		Received.	Paid.
	Called Ililiopoi in Mapulehu Valley at foot of ridge on which the trail to Mailau runs up. Built by Kupa an old Chief Was cut by stream used to run further to the West East end now standing said end was rebuilt or repaired by Kaohele a high chief & warrior He lived * on the top of a high peak back of Ohiami called Pakui overlooking Wailau & Pelekunu Valleys (with his warriors) People from Hawaii climbed up on peak from North side drove him out & killed him		

Figure 50. Heiau in Mapulehu, describing place of refuge built by Kaohele near Pākuʻi Peak.

ʻUalapuʻe-Kaluaʻaha Trail

Although not included among the trails identified by Summers (1971), Monsarrat (1888b:16) in a field book he kept of his mapping on Molokaʻi, places a trail on the ridge that serves as the boundary between ʻUalapuʻe and Kaluaʻaha Ahupuaʻa (Figure 51). The top of this ridge at the summit of the East Molokaʻi Mountain is named Kīlau, and the lower ridge lines are named Makalihua and Maileliʻi, respectively (USGS 1993). To the southeast of Kīlau is another named ridge line, Keanakoholua, that separates the two upper branches of Kaluaʻaha Gulch.

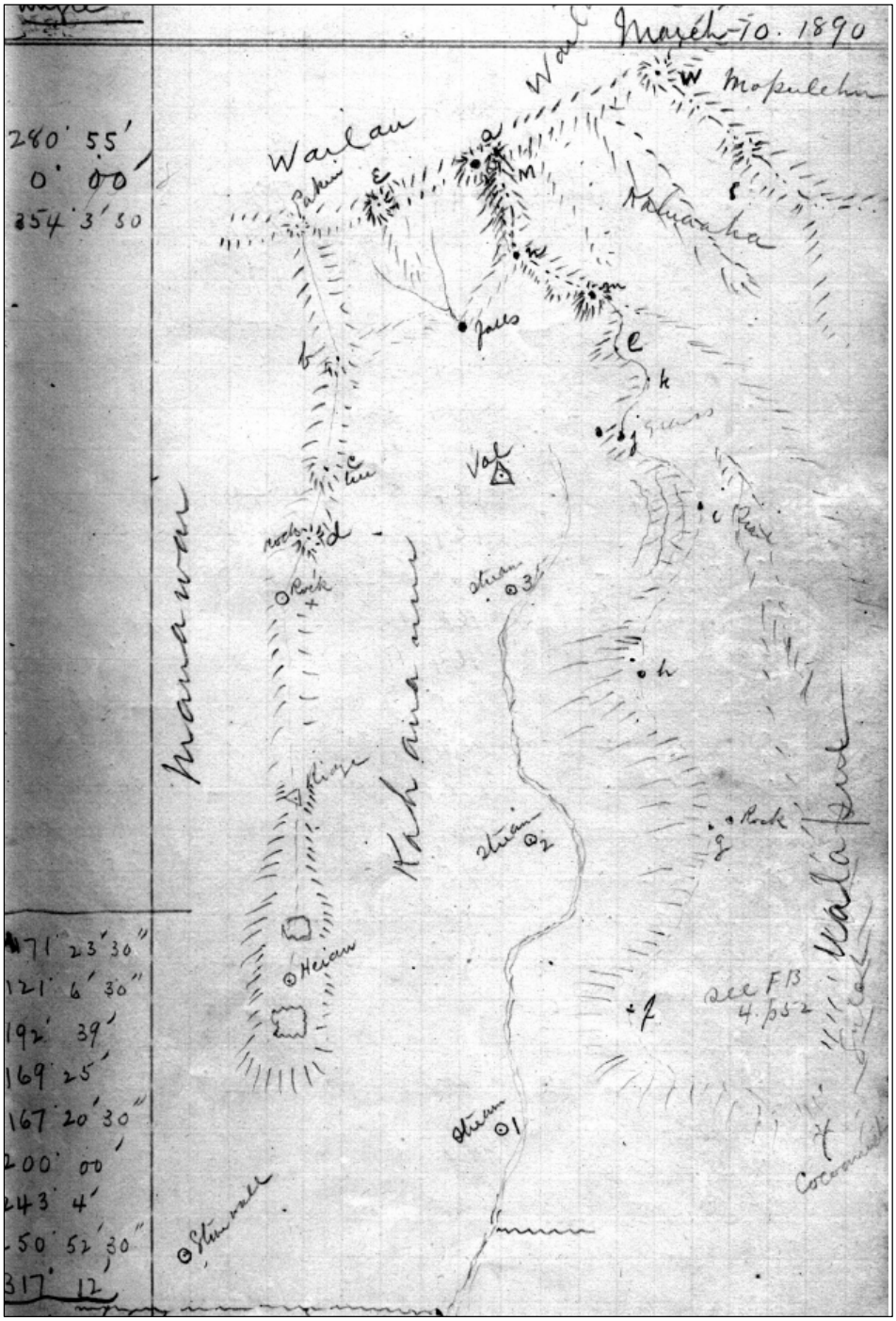


Figure 51. Sketch map showing the summit of the East Moloka‘i Mountain in the vicinity of Pāku‘i Peak and showing a trail located between ‘Ualapu‘e and Kalua‘aha Ahupua‘a (Monsarrat 1888b:16).

Although it does not identify the ‘Ualapu‘e-Kalua‘aha Trail, a second sketch map by Monsarrat (1890:52) does depict the ridge line topography of ‘Ualapu‘e and Kalua‘aha Ahupua‘a, showing the continuous descent that could be made along this boundary from the summit to the coast (Figure 52).This trail likely served a function similar to those named trails that connected leeward and windward regions of Moloka‘i. While it is not clear that this trail was matched to a trail leading into Wailau, the trail linking Pelekunu and Wailau is located just below Kīlau and could have been accessed by walking down a ridge line (Figure 53).

Pua‘ahala

A second trail is identified in two different sketch maps from Monsarrat’s Field Book No. 3 (1888b:76, 130). In the first of these maps (Figure 54) the uppermost point of the trail is situated at the Kalapamoa Survey Station (at a point where two ridge lines converge). The trail extends down along the westernmost of these two ridges to a relatively wide and flat portion of the ridge where again two ridges are converging. Monsarrat does not specifically show the trail below this point, although it would appear to have followed the westernmost of the two ridge lines as depicted in Monsarrat’s (1895) map that includes Wailau Ahupua‘a .

The second sketch map (Figure 55) is more complete showing not only the trail, and several converging ridges but also the relative locations of ‘Ōhi‘a, Keawa Nui, and Ka‘amola Ahupua‘a. In this map the trail is positioned below the Kalapamoa Survey Station on the westernmost ridge line. It is possible to descend from Kalapamoa along the Keawa Nui boundary.

It appears that the location of the survey station has been moved in the two sketch maps. The earlier map has the survey station at a higher elevation than the second map, which more closely corresponds with where the point has been located on USGS (1922, 1993) maps.

A third sketch map (Figure 56) is even more complete, placing Pua‘ahala, Ka‘amola, Keawa Nui, and West ‘Ōhi‘a in their proper locations on the map. The placement of the survey station at Kalapamoa is the same as the second sketch map of this area. If the trail were in its correct location based on Figure 55, then it would have needed to cross somewhat to the west to connect with the ridge line that is close to the western boundary of Pua‘ahala with Wāwā‘ia Ahupua‘a.

Although neither of the sketch maps show the location of the trail above its position at the survey marker, it would likely have extended along the ridge line above Wāwā‘ia Gulch to the west and the west branch of ‘Ōhi‘a Gulch to the east.

A section of what we believe to be the Pua‘ahala Trail is still visible on Google Earth, largely the result of temporary clearing of the upper ridge line for fence construction (Russell Kallstrom personal communication, 2016). Figure 57 shows an image of the uppermost portion of the trail. It can be seen at the point where the West ‘Ōhi‘a and Pua‘ahala-Wāwā‘ia boundaries converge and upslope of this point it extends to the summit of the East Moloka‘i Mountain and the boundary separating the leeward ahupua‘a from the windward ahupua‘a of Wailau. It is not clear in which direction this trail may have headed from the summit as there is a steep cliff at the back of Wailau Valley at this location.

Below the junction of the West ‘Ōhi‘a and Pua‘ahala-Wāwā‘ia boundaries the trail can be seen on the upper east slope of Wāwā‘ia Gulch to the west of the - ahupua‘a boundary. It crosses the ridge to the east and reappears on the ridge line to the east of the upper reaches of Kua or ‘Ākani Gulch (USGS 1922, 1993). This section of the trail is visible for about 800 m (2,625 ft.) closely matching the ahupua‘a boundary. Just above the proposed Pāku‘i Fence the trail appears to branch in two directions (Figure 58), with the easternmost branch following the ahupua‘a boundary to the west of an unnamed gulch that joins Wāwā‘ia Gulch near the coast.

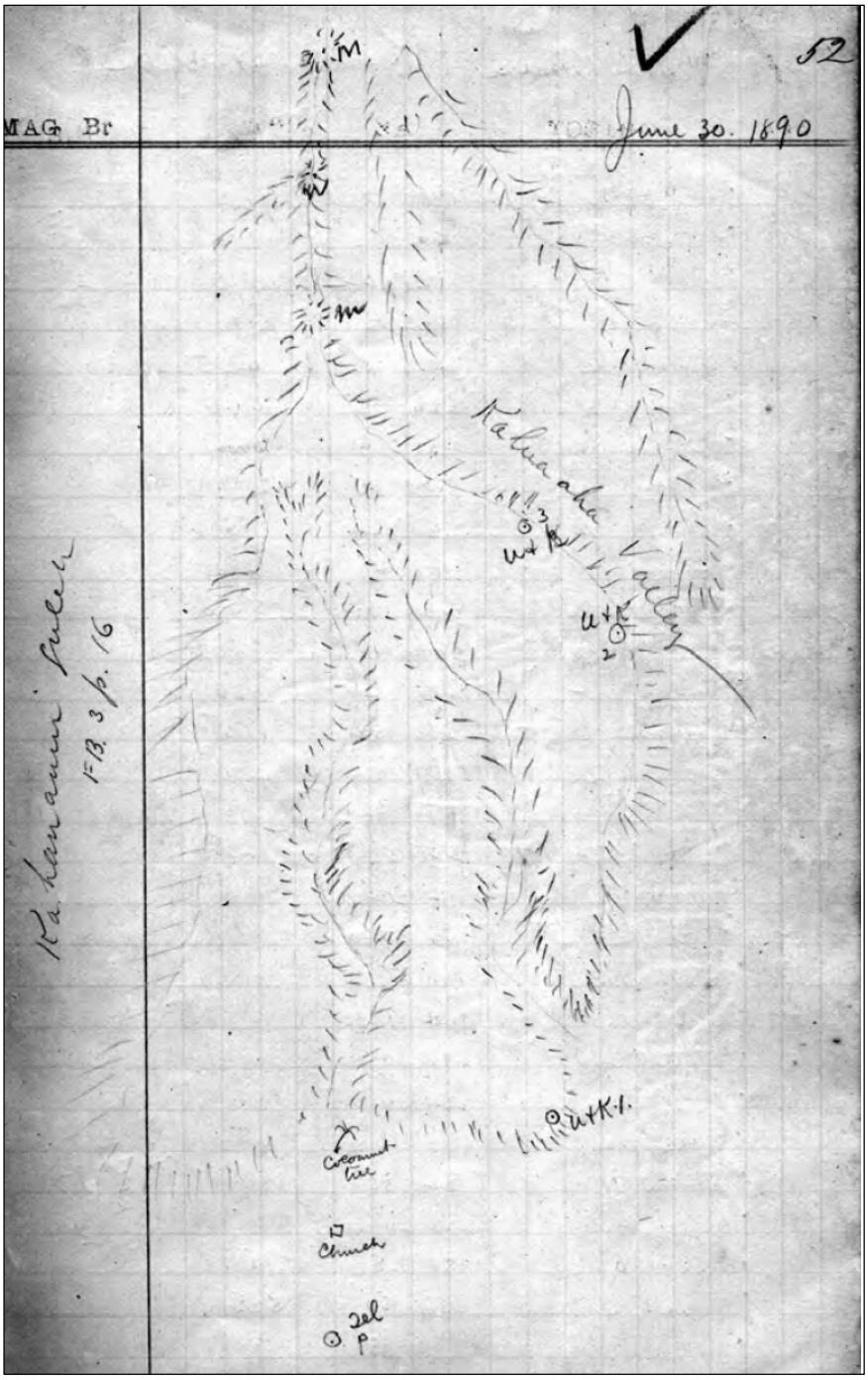


Figure 52. Monsarrat's sketch map of the ridge line topography of upper 'Ualapu'e and Kalua'aha (1890:52).

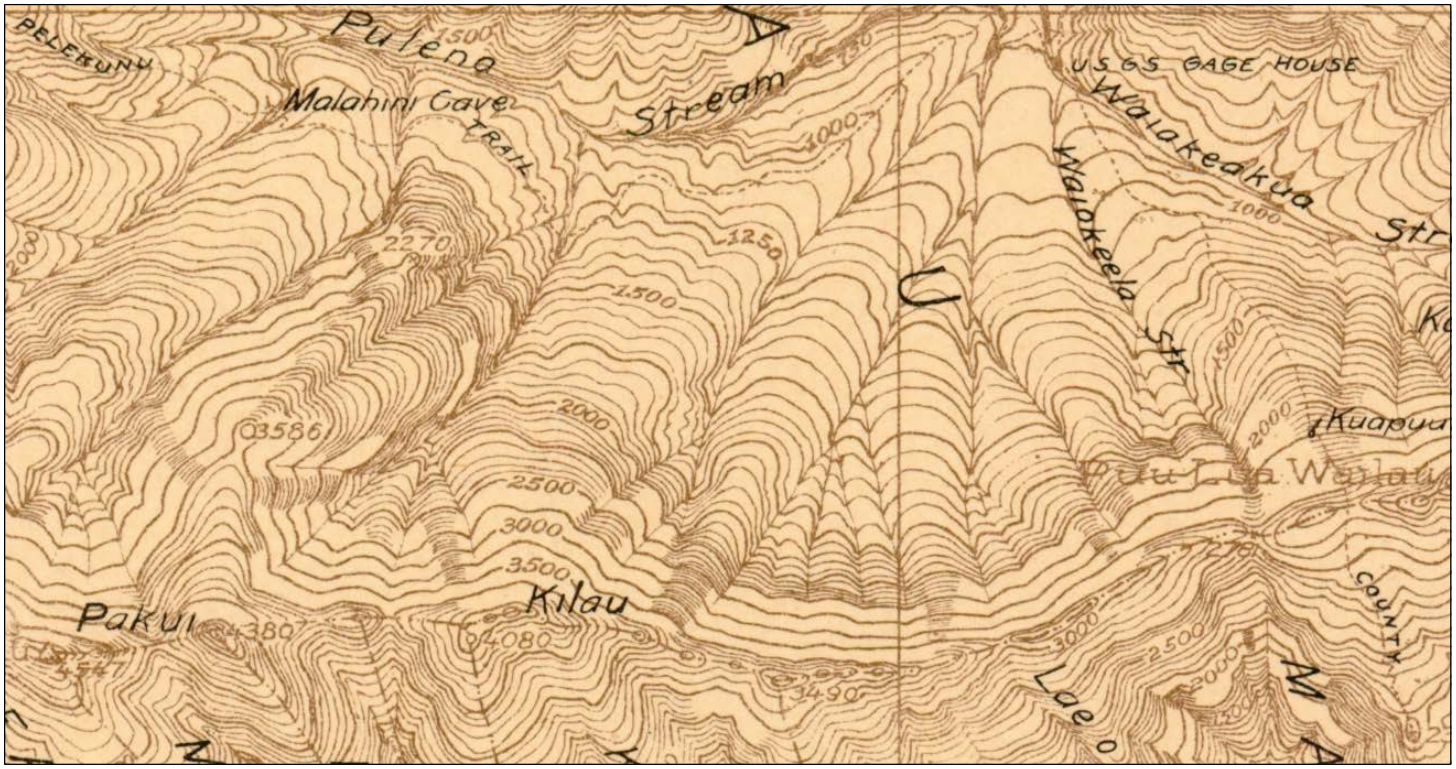


Figure 53. Upper summit area of the East Molokaʻi Mountain showing Kīlau and the Pelekunu to Wailau Trail below it (USGS 1922).

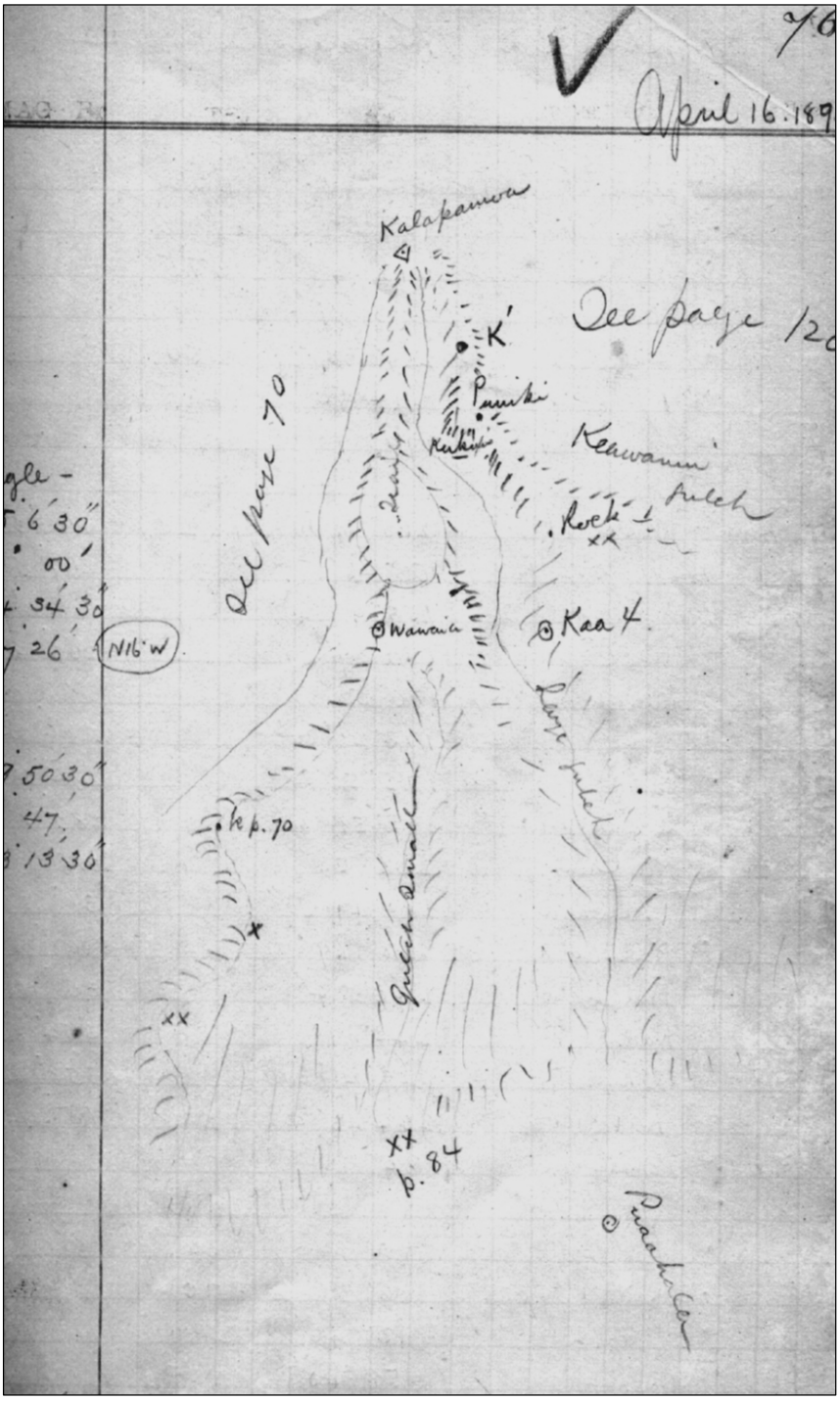


Figure 54. Monsarrat's sketch map of trail along the Pua'ahala-Wāwā'ia Ahupua'a boundary (1888b:76).

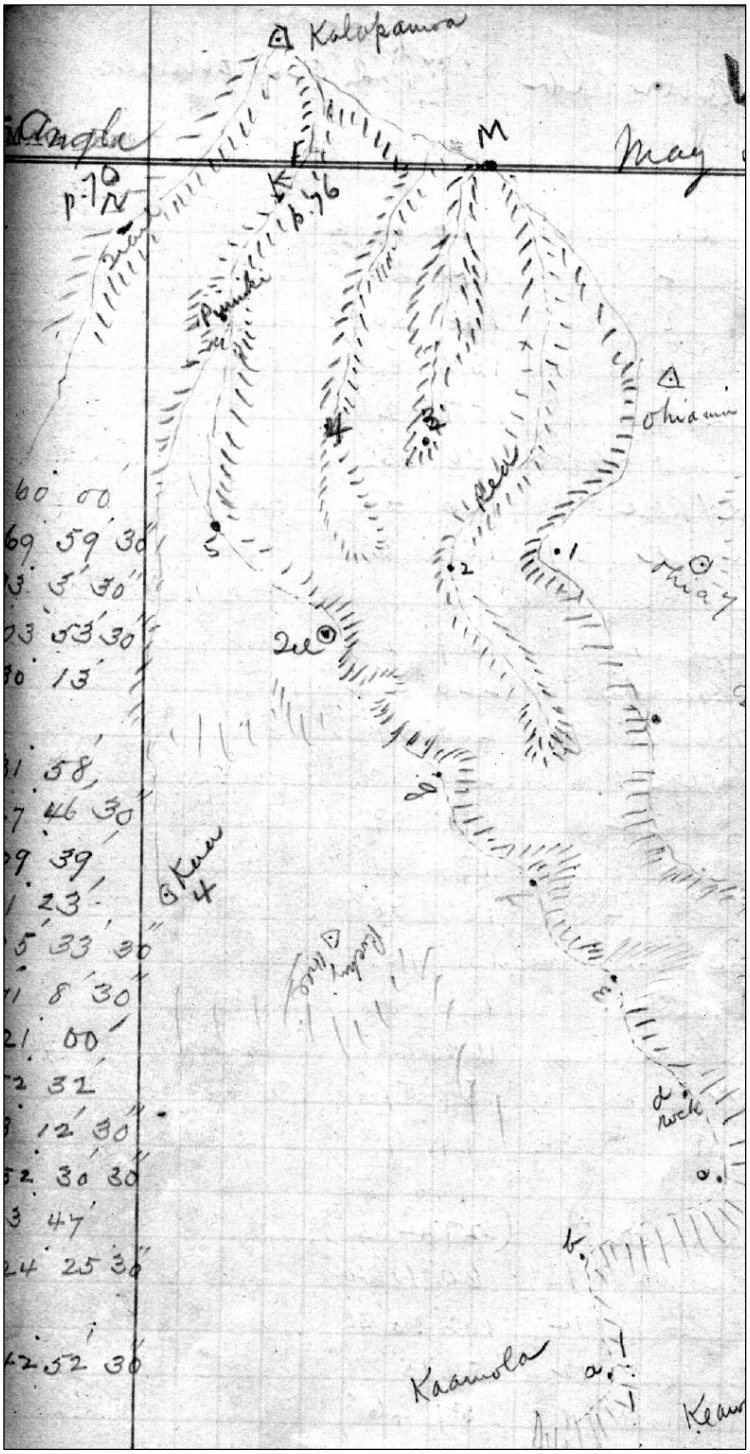


Figure 55. Monsarrat's sketch map depicting the converging ridge lines on Kalapamoa. This map links the four western ahupuaʻa of the Pākuʻi project area to the Puaʻahala-Wāwāʻia Trail (Monsarrat 1888b:130).

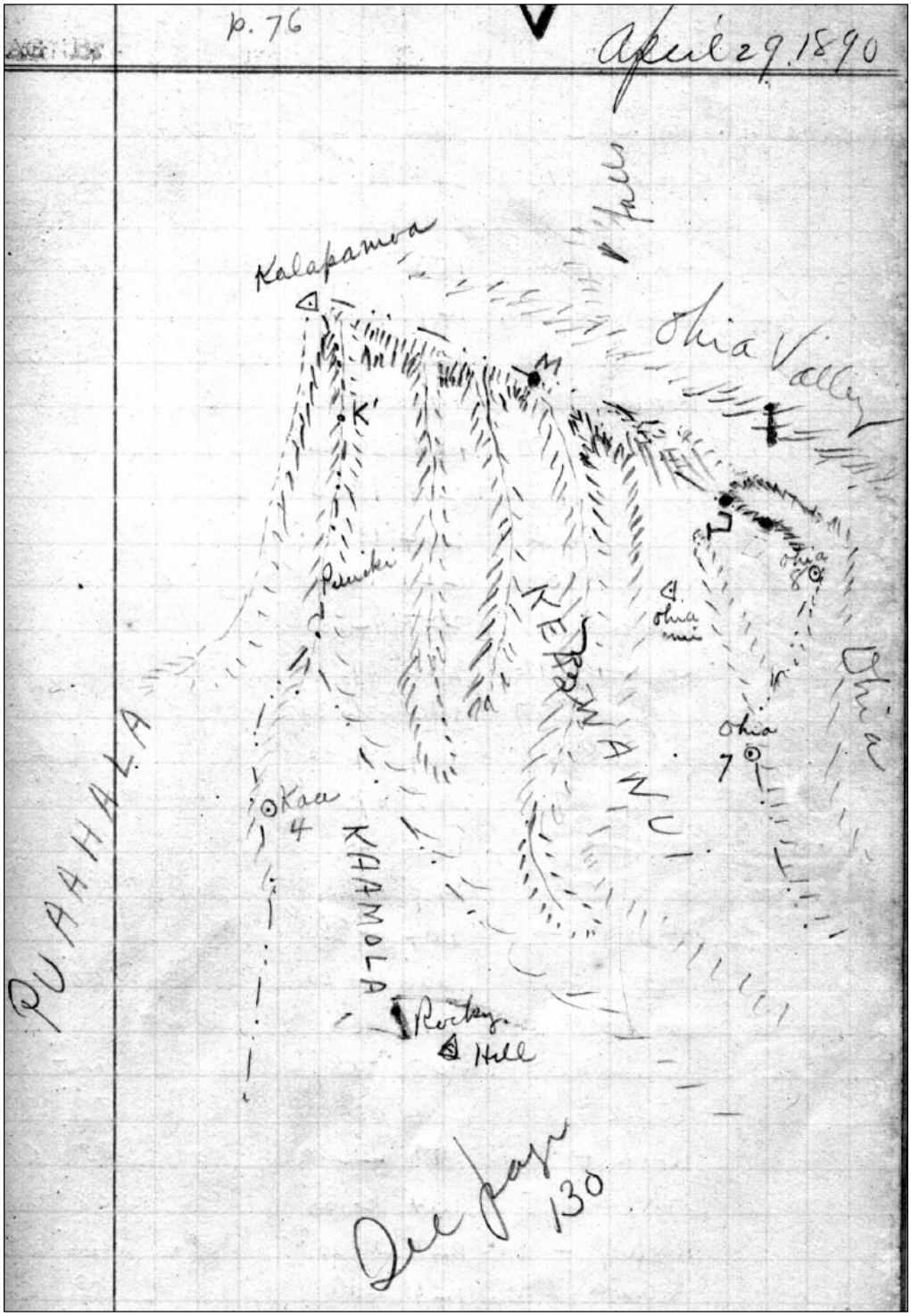


Figure 56. Monsarrat's sketch map showing ridges and ahupua'a locations for Pua'ahala, Ka'amola, Keawa Nui, and 'Ōhi'a Ahupua'a (1888b:120).

Figure 57. Google Earth image of Pua‘ahala Trail at summit of East Moloka‘i Mountain. This portion of the trail matches the Pua‘ahala-Wāwā‘ia Ahupua‘a boundary, outlined in white. The image used here is from March 4, 2013.

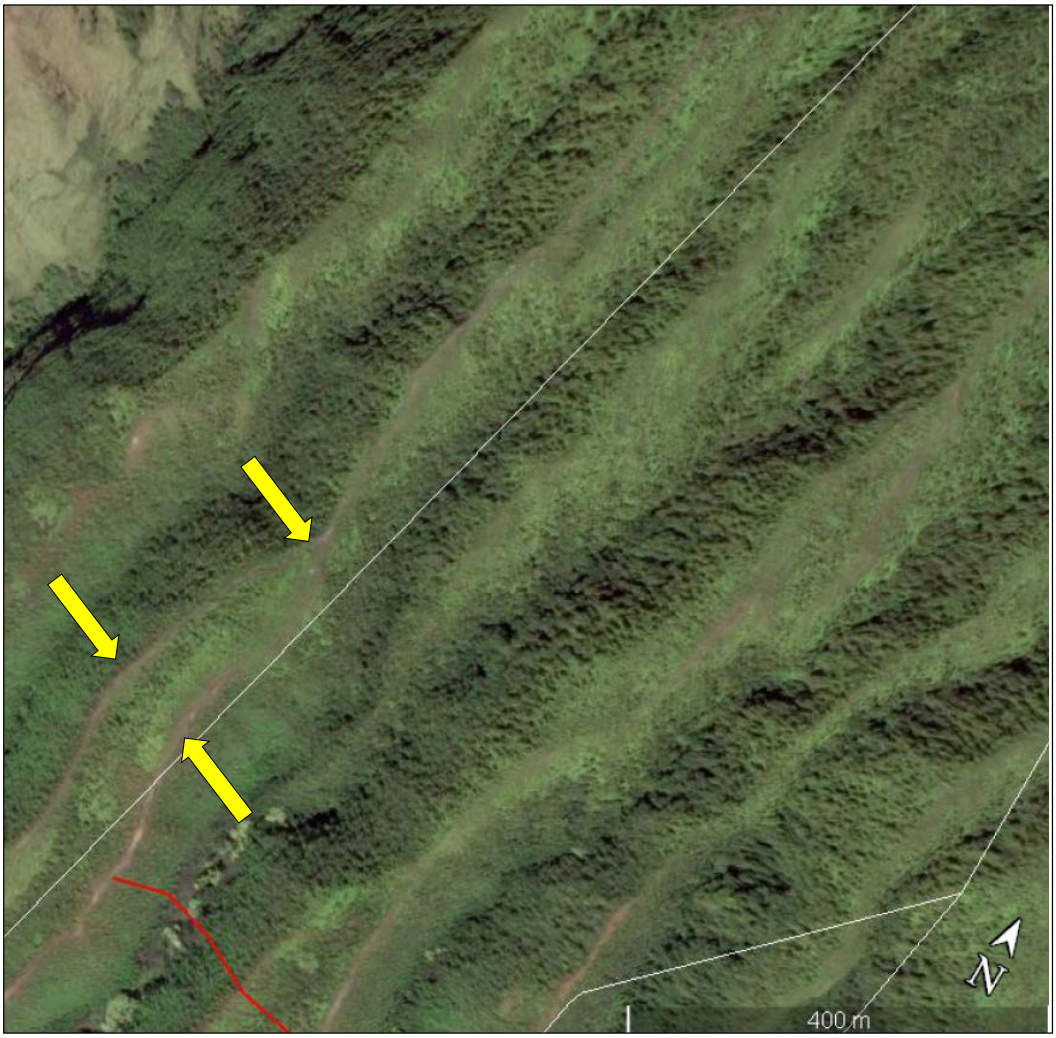


Figure 58. Google Earth photograph of the Puaʻahala-Wāwāʻia Trail just above the location of the proposed Pākuʻi Fence (in red), showing a branching segment. Ahupuaʻa boundaries are outlined in white. The branching segments are indicated with yellow arrows. The image used here is from March 4, 2013.

Māhele Land Tenure and Traditional Settlement Patterns

The change in the traditional land tenure system in Hawaiʻi began with the appointment of the Board of Commissioners to Quiet Land Titles by Kamehameha III in 1845. The Great Māhele took place during the first few months of 1848 when Kamehameha III and more than 240 of his chiefs worked out their interests in the lands of the Kingdom. The King retained roughly a million acres as his own as Crown Lands, while approximately a million and a half acres were designated as Government Lands. The Konohiki Awards amounted to about a million and a half acres, however title was not awarded until the konohiki presented the claim before the Land Commission.

In the fall of 1850 legislation was passed allowing citizens to present claims before the Land Commission for lands that they were cultivating within the Crown, Government, or Konohiki lands. By 1855 the Land Commission had made visits to all of the islands and had received testimony for about 12,000 land claims. Ultimately between 9,000 and 11,000 kuleana land claims were awarded to kamaʻāina totaling only about 12,000 ha (30,000) ac.

There were at least 215 land parcels (including land grants and claims by the crown and government) claimed in the nine ahupuaʻa represented in the Pākuʻi project area. A number of sources were used to create and cross check this listing. The most comprehensive was a volume published by the Territory of Hawaii (1929), the Indices of Awards. This listed all awards for crown lands (pp 25–28), government lands (pp. 29–45), konohiki lands or those issued as land grants (pp. 55–57), lands assigned to the more important members of the aliʻi (pp. 58–81), land commission awards by sequential alphabetized awardee, by island and district (for Molokaʻi see pp. 268–292), by sequential alphabetized location (i.e., ahupuaʻa and island and/or district, for Molokaʻi see pp. 664–690), by sequential award (LCA) number (pp. 885–1382), and by sequential (patent) number (pp. 1383–1688). This followed a number of earlier listings from the mid-19th century, such as the Māhele Book (Hawaii Kingdom 1848) that lists awards from Kamehameha III to a number of aliʻi or other prominent individuals. The General Index of Land Commission Patents (Records) followed (Hawaii Kingdom 1855); these were awards made to both native and foreign claimants, also known as the Māhele Awards. Land Commission Awards were accompanied by listings of testimonies and registers from both foreign and native claimants. These were published in several volumes between 1845 and 1855 (Hawaii Kingdom 1846–1848a, 1846–1848b, 1846–1853, 1846–1852). All of these materials are now digitized and searchable online using keywords or parcel numbers via avakonohiki.org. More than 60,000 documents have been scanned and most have transcriptions that identify given names (of both claimants and supporters), locations, place names (e.g., ʻili ʻāina), and improvements made to lands. The identification of the large number of ʻili names was made possible by these documents. For native testimonies there are often accompanying sketch maps of the parcels that depict the names of adjoining ʻili, making it possible in the future to reconstruct maps of ʻili locations.

As part of this process for awarding fee simple titles to lands, surveyors were employed to map the locations of land awards by island or portions thereof (see Alexander 1882, 1889). M.D. Monsarrat was contracted by the Hawaiian Kingdom from 1885–1895 to conduct the first really extensive triangulation surveys of Molokaʻi, to interview kamaʻāina, and use what they shared along with his measurements to develop detailed maps to scale that identified the original title holders of land parcels. This kind of mapping effort was being done throughout the kingdom so the government could more easily locate parcels (e.g., kuleana, crown, etc.) with respect to one another. In addition to the surveys, there were determinations made by the Boundary Commission for ahupuaʻa boundaries (see Alexander 1889). For the project area there are commission reports for Wāwāʻia (Pease 1873), Puaʻahala (Monsarrat 1894), Keawa Nui (Monsarrat 1902), East ʻŌhiʻa (Monsarrat 1915), Manawai (Aholo 1872, and as translated by Kallstrom 2016a), Mapulehu (Aholo 1879, and as translated by Kallstrom 2016b).

For the Pākuʻi project area this would include the map by Wall (1917) of the region from Kaʻamola to Kaluaʻaha. This composite map drew upon earlier maps by Monsarrat (1893, 1896a, 1896b). Because of the large number of awards made to individuals along the coast, maps were also created that showed these parcels in greater detail for East ʻŌhiʻa, Manawai, ʻUalapuʻe, and Kahananui (Brown 1894; Dunn 1956; King 1931; Meyer 1938; Monsarrat 1890; Whitehouse 1938). The composite map by Wall (1917) also depicts the coastal land awards for Kaʻamola, Keawa Nui, West ʻŌhiʻa, and Kaluaʻaha but does not always depict the award numbers. There is an undated map by Monsarrat (n.d.) that shows parcels, the award number, and name of the awardee.

An early map by Monsarrat (1893) shows the original major land awards (except for Ka‘amola) for the nine ahupua‘a (Figure 59). The process of making and awarding land claims was sequential and hierarchical, meaning that the earliest awards were made to the crown, government, and major ali‘i before there were subsequent awards made to other individuals. The crown or government originally claimed land in Ka‘amola 1–6, East ‘Ōhi‘a, Manawai, one-half of Kahananui Ahupua‘a, ‘Ualapu‘e, and Kalua‘aha. Subsequently, large land awards were made to seven prominent individuals (Table 6). Gulick and David Malo (for Ka‘amola), Hinau (for Keawa Nui), Helehewa (for West ‘Ōhi‘a), Hoonaulu (for Manawai), Kaeliwai (for Kahananui), and Hitchcock (for Kalua‘aha). Originally Pua‘ahala was unassigned. The total area of these awards is more than 1,390 ha (3,450 ac.).

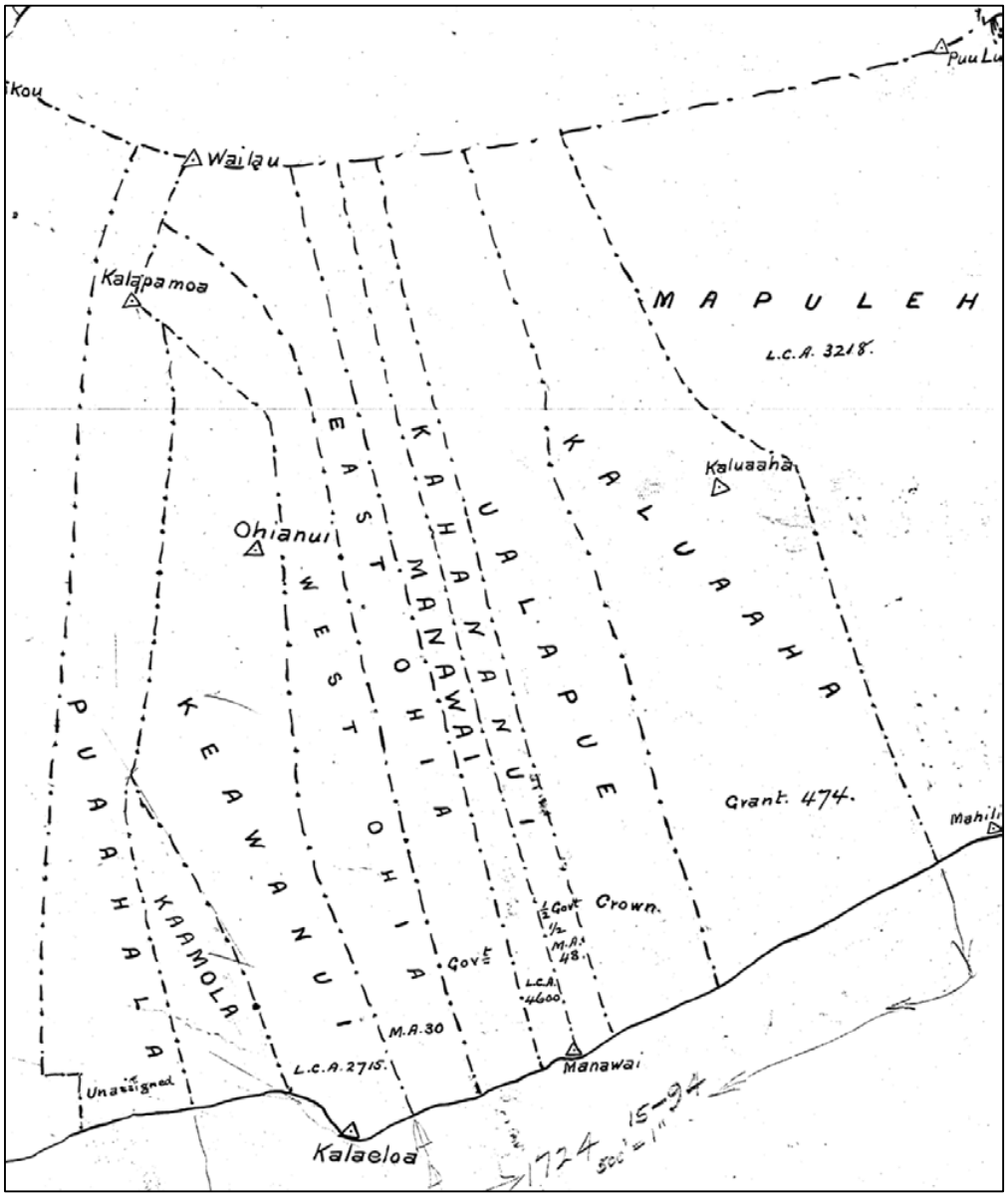


Figure 59. Sketch map of nine Pākuʻi project area ahupuaʻa showing major land awards (Monsarrat 1893).

Table 6. Māhele Land Awards for the Nine Ahupuaʻa of the Pākuʻi Project Area

Claim No.	Grant No.	Ahupuaʻa	Claimant	Area (acres)
146-B		Puaʻahala	Kahaule	8.6
4609		Puaʻahala	Piapia	8.4
3797		Puaʻahala	Lokomaikai	7.65
4924		Puaʻahala	Kaioha	9.04
5026-B		Puaʻahala	Makalehua	3.75
101-D		Puaʻahala	Akahi	0.18
	831	Kaʻamola	Gulick, O.H.	273.00
	1141	Kaʻamola	Malo, David	208.00
101-D		Kaʻamola	Akahi	0.18
3979		Kaʻamola 5	Halualani	25.50
3979		Kaʻamola	Malo, Davida	
4018		Kaʻamola 3	Mose	25.50
4018		Kaʻamola 3	Mose	0.23
4820		Kaʻamola	Kamalaua or Kumulaua	
4820		Kaʻamola, ʻŌhiʻa	Kumulaua	0.32
4822		Kaʻamola	Naili	0.32
4822		Kaʻamola	Naili	0.60
9991, 8931		Kaʻamola	Keke	2.56
10225		Kaʻamola 6	Lolo	10.00
240-S		Kaʻamola	Kekahuna	8.44
240-Y		Kaʻamola	Manoha	9.60
240-W		Kaʻamola 6	Kaleo	11.89
240-U		Kaʻamola 6	Keaweolu, alt. Keawealu	10.28
240-T		Kaʻamola 6	Kukahaoa	11.85
240-V		Kaʻamola	Kapu	11.85
240-X		Kaʻamola 6	Pupuka	8.55
00137B (see 3902B and 11085)	8207	Kaʻamola 1–6	government	50% of Ahupuaʻa
4821		Keawa Nui	Kikoikoi	3.17
2715		Keawa Nui	Hinau	537.00
3824		Keawa Nui	Pahupu	2.47

3902		Keawa Nui	Napahi	1.69
11085		Keawa Nui		
03902-C (see 138-B and 11084)		Keawa Nui	Kewainui or Kawainui	2.81

Table 6. (cont.)

Claim No.	Grant No.	Ahupuaʻa	Claimant	Area (acres)
4090		Keawa Nui	Kauakahi	1.00
4187-B		Keawa Nui	Kahookano	0.78
4187-C		Keawa Nui	Uluhani	2.37
4823 (see 189B)		Keawa Nui	Kaailepo	0.62
4948		Keawa Nui	Keanini	1.51
5193		Keawa Nui	Kaiamoku	2.30
11084 (see 138-B and 3902-C		Keawa Nui	Hinau	
		Keawa Nui	Kawainui	
11085 (see 137-B and 3902-B)		Keawa Nui	Kekoowai	2.83
	MA-30	West ʻŌhiʻa	Helehewa, S	283.50
10110		West ʻŌhiʻa	Maalahia	2.00
5001-B		West ʻŌhiʻa	Namakaelua	4.03
237-L		West ʻŌhiʻa, Kalaupapa	Kaluoku or Haalelea	3.39
4187		West ʻŌhiʻa	Kahookano	
5194		West ʻŌhiʻa	Keili	6.08
4682		West ʻŌhiʻa	Luia	4.00
10109		West ʻŌhiʻa	Mose	3.60
	1720	East ʻŌhiʻa	Manuela	
	1139	East ʻŌhiʻa	Kakioe	
5136		East ʻŌhiʻa	Kaha	3.00
4821-B		East ʻŌhiʻa, West ʻŌhiʻa	Papaiku	4.60
	6896	East ʻŌhiʻa	Rodrigues, A	
	7460	East ʻŌhiʻa	Rodrigues, M	
4985		East ʻŌhiʻa	Keaki	0.85
		East ʻŌhiʻa	Haalelea	5.58
236-W		East ʻŌhiʻa	Kumulaua	1.33
	2111	East ʻŌhiʻa	Kahema, J.	
4820		East ʻŌhiʻa, Kaʻamola	Kaluau 3	0.81
4936		East ʻŌhiʻa	Kahoowaha	4.66
	1138	East ʻŌhiʻa	KieKie	

	3091	East ‘Ōhi‘a	Kamaha	
8605		‘Ōhi‘a, Kalaupapa	Kaluoku, Kapainalua	3.39
8102, 9900		Manawai	Hapuku	0.25
			government	545.00

Table 6. (cont.)

Claim No.	Grant No.	Ahupua‘a	Claimant	Area (acres)
4600, 6546		Manawai	Hoonaulu, W.Z.	545.00
4600		Manawai, Kukaiole	Hoonaulu, W., Leimakani	6.20
4095		Manawai	Kahoowahahala	4.18
8102		Manawai	Hapuku	1 rod
237-M		Manawai	Kaluau	1.12
4185, 237-Y		Manawai	Kaluau 2	0.84
4095, 236-Y		Manawai	Kahoohalahala	
136-B, 4762		Manawai	Kapano	0.24
136-B, 4175-C		Manawai	Kapano	0.13
3751		Manawai	Napela	5 rods
3751		Manawai	Uaiaholo	4.68
4175-C		Manawai	Oni	1.81
4175		Manawai	Waiaholo	4.00 + 2 rods
4175-B		Manawai	Kuluau 1	5.61
4175-B		Manawai	Luaaka	3.18
3667		Manawai	Manukani	3.87
4097		Manawai	Manukani	3.00 + 3 roods + 20 rods
4097		Manawai	Kuaana	4.87
9104		Manawai	Kahahane	0.20
8908		Manawai	Kahiapaiole	8.63
5187		Manawai	Kaluau	0.09
4683		Manawai	Leimakani	6.00
5135		Manawai	Kekipi	4.03
4095		Manawai	Kahoohalahala	4.18
4899		Manawai	Kalamaikai	5.00
8906		Manawai	Kuhoe	2.71
4201		Manawai	Kahola	10.92
4985		Manawai	Keaki	2.65
4985		Manawai	Keaki	2.00

9102		Kahananui	Kaluaokamano-Govt	100% Ahupua‘a 1428.81
	MA 48	Kahananui	Kaeliwai	141
	2613	Kahananui	Hakuole	1.50
4186		Kahananui	Kikopaua	

Table 6. (cont.)

Claim No.	Grant No.	Ahupua‘a	Claimant	Area (acres)
9102		Kahananui	Kaauhaukini	2.54
5187		Kahananui	Kaluau 3	0.25
4056		Kahananui	Kamauoha	1.01
5147		Kahananui	Kaiu	0.40
4762		Kahananui & Manawai	Napela	2.83
4056		Kahananui	Kamauoha	1.01
		‘Ualapu‘e	Crown	709.00
4192		‘Ualapu‘e	Kaheaku	1.30
5149		‘Ualapu‘e	Kaiu	0.40
3966		‘Ualapu‘e	Hanakahi, Haunakahi	1.58
4209		‘Ualapu‘e	Kauhikoakoa	2.13
4196		‘Ualapu‘e & Kea‘ahala	Keanui	4.13
4069		‘Ualapu‘e	Kuihewa	1.89
4194		‘Ualapu‘e	Kuhuwaimaka	0.41
4816		‘Ualapu‘e	Pohuehue	1.64
4098		‘Ualapu‘e	Kana	1.36
5202		‘Ualapu‘e & Mapulehu	Kau	0.21
		‘Ualapu‘e	Kaule	4.30
3666		‘Ualapu‘e	Hakuole	4.60
8105		‘Ualapu‘e	Auhaukini	0.20
5184, 9102		‘Ualapu‘e	Kekuhe	0.17
3792-D, 5184		‘Ualapu‘e	Kawelo	0.84
3792-D		‘Ualapu‘e	Kawelo	0.37
4196		‘Ualapu‘e	Keanui	4.13
5184		‘Ualapu‘e	Kekuhe	0.17
4177		‘Ualapu‘e	Kualualu	7.00
3792		‘Ualapu‘e	Koenakia	0.34
4204		‘Ualapu‘e	Ku	1.70
4069		‘Ualapu‘e, Kalua‘aha	Kuihewa	2.24

4194		‘Ualapu‘e	Kuluwaimaka	1.89
3678		‘Ualapu‘e	Muolo	0.41
3678		‘Ualapu‘e	Muolo	0.35
3916		‘Ualapu‘e	Nahoaai	5.59
3791		‘Ualapu‘e	Oopa	

Table 6. (cont.)

Claim No.	Grant No.	Ahupua‘a	Claimant	Area (acres)
3840		‘Ualapu‘e	Paaluhi	3.85
3792, 3840		‘Ualapu‘e	Kawelo	0.84
3792-D		‘Ualapu‘e	Kawelo	0.37
3823		‘Ualapu‘e	Pala	2.77
3792-C		‘Ualapu‘e	Paele 1	4.16
3792-B		‘Ualapu‘e	Paele 2	1.10
3792-C		‘Ualapu‘e & Kalua‘aha	Paele 3	5.71
3837		‘Ualapu‘e & Kalua‘aha	Paele 4	0.37
4618, 3792-C		‘Ualapu‘e	Pohuehue	1.64
6516, 3837		‘Ualapu‘e	Wailiilii	4.87
10505-A, 6516		‘Ualapu‘e	Kaauhaukini	1.98
10505-B		‘Ualapu‘e	Kaulowaa	0.72
10505-C		‘Ualapu‘e	Kaulowaa	4.89
10505-D		‘Ualapu‘e	Hulihae	4.14
3975		‘Ualapu‘e	Kaulowaa	0.72
3281		‘Ualapu‘e	Kaheiau	3.51
4078		‘Ualapu‘e	Puupuu	3.29
4170		‘Ualapu‘e	Kaupe	0.93
4170		‘Ualapu‘e	Kaupe	0.70
3823		‘Ualapu‘e	Pala	2.77
3792-C		‘Ualapu‘e	Koenakia	0.34
4209		‘Ualapu‘e	Kauhuikoakoa	2.13
8105		‘Ualapu‘e	Hakuole	4.60
3840		‘Ualapu‘e	Paaluhi	3.85
9102		‘Ualapu‘e	Auhaukini, Kaauhaukini	
134-B		Kalua‘aha	Kamehameha III-Govt	100% Ahupua‘a
	474	Kalua‘aha	Hitchcock, H.R.	1467
237-U		Kalua‘aha	Loika	6.990
4086		Kalua‘aha	Kamakahuia	2.620

4092	Kaluaʻaha	Kamakahi	2.290
2375	Kaluaʻaha	Kauhimauna	1.520
4206	Kaluaʻaha	Kukae	5.140
3754-A	Kaluaʻaha	Aukai	7.000
3754-B	Kaluaʻaha	Aukai	1.330
3754-C	Kaluaʻaha	Aukai	1.570

Table 6. (cont.)

Claim No.	Grant No.	Ahupuaʻa	Claimant	Area (acres)
3985		Kaluaʻaha	Halulu, P	8.190
3985		Kaluaʻaha	Halulu, P	0.310
387		Kaluaʻaha	ABCFM	9.730
3732		Kaluaʻaha	Ihu, Makaio	1.870
240-C		Kaluaʻaha	Kaalele	9.700
135-B		Kaluaʻaha	Kahakumakaliilii	2.580
8901		Kaluaʻaha	Kaheana	3.270
8907		Kaluaʻaha	Kaiakea	7.000
4058_A		Kaluaʻaha	Kaiue	0.190
4058-B		Kaluaʻaha	Kaiue	1.125
4092		Kaluaʻaha	Kaluna	2.290
134-B		Kaluaʻaha	Kamakahi	5.800
134-B		Kaluaʻaha	Kamakahi	1.810
4196, 8201		Kaluaʻaha	Kamoku	10.820
239-E		Kaluaʻaha	Kane	0.180
237-S		Kaluaʻaha	Kauhimana	1.520
5196		Kaluaʻaha	Kawelo	2.190
4196		Kaluaʻaha	Keanui	4.130
8904		Kaluaʻaha	Kila	7.000
4177		Kaluaʻaha	Kualualu	7.000
4206		Kaluaʻaha	Kukae, Opunui	5.140
237-U		Kaluaʻaha	Loika	6.000
239-Z		Kaluaʻaha	Makalohi	4.060
239-V		Kaluaʻaha	Nawaa	0.070
3837, 10501-B		Kaluaʻaha	Ninihua	9.150
3837		Kaluaʻaha	Paele 4	2.460
3822		Kaluaʻaha	Pulehu	7.110
3750-A		Kaluaʻaha	Ueuele, Unele	0.758

3750-B	Kalua‘aha	Ueuele, Unele	7.518

All of these awards extend to the mauka boundaries of the nine ahupuaʻa and hence include the Pākuʻi project area. With few exceptions, there were no later land awards made to individuals within or near the boundaries of the proposed Pākuʻi Fence. Land records for these major awards contain relatively little information. For example, the record for LCA 4600 (Figure 60) transfers the entire ahupuaʻa of Manawai to Hoonaulu in the transcribed Native Register, Volume 5. The award to David Malo of land in Kaʻamola totaling one-half of the ahupuaʻa is similarly brief (Figure 61) providing no detail on how the land had been improved or used.

No. 6546 W.Z. Hoonaulu Page 27

The ahupuaa of Manawai in Molokai has been conveyed to me outright by a sale between the King and me for my land in Kailua, Oahu, names Malamalama. 4600 W.Z. Hoonaula. It is the same as that above.

Series 287 Native Testimony Volume 5-00018.tif

Figure 60. Land award testimony for LCA 4600 to Hoonaula for Manawai Ahupuaʻa, Molokaʻi (Hawaiian Kingdom 1846–1853).

No 3702 David Malo

Koauwae sworn He has see Malo's ili land of Ohia iki at Ukumehama. Kuaole would be the most qualified person for this land. The land had been from Pikanele to

Series 287 Native Testimony Volume 5-00070.tif

No. 3702 David Malo (cont.)

to his wife Kaunahi. Kaunahi to Aalaio. Aalaio to David Malo in 1832, no objections.

Section 1 - Boundaries of Ohia

Mauka	Waikapu pali
Hana	J. Kapena's land
Makai	Sea
Kaanapali	Olowalu land

Z. Kaauwai sworn:

Section 2 -

He has seen Kaamola I at Molokai. It has been divided equally 1/2 to David Malo and the king, Kaka has taken this deed to Oahu.

Figure 61. Transcribed Native Testimony for LCA 3702 to David Malo (Kingdom of Hawaii 1845–1853).

Later, additional land awards were made, sometimes relatively substantial in number, but never encompassing large tracts of land (Table 7). Six parcels were awarded to six different individuals in Pua‘ahala, totaling 15 ha (38 ac.). Seventeen land awards were made in Ka‘amola, in addition to the land grants to Malo and Gulick, and retention by the Kingdom government of their lands. The government later sold 13 ha (33 ac.) to E. Hitchcock, and a successful land claim (LCA 3979) was made by Halualani for a parcel adjacent to this and of about the same area. These two properties extended 1,706 m (5,600 ft.) inland. Little is revealed in the Native Testimony other than how the land was acquired, by sale or gift. Eight of these awards were long, narrow strips on the west side of the ahupua‘a that extended upslope more than 1,370 m (4,500 ft.). The remaining awards were clustered around Kāinā‘ohe Fishpond (Figure 62).

Much of the land in Keawa Nui was awarded to Hinau, who was assigned 217 ha (537 ac.). Individual claims totaled only 8 ha (22 ac.), and included a number of lo‘i fields, dryland kalo, and pasture lands. In West and East ‘Ōhi‘a individuals successfully were awarded parcels as well as purchased them outright as land grants (Figure 63). Parcels are concentrated along the ‘Ōhi‘a Stream and were held for agricultural and habitation purposes. A total of 17 ha (42 ac.) were in both ahupua‘a. The boundaries of one parcel extend across the west and east ahupua‘a boundary, an indication that their separation was fairly recent.

Although the entire of ahupua‘a of Manawai awarded to W.Z. Hononaulu, later 20 smaller awards were made to individuals (Figure 64). These awards cluster just inland from Pūhāloa Fishpond or on the west banks of Manawai Stream. The map by Whitehouse (1938) depicts standing stone walls, not only along the periphery of the fishpond but also extending along the west side of the stream. These match the ahupua‘a boundary between Manawai and Kahananui. There are only five land claims for Kahananui; this ahupua‘a had no coastal access.

There were more than 50 land claims awarded in ‘Ualapu‘e (Figure 65) and these were mapped by Brown in 1893. The land parcels cluster around ‘Ualapu‘e and the government fishponds on the coast, although there are a number of parcels inland from the main road. Monsarrat (1896a) identified lo‘i kalo along the east side of ‘Ualapu‘e Fishpond and this accounts for the density of claims in this section of the ahupua‘a. Many of the inland land awards are adjacent to Manawai Stream (east bank) or along both banks of Ki‘inohu Stream.

Kalua‘aha has the most diverse array of land awards of the nine ahupua‘a, with both coastal and inland claims. There are nearly 40 individual awards, not including the large land grant award made to Hitchcock. With four fishponds, the coastal clustering of parcels is not surprising, although most are located adjacent to Ka‘opeahina Fishpond (Figure 66). The lands claims mauka of the main road on the east end of ‘Ualapu‘e are located close to the four smaller gulches and streams (Figure 67). The Kalua‘aha Church land claim is within this section of ‘Ualapu‘e.

The remaining land claims are adjacent to Kalua‘aha Stream and extend inland for more than 2 km (1.2 mi.) on both sides of the stream. There is one small ‘āpana of an LCA award (No. 134-B) that is located in the Forest Reserve and near to if not within the Pāku‘i project area.

Leaving aside the major land awards, approximately 200 separate land claims for the nine project area ahupua‘a are a small proportion of the total land area. Most claims were made for lands along the coast, near fishponds or where streams were located within ahupua‘a. Several claims were made for lands extending inland, on both ‘Ōhi‘a and Kalua‘aha Streams, as well as on the lower slope of Ka‘amola.

Table 7. Large Māhele Land Awards Made to Individuals in Six Ahupuaʻa of the Pākuʻi Project

Land Commission Award No.	Land Grant No.	Ahupuaʻa	Awardee	Area (acres)
	871	Kaʻamola	Gulick	273.00
	1141	Kaʻamola	Malo, D	208.00
2715		Keawa Nui	Hinau	537.00
	30	West ʻŌhiʻa	Helehewa	282.50
4600		Manawai	Hoonaulu, W	545.00
	48	Kahananui	Kaeliwai	141.00
	474	Kaluaʻaha	Hitchcock, H.	1,467.00
			Total	3,453.50

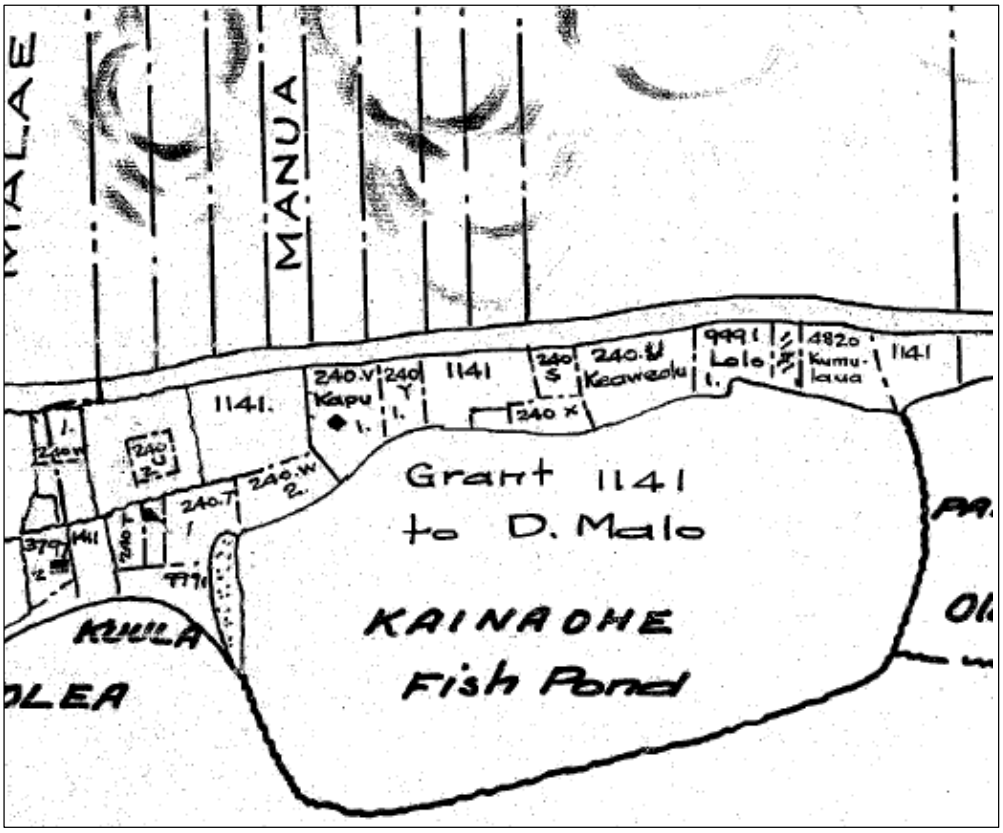


Figure 62. Land awards in Kaʻamola near Kāināʻohe Fishpond (Wall 1917).

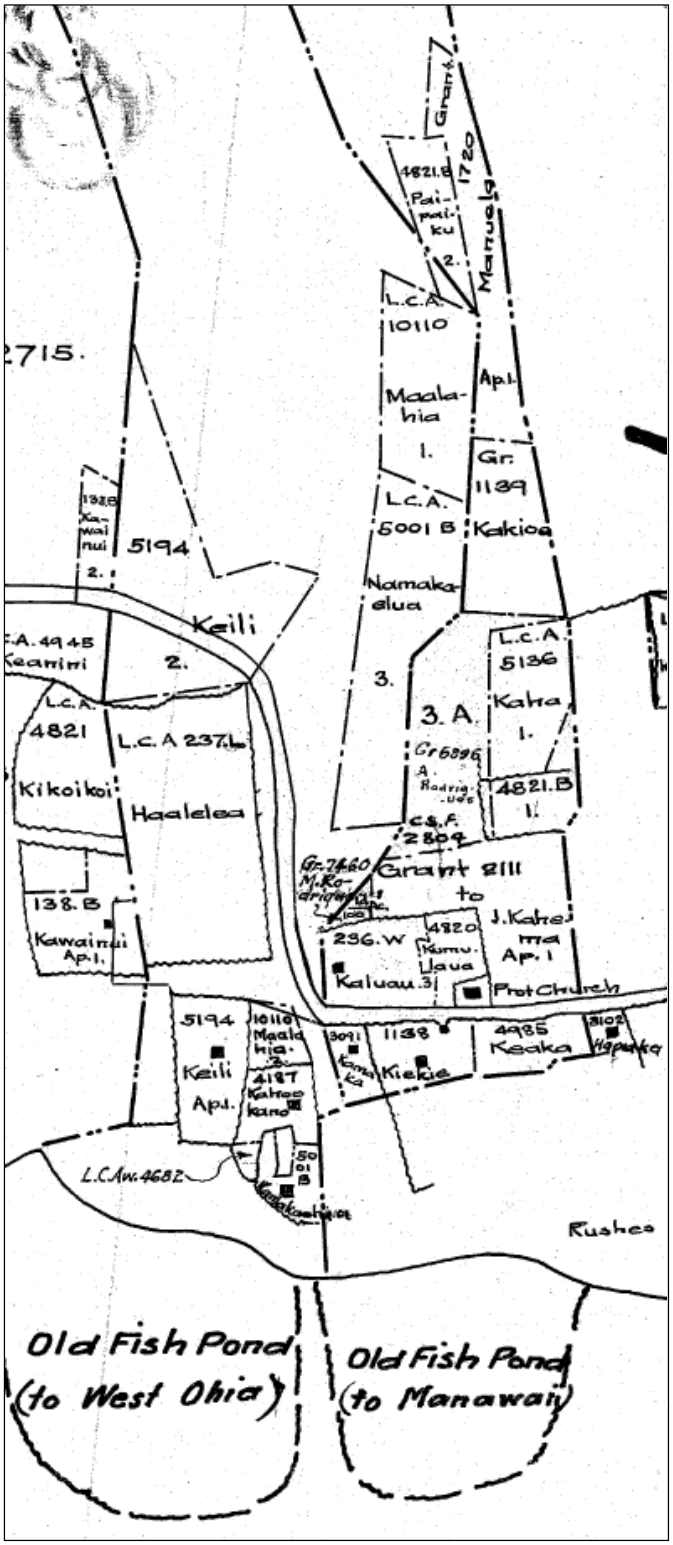


Figure 63. Land awards in West and East ‘Ōhi‘a (Wall 1917).

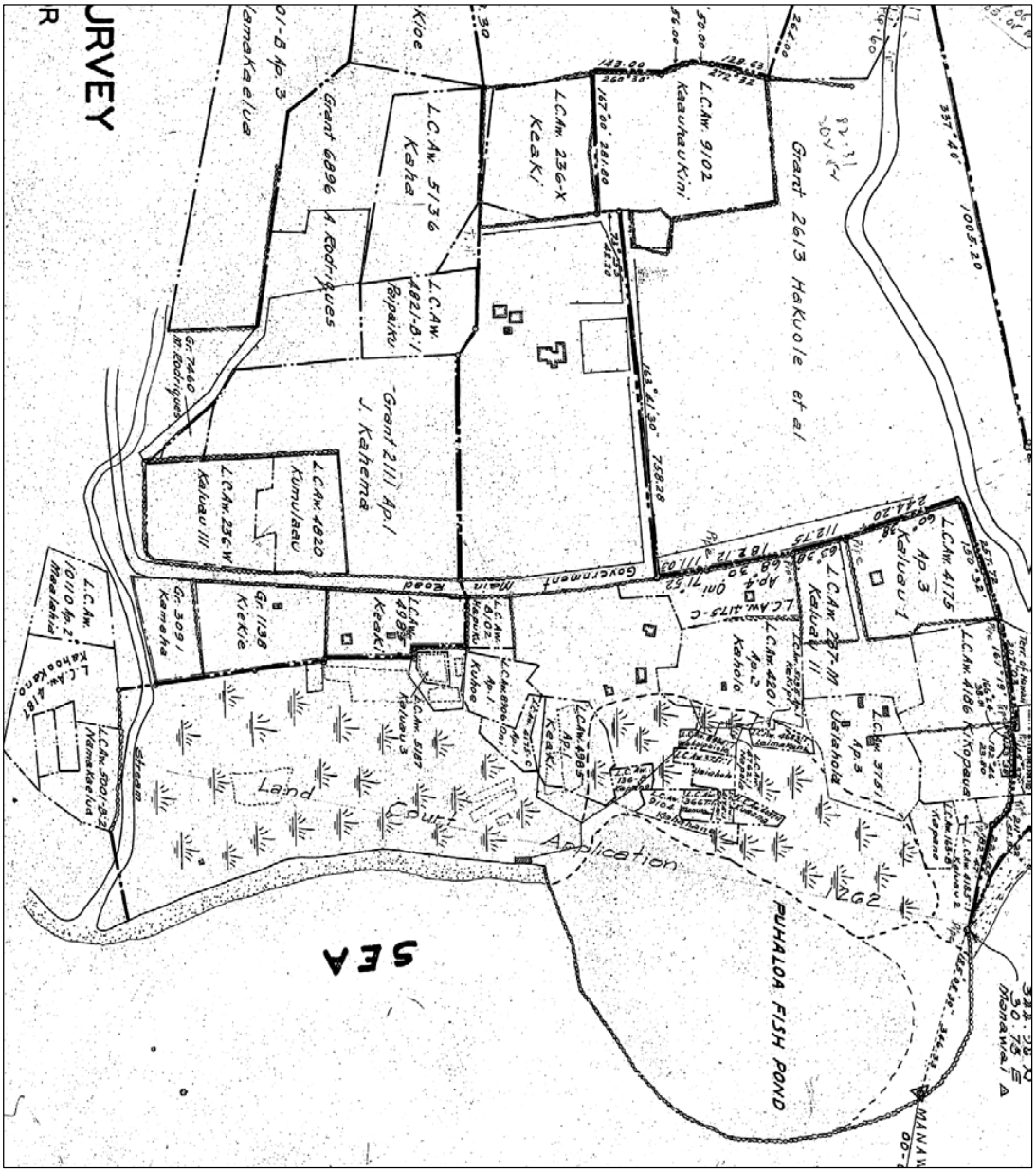


Figure 64. Coastal land awards in Manawai Ahupua‘a (Whitehouse 1938).

MAP OF
LOWER PORTION OF UALAPUE
KONA MOLOKAI
SCALE 100 FEET TO 1 IN
KAHANANUI
KAHANANUI
KALUAHA
THE
Luko
Waiuliu
Executive Order No. 128
Kaule
Ehu
Uilama
Kaina
Kaupe
Koenakaia
Pala
Kaulehupa
Aimoku
J. I. Keoni
Kaiwa
Kaiwa
Kaule
Kaule
Kaule

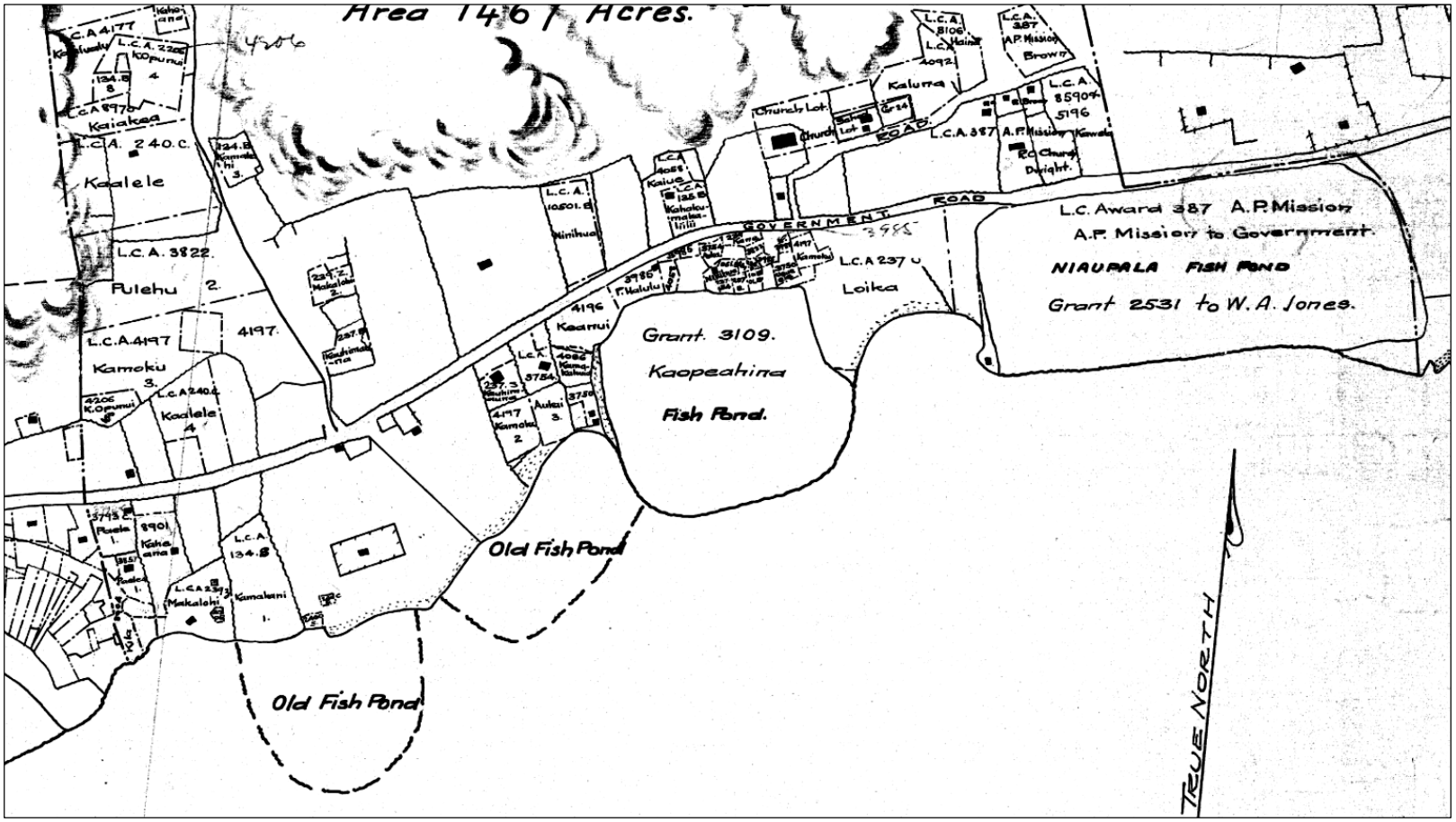


Figure 66. Land awards along the coast of Kalua‘aha Ahupua‘a.

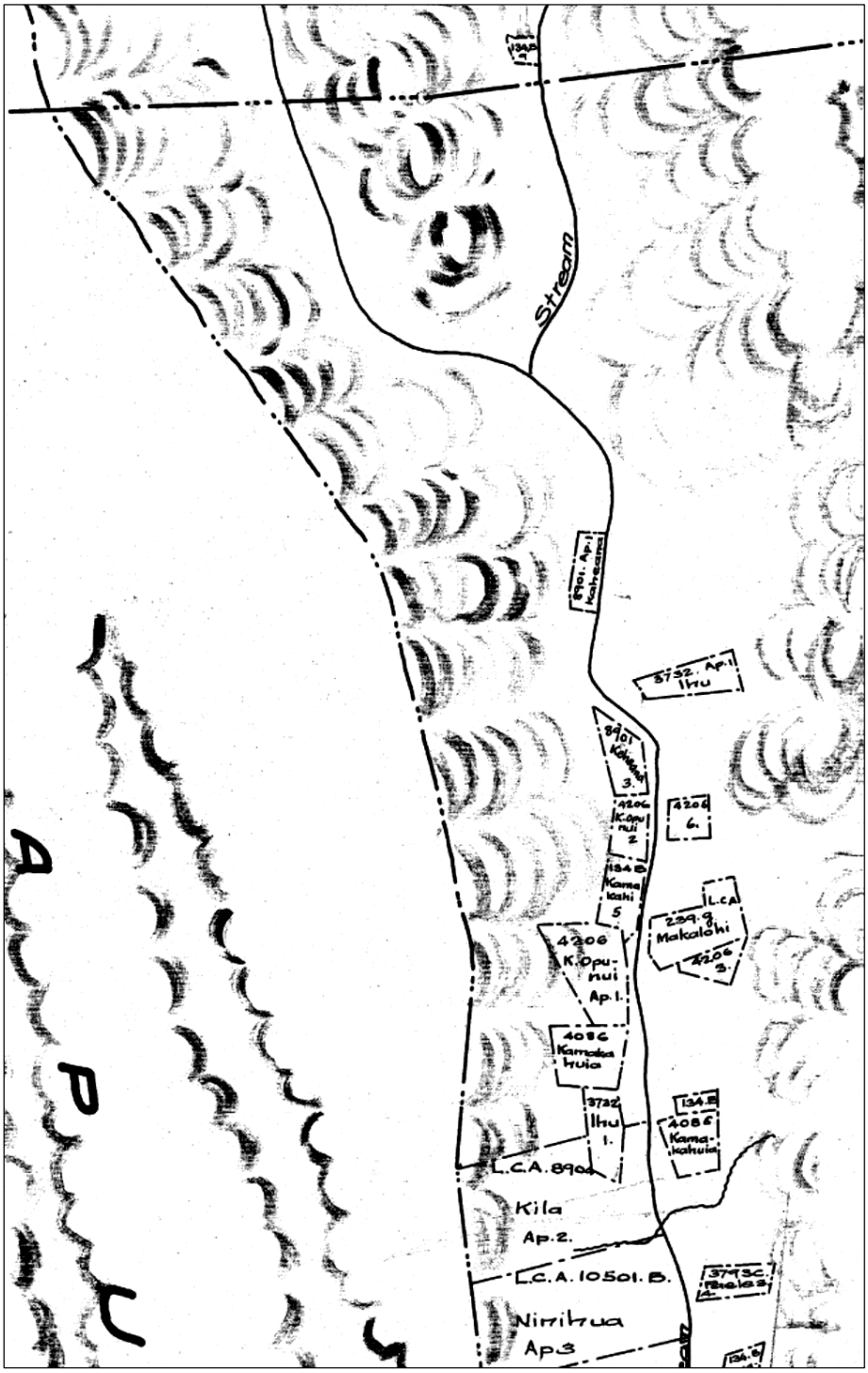


Figure 67. Upper Kalua‘aha land claims.

Hawaiian Language Newspapers

Hawaiians embraced the written language introduced by missionaries in the early 1800s almost immediately. Their quick mastery of it brought about a high literacy rate accompanied by dozens of Hawaiian language newspapers. We have scoured the archives of these newspapers to get a fuller picture of the lands of Molokaʻi which make up the Pākuʻi Fence project area. A total of seven Hawaiian language newspapers, namely, *Ke Kumu Hawaii, Ka Elele, Ka Nonanona, Ka Hae Hawaii, Ka Lahui Hawaii, Ka Lama Hawaii,* and *Ka Nupepa Kuokoa*, were found to shed some historical light on these lands. More than 150 articles from among these newspapers mention the districts that the Pākuʻi Fence runs through: Kaʻamola, Kahananui, Kaluaʻaha, Keawa Nui, Manawai, West ʻŌhiʻa, East ʻŌhiʻa , Puaʻahala, and ʻUalapuʻe. These articles span a 92-year time frame from 1834 to 1926 providing a priceless window into the island of Molokaʻi of former times.

Of all these articles about the lands of the Pākuʻi project ahupuaʻa, the majority deals with the district of Kaluaʻaha, approximately 40% of the total number. Following Kaluaʻaha, both Kaʻamola and ʻUalapuʻe districts are mentioned in approximately 20% each. The rest of the districts of Kahananui, Keawa Nui, Manawai, West ʻŌhiʻa, East ʻŌhiʻa, and Puaʻahala make up the remaining 20% of the articles gleaned from the Hawaiian language newspapers. Although a variety of factors could contribute to the amount of news that a certain locale would make, the percentages above suggests that the districts of Kaluaʻaha, Kaʻamola, and ʻUalapuʻe were bustling a lot more than the rest of the districts pertinent to the project area. Perhaps these ahupuaʻa had larger populations. If not, they at least had a lot more significant current events at the time which make them appear more significant in the papers.

One last note is that the districts of West ʻŌhiʻa and East ʻŌhiʻa are not differentiated in the articles that were found. Therefore, all of the articles which mention the district of ʻŌhiʻa are grouped together, and whether they refer to West or East ʻŌhiʻa is not clarified.

Content of Newspaper Articles

Like today's newspapers, the Hawaiian language newspapers of the late 19th and early 20th century chronicle everyday life. There is a fair share of birth announcements, death announcements, marriage announcements, last wills & testaments, a divorce announcements for Kaluaʻaha, and even a police blotter of sorts for Kaʻamola which lists charges of fighting, adultery, public intoxication, and blasphemy.

It is interesting to see blasphemy as a criminal offense in times past., as it is not a charge seen in modern Hawaiʻi. The mention of the offense of blasphemy testifies to the presence of missionaries on Molokaʻi. An article from *Ka Lahui Hawaii* particularly condemns a traditional healer from Puaʻahala for healing people in the name of the old gods. The presence of missionaries is further seen in other articles which commend the building of, the visiting of, and the fundraising for new churches in Kaʻamola, Manawai, ʻUalapuʻe, and Kaluaʻaha. The church at Kaluaʻaha is also pointed out to be the meeting place for the prohibition group called the Pualiinuwai in 1857. All of these newspaper articles attest to the influence of Christianity in these areas of Molokaʻi.

Other articles commend the progress of schools in the education of the children of Molokaʻi. Class rosters show that students from Keawa Nui, ʻŌhiʻa, ʻUalapuʻe and Kaluaʻaha were being educated in schools on Maui. Of special note is Kaluaʻaha, which also had its own elementary and English language school(s).

Another topic of interest revealed in the old Hawaiian language newspapers is the topic of land ownership and conveyance. Announcements are posted to claim kuleana awards for parcels in Kahananui, Kaluaʻaha, Keawa Nui, Manawai, ʻŌhiʻa, and ʻUalapuʻe. Additionally, announcements are posted for Royal Patents to lands in ʻŌhiʻa, Puaʻahala, and ʻUalapuʻe. On the other hand, aliʻi lands are pointed out to be in Kaʻamola and Kahananui. The concept of land ownership extends into the sea, and this is highlighted in an 1857 article which states the sale of a fishpond in Kaluaʻaha. Lastly, the ownership of land leads to many newspaper articles which announce "Keep Out/No Trespassing" for various privately owned parcels in Kaʻamola, Keawa Nui, and Manawai.

Despite the changes Molokaʻi witnessed due to the introduction of the Western concepts of land ownership, religion, and education, the Hawaiian language newspapers do affirm the perseverance of some facets of pre-contact Hawaiʻi. An article in 1858 reminds readers that the lands of Kaluaʻaha are those of a puʻuhonua, or place of refuge. Other articles retell the traditional tale of Lāʻieikawai, and where Kaʻamola and Keawa Nui fit into that story. But one of the greatest affirmations of the continuation of native Hawaiian practices in Molokaʻi is the publication of kanikau or traditional lamentations for the passing of loved ones. These lamentations have been recorded in the Hawaiian language newspapers and poetically, they mention places such as Kaʻamola, ʻŌhiʻa, and Kaluaʻaha, as they fondly recall the goodness of the recently deceased.

Finally, the most recent of these Hawaiian language newspaper articles date to the 1920s. In one of the articles, an announcement is made that government lands in Kahananui were being leased. In another article, the ʻUalapuʻe courthouse is designated as an official voting place for the election of Hawaiʻi's delegate to the United States. The content in these later articles, the leasing of government lands and the voting for a U.S. delegate, corroborates the unseen narrative that Molokaʻi, and the entire Hawaiian archipelago, by then, was in a new political era.

A Valuable Glimpse

Indeed, the time frame of these Hawaiian language newspaper articles, almost a full century of publications, reflects the social, political, and cultural changes in the fabric of life on Molokaʻi. While these articles are not an exhaustive listing of every single article written about the lands along the Pākuʻi project area, the volume of articles perused here offer a valuable glimpse into the history of these lands in the post-contact era. It is a glimpse which adds insight to the historical memory of Molokaʻi and its districts of Kaʻamola, Kahananui, Kaluaʻaha, Keawa Nui, Manawai, West ʻŌhiʻa, East ʻŌhiʻa, Puaʻahala, and ʻUalapuʻe and the changes that took place during this dynamic era. The full text in Hawaiian and a brief summary of each article are presented for all nine ahupuaʻa in Appendix A.

Summary of Cultural and Historical Resources

While it is possible to consider only the historic or cultural sites that would be directly impacted by the Pākuʻi Fence construction or limit the geographic area to the boundaries of the Pākuʻi Project, these sites and the upland, forested region where they occur did not exist in isolation. Because these features were functionally associated with their respective social units and territories, we assess the project area in terms of the natural and cultural features found elsewhere in the nine ahupuaʻa of the project area. Because of the relationship established by ʻili lele between windward ahupuaʻa, where these parcels were found, and the leeward ahupuaʻa, which had claim to them, it is necessary to view the Pākuʻi project area from this perspective as well.

As the Māhele claims demonstrate and the historic maps illustrate, much of the Hawaiian population of the nine ahupuaʻa lived along or near the coast. This is likely a function of the availability of surface water and alluvial lands for farming, along with the construction of

fishponds along the coastline for aquaculture. Other marine resources and the accessibility to the ocean offered by living near to the coast are other factors that lead to this clustering of residential areas. Regardless, it is possible that with the catastrophic loss of population that occurred after European arrival in the islands in the late 18th century and the relocation to better watered and coastal areas, upland zones on all of the islands that had supported residential groups were abandoned (e.g., Sweeney 1992). Few of these lands were awarded as parcels to individuals during the Māhele. Hence, we should be cautious extrapolating from the locations of mid-19th century land awards to earlier times in the 17th century.

The only significant array of inland land awards among the nine ahupuaʻa was found in Kaluaʻaha (see Wall 1917) and that is probably a function of topography. The Kaluaʻaha Gulch is wider and does not rise as rapidly in elevation compared to the gulches located farther west. As a result, it was possible to develop and cultivate loʻi farther upstream in Kaluaʻaha. It is the only ahupuaʻa that had a land award above the Forest Reserve boundary (see Wall 1917). It may be that other ahupuaʻa would have displayed similar land use patterns if large tracts had not been awarded earlier to aliʻi or other prominent individuals.

The interior, higher elevation lands of leeward Molokaʻi were fit into the conceptualization of the landscape provided by Hawaiian culture. They were wao lands— wao kanaka, wao akua, wao maʻukele, and waoʻēiwa. The lands of people (wao kanaka) were likely "improved" by cultivation or other clearing related to habitation or direct management of natural resources. Above this, lands would have been held in common for the use by the residents of any given ahupuaʻa (Handy et al. 1991). These Hawaiian terms for different portions of the landscape, and their application to the uplands of Molokaʻi are one indication of the significance and value these areas would have held to local residents. Among the resources found in the uplands would have been woods for various implements and construction materials, as well as for objects of use and ritual. The dispersal of kukui, along with kī and maiʻa in the upper gulches of the nine ahupuaʻa is one indication of human presence on this part of the leeward landscape. While kukui is currently naturally dispersed by animals and stream flow, those trees at the highest elevations were likely transported there by Hawaiians. Their clustering in largely continuous stands of trees between 600 and 1,600 ft. asl is likely due to their original introduction by humans.

Because they were not traditionally inhabited (or occupied permanently) and since they generally supported forests or woodlands, the kinds of cultural sites located in the Molokaʻi uplands are more limited and may be less visible. Our archival research has identified three largely undocumented cultural sites in the uplands of the Pākuʻi project area. This includes two trails and one fortress or refuge site. Neither trails nor refuge sites are unique to the project area but their preservation should be a high priority for land managers given the role they played in the history of leeward and windward Molokaʻi.

The Pākuʻi fortress is mentioned in oral traditions and oral histories collected as part of this project. Its location is not identified here but is likely to be in the vicinity of the project area, given its name, and its association with both a summit location on the East Molokaʻi Mountain as well as a heiau located on a much lower ridge line that divided the ahupuaʻa of Manawai and Kahananui. Moreover, the fortress is associated with at least two named chiefs said to have lived or visited the fortress along with their followers and possibly their opponents. A battle is said to have occurred at or near the fortress that ended in a defeat for the Molokaʻi chief.

The two new trails identified here—Puaʻahala and Kaluaʻaha-ʻUalapuʻe—are located on the western and eastern ends of the project area. We also described two major trails, Wailau and Pelekunu, that crossed from leeward to windward regions of the island. Both trails are recorded in historical accounts, and their routes can be found on historic maps and are used by some Molokaʻi

residents today. Other trails are mentioned and/or described by Summers (1971) suggesting that there was formerly a network of trails throughout the island. This network connected various ahupuaʻa to one another and provided opportunities for interaction and transport that did not need to rely upon sailing along the Molokaʻi coast.

The two new trails were identified by looking closely at several of Monsarrat's field notebooks from the late 19th century. While it was not his objective to map new trails, his sketch maps included locations identified as such in his own handwriting. While faint, these notations indicate that Monsarrat was aware of (and probably walking on) traditional pathways built by Hawaiians. The location of these trails on ridge lines and near ahupuaʻa boundaries that extend down from the summit of the East Molokaʻi Mountain provided a relatively easy means to move from the coast to the uplands and back again. It also suggests there may have been other trails in the project area that were not noted by Monsarrat. For instance, the boundaries between Kahananui and Manawai and between Manawai and East ʻŌhiʻa are located on ridge lines that extend up to the summit from near the coast. Both ridge lines have sections that are named and are backed by the summit of Pākuʻi Peak. Trails may have been established to provide access to the nearby fortress, and these trails would have been placed on named ridge lines that extended over several kilometers and connected to the summit of the East Molokaʻi Mountain.

One of the new trails, Puaʻahala, also appears still to be visible along some sections. While this may reflect recent clearing and current animal and/or human traffic over the path, its location is consistent with where Monsarrat placed it on the sketch maps: to the west of upper ʻŌhiʻa Gulch and to the east of Wāwāʻia Gulch. And its current visibility is a function of the lack of vegetation on top of the ridge near the summit. However, sections of it also are visible near the projected fence boundary. It is possible that other trail segments may still be identified with ground survey within forested areas.

Associated with trails are named sections of and locations along the ridge lines where these pathways were located. Places along the summit of the East Molokaʻi Mountain are also named and these locations are usually near one or more trails that extended from the coastal plain to the uplands. The association between names used for gulches and those used for ahupuaʻa identifies another aspect of indexing, as ridges surrounded gulches and could be used to locate other places on the landscape, especially ʻili ʻāina, the named lands occupied by extended families or groups of households.

Although it was not possible to identify new trails on the Wailau side of the East Molokaʻi Mountain, both the Wailau-Mapulehu and Pelekunu-Kamalō Trails, are nearby and could have been accessed via the summit. The East Molokaʻi Mountain extends in a west to east direction and would have provided a means to move from trails that terminated at the summit to the major trails that crossed over it. It may also be possible there were additional trails extending down into Wailau Valley from the summit area, although much of the interior and uplands of Wailau would have been impassable given the steep slope in the back of the valley.

The linkage via trails of leeward ahupuaʻa to windward ahupuaʻa corresponds to a pattern of land use and assignment on Molokaʻi. All of the nine project area ahupuaʻa (as well as others to the east and west) had ʻili lele in either Wailau or Pelekunu, or both. ʻIli lele are generally parcels of land associated with a given ʻili but which are not contiguous, i.e., they are separated on the landscape. Most ʻili lele are located within the same ahupuaʻa; this is not the case here. As many as 16 ʻili lele were identified by Summers (1971) for the nine project area ahupuaʻa. These parcels can be large in size, many are located adjacent to streams, and most were potentially suitable for the construction of loʻi or other agricultural features. The origins of ʻili lele cannot yet be identified, although this form of ʻili organization occurs elsewhere in the islands. Historically, ʻili lele could

be assigned to ahupuaʻa or were acquired by other chiefs as part of their holdings, ʻili kūpono. At least one of the ʻili lele assigned in Pelekunu was associated with East ʻŌhiʻa and awarded as a land grant during the Māhele. It is a likely candidate for an ʻili kūpono (Summers 1971:213–214).

As Summers notes:

> An interesting situation seems to have developed on Molokai, probably during the latter part of the island's history, concerning the location of *lele.* Many *ahupuaʻa* of the Kona district had *lele* in the Koʻolau district but no *ahupuaʻa* of the Koʻolau district have been reported as having *lele* in the Kona district. Geographically, these *lele* follow a pattern, the western lands having *lele* in Waikolu, those further E having their *lele* in Pelekunu or Wailau. (Summers 1971:214)

The agricultural resources of an ʻili lele that were part of an ʻili kūpono, i.e., assigned to a chief, were not responsible for tribute to the local konohiki of the ahupuaʻa in which they were located. The responsibilities of ʻili lele assigned to an ahupuaʻa are less clear, although it is likely that the konohiki of the entire ahupuaʻa was placed in charge of managing these land parcels outside of the community's territory. Since most ʻili lele were improved, that is converted to agriculture or used for other economic purposes, there is the matter of whose labor was devoted to their construction and planting (or other use). Since they were likely the responsibility of a konohiki of a neighboring ahupuaʻa, it is possible that labor to work ʻili lele came from that community, or if not, then a portion of the resources extracted or produced might have been awarded to laborers from the lele's ahupuaʻa.

Regardless of how labor was recruited and organized for the improvement of ʻili lele or the cultivation of crops on these lands, some means of recurrent, periodic interaction between residents of leeward and windward ahupuaʻa appears certain. Given the challenges of sailing from the leeward coast to the windward bays during the winter months, the trail system linking leeward and windward regions would have been utilized for the purpose of communication and for transporting people and/or agricultural resources between ahupuaʻa on either side of the East Molokaʻi Mountain.

ARCHAEOLOGICAL RECONNAISSANCE

Three days of archaeological reconnaissance were carried out between July and October 2015. Keala Pono archaeologists involved in this work consisted of Windy McElroy, PhD, Pūlama Lima, MA, and Steven Eminger, with two archaeologists present per day. Pedestrian site visits were carried out in ʻŌhiʻa, Manawai, and Kaluaʻaha Ahupuaʻa (Figure 68), and a helicopter reconnaissance was completed for the entire Pākuʻi Fence route. The purpose of this work was to identify any archaeological resources that may be potentially impacted by construction of the Pākuʻi Fence. The pedestrian reconnaissance areas were chosen because these are places where the proposed fence route can be accessed by foot without much difficulty. In addition, TNC staff had identified possible archaeological sites near the proposed fence route in ʻŌhiʻa and Kaluaʻaha, therefore this was a high priority area to visit.

A pedestrian site visit to ʻŌhiʻa was conducted On July 28, 2015. This began in West ʻŌhiʻa, with a route taken to the uplands that passed through both East and West ʻŌhiʻa and ended where the fence will cross through East ʻŌhiʻa (see Figure 68, upper left route). A variety of archaeological features were observed along the reconnaissance route; only those near the project area are described below.

One archaeological site with two features was identified near the proposed fence route, on the west bank of ʻŌhiʻa Stream. This site, designated as Site 1, includes two features, a terrace and a wall. The terrace consists of a level area with two rock faces built of stacked stones. The eastern face is above the stream and is made of 2–3 manmade courses incorporated into the natural stream bank (Figure 69), while the western face is composed of as many as 8 courses of stones stacked against a boulder (Figure 70). The total area of the terrace is approximately 8 m long x 2.5 m wide. The Site 1 wall is located roughly 2 m west of the Site 1 terrace, near the steep valley slope. The wall is made up of a single alignment of stones that runs 5.2 m, parallel to the stream (Figure 71). The fence route should avoid Site 1 so that the terrace and wall are not affected by the fence. A 3 m (10 ft.) buffer is recommended, and archaeological monitoring should be conducted during construction in this area.

On July 29, 2015 an aerial reconnaissance survey was conducted by helicopter along the entire proposed fence route, from Puaʻahala Ahupuaʻa to Kaluaʻaha Ahupuaʻa, including Pākuʻi Peak.. The helicopter flew slowly very close to the ground so that surface archaeological features could be identified visually (Figure 72). No cultural resources were identified during this aerial survey. A selection of photos from the helicopter reconnaissance is presented in Figures 73–76.

Also on July 29, 2015 a pedestrian site visit was conducted in Manawai Ahupuaʻa. Time did not permit a reconnaissance to the proposed fence route, therefore only the lower portion of the ahupuaʻa was walked (see Figure 68, lower left route). A variety of archaeological features were observed along the reconnaissance route, although none were in the vicinity of the project area. Of particular interest were four heiau, briefly described below.

The heiau observed in Manawai are thought to be Puʻu ʻŌlelo Heiau (Site 174) (Figure 77), Kaluakapiʻioho Heiau (Site 175) (Figure 78), Kahokukano Heiau (Site 177) (Figure 79), and Pākuʻi Heiau (Site 178) (Figure 80). They are a part of the Hōkūkano-ʻUalapuʻe National Historic Landmark and are described in Summers (1971) (see Previous Archaeology section).

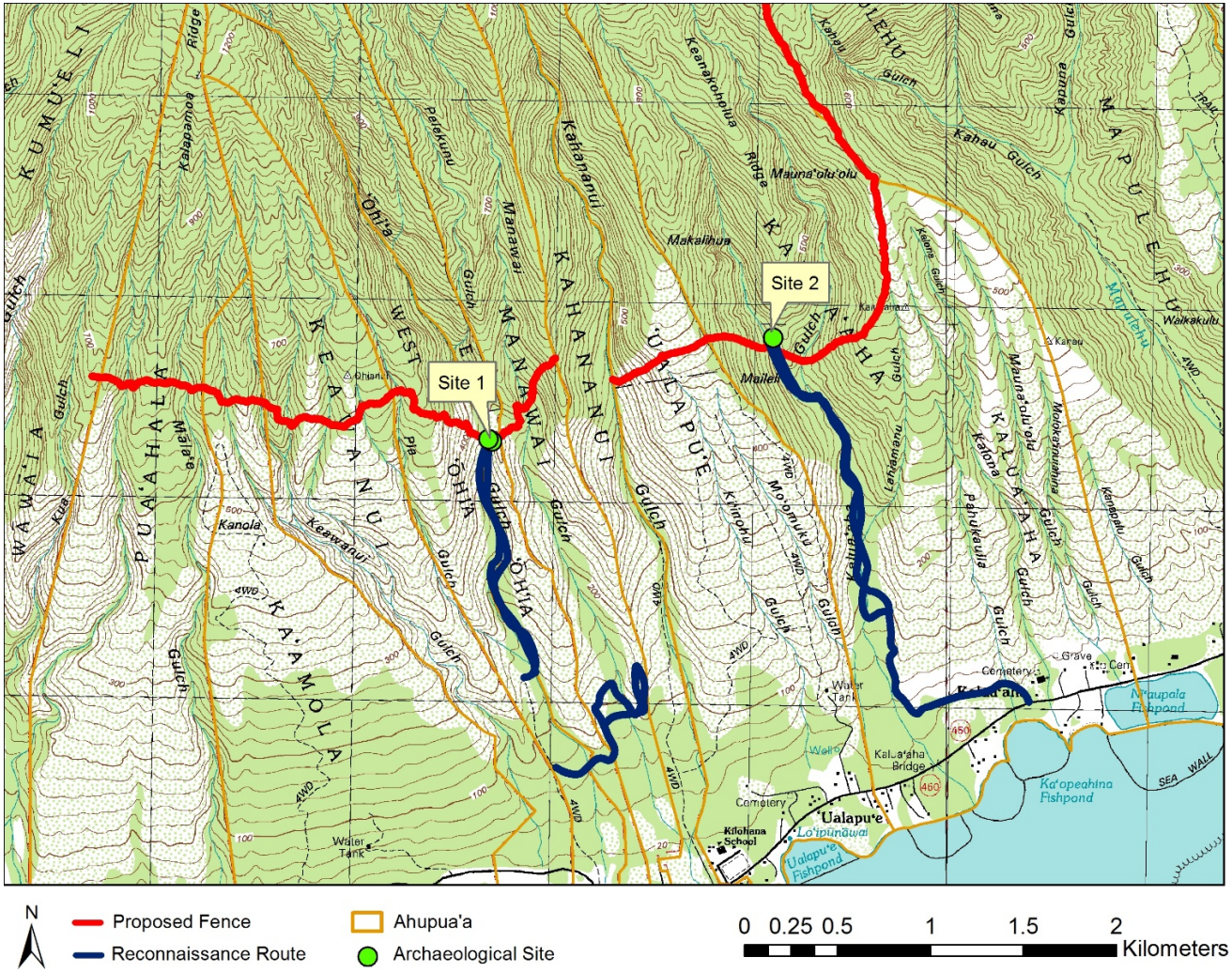

Site 1
Site 2
Ualapu'e
Kaloiana School
Cemetery
Water Tank
Kanola
Kalaʻaha Bridge
Ka'opeahina Fishpond
Ualapu'e Fishpond
Lo'ipūnāwai
Mauna'olu'olu
Makalihua
Maileli
Kahau
Kahau Gulch
Kahanamoe Ridge
Kahanamoe Gulch
Kahanamoe Ridge
Kahanamoe Gulch
Kahanamoe Gulch
Kahanamoe Gulch

Figure 69. Site 1 terrace, east face. Orientation is to the northwest.

Figure 70. Site 1 terrace, west face. Orientation is to the west.

Figure 71. Site 1 wall. Orientation is to the west.

Figure 72. Archaeologist's view of the ground surface during helicopter reconnaissance (photo by W. McElroy, July 29, 2015).

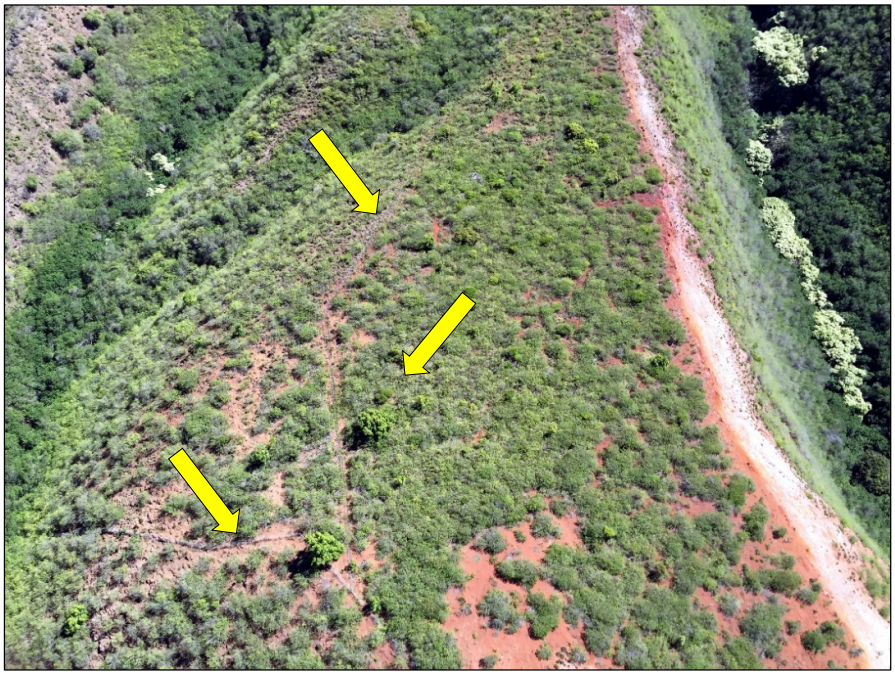


Figure 73. View of the existing fence on the west end of the project area and Pua‘ahala on the right (yellow arrows point to the existing fence line).

Figure 74. The project area with Pua‘ahala in the foreground. Orientation is to the northeast.

Figure 75. The project area above Keawa Nui Gulch. Orientation is to the north.

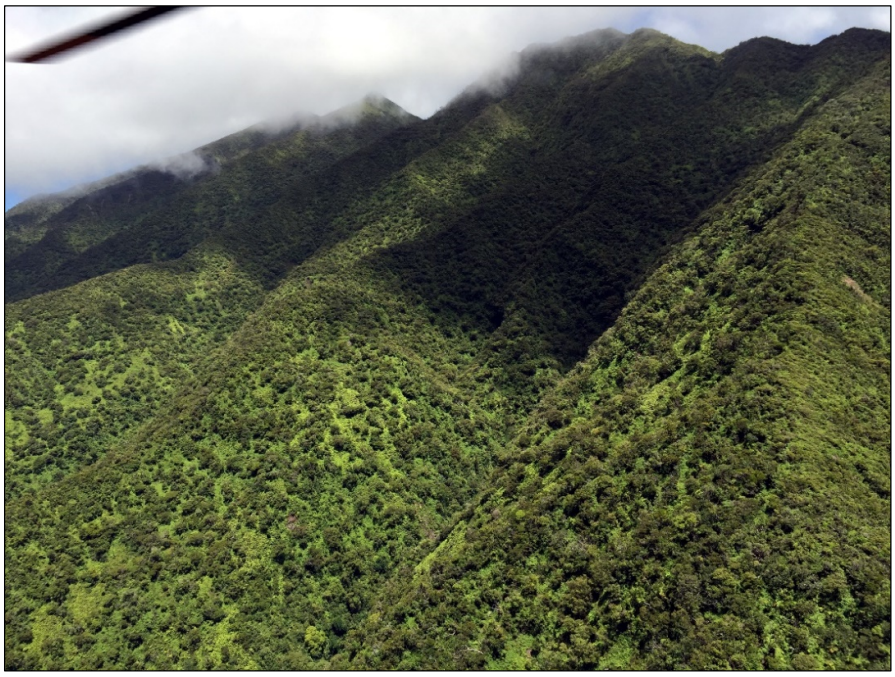


Figure 76. The east end of the project area, where the proposed fence will extend north above Kalua‘aha. Orientation is to the north.

Figure 77. Interior of structure thought to be Site 174, Pu‘u ‘Ōlelo Heiau.

Figure 78. View from what is thought to be Site 175, Kaluakapi‘ioho Heiau.

Figure 79. View from what is thought to be Site 177, Kahokukano Heiau.

Figure 80. Exterior of structure thought to be Site 178, Pāku‘i Heiau.

A final pedestrian site visit was completed on October 26, 2015 in Kaluaʻaha Ahupuaʻa. This began at Kamehameha V Highway and ended where the fence will cross through Kaluaʻaha (see Figure 68, right route). As in the other site visits, a variety of archaeological features were observed that were not in the vicinity of the project area. One archaeological site was nearby, however. This consists of a rock wall segment, designated as Site 2. The wall is located approximately 30 m north of the proposed fence route, on the west side of Kaluaʻaha Stream. It is composed of stacked stones, and measures 6 m in length, extending from the base of the west Kalua'aha ridge to the edge of the bluff, where it descends into the river (Figure 81). Because Site 2 is 30 m away from the proposed fence line, the site will not be impacted by fence construction and archaeological monitoring is not recommended for this area.

Figure 81. Site 2 wall. Orientation is to the north.

ETHNOGRAPHIC SURVEY

As we all know, there are some things that cannot be found in the archives, in textbooks, or at the library. It is here, through the stories, knowledge and experiences of our kamaʻāina and kūpuna, that we are able to better understand the past and plan for our future. With the goal to identify and understand the importance of, and potential impacts to, traditional Hawaiian and/or historic cultural resources and traditional cultural practices of the project lands, ethnographic interviews were conducted with community members who are knowledgeable about the project area.

Methods

This cultural impact assessment was conducted through a multi-phase process between May and September 2015. Guiding documents for this work include The Hawaiʻi Environmental Council's Guidelines for Assessing Cultural Impacts, A Bill for Environmental Impact Statements, and Act 50 (State of Hawaiʻi). Personnel involved with this study include Windy McElroy, PhD, Principal Investigator of Keala Pono Archaeological Consulting, as well as Pūlama Lima, MA, Ethnographer, and Michael Graves, PhD and Dietrix Duhaylonsod, BA, Archival Researchers.

Interviewees were selected because they met one or more of the following criteria: 1) was referred by Keala Pono Archaeological Consulting or The Nature Conservancy; 2) had/has ties to the project area or vicinity; 3) is a known Hawaiian cultural resource person; 4) is a known Hawaiian traditional practitioner; or 5) was referred by other cultural resource professionals. Four individuals participated in the current study. Manaʻo and ʻike shared during these interviews are included in this report.

Interviews were taped using a digital MP3 recorder. During the interviews, interviewees were provided with a map or aerial photograph of the subject property, the Agreement to Participate (Appendix B), and Consent Form (Appendix C), and briefed on the purpose of the Cultural Impact Assessment. Research categories were addressed in the form of open questions which allowed the interviewee to answer in the manner that he/she was most comfortable. Follow-up questions were asked based on the interviewee's responses or to clarify what was said.

Transcripts were produced by listening to recordings and typing what was said. A copy of the edited transcript was sent to each interviewee for review, along with the Transcript Release Form. The Transcript Release Form provided space for clarifications, corrections, additions, or deletions to the transcript, as well as an opportunity to address any objections to the release of the document (Appendix D). When the forms were returned, transcripts were corrected to reflect any changes made by the interviewee.

The ethnographic analysis process consisted of examining each transcript and organizing information into research themes, or categories. Research topics include connections to the project lands, archaeological sites, traditional practices, moʻolelo, the natural environment, recollections and anecdotal stories, and concerns and recommendations. Edited transcripts are presented in Appendices E–H.

Interviewee Background

The following section includes background information obtained from each interviewee during the interviews. This includes information on the interviewee's ʻohana and where the interviewee was born and raised, in their own words. Interviewees include Billy Akutagawa, April Kealoha, Hanohano Naʻehu, and Russel Phifer.

Billy Akutagawa

> My name is William Akutagawa. I was born here on Molokai. I've been a lifelong resident of Molokai. My parents are William and Catherine Akutagawa….Well, after my mom moved from Manaʻe to town. She lived over here in Manila Camp. So that's where I lived, but we would always go up Manaʻe, go visit the family, and stuff like that, go venturing. I reside in Kaunakakai, right in the town itself….I'm the executive director for the Native Hawaiian health care system, Nā Puʻuwai.

April Kealoha

> …My name is April Kealoha, but my maiden name is Morgan. And I was born in Kaneʻohe, Haiku Road. It's actually the ahupuaʻa of Haiku to Heʻeia Kea. And my mom is Loretta Halualani Morgan, and my father is Donald Morgan. Right now I'm married to Samuel Kealoha and have two daughters, Joy Hanaunani Kealoha and Haliu Kealoha. We live on the ʻāina Kaʻamola, now we've been there from 1980. And my older sister, Corrine Helm, has been there from 1974…Halualani is my grandpa, and their last name is Halualani. My mother is a Halualani.

Hanohano Naʻehu

> My name is Guy Hanohano Naʻehu. My parents is Sharon Uluwehi Sis Dudoit and Clayton Guy Naʻehu. My dad was hānai to the Naʻehu family, and he actually come from the Pali, Henry Pali and Emily Dudoit line. My mom comes from the Jules Dudoit and Barbara Yeda line. I Hawaiian, French, Okinawan, born and raised on this island, went to Kilohana School, went to Kamehameha School, got kick out, graduated Molokaʻi High School, participated in all kinds of sports here, world record cowboy, and then started working fishponds in 1999–2000, and ever since just become a husband, a daddy, and community activist, kiaʻi loko, fishpond guardian, conservation lobbyist, all-around good guy, you know, Manaʻe Poʻo, for the ʻAha, and Pūlama's friend and cousin.

Russel Phifer

> [My name is] Russel George Kaleolani Phifer. [I was born in 19] Fifty-six. I live in Kamalō all my life… [but I was born] in the mainland. Indiana. Irene [is] my mother. And my father was Bob, Robert Phifer. You know what is funny? My mom, every time I come up here, my mom tell us stories how her uncle used to live at the house right in the front, Uncle Sam. And das where she was born 'cause my grandma and my grandpa was on the way down to go to the hospital.

Topical Breakouts

A wealth of information was obtained through the oral interviews. Quotes from the interviews are organized in the following sections by topic. Topical breakouts include connections to the project lands, archaeological sites, traditional practices, moʻolelo, the natural environment, recollections and anecdotal stories, and concerns and recommendations.

Personal Connections to the Project Lands

> [My ʻohana connections are] right here, Puaʻahala, Kaʻamola, Keawa Nui, ʻŌhiʻa, Manawanui, Kahananui, ʻUalapuʻe, and Kaluaʻaha. Yeah, my family connection is between Keawa Nui and Kahananui in a place called Manawai. My great-grandmother, that's where she was born and raised. Her name was Hamau Halape. Halape. And she was raised there, and then my grandmother used to talk about her mother, which is

Hamau, how they used to live up in Manawai in the valley. Actually between ʻŌhiʻa and Kahananui. [Billy Akutagawa]

The other thing too is, you know in Kahananui, the upper portion, my mother said that part of the family come from inside there. And then she carries the middle name of the family, Kalua. So they used to live on that side, get Manawai, and get Kahananui, but they come from inside there. Yeah, I hunted on top there when I was younger, just when I graduated from school, went in that valley behind, go inside there, climb all the way up. On the top, then climb back down on the Mapulehu side. [Billy Akutagawa]

So it's always intriguing when you walk, and you see these things yeah? Much like where I came from, Kamalō. Although I used to go up my grandmother's house, she's from ʻUalapuʻe yeah? We down Kamalō. And then we go up, and we stay with her. So we used to go in the back, Kilohana School, walking all over the place, just for look. I don't think kids do that nowadays. [Billy Akutagawa]

You know, since we went, when we moved there, we knew the meeting people, especially that lived along the area. 'Cause you know when you first move to someplace from another place, we relocate, so of course, the community there would see who are you and what are you doing here. But you get to learn, you get to live with them alongside, and then learn the things that was happening in Kaʻamola. [April Kealoha]

Part of my resources is from Uncle John Kalilikane and Aunty Gabby, she's a Duvauchelle, and Aunty Anna Goodhue. And they used to tell us of a Japanese family, people that lived there, 'cause we did find a house site and with a toilet and all that. But there's a lot of fresh water springs, and there was a lot of taro planting over there. So now my husband continues to plant the kalo over there. And accordingly, the family used to raise livestock, like pigs, goats. [April Kealoha]

So Kipahulu, and then they had land over here, and then on Oʻahu by the Aloha Stadium. But the land over here, he met a woman named Poʻohiwi. She is of Kaʻamola. And that is why, that is how we got the land. [April Kealoha]

About, gee all my life, about twenty years I was dea. [Russel Phifer]

So I'm a kiaʻi loko, and fishpond guardian, at Keawa Nui Fishpond. Kiaʻi lokos take care of the fishpond, but more importantly, Hawaiian resource managers, because one loko iʻa is a part of the ahupuaʻa Hawaiian land management system, actually almost one of the last parts. As a Hawaiian resource manager in the ahupuaʻa, everything comes from the top of the mountain, down through the lands, down to the shoreline, out into the fishpond, and out to the reef. Therefore, everything we do and everything we see, everything we think about, how we treat ʻāina is always interconnected. One always affects the other. We become one of the best fishpond operators in Hawaiʻi, in the world. We have the only fully functioning fishpond on the planet right now. We do aquaculture with the only licensed reef ----- producers in Hawaiʻi. We're one of the six oyster farms with one research development scientific place where we get experiments going on with the oceanic institute and mullet ----- projects, limu studies, mangrove studies. We do education with Molokaʻi schools from keiki to kupuna with people from around the state, around the world. We do culture -----, hula, lomilomi, lua, papa kilo hoku. We love our place, we love our ʻāina, and I think everything that we do give you one good example of what we talk about. Everything we do is for the care and love of our island, this place, and our people. [Hanohano Naʻehu]

Archaeological Sites

So actually, we stay in the ahupuaʻa of Kaʻamola, but if I not mistaken, around the 1400s, there was this issue between Kaʻamola and Keawa Nui. Somehow, the decision was made to give the fishpond in Kaʻamola to Keawa Nui, thus renaming it Keawa Nui. And then till now, it has been that way, and we've never corrected it. But we not in the ahupuaʻa of Keawa Nui. So we in Kaʻamola. Above us, the Pedro family has been raising cattle for a long time. Next to us, Devon Manaba, established a shrimp farm that ended up being sold to John Austin. This is all Kamehameha Schools/Bishop Estate lands. And the cattle ranching has affected the shoreline, the fishpond, and the aquaculture that is done, and did at the shoreline of Kaʻamola and Keawa Nui Ahupuaʻas. [Hanohano Naʻehu]

For me, the loko iʻa itself is one cultural site. Get springs all along the shoreline. That is how we connect to the mauka. That's one direct connect. We've identified, secured, and developed punawai right on the shoreline that is separate from the ocean, completely fresh. We see ʻoʻopu, we see hapawai, we see things and organisms, life forms, that connect us to mauka. So the punawai, along with the loko iʻa, is a sacred site. And for us, the whole wao akua is a sacred site. Like me, personally, I no think pigs, deers, even humans belong up dea. No. It's the wao akua. I no see people hunting up dea. [Hanohano Naʻehu]

When I used to hunt in those regions, I came across couple heiaus. In Keawa Nui was Kukui Heiau. In Manawai, there's Kaluakapiʻioho Heiau, it's on the flank of Manawai on the left hand side. And then Kahokukano. Pakui is the fortress above Kahokukano. And then in the bottom, there's a heiau in Kahananui just above the graveyard. It's like I think it's a complex, how the way it was written for ʻUalapuʻe, the fishpond. They said it was the Kahokukano complex. [Billy Akutagawa]

Then also, you know where Kapiʻioho is? Before you get inside Manawai, this is right at the opening, there's a kapa heiau. It was used for the purpose of blessing kapa. Okay, that particular purpose, to rebury all of the bones, they had to make kapa and go to a kapa heiau to bless it. So Puanani Van Dorp, she came to Molokaʻi. And a blessing was at that kapa heiau. But you know, get one road go in, not to the heiau itself, but it goes to a fence line right in front, and the heiau is right over the fence. So they could go in and you know, take whatever kapa they made and bless it there. [Billy Akutagawa]

And even Kahananui, when we used to hunt in there, go in for pigs, come out for deer, always had that heiau right past the graveyard. [Billy Akutagawa]

The other places I went to hunt, especially in the Keawa Nui area, there is this ridge that comes down, it's called Piʻā. And there's a smaller ridge that breaks off to the east end, and it's called Small Piʻā. And you remember when had that helicopter went crash up there or whatever? My bruddah had to go up because the chopper went into the mountain, and the dirt, you know the rotor, and then one of the game guys, the game warden, had to go up because part of it was in state lands. A skull had come out of the ground. [Billy Akutagawa]

So that's the extent of it. Beyond Kahananui on the opposite side, in that valley I was telling you about, there's a heiau, Kuila, get some further in the valley. And then when you get on top, somebody told me Kaluaʻaha was a wahi pana or something, a sacred place. [Billy Akutagawa]

When you go across there and you see the graveyard, it's a county graveyard, they county guys go clean 'em. Okay, just before Kilohana School, get one road going up. You take that dirt road. It's just past the river. [Billy Akutagawa]

Well anyway, getting back, I always heard about this 'ulu maika field in 'Ualapu'e. I told people, "Where the maika?" And it wasn't for accuracy like to go between two pegs, yeah. It was for distance. So the maika field started at the beginning of Kalua'aha, get one stone wall that run in. I think when you go just before the top of the hill, you see one stone wall running in. That stone wall divides 'Ualapu'e from Kalua'aha. It began there, and it's probably one sloping course that run to Kahananui stream. If you go get the 'ulu maika up the side of Kahananui, on the west side of Kahananui, then you'll be declared the winner. Somebody said it was around there. I forget who told me, but was all covered up. But my uncle who work in the taro patch where Damon Place them live, Ka'upu, he found a maika, and he gave me the maika. [Billy Akutagawa]

It's not your regular maika. It's huge. Maika, but it's big. And he said, "Can you imagine the guy's hand going around this?" And I said, "Well get one maika field around here. Maybe the thing is attached to the field." He said he don't know. He was digging the lo'i on the side, the bank, and the thing fell out. So he gave 'em to me because you know he was already clearing the banks, kinda like widening the lo'i in the back there. And then he gave me that thing. I told him, "I think this place, I read somewhere it's called Ka'eke or something, and something about Kamehameha tried his hand at rolling the maika for distance." [Billy Akutagawa]

The people from that area were kind of interesting. When I hunted in the back, Kalua'aha, in that valley, I was hunting by myself, and I was going through the trees on the side. I came across the cowrie shell with the two holes inside. That was used for the he'e lure. I just buried it there because Ka'amola, I found one too. Actually, Ka'amola one, I went put 'em inside one rock ahu, put it back, was from the surrounding, was on the ground, and this one, I went put 'em back over there. Years later, down the ocean side by my mother's place, I found the stone for it. You know with the groove go in, so the stone is like this, and the cowrie shell on top. [Billy Akutagawa]

The bottom portion used to have taro fields. You know where Wavecrest stay? You know where the tennis courts stay? Had taro fields inside. Had spring water come up and had taro down there. [Billy Akutagawa]

They had small plots that they raised taro inside there [in the uplands]. And I said, "Wow, what kind taro that? Is that the variety that you know the corm?" Yeah, they used to raise 'em inside there, because further up the valley, I came across this taro they call ke'oke'o, no more the corm you know? It has a rooting system that run. [Billy Akutagawa]

And I'm sure get other places inside that area, Manawai, I tried to look for that place, I only found 'em on the opposite side, but my uncle, one time we was hiking back to Wailau, and he pointed up the slope. I forget what the name of that. Anyway, get one area, he said, "You see up there. Get banana and get taro up there." But it's, you know on top of the mountain, get places where it comes down into one dip, and then go over yeah, whenever the thing rain. He said, "Get banana, get taro, get everything up there." That's for people in times of war, they gotta eat, so they pull away from the lowlands, and they go up, and they hike up, and the thing is there, but you just gotta remember that the gods put it there for them in times of famine. [Billy Akutagawa]

Stuff like that, so I said, "Oh yeah," and then the opposite side, on 'Ualapu'e, on the top, I was hunting one day, and I was looking down, and I said, "Hey, this kind of look like

one nice place where had some plants growing in side there." I said, "I wonder if this is the kind place that they deliberately put plants and stuff like that away from the general population, so they can go up there, and they can get keiki when they like and bring 'em back down." So I seen that. [Billy Akutagawa]

Funny yeah? The heiau Kaluakapiʻioho, and the heiau down by Kamalō where I used to hunt in the back, before you get into Kapualei, get couple heiaus inside there. Kapualei Heiau is where Kaʻakeaakawelewele, you know tales of the night rainbow? She get one heiau inside there. But there's another one closer to the mouth where Kapualei come right into Kamalō, and that heiau get the same kind flower I seen growing up there. It's kind of like a yellowish flower. It's kind of a unusual flower, but I seen 'em on top which is kind of weird. [Billy Akutagawa]

You know Kamehameha Schools, there's a stone wall that run to Kapahu We used to follow that stone wall because if you hunting, and [it's] late, you go for that stone wall and come down. I never did understand how the stone wall run all the way down to the end, but that's a dividing line between Kamalō and Kapualei. [Billy Akutagawa]

Yeah. And then, they get burials, you know. When I was helping Kamalō Ranch, the boy same age with me told me, "We gotta go up. We gotta put the rocks again." It's on the side of Kahananui. The thing keep rolling down. I told him, "Ho, look at that, all the rocks." What you pile up, eventually going roll down. But we tried to cover as much of the cave as possible, because I think it's a royal burial cave. And the grandfather told him always, "When you up there, go cover 'em up, 'cause." [Billy Akutagawa]

Yeah, yeah. And then you get back on top. I suspect that even going east, get burial caves too. But some of them are hidden. And when you get up to the Kaʻamola side, and you get into Keawa Nui, ʻŌhiʻa, little bit more foliage, greenery, so the thing hide the cave. 'Cause I found one cave, hunting one time, I found one cave inside ʻŌhiʻa, where the split off between Keawa Nui and ʻŌhiʻa, hunting pig inside, I was going with the dogs. And then we looking for the dogs, because we hear 'em barking, and then we go up, and then sound like they was on the side. So we went on the side like that and found one cave. I said, "Ah, just leave 'em. No go inside. Just leave the cave li' that." Main thing we get the dog and can come back out yeah? [Billy Akutagawa]

Yeah da kine get heiaus all up dea, get all da kine stuff up dea…You just walk back dea, and you see 'em. [Russel Phifer]

Yeah. All up dea, all inside right back inside this gulch, go all the way up, get all…Home sites. All the way up. You walk in every valley, you going see rock formation kine, home formations and all that. And I know they had old trails to go up the mountain, go over, like even the Wailau Trail… [Russel Phifer]

I feel, as a Hawaiian and stuff, I think identifying all the heiaus and all the, you know, the shrines and the places of worship, 'cause get plenty back dea. And they probably went identify before. And I think plenty guys they don't know about this kine stuff, especially our kids ah? And das good for learn ah? [Russel Phifer]

I think da kine, you know, every valley, every ahupuaʻa, every da kine, gulch, every da kine had one significance 'cause you use 'em for one landmark direction, you use 'em for, you know, a lot of things when it gets up to there. And I don't know how far up the…All the sites would be, but I tell you, you start walking up dea, and you start venturing, you bump in to stuff, Let me tell you, and you blow your mind, caves and stuff that you know get something happening up dea. But you no go mahaʻoi, you no go. You

just, alright, you know, and then you go 'cause you was taught not to go fool around. And if you do, you going run into 'em. You going find 'em, run into burial caves and all kine stuff, kind of trippy, but when you see me, when you look at 'em, you kind of like, aahhh heavy, das a heavy thing, and leave you a good feeling, yeah, for know that place was all filled with, had life, yeah… [Russel Phifer]

By that, then when my husband would clear the taro patches, then we would come across a lot of bottles. So those bottles were old bottles, a lot of 'em was rice, rice bottles. Yeah, had Yuen on top. It was like little bottles with covers with the lid. But that was the Yuen's which I know that they lived down the road from us. They might have been there too. I don't know how those bottles all got in the loʻis, but just by digging up the loʻis, the dirt. [April Kealoha]

One more thing, yeah, when we first moved there, get special rocks up there, and they look like koa [koʻa] shrines. In fact, what we did is just kind of still stood them up and leave them as so, and looks like a, what you call that shape, a triangle but it's huge, and so we placed it just where it was…Upright, so we found out while as we were talking with Aunty Corrine and Uncle Adolph that it was like a koa [koʻa] shrine up there for fishing. For us it didn't matter. It was something that was there. We just placed it there and left it like that. [April Kealoha]

When we first built our house too, our first shack [laughs], there was like a kinda concrete, look like a heiau kind of thing, and it was half built. So Uncle went continue it, and so it's a square. [April Kealoha]

Traditional Practices

Plants, pigs, hunting, herbs, spiritual power you know da kine get plenty. [Russel Phifer]

Uh just with access, like, we go hunt right up dea, we go all the way up. And you can only get so far up, and that's it. The deer only go so much. And then she go more up into the forest where the ferns… [Russel Phifer]

And then if you going drop off, take one helicopter and go up dea and start doing your thing, you know the meaning, because every ahupuaʻa, every da kine, you get one trail go up dea, 'cause you get trails going up dea already, you know, hunting trails, and we always take the same trails, you know, and every one probably get one trail, you go up, you get water intakes up dea, and moa up you get good water, you get the best water ova dea, you know, or wells, really, really good water. And the monitoring should be, you know, a lot of guys, until you learn it, until you understand it, then you going feel 'em. If you just one pig hunter, and you go, you don't know, if you don't know about the plants, you don't know. But when you learn about 'em, then you going blow your mind. And then you get deeper into that, and then when you learn about the culture, you know, the Hawaiian, you know, all that, then you see all the heiaus, all the structures, everything, then you learn, you going listen to the chants and stuff. That's one whole different thing. Then you going, "Wow." Then you put old pictures together, you blow your mind. [Russel Phifer]

So yeah, I no see any, you know, native gathering whatsoever. I heard of da kine, like ahus that da kine, would line up fishing spots, you know, from Tubbs Kalipi, but other than that, even that was displaced from the cattle. [Hanohano Naʻehu]

Kiawe, yeah like the only thing you going gather is probably deer. You know? We hardly see anything, the vegetation is all like of that sort until you reach like the proposed

watershed area where you start running into our ferns, you know what I mean? [Hanohano Na‘ehu]

And then the other thing that I do know, of course down below, is the limu ‘ele‘ele grounds yeah? So once I started getting into that, then some family, like Aunty Hala Pali, and Aunty Gabby, go out, and my niece we used to take all the time. And then we gather crab and go fish and all that kind of stuff, all the good stuff out there. [April Kealoha]

The upper areas, we use the upper areas, but what we did was, Uncle Sam fenced, because of the dryness and drought, what he did is put the goats, let them go around so they eat down the shrubs, so you know, in case of a big fire or something like that, which never happened, you know, but just to be cautious that something like that might happen. We make sure that the shrubs are eaten down ’cause usually by winter then he move the goats mauka. [April Kealoha]

So it’s, you know, another thing, and I don’t know if this happens, but the akule guys, you know, like Uncle Kapae and Uncle Joe, they always come up and go look fish. So they come up. ’Cause you can see. So the reason they come up, so they can look in the ocean. And they come with the binoculars too. And they just park up there. They know. They tell us that they going come up, so they park up by the house, and they look for fish. And they do that when the season, and they all come up, also the Kalimas, Uncle John Duvauchelle, das the ones that always come up, yeah. [April Kealoha]

Because you have the kalo, you have the fish, the gathering the limu, and now, we raise the pigs. Uncle raise the pigs and the goats. [April Kealoha]

I had to go back. Some years ago I had to help transport [John Ka‘imikaua], they did one video on that. So John had to help transport his troop up there. To go on to the heiau to dance. And he was on the bottom. And I think he was the one that said that with the overthrow of the kapu, the kahunas got on the top and started chanting. Somewhere around 1819, I think, they chanted. That generally was the demise of the Kamehameha line, you know, so many generations that they’ll be gone. And then so many years after that would start reclamation for Hawaiians. The renaissance would start so many, maybe I don’t know hundred years after the last Kamehameha, which was Lot yeah, would come back. But that’s sort of like my understanding of the place. So that’s partially what I know. [Billy Akutagawa]

I don’t think [people will have issues with hunting and gathering] because most of the people hunt in the lowland areas. They no go that far up. My nephew hunts a lot, but he doesn’t go way up into the forested area. [Billy Akutagawa]

The only thing why we used to go up there a lot beside the hunting, was for go pick pepeiao. Kahananui especially, Kahananui is pretty well-known for that. Actually where you see get kukui nut trees that fall down, or get plenty kukui nut trees, go inside there because the pepeiao is inside there. Every time rainy season, get plenny pepeiao. So we just take ’em off the fall down log, but you gotta know what to pick. Get two other fungus, but the pepeiao, if people know where you get the pepeiao from, I no think they like eat because you know when you take ’em off the rotten log, the thing get all the bugs all come out ah? So you know what we do? We take ’em home, we soak ’em in water. [Billy Akutagawa]

And then you soak ’em in the water, and then if you like keep ’em for long time, you clean ’em, and they you put ’em in one dry box. You dry ’em, and then you put ’em in one package. But I generally like to eat pepeiao fresh. You know, after you pau clean

everything, and that's the only way you can tell. No wonder the Hawaiians call 'em pepeiao, because it's like your ear. When you stretch the thing like that, the other two fungus going start falling apart. But this one, when you stretch the thing like that, you see, just like rubbery like the ear. I don't know who else pick pepeiao, but in Kahananui was the place for that, pepeiao. And Hawaiians knew that too, so they would pick the pepeiao too. [Billy Akutagawa]

Moʻolelo

You know, the mostly, the only one is the Kapualei, the moʻo, and that's more on Kamalō side, you know, that area, that's the only. Then I hear about the night marchers, you know. There's a lot of people that talk about, in fact even I remember Aunty Gabby used to talk about that, the night marchers that go along the mountain tops. [April Kealoha]

But that's the only moʻolelos I heard of, the night marchers, 'cause I remember Aunty Gabby used to mention that. And the Kapualei, you know, the moʻo that went down into Puʻohala. But you know, we did used to hear stories about that Puʻohala, by the beachside, the fishpond. Then they tried to do construction or something, and about the moʻo came out of the ocean… [April Kealoha]

People used to talk to me about it, the old timers. They always mentioned that Kahokukano is the head, the poʻo, okay. The shoulders are Kaluakapiʻioho and the one in Kahananui. And I didn't quite understand, but the ʻōpū, or the stomach, is under Kilohana School. So they always say, "Kilohana School, night time, there's a lot of stories about it." [Billy Akutagawa]

And then the feet goes out into the ocean. On the side where that resort is, not resort. If you go out into the ocean, maybe about the 10, 12 foot level, there's an ahu under the ocean. So they said, "That's the foot." But I could never understand. They call it the wāwae. I could never understand where the left foot stay. That's the right foot, but where's the left foot? [Billy Akutagawa]

So in trying to dive outside of several areas outside there, we used to dive, I was always on the lookout trying to figure out whea the thing stay. The old timers knew, the people who used to dive. It's like a flat, it's not in a tidal surge, it's a flat area, then all of a sudden, [the] thing pop out, this ahu. And it's made of boulders from inland. And they constructed it in a round, there's a slight slope there…Most of the divers have seen it, but I don't think other people seen the thing. So I don't know what it is. I don't know if it's how they say is the foot. Generally it's a man lying down with his head, shoulders, and the foot go out into the ocean. That's what the old timers say, but archaeologists, they just discount the whole thing. They only talk about Kahokukano. But most of the people in ʻUalapuʻe and Kahananui say that's the poʻo. You can see it. [Billy Akutagawa]

The ōpū, I don't know how the head stay over here, the shoulders in here, but Kilohana school is over here. But they always talked about it, the ōpū, because ʻUalapuʻe began as a hospital. And they ran into so many problems. And my grandmother used to work there as a practical nurse. And she said they would shut the doors certain nights because they can hear footsteps. And the patient stay in the room, so they close it. And then, some of the other people, one was my teacher. He was working late one night, then he could hear. [Billy Akutagawa]

They gave up three feet of her property where she stay now. She gave it to these people, the Kalois, they were living there. And when I ask my mom how come they gave that,

she said, "Well go out there and look at the stone." You going see set stones. I think her mother told her, "You should never interfere with that stones." Because the people at Kahokukano, the royalty would come down at night to go to the ocean, so you don't block the path. And they would come at night because daytime, if they going walk, the shadow fall on people and whatever, so they would always come in the evening or night. And that was the pathway to get to the ocean. It was, I think according to her, it was like a pathway or whatever. And the chiefs, chiefess, would all walk on that path down. And then she said that no one should block it. And then she didn't want it so she gave that portion away…I went back, I see the rock. It's like set stones. Part of it is covered though. So was that the trail that came down and went under the school? Why was it there? Nobody seems to know. [Billy Akutagawa]

Well the thing is I used to hunt. Especially, my mother said, "Don't fool around by the sacred places. Just let it go." You know, you just passing through. I said, "Yeah, we just passing through. We not going make any kine." I know better than that too. As Hawaiians we believe that, we just don't upset anything. [Billy Akutagawa]

We go shoot, we go take a 22, and we go shoot, but it's in the kiawe trees yeah. 'Cause I used to do that when I was young. So I took him up there [by the graveyard in Kahananui]. And before we was stopping where get kiawe trees by the beach, and we go look for rats. So we went up there. By the time we got up there was evening time. And I told him, "Ah we go up here we go take a look." So we went across that river, and then we come across by the graves, had one lady by the entrance, white-haired lady, in white. So I went past the graves. And then my nephew said, "Eh uncle, you neva see the lady over there?" I told him, "What lady?" He said, "Get one lady over there." I said, "I don't think so. We go just stay up here little while." And then we came back down, maybe about 20 minutes, we came back down, the lady wasn't there. So I told him, "No moa one lady." [laughs] We got kind of frightened. I said, "Nah." They just come and go. They no stay long. But anyway, that's a grave. I always figured, why this grave like that because it's so rocky. I don't know if the back end get the stream. [Billy Akutagawa]

You know how they tell the story ah? The thing was sinking, the canoe was sinking, I think the rat jumped off the canoe. He was drowning ah? So he called for help. So the he'e came, and he tell 'em, "Come on top me. I take you in." So he took the rat, but before he reached the shore, the rat went jump off. But the claw of the rat caused the he'e to get all that, you know when you look at the he'e, get all that almost like bumps or whatever. They said that from that time on, the he'e hate the rat, the 'iole, and he going pounce on 'em any time. That's of course this story. But then the scientific fact is that the he'e love cowrie ah, because he pounce on the cowrie, and then he get the tentacles go inside there, and then he pull 'em, pull the thing out. They love to eat that. But I don't know….So I seen that, and then I said, "Eh, these people must have been fishing long, long ago down there." But somebody told me, yes, sometimes they bury the cowrie with the person. I was thinking, "Chee," I wasn't in the mood to look if get bones or anything, just put it away, and then that was it. But that came from that general vicinity. So must have had a larger population because my mother told me that my grandmother said that before it wasn't like this, all the kiawe trees. You can yell, and they hear you on the opposite side. And then they used to take the clothes go up, go wash, 'cause the river no run all the time yeah? [Billy Akutagawa]

So she's not a learned person, but it's just the way that they listen to their kūpuna before. Kids nowadays different ah? You know, we never capture enough. The one thing happened is Davianna McGregor, she called me one time, and she was finishing a book, *Kua'āina.* And she said, "Your grandmother is in there, you know." She translating from the transcript, from recordings. So Mary Kawena Pukui came up here to talk to the people up East End. And some of the names I remember…And then my grandmother

spoke Hawaiian yeah? So she was telling her in Hawaiian that, there's fishpond over there, you know, everybody call 'em 'Ualapu'e Fishpond, but probably had one different name. When she was young, she was walking over there, and I think she said the huaka'i went pull her hair, you know, like pull her hair in the back. And she kind of understood what it meant. When you get your menstrual period, you don't go near the loko kuapā. And years later, her daughter had the same thing went happen to her. And so my mother said that's how she knew about the place, you know, about the pathway and stuff like that, and 'Ualapu'e, you go little bit more and you get da kine. I used to go in there with her when I was small because she go pick lauhala ah? [Billy Akutagawa]

And you look back, you can be any place, and you look, and if you understand it, you understand wow what they did, that everything had meaning…everything that was done had meaning. And every place get their own meaning ah, what they had. And if you brought up in that area, you understand it. You know, you kind of, after you get older, you going tell, "Oh das what my grandma went tell me, and my grandpa told me that." And you understand 'em, fifty years later, wow, you blow your mind. So, you know, that kind stuff is so important that our kids learn and understand that kind stuff 'cause they not going know until they get older. [Russel Phifer]

The Natural Environment

But they neva have that much invasive plants, actually it's all invaded already, the plants, all the maile, get plenty maile up dea too. Get nice maile up dea. [Russel Phifer]

…The old days, especially da kine like, even white owl, you go all the valleys, you see 'em all. And Kalaupapa, man, Kalaupapa is amazing, unreal. That place just blows me away when I go down dea. Wow. And it's all, plenty, Hawaiian culture, Hawaiian, you know, da kine, it has, Moloka'i we get plenty you know over hea, and plenty for learn, plenty for teach. [Russel Phifer]

One interesting thing about the Ka'amola side is, as I was talking about that guy Norman Mcguire, his son came back maybe 15, 20 years ago I think. He came back, and he just wanted to go hiking and stuff like that. He went up, and he came down with Hawaiian snails. Apparently had plenty up there. He never thought it would survive up there, but I was looking at it too. It's endemic, and it's endangered…But had quite a bit from above Ka'amola. At least get native species up there. Probably get native plants too, probably up in the higher reaches yeah? We neva had any reason to go beyond hunting pig on the bottom. When you go up the mountain, you hit pig, you just bring the pig from up there. [Billy Akutagawa]

I no even see animals, like wild animals, ravaging in dea. I see 'em pristine, clean, perfect almost, as perfect as you can get. Das what I see. [Hanohano Na'ehu]

Recollections and Anecdotal Stories

The only, not place name, but all I remember is when I used to go up there hunt and go Manawai or Kahananui, orange trees. Yeah. So the old timers told me, "If you go up there, you going find get Hawaiian oranges inside there." That fed the people that were living in there. And if you look at the trees, look at the trees away from the main street[?] because it's kind of thick inside there, you gonna find one hook hanging on one of the branches. That's for people who know, so they go up and they hook the oranges. And then in the bottom had lot of coffee trees, ti leaves, coffee trees. And I just ask what the coffee doing [there], they say, "Oh they love their kope." They used to drink that. They used to use the beans to make. So those are the things I remember. [Billy Akutagawa]

The other side, where Pedro's is, get one small road going in. Sam Pedro used to manage that. And then Edmund Wond came back. He get one small parcel. Edmund get a bigger parcel in there. And so Edmund Wond built his house in there, and he came back, and both of them were good friends, and he just said, "I not going put cattle inside there anymore." But the cattle used to run around inside there. Some people say, "Oh the cattle wreck the stone walls," and that kind of stuff. So cattle production was on the Kahananui side. Mike Decoite built one pen to bring the cattle down, brand, and then same thing with Pedro, he had one place on the other side in ʻŌhiʻa, Keawa Nui, he had one place where he bring the cattle in. So they were raising cattle inside there. [Billy Akutagawa]

And then I know, after a while, somebody made one road go up on top Piʻā. In the days when we were going Kilohana School, the upper Kaʻamola lands were managed by Norman Mcguire. He had a ranch, so he ran cattle up there. Then he had Sam Pedro, and I not sure about Edmund Wond, working for him. And then he put one pipe all the way across to Piʻā, so it crosses Keawa Nui. It goes on to Piʻā because he wanted to put water there for cattle if they ever go up. And then he kind of opened the place so cattle could go up. And then that long pipeline, Sam told me what they did was they run one wire across, okay they anchored a wire on the other end, and they make loops. And they push the galvanized pipe across. And it's an enormous stretch you know. So when we at Kilohana School in the morning we can see the pipeline, even though the pipe was maybe about 1 inch, but you can see 'em in the early morning light, the thing span the gulch. [Billy Akutagawa]

And then they put one trough on the other end. And then when Norman died, the land went back to, a hui was leasing it from Bishop Estate. So Bishop Estate get upper Kaʻamola, not the whole Kaʻamola, but one section, they get one fence line running up. And they get that, and the thing go down into Keawa Nui, up the other side they get up to Piʻā, then after Piʻā, I think belong to, any way it's in ʻŌhiʻa any way, where other lands were, I think that's where Edmund Wond and Sam Pedro managed. And then Pearl had cattle in the bottom portion, but it was all the way up to the fence line. That's why the fence line was built. You know where the kapa heiau is, that's why the fence line was built, to prevent the cattle from going more up. [Billy Akutagawa]

Well I think the feeling is really good. When Uncle and I first lived there to, we just kind of moved, you know, with no job, no nothing, and just moved, and lucky Aunty Corrine and Uncle Adolph was there. So when we did get around, we used to walk up to her house 'cause that's the only way we could do it, with the trail. And sometimes we used to walk pitch dark, but I mean, it was all good 'cause I just felt that my ancestors… [April Kealoha]

At this property where we staying, and I knew nothing could happen, which was good. And yeah I think the feeling was good and more so now that Uncle does the loʻi, and you know, I can go out, 'cause we went crabbing, right, the other week [laughs] and did all kind stuffs so. [April Kealoha]

Concerns and Recommendations

Going into our history, you start to realize that neva have wild animals that we had to go get out of our forests, you know? So the concerns that was brought up [at the community meetings], to me, was real shallow, neva have any intellectual research or historical standing whatsoever. And the gathering thing is ridiculous because we get so much room from the watershed down around our whole island for gather and subsist, you no understand that the ability to catch, distribute water is vital, we absolutely need that, living on one island, you know? We need water. Water is life. [Hanohano Naʻehu]

Keawa Nui Fishpond, we interested in the watershed project because we understand how intact our native forests are up there. We understand how precious this layers of vegetation and native habitat is critical for us to catch and disperse water down [there]. We understand that get ungulates, some deer, goat that threaten the edge of this and continually, with global warming, push our forest further mauka. We like combine and see Kaʻamola as an ahupuaʻa that can be fully functioning from top to bottom. So my concern as one kiaʻi loko, as is as just a Manaʻe resident, is for actually see one of these in our lifetime. [Hanohano Naʻehu]

Well cattle went destroy plenty. So we'd love to go da kine, you know, if you ever went, we would love to go with you, go cruise, check 'em out, and see what your perspective see 'cause like we no come from that perspective, and yet there are so much destruction from cattle, that that would be even a better reason than just saying, "Oh brah, I no like you raising cattle up here 'cause I stay underneath, I below you," you know? Like, I would love to have evidence that support. This industry, and I one cowboy myself, I know went destroy plenty sites, right? And can we recover them? I don't know. And if we cannot, that's a tragedy. You know? So more reason to stop the degradation, you know, especially cattle, get 'em out. [Hanohano Naʻehu]

Cultural access, no [there should be no concerns]. Recreational access, yeah. [Hanohano Naʻehu]

The fence line area, just pretty much, take out invasives, replant natives, and we interested in leaving one area below the wao akua and above the fishpond that we gotta kalai ʻāina, or recarve, but also manage our deer population. That was one gift from, you know, King Lot Kapuāiwa, from 1868 to now, so that, and the ability for us for feed our kids and our people from that, needs to be protected. So there's gotta be a balance and one understanding that, again, you know, we are the apex predators in our land. We are the wolves. We are the tigers. We are the snakes. We are the lions 'cause no more that kine animals. So we need to be vigilant and responsible for ungulates that we let go wild…And I no eva like lose that privilege or responsibility for that kine, yeah? [Hanohano Naʻehu]

Yeah, was something, this is something so obvious, and yet I was so disappointed when we ran into Hawaiians who thought this was a bad idea…Cuz, right now, in 2015, das not good enough. Das not good enough. Das unacceptable, f*cken unacceptable, you know? I cannot be held back or led by people that no can da kine, validate why, you know, why or why not they going do something. Even if was by spirit, or you said like, "Oh, my kupuna came to me in my dream, they said, this is, no can." [Hanohano Naʻehu]

The other concern that I thought was kind of ridiculous was this was one attempt to fence off our watershed so that America can put more ownership over 'em and kind of like steal 'em from the Hawaiians. And I was like, "F*cken ridiculous. That is ridiculous. The thing not going anywhere." So we kept coming back to the point where, do you think times are better now, or it was better before? Because depending on what you think, we projecting into one future that gets worse, right, because of global warming, climate change, rising sea levels, or pollution in the air, I mean, that's the way we going. And as one kiaʻi loko, as one ʻAha Manaʻe Poʻo, our kupuna said, "'Ai pōhaku," which means, "They need to eat the stone." And headed into one projected future like this, the only thing that going save us is our ʻāina. Our ʻāina was here way before, going be here way afta, but our ability for learn how for take care of 'em, know how for mālama, when for mālama, is so faded from our memory that projects like this, even though this came from one, this came from one Molokaʻi girl, you know, who's Hawaiian. And it's not coming from like somebody from the feds that don't know our place and don't know our stuff, not coming from somebody that, you know, never walked the grounds or lived the

grounds, you know, or made babies ova hea, brah this is a homegirl. This is an attempt for make our ʻāina bettah for our future. And that alone, I'm all behind and support for, you know? I never come across one reason that was good enough for not do 'em. [Hanohano Naʻehu]

Mountain, ocean, in our environment, everything connected. So the health of one directly affects the health of the other. So people that can separate all of these sections, that's western thinking. And we gotta get back to one more Hawaiian way of thinking, a more native way of thinking, for nature. [Hanohano Naʻehu]

So I know how the terrain is up there. It's difficult. Even when you go in the valley in the back of the pink store, the thing split, and there's a central ridge come down. So putting one fence, can be done, because over there is not like Kaʻamola side dry, it's kind of rainy, easy to dig into the soil and just cut one path. [Billy Akutagawa]

But I seen the damage that cattle does. That's why there's some bad things about cattle, like ungulates. Like the purpose of the fence line is to stop the incursion of goats going up, that they don't go east. So I heard had pigs before, then after a while neva have pigs in that area. Then Mike Decoite came in, and he put pigs. And pigs, they travel. They went all the way to Kaʻamola. Beyond Kaʻamola Gulch, get pigs already. But that's what happens when you put pigs in the area. The thing just multiply. [Billy Akutagawa]

I agree with the fence line project, but like I said in the video they did is that it's alright to put a fence up, but you have to stop the incursion of goats going east-west. See because when they did the fence line, above Keawa Nui I thought I seen goats. They never came there before. So they migrating over from Kaʻamola because you cannot go up yeah? [Billy Akutagawa]

The fence running this way. So the goats cannot go up. But they start going this way. And I think they was telling me if they put the fence line they going keep that in mind. Maybe they gotta run lateral fences up, stop migration. [Billy Akutagawa]

I thinking the fence line is, if it helps to restore the native plants, and it helps to, you know, for me the overall look in the long run, you know, the more greenery, the more trees, maybe draw more rain, I mean, I'm thinking, this should all, it's all good, like I see it as all good because to just let it go, and not take ahold on controlling the growth up there, and just allowing the animals, yeah, so like our goats, it's all fenced. [April Kealoha]

And I think you might be good to control further up. Even the deers, they come down a lot, like every day. And they barking now. [April Kealoha]

Yeah, but I don't see an issue. I think the project is good 'cause we need restoration and if it can keep things and affect, you know what I mean, be a better effect… [April Kealoha]

Well that was the whole concern, that was the whole thing about doing the fence lines at that time. My understanding that, and I mentioned it in the meeting so that, limited helicopter use to where that they don't use helicopter at all. I really against the use of helicopters for projects like that especially. At that time they had to use it, but when the thing is all done, you no need use helicopters already. So I just was concerned about that. [Russel Phifer]

Well more so, when you going in there and making one fence line, you actually activating problems when you do that. [Russel Phifer]

Because sometimes, when you do a fence line, the pig trails only go a certain area, certain place ah? And when you cut down one whole ridge, going have to cut and trim, and make 'em ready for the fence line, so that involves a lot of activity and movement of the area, whereas by not making one fence line, you know, wouldn't damage. Making the fence line would damage a lot of stuff, more than make it good. Whereas when they were doing it up that side, for the goats, you could see that you needed one fence line because that was a big problem 'cause of the goats. But this side, you don't have that problem. I think you going create problems when you put in one fence line. [Russel Phifer]

Whereas I think of the big land owners and the ranchers, they concerned about, I think, more so, of the deer, because the deer, they eating the grass for the cows. You know, the deer really is the problem. And I feel, the deer is one big problem now, 'cause, plenty deer. Yeah and the deer is a big problem. And I don't know if one fence line going help. I think the fence line ain't gonna help. [Russel Phifer]

…Go all the way up and you can go see, and you can go in the ocean, and you look up in the mountain, and you can see above Bishop Estate what they did up dea. When you make one road or you clear land or you make trails or something, that going create one waterway. You get one big problem with flash flooding over dea, big rains like one time, and one big rain can do a lot of damage. You know what I mean? And we seen it already. We seen it as you go up, when we had flash floods, you look all down by Bishop Estate, mean ah? The damage that the thing did to the bridge. [Russel Phifer]

And coming down by Sam's, that road going up, when every time big rain, the thing wash across the road. Every big rain, you gotta go grade… and all the roads, das what roads does, you know. And get old existing roads, get old, da kine, trails li'dat, but now, development now, you don't know, guys go buy property up dea, and they gotta make roads to their property, and I think they gotta go through all kinds process they get, to do that. They have to get one permit you know you gotta grade. And you gotta get runoff. Das one big problem. So das gonna create, you know, I know, if you are a landowner and you wanna build, or you wanna make access, you probably going have to go through one big permitting just to make your road. And plenny guys did roads or did stuff already, and you get the damage afta yeah? And I think, I know, that if they go up, and they just start cutting and making trails to the path dat da kine going be destructive already, and I don't know how much really the fence line going help controlling it more so than… [Russel Phifer]

…You get so much invasive already, the invasive plants already, it's incredible, like the Christmas berry, the plum, the waiawī, took over the forest already. It's already taken over, you know, you no can control 'em already. It's already invaded already. [Russel Phifer]

Ka'amola and Puohala especially 'cause the damage was done, yeah, to the fishpond. Like I think there's a development firm or a development investment company that got the lease or something on this land, and they did the dredging back in the '60s ah? '70s? And look what they did, they left a big mess. They left a big mess there. They buried the dredge under hea. [Russel Phifer]

And how much damage they did when they did the dredging. It's still affecting us now. You know, they didn't have no control, no pollution control, you know, it's probably polluted in dea. The dredge it still buried under dea, probably all da oil, you know. So

> you know, if anything, you look at it…aww the damage done already. You cannot really do too much about it after the damage was done. How much can you do about it? [Russel Phifer]
>
> I feel the best thing you can is da kine, education, man. We gotta learn our history, learn what really disrupts our land, the Hawaiian, you know, the people who live hea that have kuleana that hanging on to their culture, and trying to live the way they like live from where how they went learn how live and carry on. But it's different, times changing, you know, and you cannot keep up with the change. Everything happen too fast. You gotta look back. You gotta step back little bit and look at what, how the change went change. What was the reason? [Russel Phifer]

Summary of Ethnographic Survey

A total of four ethnographic interviews were conducted with individuals knowledgeable about the project lands: Billy Akutagawa, April Kealoha, Hanohano Naʻehu, and Russel Phifer. The interviewees are residents of the project lands and/or frequent the areas regularly.

The interviewees mentioned a variety of archaeological sites, including fishponds, several heiau, an ʻulu maika field, loʻi, stone walls, burial caves, house sites, trails, ahu, koʻa, a cemetery near Kilohana School, human remains from a helicopter crash, and the wao akua itself. Artifacts such as ʻulu maika, lūheʻe, and glass bottles were also noted.

Cultural practices that occur in the uplands consist of hunting and gathering, particularly gathering of pepeiao in Kahananui. Cultural practices closer to the coast include gathering of limu and other ocean resources, hula dancing on the heiau, and using the higher ground as lookouts for fishing.

Several moʻolelo were shared, involving moʻo, night marchers, a pathway for royalty, and a ghost at the graveyard in Kahananui. It was also noted that the archaeological sites in the vicinity of Kahananui were thought of as a large human form, with Kahokukano Heiau as the head, Kaluakapiʻioho and the Kahananui heiau forming the shoulders, a site under Kilohana School representing the stomach, and an underwater ahu signifying the feet.

Natural resources mentioned during the interviews include fresh water, maile, the white owl, and Hawaiian land snails. Interviewees also reminisced of the past, sharing several recollections of time spent in the project lands. These involved hunting in the area, visiting cattle ranches, and going crabbing on the coast.

Finally, most of the interviewees generally support the project, because of their concerns dealing with the loss of native forest, erosion, sedimentation, and protection of cultural sites. One of the main concerns is that the fence may encourage animal movements laterally along the fence line across ahupuaʻa. While one interviewee felt that the direct result of the construction of the fence will result in destruction from cattle, potential limitation of recreational access to the uplands, and more flash floods and runoff, other interviewees felt the fence will help with these problems over the entire area and not just the fence line. Recommendations that were offered consist of removing invasive plants and replanting native species, blocking goats from going east to west, enforcing limited or no helicopter use during fence construction, and educating people more about the history of the project lands.

CONCLUSIONS AND RECOMMENDATIONS

The project area of Puaʻahala, Kaʻamola, Keawa Nui, West Ōhiʻa, East Ōhiʻa, Manawai, Kahananui, ʻUalapuʻe, and Kaluaʻaha is an important region on Molokaʻi in both the past and present. A rich corpus of background information was found for the area, including moʻolelo, information on land use in traditional and historic times, Hawaiian language newspaper articles, and data from archaeological work. Adding significantly to this is the information shared during oral history interviews. The interviewees for this project all have strong ties to the region, and the project lands are places where their ʻohana live and feed their families.

Cultural Resources, Practices, and Beliefs Identified

Research and ethnographic survey compiled for the current study revealed that the project lands are a culturally significant area where both natural and cultural resources occur. Natural resources mentioned for the uplands include water, maile, the white owl, and Hawaiian land snails.

Cultural practices that occur in the uplands include hunting and gathering, particularly gathering of pepeiao in Kahananui. Cultural practices closer to the coast consist of gathering of limu and other ocean resources, hula dancing on the heiau, and using specific high spots as lookouts for fishing.

A variety of archaeological sites were also noted during the interviews, although most are located closer to the coast. These consist of fishponds, several heiau, an ʻulu maika field, loʻi, stone walls, ahu, koʻa, and a graveyard near Kilohana School. Closer to the project area are burial caves, house sites, trails, and human remains from a helicopter crash. The wao akua itself was also mentioned as a significant cultural resource.

From archival research, we were able to inventory and describe previously identified archaeological and cultural sites for the nine ahupuaʻa. The inventory of place names includes a number of ʻili lele located in Wailau or Pelekunu that are associated with the nine ahupuaʻa or a chief from those ahupuaʻa. This arrangement of lands, with ʻili lele in windward ahupuaʻa associated with individual leeward ahupuaʻa, is rare in Hawaiʻi but more common on Molokaʻi. This organization of lands facilitated access to loʻi and other windward resources by groups from the leeward ahupuaʻa.

Three previously undocumented cultural sites were identified from archival sources: two trails and a defensive site (i.e., refuge or fortress) that occur within the project area or close by. The two trails in Puaʻahala and ʻUalapuʻe-Kaluaʻaha were identified from the field notebooks and diary of Monsarrat. One of the trails, Puaʻahala, also is visible on aerial images of the uplands within the Pākuʻi project area. It may still be in use by Molokaʻi residents (and by animals that are hunted). The new trails join with two major, named trails—Wailau-Mapulehu and Pelekunu-Kamalō—that have been known for some time. Where the previously identified trails cross over from leeward to windward areas of the island, the new trails appear to end at the summit of the East Molokaʻi Mountain, although they may be linked to the named trails via this summit area. It appears that a system or network of trails likely existed on Molokaʻi that facilitated interaction, movement of people, and transport of goods. The area to be enclosed by the proposed Pākuʻi Fence will thus include these two significant cultural sites, and there may be other as yet undocumented trails along other ridge lines. The fence will provide protection to these sites by limiting access to the area by feral animals.

The third site, the Pākuʻi fortress, is mentioned in historical accounts and is associated with named chiefs, recognized events, and served as a defensive location. Its location is not reported but likely would be in the vicinity of Pākuʻi Peak at the summit of the East Molokaʻi Mountain. Given its

historical context and associations with people and events it represents a significant cultural site. While we do not necessarily recommend locating the site, activities near the summit should proceed with caution. Again, the proposed fence will limit access by animals to this site and thus should provide protection to it.

Two additional sites, consisting of three features, were identified during a reconnaissance of parts of the Pākuʻi Fence route. A terrace and rock wall were located on the west bank of ʻŌhiʻa Stream. A rock wall segment was found in Kaluaʻaha, extending from the base of the west Kaluaʻaha ridge. These two sites will also be within the protected area of the proposed fence.

The Pākuʻi project area includes these five sites but it also is indirectly associated with coastal areas of the leeward ahupuaʻa since this is where the bulk of the population resided and from which interaction with windward groups via the trails was likely to occur. While the trails facilitated movement, the refuge site was designed to limit access and provide protection to Molokaʻi chiefs from the leeward region. Thus the project area would have been important in the past in two quite different ways. Ordinarily, cultural sites and their associations reflect only one aspect of interaction. In the area enclosed by the fence, cultural sites were placed to facilitate and at the same time, limit access.

Potential Effects of the Proposed Project

As mentioned above, the proposed fence would have various impacts—cultural and natural, along and within the project area. These include the following, direct and positive impacts:

- conservation and preservation of archaeological sites and traditional properties (named places)
- protection of the native intact forest and native plant taxa that are not currently protected from animal intrusions
- protection of native and Polynesian introduced species important to Hawaiian culture
- reduced erosion of areas with limited plant growth and reduction in the corresponding transport of sediments through drainages, and limiting sedimentation along the coast and into the ocean
- preservation of cultural practices that depend upon native plant taxa in the uplands of East Molokaʻi
- water conservation as more moisture is held in the soils and translocated gradually down drainages and across slopes

Indirect and positive impacts would include:

- employment opportunities in building, maintaining, and improving the fenced area
- establishment of management practices that would help sustain native forests in Molokaʻi and elsewhere in the Hawaiian Islands
- providing opportunities to learn and share information among residents and The Nature Conservancy about the project area

Concerns about the fence project identified during ethnographic interviews that are seen as negative impacts include:

- limitations on access to the uplands for residents to engage in recreational pursuits
- the efficacy of the proposed fence to achieve the positive impacts listed above
- potential of increased water runoff and erosion during the period of fence construction
- potential noise pollution caused by helicopters involved in the fence construction
- as yet unanticipated problems that the fence may produce

Destruction brought about by cattle was also mentioned, although this would not be an effect caused by the proposed fence line. It was also mentioned by one interviewee that some who oppose the fence do not have valid reasons why.

Confidential Information Withheld

During the course of researching the present report and conducting the ethnographic survey program, no sensitive or confidential information was discovered or revealed, therefore, no confidential information was withheld.

Conflicting Information

No conflicting information was obvious in analyzing the gathered sources. On the contrary, a number of themes were repeated and information was generally confirmed by independent sources.

Recommendations/Mitigations

Two recommendations are to further document the archaeological sites near the proposed fence route and to increase community involvement in the project. We recommend that the archaeological sites that might be affected by the proposed fence are further documented through either historical research (including oral histories) and/or archaeological surveys. As these sites have not yet been formally recorded and entered into the State's listing of archaeological sites, this should be a priority for the proposed project. A qualified archaeologist should be hired to complete these tasks, and community members may be invited to participate in the recording of archaeological sites. Other ways to increase community involvement include hosting additional public meetings with residents to describe the project and provide opportunities for additional input; and/or inviting concerned community members to watch the fence construction. Once the fence is in place, additional meetings could be arranged to inform residents on the positive and negative impacts of the Pāku‘i Fence to continue education and information sharing for the long term.

Most of the interviewees generally support the project, because of their concerns dealing with the loss of native forest, erosion, sedimentation, and protection of cultural sites. One of the main concerns is that the fence may encourage animal movements laterally along the fence line across ahupua‘a. While one interviewee felt that the direct result of the construction of the fence will result in destruction from cattle, potential limitation of recreational access to the uplands, and more flash floods and runoff, other interviewees felt the fence will help with these problems over the entire area and not just along the fence line. The one interviewee who seemed to be against the fence project was mainly concerned about the use of helicopters, which was a theme throughout his interview.

There were several recommendations that were offered in the interviews to mitigate impacts caused by the proposed fence line:

- block goats from going east to west
- limit helicopter use during fence construction or refrain from using helicopters at all
- educate people more about the history of the project lands

One interviewee summed it up with the following statement, underscoring the need to protect the uplands:

> Mountain, ocean, in our environment, everything connected. So the health of one directly affects the health of the other. So people that can separate all of these sections, that's western thinking. And we gotta get back to one more Hawaiian way of thinking, a more native way of thinking, for nature.

GLOSSARY

‘a‘ali‘i *Dodonaea viscosa*, the fruit of which were used for red dye, the leaves and fruits fashioned into *lei*, and the hard, heavy wood made into bait sticks and house posts.

‘āholehole Young stage of the Hawaiian flagtail fish.

ahu A shrine or altar.

ahupua‘a Traditional Hawaiian land division usually extending from the uplands to the sea.

‘ai‘ai Living off another’s resources, dependent.

‘akoko Endemic shrubs and trees of *Euphorbia spp.*, the sap of which was made into a paint for canoes in traditional Hawai‘i.

akua God, goddess, spirit, ghost, devil, image.

akule Big-eyed or goggled-eyed scad fish (*Trachurops crumenophthalmus*).

ali‘i Chief, chiefess, monarch.

‘ama‘u The endemic ferns of the genus *Sadleria*. In traditional Hawai‘i, the trunk was eaten during times of famine, leaves were used as mulch, for dryland taro, stems were woven and used as sizing for tapa. One species was utilized for pillow stuffing. The ‘ama‘u fern was also one of the forms that the pig god Kamapua‘a could take.

‘āpana Piece, slice, section, part, land segment, lot, district.

Christmas berry The ornamental tree Schinus terebinthifolius known for its bright red berry-like fruits.

hālau Meeting house or long house for canoes.

hala The indigenous pandanus tree, or *Pandanus odoratissimus*, which had many uses in traditional Hawai‘i. Leaves were used in mats, house thatch, and basketry; flowers were used for their perfume; keys were utilized in lei and as brushes; roots and leaf buds were used medicinally; and wood was fashioned into bowls and other items.

hame The native tree, *Antidesma pulvinatum*, whose fruit was used traditionally in dyes.

hana ‘ino To abuse, mistreat, torment, or injure; cruel, cruelty; evil deed.

hānai Foster child, adopted child; to raise, feed, or sustain; a provider or caretaker.

haole White person, American, Englishman, Caucasian; formerly any foreigner.

hapawai The shellfish *Theodoxus vespertinus.*

hāpuʻu Tree ferns endemic to Hawaii of the genus *Cibotium*; these can grow up to 5 m in height.

heʻe Octopus (*Polypus* sp.).

heiau Place of worship and ritual in traditional Hawaiʻi.

hōʻawa *Pittosporum* spp., a native tree, the wood of which was used to manufacture canoe gunwales.

hōkū Star.

hōlei The native tree *Ochrosia compta*, which was used traditionally in canoe gunwales and in yellow dyes.

huakaʻi Trip, voyage, journey; to travel.

hui A club, association, society, company, or partnership; to join, or combine.

ʻike To see, know, feel; knowledge, awareness, understanding.

ʻiliahi *Santalum* spp., refers to all types of Hawaiian sandalwood.

ʻili ʻāina Land area; a land section, next in importance to ahupuaʻa and usually a subdivision of an ahupuaʻa.

ʻili kūpono An ʻili within an ahupuaʻa that was nearly independent. Tribute was paid to the ruling chief rather than the chief of the ahupuaʻa, and when an ahupuaʻa changed hands, the ʻili kūpono were not transferred to the new ruler.

ʻili lele Jump strips; disconnected subsistence land units, often with one plot near the ocean and another in the uplands.

ʻiole The Hawaiian rat (*Rattus exulans*) or other introduced rats or mice.

kahakai Beach, seashore, coast.

kahawai Stream, creek, river; valley, ravine, gulch, whether wet or dry.

kahu Honored attendant, guardian, nurse, keeper, administrator, pastor.

kahuna An expert in any profession, often referring to a priest, sorcerer, or magician.

kalana A Hawaiian land unit smaller than moku.

kalo The Polynesian-introduced *Colocasia esculenta*, or taro, the staple of the traditional Hawaiian diet.

kālua To bake by underground oven.

kamaʻāina Native-born.

kanikau Lamentation, dirge, mourning chant; to mourn, wail, chant.

kapa Tapa cloth.

kapu Taboo, prohibited, forbidden.

kauila The name for two types of buckthorn trees native to Hawai‘i (*Alphitonia ponderosa* and *Colubrina oppositifola)*. Produced a hard wood prized for spear and a variety of other tool making.

keiki Child.

kia‘i Guard, caretaker; to watch or guard; to overlook, as a bluff.

kiawe The algaroba tree, *Prosopis* sp., a legume from tropical America, first planted in 1828 in Hawai‘i.

ko‘a Fishing shrine.

koa *Acacia koa*, the largest of the native forest trees, prized for its wood, traditionally fashioned into canoes, surfboards, and calabashes.

kōlea The Pacific golden plover *Pluvalis dominica*, a bird that migrates to Hawai‘i in the summer; the native trees and shrubs *Myrsine*, the sap and charcoal of which were used as a dye, the wood used for houses and for beating kapa.

konohiki The overseer of an ahupua‘a ranked below a chief; land or fishing rights under control of the konohiki; such rights are sometimes called konohiki rights.

ko‘oko‘olau, koko‘olau *Bidens* spp*.,* refers to all species. Certain varieties used medicinally.

kope Coffee (*Coffea arabica)*, introduced to Hawai‘i in 1813, which grows within the 1,000 to 2,000 ft. elevation zone.

kōpiko The native shrub-tree, *Psychotria* sp., four species of which are known to Moloka‘i. Its wood was previously used as firewood and to make kapa logs.

Kū The Hawaiian god of war and fishing.

kuahiwi Mountain or high hill.

kualapa Ridge.

kukui The candlenut tree, or *Aleurites moluccana*, the nuts of which were eaten as a relish and used for lamp fuel in traditional times.

kula Plain, field, open country, pasture, land with no water rights.

kumu hula Hula teacher/master.

kupua Demigod, hero, or supernatural being below the level of a full-fledged deity.

kupuna Grandparent, ancestor; kūpuna is the plural form.

lāʻau Medicine, medical, trees, plants.

lama The native trees of the genus *Diospyros*, that had many uses in traditional Hawaiʻi. Fruit was eaten, wood was fashioned into fish traps and sacred structures within heiau. Lama wood was also crushed and used for medicinal purposes.

lauhala Leaf of the hala, or pandanus tree (*Pandanus odoratissimus*), used for matting and basketry.

laukahi *Plantago major*, the broad-leaf plantain. Used traditionally to treat boils and diabetes.

lele A detached part or lot of land belonging to one ʻili, but located in another ʻili.

limu Refers to all sea plants, such as algae and edible seaweed.

limu ʻeleʻele The long, green seaweed Enteromorpha prolifera, commonly eaten raw as condiments.

loʻi, loʻi kalo An irrigated terrace or set of terraces for the cultivation of taro.

loko, loko iʻa Pond, lake, pool, fishpond.

loko kuapā A fishpond composed of a stone wall built upon a reef.

loko ʻume iki Fish trap.

lomi, lomilomi To massage, rub, press.

loulu The fan palm (*Pritchardia spp*.), endemic to Hawaiʻi.

lua The ancient style of fighting involving the breaking of bones, dislocation of joints, and inflicting pain by applying pressure to nerve centers.

lūʻau Young taro tops, often refers to a dish of taro leaves baked with coconut cream and chicken or octopus.

lūheʻe Octopus lure.

mahaʻoi Bold, rude, forward.

Māhele The 1848 division of land.

maika Ancient Hawaiian game suggesting bowling.

maile *Alyxia stellata*, a fragrant native shrub used for twining.

mākāhā A fishpond sluice gate.

makahiki A traditional Hawaiian festival starting in mid October. The festival lasted for approximately four months, during which time there was a kapu on war.

makai Toward the sea.

mālama To care for, preserve, or protect.

māmane *Sophora chrysophylla*, a native high altitude tree found on the slopes of Mauna Kea and Mauna Loa. Trees grow to 50 ft. high and have yellow blossoms.

mana‘o Thoughts, opinions, ideas.

mau Name of a region on the sides of the mountain next below the wao akua (dwelling place of the gods), also called wao kanaka, place where men may live.

mauka Inland, upland, toward the mountain.

mauna Mountains, mountainous region.

mele Song, chant, or poem.

moi The threadfish *Polydactylus sexfilis*, a highly prized food item.

moku District, island.

mo‘o Narrow strip of land, smaller than an ‘ili.

mo‘olelo A story, myth, history, tradition, legend, or record.

nehe The native shrub *Lipochaeta spp*. that has yellow flowers.

nīele Curious, inquisitive; to keep asking questions.

nioi Native trees of the genus *Eugenia.* Only at Mauna Loa on Moloka‘i was the wood said to be poisonous.

‘ōhai Typically, the Hawaiian endemic tree or shrub *Sesbania tomentosa* (Family Fabaceae). May also refer to other non-native trees of the same family such as monkeypod (*Samanea saman*) or ‘ōhai ali‘i (*Caesalpinia pulcherrima*).

‘ohana Family.

‘ohe Bamboo of all kinds.

‘ōhelo *Vaccinium spp.*, a native shrub with small edible berries. Found in higher altitudes.

‘ōhi‘a ‘ai The mountain apple tree, *Syzigium malaccensis*, a forest tree that grows to 50 ft. high.

‘ōhi‘a lehua The native tree *Metrosideros polymorpha*, the wood of which was utilized for carving images, as temple posts and palisades, for canoe spreaders and gunwales, and in musical instruments.

‘okana Subdivision or district, usually consisting of several ahupua‘a.

‘ōlelo no‘eau Proverb, wise saying, traditional saying.

‘ōlena The turmeric plant, *Curcuma domestica*, traditionally used as medicine and for spices and dyes.

oli Chant.

olomea The native shrub-tree *Perrottetia sandwicensis,* used for starting fires in traditional times.

olopua *Nestegis sandwicensis*, a large native tree, the wood of which was used traditionally for adze handles, spears, and digging sticks.

o‘opu Fish of the families *Eleotridae*, *Gobiidae*, and *Bleniidae*.

‘ōpiko See kōpiko.

‘ōpū Stomach or womb.

pā hale Yard, house lot, fence.

pali Cliff, steep hill.

pane po‘o Summit, pinnacle, most important.

pāpala Refers to native shrubs in the geni *Charpentiera* and *Pisonia*.

piko Navel; summit; center.

pili A native grass, *Heteropogon contortus*.

pilo Hawaiian *Coprosma* shrubs, a genus of the coffee family.

po‘o Head; summit; director of an organization.

pōpolo The herb black nightshade (*Solanum nigrum*), traditionally used for medicine and in ceremony.

pūkiawe Refers to a variety of native trees and shrubs (*Leptecophylla* [Family Ericaceae]).

pule Prayer; to pray.

pūnāwai Fresh water spring.

pu‘u Hill, mound, peak.

pu‘uhonua Place of refuge.

pu‘ukaua Fortress, stronghold.

ti (kī) The plant *Cordyline terminalis*, whose leaves were traditionally used in house thatching, raincoats, sandals, whistles, and as a wrapping for food.

‘uala The sweet potato, or *Ipomoea batatas*, a Polynesian introduction.

uka See mauka.

‘ūlei The native shrub *Osteomeles anthyllidifolia*, the berries of which were eaten, sewn into lei, and used to make lavender dye, and its hard wood used to produce a variety of implements.

‘ulu maika Stone used in the maika game, similar to bowling.

ulunahele Wilderness.

wahi pana Sacred places or legendary places that may or may not be kapu, or taboo.

wahine Woman, wife; femininity. Wāhine is the plural.

waiawī *Psidium cattleianum f. lucidum*, the yellow strawberry guava. May also refer to the red strawberry guava (*Psidium cattleianum f. cattleianum*) and the yellow oblong pineapple “strawberry” guava (*Psidium cattleianum var. littorale*), both of which are very invasive on Moloka‘i.

wao A general term for inland areas, usually forested and uninhabited; realm.

wāwae Foot, leg; to walk.

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APPENDIX A: HAWAIIAN LANGUAGE NEWSPAPER ARTICLES

The following Hawaiian language newspaper articles are relevant to the ahupua‘a of the project area. Brief translations (in italics) were prepared by Keala Pono archaeologist/ethnographer Dietrix Duhaylonsod, BA.

Pua‘ahala Articles

KA HAE HAWAII, NOVEMABA 4, 1857. 127
Okt. 18, ma Puaahala, Molokai, make o Kaaioha k.

This is a death announcement for a man named Kaaioha who died at Pua‘ahala.

KA LAHUI HAWAII. Buke 1, Helu 6, Aoao 1. Feberuari 4, 1875.
4 February 1875

O Hilea w, me kona Akua Hoomanamana.
E ka Lahui Hawaii; Aloha:—
E oluolu kou Lunahooponopono, e ae mai ia'u, i wahi rumi kaawale ma kou kino a nau ia e hoike ae imua o ka lehulehu i kela mau hua "Hilea me kona Akua Hoomanamana."
Eia ma Puaahala, Molokai nei, he wahine i kapaia o Hilea me kona mau akua, o Punohu a me Kahala, ke lapaau nei oia i kahi poe; nui wale ka poe i huli mahope o keia hana ino. He mea hilahila ia'u i ka nana'ku, ke komo nei iloko o ia ki-o lepo kekahi poe i ao ia i ka ike, no lakou na kulana kumukula mamua, a i keia manawa, he mama awa no na akua o Hilea. Ma keia mau la i hala iho nei, ua wanana ae o ua Hilea 'la, e ku ana ka i-a ma Honouli, oia ke akule, nui ka poe i hele mamuli o ia olelo, a ua hoi mai me ka nele. Ua hopu ia o Hilea, a ua hoopii ia imua o ka Lunakanawai Apana o Molokai nei, a mamuli o ka hoike wahahee a ka hoike, e huna hewa ai, ua hookuu ia ka lawehala. Ua hala ka manawa o ka pouli, ua puka mai ka malamalama, ahea pau ae ka pohihihi o na maka. Ina no ka paa o na maka i ka inu awa, eia ka manawa e pau ai ia kuhihewa, a e hoomanao iho, hookahi AKUA, aia ma ka Lani. "O ka lohe ke ola, o ke kuli ka make." Me ke aloha no,
MOLOKAI.

This is a letter to the editor asking permission to tell about a woman named Hilea on Moloka‘i. The author is ashamed and distressed at this woman in Pua‘ahala named Hilea who goes about healing people through her gods, Punohu and Kahala, but instead is of no help to the people. Her deception has brought her charges before the District Judge of Moloka‘i. The author reminds all that there is only one God in heaven and to heed that means life, but to turn a deaf ear means death.

KA
NUPEPA KUOKOA:
BUKE XVIII. HELU 21 POAONO, MEI 24, 1879. NA HELU A PAU 912.
Ma ke kauoha.
Keena Aina, Oihana Kalaiaina Honolulu, Mei 1, 1879. Ua makaukau no ka hoopuka aku na Palapala Sila Nui e waiho nei ma ke Keena Kalaiaina o na Aina malalo nei: SAM'L G WILDER. Kuhina Kalaiaina.

MOLOKAI.
1133 Kupanihi Honouli
2581 Kalawaianui Waikolu
1132 Kuhio Honouli

6037 Luaaka Manowai
6062 Kaneheana Kumueli
6312 Makaholo Pelekunu
5549 Pihi "
2970 Waimea Mapulehu
4139 Kauhanui Kumimi
3944 Lawelawe Honouliwai
5203 Ailaau "
6113 Kaleo Honoulimaloo
6050 Ohule Kupeke
6160 Piapia Puaahala
3649 Kaauhaukini Ualapue
6365 Hauhalale Kalaupapa
6036 Kekuhi Pukoo
3870 Kahueia "
6038 Pua " 2
6257 Kalino Kalamaula
6274 Kahapuu Kawele

This is a decree (dated May 24, 1879) from the office of the Minister of the Interior S.G. Wilder in Honolulu stating that the royal patents for certain lands around the islands have been issued. On Moloka'i, Royal Patent #6160 has been given to Piapia for land at Pua'ahala.

Ka'amola Articles

Ka Elele Hawaii. 14 July 1848: page 17-19
"Na ke Aupuni. He Kanawai no na Aina Ponoi o ka Moi, A me na Aina o ke Aupuni."
Kaamola 1, Ahupuaa, Kona, Molokai,
Kaamola 2, Ahupuaa, Kona, Molokai,
Kaamola 3, Ahupuaa, Kona, Molokai,
Kaamola 4, Ahupuaa, Kona, Molokai,
½ Kaamola 5, Ahupuaa, Kona, Molokai,
½ Kaamola 6, Ahupuaa, Kona, Molokai,

This is a decree in the newspaper which points out the lands belonging to the king and the land belonging to the government (kingdom). At least 6 different parcels of land within Ka'amola are designated as such.

Ka Hae Hawaii. 3 June 1857: page 39
"NO NA AHA HOOKOLOKOLO."
E ka Hae Hawaii e:
Ua kauoha mai oe i na kahu kanawai o ka Moi mai Hawaii a Kauai, e hai aku ina kane me me na wahine i hoopaiia i na hewa karaima. Aole oe i hoakaka mai o na hewa kahi o kela makahiki 1856, 1855. Ua poina paha oe, ua hai pololei ia aku no no keia makahiki 1857 mai ka malama o Ianuari, a hiki i ka la 8 o Mei, o keia makahiki e holo nei. Eia no ia malalo iho.
Ianuari 28, 1857. Ua hoopaiia o Keaka haole ma ka Ahahookolokolo ma Kaamola, Mokupuni o Molokai, na ka hakaka, $6.00 ka uku hoopai.
Ian. 28. Ua hoopaiia o Kanae w., $3.00 kane $5 00, Kaiheaua, $5.00, hoopii nae ia ma ka Ahahookolokolo ma Kaamola, Mokupuni o Molokai, no ka hakaka, oia ka uku hoopai.

Feb. 13. Ua hoopaiia o Makahalupa k., $15.00, Namakaokeawe w., $15.00, no ke kane ole wahine ole, ma ka Ahahookolokolo ma Kaamola, Mokupu o Molokai, no ko laua moekolohe, oia ka uku hoopai.
Feb. 14. Ua hoopaiia o Kaueia k., $30.00 Kaniho w., $30.00 ma ka Ahahookolokolo ma Kaamola, Mokupui o Molokai, no ko laua moekolohe, oia ka uku hoopai.
Feb. 14. Ua hoopaiia o Kuhaulua k., $30.00 Kulani w., 30.00 ma ka Ahahookolokolo ma Kaamola, Mokupuni o Molokai, no ka moekolohe, oia ka uku hoopai.
Ap. 13. Ua hoopaiia o Palau k., ma ka Ahahookolokolo ma Kaamola, Mokupuni o Molokai, no ke kuamuamu, $2.00 ka uku hoopai.
Ap. 13. Ua hoopaiia o Kahopukahi $5.00 Konia k., $5,00 Makaole k., $5.00 ma ka Ahahookolokolo ma Kaamola, Mokupuni o Molokai, no ko lakou hakaka, oia ka uku hoopai.
Ap. 13. Ua hoopaiia o Kahopukahi no ka ona $3.00 Konia k., no ka ona $3.00 Makaole k., no ka ona $3.00 Lawelewe k., no ka ona $3.00 ma ka Ahahookolokolo ma Kaamola, Mokupuni o Molokai, no ko lakou inu ana i na mea ona, oia ko lakou uku hoopai.
Ap. 18. Ua hoopaiia o Kaokaka k., $5.00 Kahiaina k., $5.00 Kanelaauli k., $5.00 Beniamina k., $5.00 ma ka Ahahookolokolo ma Kaamola, Mokupuni o Molokai, no ko lakou hakaka aku, hakaka mai, waawaa na lae, oia ka uku hoopai.
D. LOKOMAIKAI. Luna K. Apana.
Kaamola, Molokai, Mei 8, 1857.

This is a rundown of the charges in the court at Ka'amola in the early part of 1857 and the fines that were assessed for each case. Among the charges noted were fighting, adultery, public intoxication, and some kind of blasphemy.

Ka Hae Hawaii. 29 July 1857: page 71
"HE KANIKAU NO D. LOKOMAIKAI."
Kuu kane mai ka malu o ka Hale.
Mai ka malu hale o Pohakumauna,
Kuu hoa mai ka la ku kanono o Kaamola,
Mai na makani paio lua o ka aina,
I pili ai maua me ke aloha...

This is a chant of lamentation for the passing of D. Lokomaika'i. This could possibly the author of the newspaper article above summarizing the court cases at Ka'amola earlier in the year. If so, Mr. Lokomaika'i died soon after writing that article.
This chant appears to have been written by his wife. She connects him to the house at Pohakumauna, the sun at Ka'amola, and the striking winds of the land.

Ka Hae Hawaii. 2 September 1857: page 91
"OLELO HOOLAHA."
NO KA MEA, ua noiia mai ka mea nona ka inoa malalo Lunakanawai Kauoha Apana Hookolokolo alua e R. Kapuuhonua, a me Mahu, no ka hooiaio ana i ka palapala kauoha a D. Lokomaikai, ka mea i make no Kaamola, Mokupuni o Molokai.
Nolaila, ke hoikeia'ku nei i na mea a pau i pili o ka poakolu, oia ka la 22 o Sepet., 1857, i ka hora 10 o kakahiaka, oia ka la a me ka hora i oleloia, no ka hoolohe ana i ka mea i noiia mai, a me ka poe hoole, e hoikeia'ku, aia ma ka Hale Hookolokolo ma Lahaina, Mokupuni o Maui, kahi e hana ai.
IOANE RICHARDSON. L. K. Kauoha.
Waikapu, Maui, Aug. 20, 1857.—23-4t

This is an announcement that the last will and testament of the deceased D. Lokomaikai of Ka'amola will be read in the courtroom of Lahaina, Maui, later that month.

Ka Hae Hawaii. 24 March 1858: page 207
"Make."
Ian. ma Kaamola, Molokai, make o Kahemahema w.
Ian. ma Kaamola, make o Lokomaika keiki kane.

This is a death notice for a woman named Kahemahema and a boy named Lokomaika, both of whom died in January 1858 in Ka'amola.

Ka Hae Hawaii. 21 July 1858: page 63
"Hanau."
Iune 24, ma Kaamola, Molokai, hanau o Mataio. k. Na Halualani me Poohiwi.

This is a birth announcement of a baby boy named Mataio, born to Halualani and Poohiwi in Ka'amola.

Ka Hae Hawaii. 28 July 1858: page 67
"OLELO HOOLAHA."
O NA mea a pau, he kuleana ko lakou i ka waiwai o D. Lokomaikai, ka mea i make no Kaamola, Mokupuni o Molokai, e like mena mea aie a me na mea i pili i ka hanau ana, a ma kekahi ano e ae paha, ke kauoha ia aku nei lakou e hele mai imua o'u ma ka Hale Hookolokolo ma Lahaina, Mokupuni o Maui, i ka hora 19 kakahiaka, o ka poalua, oia ka la 10 o Augate, e nana i na palapala aie a ka Luna hooponopono i hoonohoia maluna o ia waiwai i olelo ia ae nei, a e hoole paha i kekahi o ia mau palapala, ke loaa ke kumu pono e hoole ai, a pela e hoopau ia ai ka hana a ua luna la.
IOANE RIOHARDSON. L.K. Kauoha. Lahaina, Maui, Iulai 21, 1858.17-2t

This is an announcement to family members, those with outstanding debts, and any others who have an interest in the estate of the late D. Lokomaika'i of Ka'amola, to come to the courthouse in Lahaina to help settle matters.

Ka Hae Hawaii. 10 November 1858: page 127
"Make."
Okat. 25, ma Kaamola, Molokai, make o Mataio k.

This is a death announcement for a man named Mataio of Ka'amola.

Ka Hae Hawaii. 20 April 1859: page 11
"Make."
Aperila 3, ma Kaamola, Molokai, make o M. Kawainui k.

This is a death announcement for a man named M. Kawainui of Ka'amola.

Ka Nupepa Kuokoa. 1 March 1862: page 3

"Make."
Kailiahi — Dek 29, 1861, ma Kaamola, Molokai, make o Kailiahi (w.)

This is a death announcement for a woman named Kailiahi of Ka'amola.

Ka Nupepa Kuokoa. 29 March 1862: page 3
"Mare."
MOEWAA—KUHELELOA—Mar. 12, ma Kaamola, Molokai, mare o Moewaa me Kuheleloa, na Rev. A. O. Poiepe laua i mare.

This is an announcement for a wedding in Ka'amola between Moewaa and Kuheleloa; Rev. Poiepe is the one who married them.

Ka Nupepa Kuokoa. 13 December 1862: page 1
"Ka Moolelo —o— Laieikawai. Mokuna III."
A hiki keia i Kaamola ka aina e pili pu la me Keawanui, kahi hoi ai kela po a ka Makaula e moe la i Kaamola, aia hoi, ua hiki…

This is a printing of the story of Lā'ieikawai, chapter 3. In this part of the story, they arrive at Ka'amola close to Keawa Nui, and the prophet is sleeping at Ka'amola.

Ka Nupepa Kuokoa. 8 September 1866: page 2
"HUNAHUNA MEA HOU O HAWAII NEI."
HOLO MAOLI KA HANA. - I ka la 24 o Aug. nei, oia ka Poalima, ua hana ia ma Kaamola he Ahaaina lulu dala na na hoahanau, elua lulu dala ia la, ua haawi mua ia ka ka hanai kumu 15 a mahope haawi hou no ka Halepule 25 alaila haawi ka poe hele mai o waho no ka Ahaaina ka huina o ka loaa ma ia la kanaono kumamakolu, o na dala o keia hale mai ka hoomaka ana a ka paa ana 145, ua pau maikai mai waho a me na noho o loko. L. Kuaihelani, Kaamola Augte, 28, 1866.

This article states that two separate fundraiser feasts were put together for the church at Ka'amola.

Ka Nupepa Kuokoa. 16 November 1867: page 4
Okatopa 14. Ua loaa ko'u waa e holo ai i Molokai a pae ma Kaamola, a moe au ma ka hale-pohaku maikai o Lokomaikai, e ola maikai ana o Mrs. Kapuuhonua, o Rev. Lota Kuaihelani ka mea mai lolo, ua oluolu ae no.
Okatopa 15. Ua piha o "Pupukanioe" ma Kamaloo i na kanaka, e kali ana e lohe i na mea hou, a haawi mai i na dala $8.50. A awakea ae, ua halawai ma Kaunakakai makou, a ahiahi iho halawai ma Kawela, a poeleele hiki ma Kaamola.

This appears to be an excerpt of someone's journal. On October 14, this person sailed to Moloka'i and landed at Ka'amola, sleeping there. Then on October 15, this person visited Kamaloo, Kaunakakai, and Kawela before returning to Ka'amola at night.

Ka Nupepa Kuokoa. 2 May 1868: page 3
"Make." Mar 22, ma Kaamola make o Kapanookalani k.

This is a death announcement for a man named Kapanookalani of Ka'amola.

Ka Nupepa Kuokoa. 5 August 1876: page 2
E ike auanei na kanaka a pau, owau o ka mea nona ka inoa malalo nei, ke hookapu loa aku nei au i na holoholona Bipi, Lio, Hoki, Miula, Hipa, Kao, Puaa a me na holoholona e ae, aole e hele wale maluna o ke kula o kuu aina, oia o Kaamola-elima, e waiho la ma ka apana o Kaamola, mokupuni o Molokai. Ina e loaa ia'u mau paniolo kekahi o keia mau holoholona, e uku no i $1.00 no ke poo hookahi. A ke papa loa ia aku nei no hoi na kanaka o kela a me keia ano, aole e hele wale maluna o kuu aina, a kii wale paha i na holoholona a me na mea maluna. Ua kapu loa no A ke hookohu aku nei au ia W Kalaauala a me S Naihe i mau paniolo, he mana ko laua e hopu i na holoholona, mai a'u aku. Ina e loaa ia'u a i o'u mau hope paha e kue ana i keia hoolaha, e hopu no au a hoopaa. He kuli ka make he lohe ke ola. D HALUALANI. Kapauhi Honolulu, Aug. 3, 1876. 2ts*

This article warns all to keep their animals off of the Ka'amola lands belonging to D. Halualani. Failure to heed this will result in the capture of any trespassing animals and a fine of $1.00 per head.

Ka Lahui Hawaii. 31 August 1876: page 3
"NA ANOAI."
PAU I KE AHI.—Ma ka la 27 o keia malama, pau iho la ka hale o Kukahaloa i ke ahi, ma Kaamola i Molokai. I ka hora 9 o ua la la, hele aku la ka mea nona keia hale i ka pule, a mahope aku kana keiki, a ia laua ma ka halepule, pau aku la ko laua hale i ke ahi. Ua nui na mea i poino. Heaha no la ka mea o ka nana mua ole ana i na pilikia o ka hale? KALAWAIA.

This article tells about a fire that destroyed the house of Kukahaloa in Ka'amola. The fire happened while Kukahaloa and his or her child were at church.

Ka Lahui Hawaii. 15 March 1877: page 1
"Pane i ka moolelo a E. Kekoa. Helu 2."
…
Eia ka nui o na dala i lulu ia e na apana no ia hana lokomaikai :
Na apana o Honomuni, $4.00, Pukoo, $2.00, Mapulehu, $2.00, Kaluaaha, $1.50, Ualapue, $3.00, Manawai, $2.00, Kaamola, $1.50, Kamalo, $3.50, Kawela, $1.50, Kaunakakai, $3.00, Palaau & Kalae, $2.00, huina, $25.50.

This is a listing of the amount monies donated by various Moloka'i districts for an unspecified good work. The people of Ka'amola donated $1.50.

Keawa Nui Articles

Ke Kumu Hawaii. 9 December 1835: page 196
KE KULA NUI.
He Papainoa no na Kahu, a me na Kumu, a me na Haumana, o ke Kulanui o Hawaii nei, ma Lahainaluna i Maui. 1835.
NA KAHU.
Rev. Messrs. William Richards, Jonathan S. Green, Richard Armstrong, Hervy R. Hitchcock, Lorrin Andrews, Ephraim W. Clark, Sheldon Dibble.
NA KUMU.

Rev.Mesrs. Lorrin Andrews, Ephraim W. Clark, Sheldon Dibble.
NA HAUMANA.
Papa 3.
Kawainui, Keawanui, Molokai… [*one of only 3 from Molokai*]

This is a roster of names of the faculty, staff, and students at Lahainaluna High School. Of the three students from Moloka'i, one was from Keawa Nui.

Ka Hae Hawaii. 30 July 1856: page 88
OLELO HOOLAHA.
Keena Kalaiaina, la 25 o Iulai, 1856.
KE KAUOHA ia'ku nei ua mea a pau o na inoa malalo nei, e kii koke mai i ko lakou mau kuleana e waiho nei malalo o keia Keena, he mau kuleana ua hooko ia, nolaila, e pono ia oukou e kii koke mai i ko oukou mau kuleana. Ina ua make ka mea nona ke kuleana, e kii mai na hooilina.
MOLOKAI.
…
Pahupu, [Kona] Keawanui,
Kaailepo, " "

This is an announcement for people, or their heirs, to get their kuleana awards. Two of the awardees are from Keawa Nui; Pahupu and Kaailepo are their names.

Ka Hae Hawaii. 6 August 1856: page 92
OLELO HOOLAHA.
E IKE AUANEI na kanaka a pau, owau, o ka mea nona ka inoa malalo iho nei, ko papa aku nei au i na kanaka mea lio, pipi, hoki miula, puaa, aole e hele wale ma kuu loko, a me kuu kuleana Pahule, a me na apana kula o'u, a me na mea a pau e ulu ana maluna o ua mau wahi nei i hai ia ae nei maluna, ua kapu loa. E malama oukou i ko oukou mau holoholona ina loaa i kuu luna e hele ana maluna o ua mau wahi nei i olelo ia, e hopu no kuu luna. O ka uku no ka mea e kue i na olelo maluna, hookahi $1 pakahi no ke poo.
P. HINAU:
Keawanui, Molokai, Iulai 26, 1856. 1t*

This is an announcement by P. Hinau of Keawa Nui warning everyone to keep their animals off of his lands. If not, their animals may be caught, and they will be fined $1.00 per head.

Ka Hae Hawaii. 3 September 1856: page 106
NU HOU MA MOLOKAI.
Ua loaa hou iho nei kekahi wai hou maluna o Maunaloa i Molokai, i keia mau malama aku nei. He ano e, loaa ka wai he awaawa loa, e like me ke kai ka awaawa. Ua hana ia na loi he nui, ua kanu ia i ka huli kalo, aole nae kupu pono na huli kalo, ua palakai a ponalo. Aia no keia wai ma ke kuahiwi loa, e kokoke ana ma ka wai i loaa ai mamua iho nei, aia ma ka hema, Aole wai ma keia aina mamua, he nele loa; i keia mau makahiki ua loaa ka wai a me na loi kalo he nui loa. Ke hana nei na kanaka malaila, me ka hauoli, me ka loaa o ke kalo ia lakou me ka wai. Aole kalo malaila mamua, he uala wale no. Pomaikai lakou i ke kokua ana mai o ke Akua ma kela aina kalo ole.
S. P. T. KAUNAHI.
Keawanui, Molokai, Iune 12, 1856.

This article is submitted by S.P.T. Kaunahi of Keawa Nui, who writes about newly obtained water at the top of Maunaloa, Moloka'i. This water allows a a great number of taro patches to be planted. What is not clear is how the water is connected to Keawa Nui, if at all.

Ka Hae Hawaii. 30 September 1857: page 107
KEENA KALAIAINA, la 15 o Sepetemaba 1857.
KE KAUOHA IA'KU na mea a pau o na inoa malalo nei, e kii koke mai i ko lakou mau kuleana e waiho nei maloko o keia keena, he mau kuleana ua hooko ia, nolaila, e pono ia oukou e kii koke mai i ko oukou mau kuleana. Ina ua make ka mea nona ke kuleana, e kii mai na hooilina.
MOLOKAI.
…
Kaailepo, Keawanui,
Napela, "
Pahupu, "

This is another announcement for people, or their heirs, to get their kuleana awards. Three of the awardees are from Keawa Nui; Kaailepo, Napela, and Pahupu.

Ka Hae Hawaii. 7 October 1857: page 112
[same as 30 September 1857: page 107]
Ka Hae Hawaii. 20 January 1858: page 172
Na Luna Kula.
Ua ike au ma ka Helu 35, aoao 139, i na manao o J. Fuller, e hoakaka ana i kona manao, no ke koho ana i na luna kula, ma kela Apana keia Apana o ke Aupuni Hawaii nei, ke hiki aku i ka Monede hope o Dek. o keia makahiki e pau ana.
Ma ka Mokupuni o Molokai, ua hemahema loa na Kahu nana ia Oihana, oia hoi na Lunakawai, e noho mau ana ma ka lakou Oihana, i ka makahiki i hala ae nei, ua manao nui ia ma ke koho balota Lunamakaainana, a o ke koho ana i na Luna Kula, aole loa. Hookahi wale no kanaka manao nui i keia Oihana, oia hoi o S. G. Dwight, he lana kona manao, ma ka hoonaauao ana i na haumana, a me na kanaka a pau.
Eia kekahi kumu e make ai keia hana ma Molokai nei, i ka nana aku, a me ka noonoo maoli ana, ke makau nei na kanaka i ka luhi, i ka hele i o ia nei, me kahi uku uuku, oia hoi ke dala kino, hookahi, a me na dala kula elua, e mau ana no ko lakou hele ana i ke aupuni, ma ko lakou mau Apana, nolaila, makau na kanaka i kohoia, a haalele i keia Oihana, pela ma na makahiki i hala ae nei.
Owau no me ka mahalo. K.
Keawanui, Molokai, Dek. 2, 1857.

This is an article which addresses the need to choose the school supervisors around the islands. With regards to Moloka'i, the author says that these are difficult positions to fill because this work is wearisome and discouraging, taking the school personnel here and there for very little pay. What is not clear is if the author's name is K. Keawa Nui, or if the author is from Keawa Nui and the author's name is written only as "K" (which is unusual).

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*Ua make
Ka Hae Hawaii. 18 April 1860: page 11
Make.
Mar. 30, ma Keawanui, Maui, make o Makaio k,

This is a death announcement for a man named Makaio from Keawa Nui.

Ka Nupepa Kuokoa. 25 January 1862: page 3
NAWAHIE Ian. 1. ma Keawanui. Molokai, make o Nawahie (w) he mai paa ke kumu i make ai.

This is a death announcement for a woman named Nawahie of Keawa Nui.

Ka Nupepa Kuokoa. 8 February 1862: page 3
Hanau.
KOMOIKEEHUEHU—Ian. 81, na Keawanui, Molokai, hanau o J. Komoikeehuehu (k) na Kauapaupili me Mahiai.

This is a birth announcement for a baby boy named J. Komoikeehuehu who was born in Keawa Nui to Kauapaupili and Mahiai.

Ka Hoku o ka Pakipika. 13 February 1862: page 3
Hanau.
Ianuari 31, ma Keawanui, Molokai, hanau o J. Komoikeehuehu k, na Kauapaupili k. me Mahiai w

This appears to be a reprinting of the birth announcement above, except this time, it is stated that Kauapaupili is the baby's father, and Mahiai is the baby's mother.

Ka Nupepa Kuokoa. 6 December 1862: page 1
Ka Moolelo o LAIEIKAWAI.
MOKUNA II.
...
Haalele laua ia wahi, hiki aku laua ma Keawanui kahi i kapaia o Kaleloa, a malaila laua i halawai ai me ke kanaka e hoomakaukau ana i ka waa e holo ai i Lanai. Ia laua i halawai aku ai me ka mea waa, olelo aku la o Waka, "E ae anei oe ia maua e kau pu aku me oe ma ko waa, a holo aku i kau wahi i manao ai e holo?"
Olelo mai la ka mea waa, "Ke ae nei wau e kau pu olua me a'u ma ka waa, aka, hookahi no hewa, o ko'u kokoolua ole e hiki ai ka waa."
Ia manawa a ka mea waa i hoopuka ai i keia olelo "i kokoolua" hoewaa, wehe ae la o LAIEIKAWAI i kona mau maka i uhiia i ka aahu kapa, mamuli o ka makemake o ke kupunawahine e huna loa i kana moopuna me ka ike oleia mai e na mea e ae a hiki i ko laua hiki ana i Paliuli, aka, aole pela ko ka moopuna manao.
I ka manawa nae a LAIEIKAWAI i hoike ai i kona mau maka mai kona hunaia ana e kona kupunawahine, lulilili ae la ke poo o ke kupunawahine, aole e hoike kana moopuna ia ia iho, no ka mea, e lilo auanei ka nani o kana moopuna i mea pakuwa wale.
I ka manawa nae a LAIEIKAWAI i wehe ae ai i kona mau maka, ike aku la ka mea waa i ka oi kelakela o ko LAIEIKAWAI helehelena mamua o na kaikamahine kaukaualii o Molokai a puni, a me Lanai. Aia hoi, ua hookuiia mai ka mea waa e kona iini nui no kana mea e ike nei.

This is an excerpt from the great story of Lā'ieikawai. In this part of the story, Lā'ieikawai and her grandmother have arrived at Keawa Nui, at a place called Kaleloa. There they see Waka preparing to sail to Lāna'i, and so Lā'ieikawai and her grandmother ask for a ride in the canoe as they try to make their way to Paliuli.

Ka Nupepa Kuokoa. 13 December 1862: page 1
Ka Moolelo o LAIEIKAWAI.
MOKUNA III.
I HELE ANA O KA MAKAULA mahope iho o ko laua halawai ana me kahi kanaka, hiki mua keia iluna o Kawela, naua aku la oia, e pio ana ke anuenue i kahi a ua wahi kanaka nei i olelo ai ia ia; alaila, hoomaopopo lea iho la ka Makaula o kana mea no e ukali nei.
A hiki keia i Kaamola ka aina e pili pu la me Keawanui, kahi hoi a LAIEIKAWAI ma e kali nei i ka mea waa, ia manawa, ua poeleele loa iho la, ua hiki ole ia ia ke ike aku i ka mea*** ana i ike ai iluna o Kawela, aka, ua moe ka Makaula malaila ia po, me ka manao i kakahiaka e ike ai i kana mea e imi nei.
I kela po a ka Makaula e moe la i Kaamola, aia hoi, ua hiki ka olelo kauoha a Kapukaihaoa ia Laieikawai ma ka moe uhane, e like me ke kuhikuhi ia laua iloko o ko laua mau la ma Malelewa.
Ia wanaao ana ae, loaa ia laua ka waa e holo ai i Lanai, a kau laua malaila a holo aku la, a ma Maunalei ko laua wahi i noho ai i kekahi mau la.
Ia Laieikawai ma i haalele ai ia Kalaeloa ia kakahiaka, ala ae la ka Makaula, e ku ana ka punohu i ka moana, a me ka ua koko, aia nae, ua uhi paapuia ka moana i ka noe a me ke awa, mawaena o Molokai, a me Lanai : Ekolu mau la o ka uhi paapu ana o keia noe i ka moana, a i ka eha o ko ka Makaula mau la ma Kaamola, i ke kakahiakanui, ike aku la oia e ku ana ka onohi iluna pono o Maunalei; aka, ua nui loa ka minamina o ka Makaula no ka halawai ole me kana mea e imi nei, aole nae oia i pauaho a hooki i kona manaopaa.

This is another excerpt from the Lāʻieikawai story. In this part of the story, Lāʻieikawai and her grandmother meet with the prophet and are at Kaʻamola, which is described as being the land next to Keawa Nui. (The story here does not really take place in Keawa Nui)

Ka Lahui Hawaii. 27 September 1877: page 1
Ka Honua nei.
(Kakauia e J. H. Kanepuu.)
...
Na lae o Molokai.—Aia ma Halawai ka lae o Puuohoku, a o Kapuupoi paha kekahi inoa, aia ma Halawaiki ka lae o Hinalenale, aia ma Puaahaunui, Hukaaano, Kikipua, aia ma Wailau ka lae o Malelewaa. He wahi lae kekahi ma nae iho o Pelekunu, kokoke i Oloupena. Aia ma Papapaiki, aia ma Waikolu, o ka lae o Leinopapio, aia ma ka poai o Kalaupapa, e pili ana ia Pohakuloa, ka lae o Kaupakihawa, aia Makanalua i kai, ka lae o Kahi-o ka uahi a Kamakiki, a me ka lae o Kokilae, aia ma Iliopii, Kalaeaa me ka Maemilo, he mau wahi lae liilii paha keia, ua kappa inoa ia nae hoi. Aia ma Kaluakoi ka lae o Moki-o, ka lae o Kailio a me Kalaeokalaau, aia ma Keawanui ka lae o Kalaeloa, oia paha na lae o Molokai, na ko Molokai poe e hoike mai i ke koena.

This article names the different capes or geographic promontories around the island of Molokaʻi. For the district of Keawa Nui, the promontory there is called Kalaeloa.

Ka Nupepa Kuokoa. 16 October 1924: page 5
KUU WAHINE ALOHA UA HALA
…
Kamalo e, ua pau kou ike hou ana ia Mrs, H. K Nihipali, Keawanui, Ohia, Manawa, Ualapue, pau kona hehi hou ana i kou mau huna lepo. …

The title of this speaks of a beloved woman who has passed away. It appears that the recently deceased is a Mrs. H. K. Nihipali, but it is not clear why Keawa Nui, Ohui, Manawa, and Ualapue (presumably all place names) are all listed immediately after Mrs. Nihipali's name.

East and West ʻŌhiʻa Articles

KA LAMA HAWAII. Buke 2, Helu 1, Aoao 1. Ianuari 1, 1841.
1 January 1841

NO KE KULANUI.

Eia kekahi mau mea no ke Kulanui ma Lahainaluna, O ka Papainoa malalo iho ka mea e hoike mai i na inoa o na Kahu a me na Kumu a me na Haumana, ma Ianuari 1, 1841.

NA KAHU.

REV. LORRIN ANDREWS.
" EPHRAIM W. CLARK.
" SHELDON DIBBLE.
" HARVEY R. HITCHCOCK.
"JONATHAN S. GREEN.

NA KUMU.

REV. LORRIN ANDREWS.
" EPHRAIM W. CLARK.
" SHELDON DIBBLE.

NA HAUMANA.
PAPA 1.

NA INOA. Na wahi e noho ai. Na Moku.
Kaiaikai, Lahainaluna, Maui.
Kaumaka, Kaneohe, Oahu.
Kauwahi, Kipahulu, Maui.
Kekaulahao, Honolulu, Oahu.
Nuuanu, Lahainaluna, Maui.
I ka hui ana 5.

PAPA 2.

Aumai, Kaawaloa, Hawaii.
Aka, Waimea, Kauai.

Na Inoa. Na wahi e noho ai. Na Moku.
Hoaai, Hilo, Hawaii.
Kaaikaula, Wailuku, Maui.
Kaaiawaawa, Hilo, Hawaii.
Kaauwaepaa, Kaawaloa, Hawaii.
Kaehu, Anahola, Kauai.
Kaiawa, Waikiki, Oahu.
Kauku, Ohia, Molokai.
Kaumaea, Lahaina, Maui.
Kahulanui, Wailuku, Maui.
Kaka, Honuaula, Maui.
Kalepo, Hilo, Hawaii.
Kaluau, Mapulehu, Molokai.
Kamali, Waimea, Kauai.

Kamiki, Hilo, Hawaii.
Kapeau, Honolulu, Oahu.
Keaka, Honolulu, Oahu.
Keaku, Lahaina, Maui.
Kou, Ewa, Oahu.
Lilikalani, Kaawaloa, Hawaii.
Naue, Waialua, Oahu.
Wana, Waimea, Kauai.
Samuela, Hilo, Hawaii.
I ka hui ana 24.

This is a list of the ministers/teachers, the students, and the hometowns of each of the students at Lahainaluna High School. In Class #2, there is a student named Kauku from ʻŌhiʻa.

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88 KA HAE HAWAII, IULAI 30, 1856.

OLELO HOOLAHA.

Keena Kalaiaina, la 25 o Iulai, 1856.
KE KAUOHA ia'ku nei ua mea a pau o na inoa malalo nei, e kii koke mai i ko lakou mau kuleana e waiho nei malalo o keia Keena, he mau kuleana ua hooko ia, nolaila, e pono ia oukou e kii koke mai i ko oukou mau kuleana. Ina ua make ka mea nona ke kuleana, e kii mai na hooilina.
MOLOKAI.
Nunuonea, Koolau, Kalaupapa,
Piikoi, " "
Puailelewale, " "
Kauhi, "
Kaluoku, " "
Keawe, " "
Nanaonokueha, " "
Naale, " "
Ihu, Kona, Kumimi,
Penopeno, " "
Pahupu, " Keawanui,
Kaailepo, " "
Hapuku, " Kapualei,
Nakeleawe, " "
Kanakaokai, " "
Nuipohiwa, " "
Kawaihoa, " "
Peinoa, " "
Nahauna, " "
Lipali, " "
Kauhi, " Moanaui,
Waimoe, " "
Nahoeha, " "
Kauhanui, " "
Koa, Koolau, Waikolu,
Kahakahaka, " "
Napela, Kona, Manawai,
Kalamaika, " "

Kane no Hau, Koolau, Halawa,
Kelohanui, Kona, Honouliwai,
Kamoku, " Kaluaaha,
Kualualu, " "
Kapela, " Kahananui,
Naluau, 3, " "
Kaiu, " "
Kehinolau, " Makanalua,
Lili, " Kupeke,
Maalahia, " Ohia,
Kaahoowaha, " "

This is an announcement telling people to pick up their kuleana claims which have been awarded. If the person listed has passed away, then the heir is invited to come forth. On the island of Moloka'i, this list names two people, Maalahia and Kahoowaha, each one being awarded a kuleana in the ahupua'a of 'Ōhi'a.

KEENA KALAIAINA, la 15 o Sepetemaba 1857.

KE KAUOHA IA'KU na mea a pau o na inoa malalo nei, e kii koke mai i ko lakou mau kuleana e waiho nei maloko o keia keena, he mau kuleana ua hooko ia, nolaila, e pono ia oukou e kii koke mai i ko oukou mau kuleana. Ina ua make ka mea nona ke kuleana, e kii mai na hooilina.

MOLOKAI.
Kaaukaokai, Kapualei, Kalamaika, "
Niupohiwi, " Naale, Kalaupapa,
Kawaihoa, " Keawe, "
Peinoa, " Puailelewale, "
Nahauna, " Kauhi, "
Lipali, " Kauhanui, Moanui,
Nakeleawe, " Nahoiha, "
Hapuku, " Waimoe, "
Kelohanui, Honouliwai, Kauhi, "
Paluhi, Ualapue, Maalahia, Ohia,
Kawelo, " Kahoowaha, "
Kaupe, " Kaiu, Kahananui,

This is an announcement telling people to pick up their kuleana claims which have been awarded. If the person listed has passed away, then the heir is invited to come forth. On the island of Moloka'i, this list names Maalahia, Kawelo, Kahoowaha, and Kaupe, each one being awarded a kuleana in the ahupua'a of 'Ōhi'a.

KEENA KALAIAINA, la 15 o Sepetemaba, 1857.
KE KAUOHA IA'KU na mea a pau o na inoa malalo nei, e kii koke mai i ko lakou mau kuleana e waiho nei maloko o keia keena, he mau kuleana ua hooko ia, nolaila, e pono ia oukou e kii koke mai i ko oukou mau kuleana. Ina ua make ka mea nona ke kuleana, e kii mai na hooilina.

MOLOKAI.
Kaaukaokai, Kapualei, Kalamaika, "
Niupohiwi, " Naale, Kalaupapa,
Kawaihoa, " Keawe, "
Peinoa, " Puailelewale, "
Nahauna, " Kauhi, "
Lipali, " Kauhanui, Moanui,
Nakeleawe, " Nahoiha, "
Hapuku, " Waimoe, "
Kelohanui, Honouliwai, Kauhi, "
Paluhi, Ualapue, Maalahia, Ohia,
Kawelo, " Kahoowaha, "

This is an announcement telling people to pick up their kuleana claims which have been awarded. If the person listed has passed away, then the heir is invited to come forth. On the island of Moloka'i, this list names Maalahia, Kawelo, and Kahoowaha, each one being awarded a kuleana in the ahupua'a of 'Ōhi'a. This appears to be a reprint of the list published the month before minus the name of Kaupe who perhaps had already diligently picked up the kuleana award when it was previously announced.

Ka Hae Hawaii, Augate 11, 1858. 75
Make.
Iulai, ma Ohia, molokai make o Loheau k.

This is a death announcement for a man from 'Ōhi'a named Loheau.

Vol. 1, No. 6
1 January 1862 *Ka Nupepa Kuokoa*
Novemaba 1, ma Ohia, Molokai, make o Kane k.

This is a death announcement for a man from 'Ōhi'a named Kane.

Vol. 1, No. 57
27 December 1862 *Ka Nupepa Kuokoa*.
Dek. 8, ma Ohia, Molokai, make o Kiaaina (w.)

This is a death announcement for a woman from 'Ōhi'a named Kiaaina.

Ka Nupepa Kuokoa:
KE KILOHANA POOKELA NO KA LAHUI
BUKE XVIII. HELU 13. POAONO, MARAKI 29, 1879. NA HELU A PAU 904.

Ma ke Kauoha.
Keena Aina, Oihana Kalaiaina
Honolulu, Maraki 19, 1879.

UA makaukau no ka hoopuka aku na Palapala Sila Nui e waiho nei ma ke Keena Kalaiaina o na Aina malalo nei : SAM'L. G. WILDER, Kuhina Kalaiaina.

OAHU.

Palapala
Sila Nui INOA. AINA
5592 Kaawa Elia Honolulu

MOLOKAI.

6565 Kalamika Maunawai Ili o Ninihua
6553 Maalahia Ohia Ili o Pohakea
6527 Kula Mapulehu
6526 Hihia Makalii Kapualei
6507 Ohuaaiai Kalaupapa
6506 Nanamokueha Ahuli "
6489 Kane o Hau (Hooilina) Halawa
6485 Kuanea Mapulehu

This is a decree stating that royal patents have been issued in the Land Commission[?] Offfice in Honolulu. For the island of Moloka'i, Royal Patent #6553 has been issued to a person named Maalahia for land in the 'ili of Pohakea, in the ahupua'a of 'Ōhi'a.

ELUA NUPEPA KUOKOA, HONOLULU, T. H. POAHA, APERILA 30, 1925.

MRS. LIKE.
Kanikau aloha no Alapaki K. Ke-
awekane,
Kuu kaikuaana mai ka uka o Ohia,
Mai ka uluwehiwehi o ka Iau o ka
laau,
Aloha ia uka a kaua e hele ai,
Aloha ka leo o ke kahuli o ka na-
hele,
Hele oe e kuaana kuu hoa-pili,
Kuu hoa hana o ka uka o Kanaha,
Hala aku la oe kuu hoa-pili,
Kuu hoahele o ka hana a ke aupuni,
Aloha ia hana a kaua e luhi ai,
Kuu kaikuaana mai ka Ia'i o Kalia,
Aloha ia kai a kaua e lamalama ai
B imi ai i pono no ka noho ana,
Noho aku kaua nana i na moku,
I ka hookomo mai i ka nuku o
Mamala,
Mahea la oe i nalo iho nei.
Haalele oe ia 'u kou pokii,
Kuu hoa-pili i ka la wela o Makiki
Mai ka uluwehiwehi a ka he-i,
Auwe oe e kuaana kuu aloha pau
ole!

This is a chant of lamentation written for a recently deceased person by the name of Alapaki K. Keawekane. In this chant, Alapaki is called, "My beloved older sibling from the uplands of 'Ōhi'a." However, it is not clear whether or not this is referring to the 'Ōhi'a on Moloka'i. The composer of this chant appears to be a Mrs. Like.

Manawai Articles

KA HAE HAWAII. Buke I, Helu 22, Aoao 85. Iulai 30, 1856.
30 Iulai 1856

OLELO HOOLAHA.

Keena Kalaiaina, la 25 o Iulai, 1856.
KE KAUOHA ia'ku nei ua mea a pau o na inoa malalo nei, e kii koke mai i ko lakou mau kuleana e waiho nei malalo o keia Keena, he mau kuleana ua hooko ia, nolaila, e pono ia oukou e kii koke mai i ko oukou mau kuleana. Ina ua make ka mea nona ke kuleana, e kii mai na hooilina.
MOLOKAI.
Nunuonea, Koolau, Kalaupapa,
Piikoi, " "
Puailelewale, " "
Kauhi, "
Kaluoku, " "
Keawe, " "
Nanaonokueha, " "
Naale, " "
Ihu, Kona, Kumimi,
Penopeno, " "
Pahupu, " Keawanui,
Kaailepo, " "
Hapuku, " Kapualei,
Nakeleawe, " "
Kanakaokai, " "
Nuipohiwa, " "
Kawaihoa, " "
Peinoa, " "
Nahauna, " "
Lipali, " "
Kauhi, " Moanaui,
Waimoe, " "
Nahoeha, " "
Kauhanui, " "
Koa, Koolau, Waikolu,
Kahakahaka, " "
Napela, Kona, Manawai,
Kalamaika, " "
Kane no Hau, Koolau, Halawa,

This is an announcement listing those who have been awarded kuleana lands. For those listed who have passed away, their heirs are asked to come forth. The list shows 2 kuleanas awarded in Manawai, one to a person named Napela, and the other to a person named Kalamaika.

KA HAE HAWAII. Buke I, Helu 28, Aoao 109. Sepetemaba 10, 1856.
10 Kepakemapa 1856

KA NU HOU MA MOLOKAI
KALUAAHA, Sep. 5, 1856.

E ka Hae Hawaii.
Ua nui ka hana maikai ma Molokai I keia mau la iho nei. I ka la mua iho nei, ua hoike na kula mai Halawa a Kaaunakakai he 11 kula me 299 haumana maloko. Ua hoike nui lakou ma ka heluhelu, helu, kakaulima palapala aina, hoailonahelu, pa ko li, a pela aku I ka Poalua hoi ua hoike na kula o Molokai nei, ma Halawa a Palaau, 6 Kula, me 116 haumana, a ua like ka hana ana me kela mau kula maluna iho. I ka Poakolu, ua hoike na kula pa ko li, a me na papamua o kela kula keia kula, a me ke kula ma ka olelo Beretania o D. H. Hikikoke. He 31 haumana iloko o ia kula, a ua hui hou mai I keia la me na kula he 54 haumana, I hiki ole mai mamua Hui na haumana a pau loa I keia hoike ana, ua 530.
Ma ka nana i keia hoike ana, ua maopopo ka ike o na haumana. Ua maikai ka heluhelu buke ana; he mea nui ia, o ka heluhelu pololei, no ka mea, ma ka heluhelu loaa mai i ke kanaka ka ike, ka nu hou, na manao hou, a me ka manao lana. a me ka olioli no hoi. He waiwai nui ia. Ina hemahema ka heluhelu, o ke kumu ia e hemahema ai ka ike, ka noonoo, a me ka hana no hoi. Nolaila, ua olioli au i ka nana i ka heluhelu buke o na haumana o Molokai nei, ua akamai ka nui malaila.
Ma ka huina helu wale no ka hoike ana ma ka helu, a ua makaukau kekahi poe ma ia buke mai ka mua a i ka hope; hemahema nae kekahi. I ka nana aku, aole makaukau loa kekahi poe kumu ma ia buke, nolaila ka hemahema o na haumana.
Ma ke kakaulima ua nui ka poe akamai; ua oi aku nae ke kula o Kamala malaila. Maikai maoli ka palapala lima o kekahi poe haumana o Molokai nei.
Ma ka palapala aina, aole nui loa ka ike, no ka mea, ua loihi ka waiho ana o ia hana no ka buka ole. I keia makahiki iho nei wale no ka loaa ana o ka palapala aina hou. Ua aoia nae ma Molokai nei, a e pono e hoikaika malaila ma keia hope aku, i ikeia ke ano o kela aina keia aina a ka honua nei, a me na moana, na mauna, na muliwai me na kanaka o kela ano keia ano. He mea nui loa keia.
Inehinei, oia ka la pualiinu wai, he la nui ia, he la olioli. I kakahiaka, hora eiwa, he huakai hele ko na haumana, a komo iloko o ka luakini, a piha loa i na makua a me na keiki, a hu iwaho. Ua hele mai kekahi poe hanohano, no kahi e mai, e nana i keia hana.
O Limaikaika, o loane Richardson, Bako, Jones no Lahaina, a me na haole e ae. Ku o Limaikaika a pule, alaila mele ka papa himene me ka leo maikai, a me ke akamai, alaila nui wale na olelo, na kamakamailio, haimanao, na mele kahiko, he kanalima a keu, mai ka hora 9 a i ka hora elua o ke ahiahi ka hana ana; no na mea kahiko o Hawaii nei, a me na mea hou; noloko mai o ka Baibala kekahi, noloko mai o ka noonoo o lakou ilio no kekahi o keia maii olelo. Olioli loa na kanaka i ka lohe ana, piha loa i ka olioli, aole okana mai o ka akaaka, a me ka lealea i kekahi manawa. Aole paopao aho iki na kanaka i ka lohe a hiki i ke ahiahi O ka papa himene kekahi mea i mahalo nui ia, a ua ao nui ia na kula o Molokai nei i ka pa ko li, a me na leo mele maikai.
A i ka pau ana o ka hana, ku kekahi poe a paipai aku, oia hoi o Limaikaika, I Richardson, Lokomaikai, Kamaipilikane, Pika nele. Olelo o Ioane, e paa mau aku ka manao o ko Molokai, ma ka puali inu wai, a me ka imi naauao; e wawahi i kela olelo a ke kahi poe, e olelo ana, aole e hoomau aku na kanaka Hawaii ma ka pono, he poe lauwili, hoi hope. E lilo ia olelo i mea wahahee, ma ka hana mau ana e like me keia.
Olelo hoi o Limaikaika ia lakou, ua akaka ka holo mua o ka naauao ma Molokai nei, aole nae pau i ka loaa, nui loa koe; e hoikaika a pau loa ka naaupo, ka ilihune ka noho pilikia, a noho kuonoono ko Molokai nei iloko o na hale maikai, me ka lako i ka lole, ka ai, ka ia, a pela aku. Hooholo hui ia ka olelo e kupaa ma ka puali inu wai. Paipai no hoi o Limaikaika e hui i ka mahiai a me na hana e ae, me ka imi naauao. Pau keia, he wahi ahaaina i hoomakaukauia e Kuaita me Davida, me na keiki a Hikikoke, ekolu papa aina iloko o ka hale kula; maemae no hoi, maikai ka ai. O na malihini nae ka poe ei, aole nui o na kamaaina, oia ka hemahema a'u i ike ai iloko o keia hana Kainoa, e

lawe like mai na makoa i ka ai na ka lakou poe keiki, e ai pu ma keia puali inu wai. Eia ka, o Kuaika me Hikikoke wale no na mea hana i ka ai. Aole pela mamua, he hui na makua mamua.
Pau ka ahaaina ana, ma ke kahea ana o Limaikaika, halawai na kanaka e kukulu i ahahui mahiai no Molokai nei. Ua kohoia o Lokomaikai, a o ---- i kakauolelo. Hoike nui o Limaikaika no ke kanu uala maoli maikai, e waiho loa aku i ka uala kahiko, he uala popopo koke ia, hoowahawaha na haole. O ka uala hou, uala paa, popopo ole, ka pono. E kanu nui a lawe no na moku, a me Kaliponia; he mea makemake nui ia malaila. Hookahi hewa, o ka hapa o ka uala maikai e laweia aku ilaila.
O ka papapa kekahi mea e kanu ia ; he nui ke kumu kuai; he mea makemake nui ia maluna o na moku O ka hanai hipa kekahi mea kupono ma Molokai; makemake ka hipa i ka aina pali, aa, uuku ka weuweu, e like me keia mau pali.
O ka huita kekahi mea kupono ma Kalae. Hoike no hoi oia i ka pono o ka hui ma ka mahiai; oia ka mea e ikaika ai; e like me na rope liilii owili ia a loaa ke kaula paa. Aole ikaika ke hana liilii, kela mea keia mea ma kona manao iho. E hui ka pono, e kukapu, e kokua kekahi i kekahi. Pau keia, ua hooholoiaa koho i mau Komite e imi i Kumukanawai no ka Ahahui Mahiai, o Molokai nei. O Kuaita, o D. H. Hikikoke, a me Lokomaikai na Komite. O ka pau no ia o ka hana.
Eia kekahi ; ua hanaia a maikai loa ka luakini ma Kaluaaha; ua paa i ka noho, a ua pau i ke pena ia; a ua hookelekele ia i ka puna maloko a ma waho, keokeo maoli a me ka maemae ; hanohano maoli ke nana'ku. Ua hanaia no hoiha halepule maikai, hale paa, ma na wahi e ae, ma Uala pue, Manawai, a me Mapulehu.
Eia kekahi ; ua paa i ka lole na kino a keia mau kamalii, he 530 i hoike ae nei ; he lole maikai, kuoonoono ke nui; ua oi aku ka maikai mamua o na makahiki i hala. No ka mea, ua hooikaika na makua e imi i ka lako no ka lakou poe keiki . Nolaila, ua holo io no ka naauao ma Molokai.
I ka la pule iho nei, ua malama ia ka ahaaina a ka i aku maanei; ue piha loa ka hale pule; maikai ka hana ana ke nana'ku. He hemahema nae no ke Kahuhipa ole hana e huai i keia ohana maikai? L.

This article tells of the various news items of the day concerning Moloka'i. It begins by praising the progress on the education front with the number of schools and enrolled students on Moloka'i, and commends the students for their exemplary progress in reading, math, writing, geography, music and other subjects. The article then goes on to mention other news: visiting missionaries from Maui; the raising of sheep on Moloka'i; the growing of wheat at Kalae. Regarding Manawai, the author praises the beautiful church that has been built there and also praises the churches built in Kaluaaha, 'Ualapu'e, and Mapulehu.

KA HAE HAWAII. Buke 2, Ano Hou.---Helu 23, Aoao 89. Sepetemaba 2, 1857.
2 Kepakemapa 1857

OLELO HOOLAHA.

E IKE auanei na kanaka a pau ma keia palapala, ke hookapu aku nei au i na holoholona lio, bipi, hoki, miula, kao, hipa, puaa, aole e hele malunao kuu aina o Manawai, i Molokai nei, aole hoi e hele ma ke kula a me na wahi i pili i ke konohiki, aole hoi e lawe na mea holoholona ma kuu Loko-Ia-wai e hoohainu ai i na holoholona, ua kapu loa. O ka mea kue i keia mau olelo e uku no ia e like me ka uku i oleloia ma ke kanawai o ke aupuni; a ina uku ole mai kekahi, e hookomo koke no wau ia mau holoholona iloko o ka Pa Holoholona o ke aupuni.
Na kou lima i hana i keia la 26 o Aug. 1857, maManawai, Mokupuni o Molokai, ko Hawaii Pae Aina.
WILLIAM H. ZUPPLIEN. 23-1t*

This is an announcement from a William H. Zupplien of Manawai prohibiting others from letting their animals go upon his land there. He also forbids others from taking their animals to drink

from his fresh water source called Loko-Ia-Wai. Mr. Zupplien warns others of a fine if they trespass, and a failure to pay the fine would have their animals sent to the "Animal Pound" held by the government.

KA HAE HAWAII, SEPETEMABA 30, 1857. 107

KEENA KALAIAINA, la 15 o Sepetemaba 1857.

KE KAUOHA IA'KU na mea a pau o na inoa malalo nei, e kii koke mai i ko lakou mau kuleana e waiho nei maloko o keia keena, he mau kuleana ua hooko ia, nolaila, e pono ia oukou e kii koke mai i ko oukou mau kuleana. Ina ua make ka mea nona ke kuleana, e kii mai na hooilina.

MOLOKAI.
Kaaukaokai, Kapualei, Kalamaika, "
Niupohiwi, " Naale, Kalaupapa,
Kawaihoa, " Keawe, "
Peinoa, " Puailelewale, "
Nahauna, " Kauhi, "
Lipali, " Kauhanui, Moanui,
Nakeleawe, " Nahoiha, "
Hapuku, " Waimoe, "
Kelohanui, Honouliwai, Kauhi, "
Paluhi, Ualapue, Maalahia, Ohia,
Kawelo, " Kahoowaha, "
Kaupe, " Kaiu, Kahananui,
Koenakaia, " Kaluau, "
Kaailepo, Keawanui, Napela, "
Pahupu, " Kuaiualu, Kaluaaha,
Kane [Hau] Halawa, Koa, Waikolu,
Penopeno, Kumimi, Kahakahaka, Waikolu,
Napela, Manawai, Puhi, Kapuaokoolau.

This is a listing of those who have been awarded kuleana lands. For those in the list who have passed away, their heirs are asked to come forward. This list shows one kuleana parcel in Manawai, and it has been awarded to someone named Napela.

KA HAE HAWAII, AUGATE 11, 1858. 75
Iulai 24, ma Manawai, Molokai make o Maoha k.

This is a death notice for a man from Manawai named Maoha.

Buke 1, Helu 11
8 Pepeluali 1862 *Ka Nupepa Kuokoa*.
KAHOLO—Ian. 31, ma Manawai, Molokai, make o Capt. Kaholo (k,) he make emoole kona, he wahi nahu ka hoomaka ana, aole i liuliu make aku la.

This is a death announcement for a man from Manawai named Captain Kaholo. He died quickly from what started as a bite of some sort.

Kawahamana, et al. "He Waimaka Aloha no Kuu Kane, I Aloha Nuiia Mr. Jonah M. Kawahamana." *Ka Nupepa Kuokoa*, Volume LXII, Number 33, 16 August 1923, p. 8.

HE WAIMAKA ALOHA NO KUU KANE, I ALOHA NUIIA MR. JONAH M. KAWAHAMANA

MR. JONAH M. KAWAHAMANA.

Mr. Lunahooponopono o ka Nupepa Kuokoa, Aloha Kaua:—O ka'u ukana e haawe nei ma kuu kua, a e hii nei hoi ma kuu alo me ka luuluu e noi aku nei i kou oluolu; e hookomo iho hoi ma kekahi wahi kaawale o ka kakou pepa; i kela mau huapalapala e kau ae la maluna, a nana hoi ia e ha'i aku i ka nui ohana e nobo ana ma kela ame keia wahi o ke Teritore nei.

Ma ka makihiki i hala aku nei, 1922, ua hoomaka mai ka ma'i o kuu kane me ka ikaika, ua kiiia ke Kauka E. S. Goodhue, a ma kana lawelawe ana i loaa mai ai kahi oluolu, a m ana mahina i kaahope aku la, ua hoomahuahua loa mai la ka ma'i maluna ona, me ka lawelawe no o ke kauka, a loaa mai no kahi oluolu, me ia wahi oluolu ma ka Poakolu Iulai 11, ua kii mai la ka lunamakai nui o ke Kalana o Maui nei, Clement Crowell, ame ka Hope Makai Nui o Molokai nei Bob. Lindsay, iaia, no ka noho ana i ka aha nimaninau ma Kaunakakai, no ka hoike ana i kana ike i pili i ka hibia pepehikanaka i pepehiia ai ka Pake, Wai Bow, i make.

Ma ka Poaono mai, i hoihoiia mai ai me ka mau no o ka nawaliwali ma ka Poakahi ae, Iulai 16, ua kii hou ia mai la no, ia hana hookahi no, ma ia ahiahi no i hoihoi hou ia mai ai, a lawe loa ia i kahi o ke kauka, oiai ua oi loa mai la ka ikaika o ka ma'i, a hoihoiia mai i ko mauna home.

Mai ia manawa mai ahiki i ka hora 7 p. m., o ka Poaha, Iulai 19, maluna o ka makou papaaina ia ahiahi i heleawai mai ai ke koko mailoko mai ona, ke kane hoi e hou hele ana i o ianei, ahiki i ka waiho ana o ke kino iloko o ke koko, e kahe awai ana. Auwe kuu manaonao i kuu kane, me ka leo nui e kahea ana i na kokua, ua hiki mai la na kokua ia manawa, ua lele loa ae la kona aho hope loa, aole puai leo a pili iho la ka maka a moe aku la.

He manawa ia o ke pioloke me ka waimaka, e hapapa ana mao a maanei Auwe, kuu manaonao i kuu kane me he poiwai la ka waimaka e hoopulu ana i kuu nui kino, auwe lihaliha wale! Mokumokuahua ka naau i ke aloha ia oe e kuu kane, e kuu Iona hoi!

Ua hanauia kuu kane ma Keanae Maui, na Kawahamana kona papa ame Keawe kona mama. Ua piha iaia na la o kona ola ana i ke 56 makahiki a moe aku la i ka moe kau a moe hooilo. Aloha no! Ua hoonaauaoia no ma kona onehanau.

Ua hoohuiia maua ma ka mare e ka Rev. J. Kaalouahi, Kahu o Halawa Honouli, Waialua, huiia, i ka A. D. 1907, a i ka 25 makahiki a oi o ko maua noho ana a mo-ku iho la ke kaula gula ma ka la 19 o Iulai. Mai ko maua mau puhaka mai he 11 keiki, ua pau wale no i ka make, a koe hookahi, he kaikamahine e ola nei.

He lawai'a ka oihana a kuu kane iloko o 20 M. H., a oi, he kakaikahi loa kona hana i na hana e ae.

Ua heleia e maua apuni o Molokai, Lanai, Kahoolawe, ame kekahi hapa o Maui, i ka lawai'a, no ka imi ana i na mea e pono ai keia noho honua ana. He poe lawai'a kuu kane malalo o kekahi poe. Me ia hana oia a moe aku la, kuu ka luhi.

E kuu aloha e, e maliu mai, a ka manao e lauwili nei. Eia au la, ua eha ua eha i ka eha lima ole a ko aloha.

Ha kane heahea, a he oluolu kona mau ano apau, he hale piha ko maua i na makamaka, ame na hoaloha he puuwaihamama, he umeke poi ole, he ipukai hamama wale.

Kuu kane i ka huikau o Pukoo, kahi a maua i noho ai me na pokii o maua. Imi au ia oe i Ko'akapu, aole oe i loaa ia'u, a na kapakai au o Mapulehu, he ole no ka maaloalo mai. Eia paha i Kaluaaha i na kai o Kapipipi ame Kakai, aloha ia mau kai a kaua e hele ai! Ei paha oe i ke kai o Kulu'i, aloha Oneke i ka leo o ke kai e hea nei, auhea oe e Iona? Ei no paha i Ualapue i ka home aloha o maua. Ei aku nei paha oe i Manawai i ka nalu ha'imuku o Kapaekahi, a Keawanui au i Eaealai o Kalaeloa, kahi a makou i noho ai i ka lawai'a o ka mahina aku la o Iune i hala me na lei a maua he kaikamahine ame ka moopuna, mea ole ke anu ame ke ko'eko'e.

Kuu kane i na kai o Kaamola, Wawaia, Puaahala, a hala aku i na kai o Kamalo. Aole oukou e ike hou ana ia Iona i keia la, ka la apopo, a mau aku. Kuu kane i ka ihu o ka waa a ka makani ame ka ua e haluku ana, i ka iini nui no na pomaikai o keia kino, kuu kane i ka i'a ewalu hi'u he kui hao ka upena e hei ai. E Molokai nui a Hina e, aole e hehi hou ana kuu kane i kou mau kuahiwi aloha, no ka wa mau loa.

Auwe kuu aloha i kuu kane, kuu hoapili o na wahi apau. Ei aku nei paha oe i ka waikau mai o Keanae, ko onehanau, auwe aloha wale!

Ma ka Poaono, Iulai 21, hora 8 a. m., i malamaia ai kona anaina hoolewa ma ko maua home, e ka Rev. I. D. Iaea, kahu o ka Ekalesia o Kaunakakai ame H. H. Ewaliko, lunakahiko o ka Ekalesia o Kaluaaha, a ma ka lua i waihoia aku ai kona kino lepo no ka wa mau loa. Na Iehova no i haawi mai, a na Iehova no i lawe aku, e hoomaikaiia ka inoa o Iehova.

Maluna ae o na mea apau ke haawi aku nei au i ko'u hoomaikai kulo i ka lunamakai nui o ke Kalana o Maui, Clement Crowell ame ka hope makai nui o Molokai, no ke kokua ana mai ia'u i ka home no ke kino o kuu kane ame na kokua e ae mai ia laua mai, a i ka poe no apau i lawe mai i na lei ame na bo-ke pua, ame ke ala pu ana mai hoi me a'u i ka po o kuu kane aloha i hala aku la.

E oluolu e lawe aku i ka'u mau hoomaikai ia oukou apau loa, a na Je Akua no e kiai mai ia kakou apau.

O makou iho no me ka luuluu.

MRS. M I. M. KAWAHAMANA
MISS ISABELL IONA,
MASTER IONA, JR.
MRS. M. K. KALILIKANE,

This is a letter in lamentation for Jonah M. Kawahamana written primarily by his wife. Jonah who was a fisherman for more than 20 years and they made their home in Puko'o, Moloka'i. She recounts some of their shared life, and poetically calls out to him invoking the name of many ocean areas where she looks for him, but he is not found.

Kahananui Articles

KA HAE HAWAII. Buke I, Helu 22, Aoao 85. Iulai 30, 1856.
30 Iulai 1856

OLELO HOOLAHA.

Keena Kalaiaina, la 25 o Iulai, 1856.
KE KAUOHA ia'ku nei ua mea a pau o na inoa malalo nei, e kii koke mai i ko lakou mau kuleana e waiho nei malalo o keia Keena, he mau kuleana ua hooko ia, nolaila, e pono ia oukou e kii koke mai i ko oukou mau kuleana. Ina ua make ka mea nona ke kuleana, e kii mai na hooilina.
MOLOKAI.
Nunuonea, Koolau, Kalaupapa,
Piikoi, " "
Puailelewale, " "
Kauhi, "
Kaluoku, " "
Keawe, " "
Nanaonokueha, " "
Naale, " "
Ihu, Kona, Kumimi,
Penopeno, " "
Pahupu, " Keawanui,
Kaailepo, " "
Hapuku, " Kapualei,
Nakeleawe, " "
Kanakaokai, " "
Nuipohiwa, " "
Kawaihoa, " "
Peinoa, " "
Nahauna, " "
Lipali, " "
Kauhi, " Moanaui,
Waimoe, " "
Nahoeha, " "
Kauhanui, " "
Koa, Koolau, Waikolu,
Kahakahaka, " "
Napela, Kona, Manawai,
Kalamaika, " "
Kane no Hau, Koolau, Halawa,
Kelohanui, Kona, Honouliwai,
Kamoku, " Kaluaaha,
Kualualu, " "
Kapela, " Kahananui,
Naluau, 3, " "
Kaiu, " "
Kehinolau, " Makanalua,
Lili, " Kupeke,
Maalahia, " Ohia,
Kaahoowaha, " "
Koenakaia, " Ualapue,

Paluhi, " "
Kaupe, " "
Kawelo, " "
Leleiohoku, " Kamalo,
Kekauonohi, " Moakea Naiwa, a me Makaulalua
KAUAI.
Kaaha, Kona, Hanapepe,
Kupia, " Kamoku,
Lupaieie, Koolau, Anahola,
Kahaioia, " "
Puhi, Halelea, Kealia,
Kekauonohi, Koolau, Waiakalua,
" " Kaakaanui,
" " Namahana,
" Puna, Kealia,
" Halelea, Wainiha.
Ma ke kauoha. S. SPENCER, Kakauolelo.

This is an announcement listing those who have been awarded kuleana lands. For those listed who have passed away, their heirs are asked to come forth. The list shows three kuleanas awarded in Kahananui. One is to a person named Kapela, another is to a person named Naluau, and the third was to a person named Kaiu.

Buke 5, Helu 15
14 ‘Apelila 1866 Ka Nupepa Kuokoa.

HE MAU AINA WAIWAI NUI.

E KUAI LILO ANA KA MEA NONA ka inoa malalo nei ma ke KUAI KUDALA! Ma ka Halehookolokolo, Honolulu, POAKAHI, APERILA 23, HORA 12 O KE AWAKEA, Ina aina nona na inoa malalo nei! A I OLE IA Aia e like me ka me e kaa'i ka Aie o ka MEA HANOHANO LEVI HAALELEA! E like me ke kauoha a ka Aha Hookolokolo i na Lunahooponopono Waiwai.
Ka aina o KAHANANUI, ma Molokai.
" " " KIPU, " "
" " " MANAWAINUI," "
" " " KAPUALEI, " "
" " " KUMUELE, " "
" " " AWAWAIA, " "
" " " MAKANALUA, " "
" " " KAMANONI, " "
" " " WAINIHA, " Kauai.
" " " WAIKOKO. " "
Eia no na kii ma ko'u keena o keia mau aina. Eia hoi kahi, o ka hoolimalima o ka Loko ia o Maunalua, $200. no ka Makahiki, A ina e oi ar ka hawina a kekahi mamua o ka uku mua, alaila lilo. Aia no i ka mea e lilo ai ka hana hou ana i ka Loko, a o 5 makahiki ka hoolimalima. H. W. SEVERANON, Luna Kudala. 227-3t

This announcement appears to be selling lands that formerly belonged to the ali‘i Levi Ha‘alelea. Land in Kahananui is among the lands listed for sale on Moloka‘i. An interesting aside in this announcement is that the Maunalua Fishpond is offered to be “rented out” at $200 for a year of use.

Buke 63, Helu 39
25 Kepakemapa 1924

NUPEPA KUOKOA

HOOLAHA O NA HOOLI-
MALIMA AUPUNI.
Ma keia ke haawiia aku nei ka
hoolaha akea ma ka hora 10:00 a-.
m.,' Poaono, Okatoba 25, 1924, ma
ke Keena o ka Hope-akena, Mr.
F. K. Kalua, Wailuku, Maui, ma-
laila e kuai hoolilo ia aku ai ma
ke kudala akea i ka poe koho kie-
kie loa malalo o na manao o ka
Pauku 73 o ke Kanawai Kumu p
Hawaii, na Pauku 358 ame 380 et
seq. o na Kanawai Hooponopono Hou
ia o Hawaii o 1915, ame ke Kana-
wai 143 o na Kanawai Ahaolelo o
1917, na Hoolimalima Laula, o na
Aina Aupuni mahope ae nei no na
hana hookuu holoholona wale no:
1. Hapa o ka Aina Aupuni o Ua-
lapue, Mokupuni o Molokai, no-
na ka iliaina o 370 eka, oi aku
a emi mai paha. Uku hooli-
malima haahaa, $93.00 o ka
makahiki, *e* uku hapa-makahi-
ki mua ia.
2. Ko ke Aupuni hookahi-hapalua
i mahele ole ia o ka hapa o
ka aina o Kahananui, Moku-
puni, o Molokai, nona ka ili-
aina o 115 eka, oi aku a emi
mai paha. Uku hoolimalima
haahaa, $29.00 o ka makahiki,
e uku hapa-makahiki mua ia.
E kaa na hoolimalima e hooliloia
aku ana malalo o na kumu aelike
apau ame na kulana o na Hoolima-
lima Laula Aupuni hoopukaia, e ke
Keena o ke Komisina o na Aina
Aupuni a malalo hoi o kekahi hookoe
ana ame ke kulana paku'i e hoo-
komoia aku ana maloko o na hoo-
limalima e hoopukaia aku ana ma-
muli o keia kuai, elike me heia iho:
1. E hookoe ana i na Kuleana-
Aina apau, na alanui, na moali
alanui, ka laina paipu Kalana
ame kekahi mau pono alahele
e ae e hookaawaleia ana *e* ke

Komisina o ua Aina Aupuni.
2. Ina e hooliloia ana kekahi hapa o na aina e hoolimalimaia aku ana uo ke kanu ana, o ka ili-aina i kanuia e hoohua mai i kekahi uku hoolimalima maka-hiki o $5.00 no ka eka o ka makahiki no ke koena aku o ka manawa mai ka la aku o ke kanuia ana mawaho ae o ka hoolimalima i hoakakaia ma-loko o na hoolimalima i oleloia. E kaa keia kuai malalo o na ku-lana mahope ae nei:
a. Manawa o na hoolimalima, 15 makahiki pakahi mai Ianuari 1, 1925 aku.
b. E uku ka poe e lilo ai, ma ka haule ana o ka hamare, i ka uku hoolimalima o na mahina mua eono, hui pu me na hoolilo apau o ka hoolaha ana ame na kaki e ae apau e pili ana me ka hoomakaukau anau na hoo-limalima i oleloia.
c. E koiia aku ana ka poe e lilo ai e waiho mai me ke Komi-sina o na Aina Aupuni ma a i ole mamua ae o ka hooko ame ka haawiia ana o na hoolima-lima i oleloia, a i ole iloko o kanakolu (30) la mahope aku o ke kuai, i na bona maikai a lawa pono ma ka huina o $500.00 pakahi me na hope i aponoia e ke Komisina o na Aina Aupuni e hoakaka ana no ka hooko pono ia o na kumu hoopaa apau i paa maloko o na hoolimalima e hoopukaia aku ana mamuli o kuia kuai.
No ka hoakaka aku i koe e ninau ne ma ke Keena o ka Hope-akena. Mr. F. K. Kalua, Wailuku, Maui, a i ole ma ke Keona o ke Komisina o na Aina Aupuni, Hale Kapitala, Hono-lulu, kahi o ke kii palapala aina o na aina e hoolimalimaia aku ana me ke ano o ka Hoolimalima Laua Aupuni e waiho nei a e ikeia ai. Hanaia ma Honolulu, maloko o ke Keanu o ke Komisina o na Aina

Aupuni i keia la 18 o Sepatemaba,
A. D. 1924.
C. T. BAILEY.
Komisina o na Aina Aupuni.
6627— Sept. 25; Oct. 2.

This is an announcement letting the public know that government lands will be offered for lease. Land at Kahananui, Moloka'i is the second one listed in this announcement. Approximately 115 acres in Kahananui are being offered for lease at the "low rate" of $29.00 for a period of one year.

'Ualapu'e Articles

KA HAE HAWAII. Buke I, Helu 11, Aoao 41. Mei 14, 1856.
14 Mei 1856

UA noiia mai kekahi o na Lunakanawai Kaapuni e Kuhio, i luna hooponopono i ka waiwai o Manuwai i make aku nei ma Moanui, Molokai: Nolaila ua kauoha ia'ku na kanaka a pau i pili, o ka la 22 o Iulai e hiki mai ana, oia hoi ka Poalua, i ka hola 10 o ke kakahiaka, oia ka wa e hana'i ma ke keena hookolokolo ma Ualapue, Molokai. Z. KAAUWAI,Lunakanawai Kaapuni.
Lahaina, Maui, Mei 9, 1855. 11-4t

UA noiia mai kekahi o na Lunakanawai Kaapuni e Kawaenalulu, ka mea i make aku nei ma Puako i Lahaina, Maui: Nolaila, ua kauoha ia'ku na kanaka a pau i pili; o ka la 22 o Iulai e hiki mai ana, oia hoi ka Poalua, i ka hola 10 o ke kakahiaka, oia ka wa e hana'i ma ke keena hookolokolo ma Ualapue, Molokai. Z. KAAUWAI, L. K. Kaapuni.
Lahaina, Maui, Mei 9, 1856. 11-4t

Both of these articles are letting people know that the estate of the recently deceased will be sorted out at the courthouse in 'Ualapu'e. The first announcement pertains to someone from Moanui, Moloka'i who has passed away, and the second announcement pertains to someone from Lahaina.

KA HAE HAWAII. Buke I, Helu 22, Aoao 85. Iulai 30, 1856.
30 Iulai 1856

OLELO HOOLAHA.

Keena Kalaiaina, la 25 o Iulai, 1856.
KE KAUOHA ia'ku nei ua mea a pau o na inoa malalo nei, e kii koke mai i ko lakou mau kuleana e waiho nei malalo o keia Keena, he mau kuleana ua hooko ia, nolaila, e pono ia oukou e kii koke mai i ko oukou mau kuleana. Ina ua make ka mea nona ke kuleana, e kii mai na hooilina.
MOLOKAI.
Nunuonea, Koolau, Kalaupapa,
Piikoi, " "
Puailelewale, " "
Kauhi, "
Kaluoku, " "
Keawe, " "
Nanaonokueha, " "
Naale, " "

Ihu, Kona, Kumimi,
Penopeno, " "
Pahupu, " Keawanui,
Kaailepo, " "
Hapuku, " Kapualei,
Nakeleawe, " "
Kanakaokai, " "
Nuipohiwa, " "
Kawaihoa, " "
Peinoa, " "
Nahauna, " "
Lipali, " "
Kauhi, " Moanaui,
Waimoe, " "
Nahoeha, " "
Kauhanui, " "
Koa, Koolau, Waikolu,
Kahakahaka, " "
Napela, Kona, Manawai,
Kalamaika, " "
Kane no Hau, Koolau, Halawa,
Kelohanui, Kona, Honouliwai,
Kamoku, " Kaluaaha,
Kualualu, " "
Kapela, " Kahananui,
Naluau, 3, " "
Kaiu, " "
Kehinolau, " Makanalua,
Lili, " Kupeke,
Maalahia, " Ohia,
Kaahoowaha, " "
Koenakaia, " Ualapue,
Paluhi, " "
Kaupe, " "
Kawelo, " "
Leleiohoku, " Kamalo,
Kekauonohi, " Moakea Naiwa, a me Makaulalua

This is an announcement telling people to pick up their kuleana claims which have been awarded. If the person listed has passed away, then the heir is invited to come forth. On the island of Moloka'i, this list names four people who have been awarded kuleana parcels in the ahupua'a of 'Ualapu'e: Koenakaia, Paluhi, Kaupe, and Kawelo.

KA HAE HAWAII. Buke 2, Ano Hou.---Helu 10, Aoao 37. Iune 3, 1857.
3 Iune 1857
I ka la 3 o Mei, ma Ualapue, Molokai, o Kekaha, 20 kona mau makahiki, he puu ma kona opu ka mai.

This is a death announcement for a 20-year old person named Kekaha from 'Ualapu'e who died from swollen stomach complications.

KA HAE HAWAII. Buke 2, Ano Hou.---Helu 16, Aoao 61. Iulai 15, 1857.
15 Iulai 1857
Iune 22, ma Ualapue, Molokai, make o Hanakahi.

This is a death announcement for someone from 'Ualapu'e named Hanakahi.

KA HAE HAWAII. Buke 2, Ano Hou.---Helu 19, Aoao 73. Augake 5, 1857.
5 'Aukake 1857
Iulai 15, ma Ualapue, Molokai, ua make o Kuaana w, he 48 paha kona mau makahiki.

This is a death announcement for a woman from 'Ualapu'e named Kuaana.

KA HAE HAWAII. Buke 2, Ano Hou.---Helu 25, Aoao 97. Sepetemaba 16, 1857.
16 Kepakemapa 1857

OLELO HOOLAHA.

KEENA KALAIAINA, la 12 o Sepetemaba, 1857.
KE KAUOHA IA'KU na mea a pau o na inoa malalo nei, e kii koke mai i ko lakou mau kuleana e waiho nei maloko o keia keena, he mau kuleana ua hooko ia, nolaila, e pono ia oukou e kii koke mai i ko oukou mau kuleana. Ina ua make ka mea nona ke kuleana, e kii mai na hooilina.
Keki Oahu Honolulu aina Kapaloa
Puowaina " " Kaikahe
Kaohe " Ewa Aiea
Haawenui no Puhibaka " Waianae Pohakoi
Keolohua " Waialua Laukihaa
Kawelohelii " Waikiki Kamoku
Iwinui " " Hamohamo
Ohuohu " " "
Upai no Opuhali " " "
Pelekane " " "
Kaiakoili " " Kamooiki
Hulilau " " Piliamoo
Kamoanahulu " " Mookahi
Kalalakoa " " Hopoe
Kuleleloa " " Pawaa
Keaka " " Palolo Kaululoa
Opunui no Kahaleula " " " Waiamao
Moo " " Makiki Pohukini
Mokuhanui " " "
Nahina " " "
Aohoaka " Kailua Kainamu
Kealina " " Kaulu
Mahu " Kaneohe Punaluu
Hoiwale Molokai Honomuni
Kelupaina " Mapulehu
Pala " Ualapue
Kana " "
Kana " "
Nahoaai " "

Puupuu " "
Kauhikoakoa " "
Kekuhe " "
Kahilahaole Kauai Koolau Moloaa
Kanakaiki " " "
Kauwika " " "
Kaaa " " "
Kaukini " " "
Inoa " " "
Moopuna " " "
Onionio " " "
Hoolili " " "
Lilihae " " "
Piho " " "
Ma ke kauoha. 25-2 S. SPENCER, Kakauolelo.

This is an announcement telling people to pick up their kuleana claims which have been awarded. If the person listed has passed away, then the heir is invited to come forth. On the island of Moloka'i, this list names six people who have been awarded kuleana parcels in the ahupua'a of 'Ualapu'e: Pala, Kana, Nahoaai, Puupuu, Kauhikoakoa, and Kekuhe. Note that two separate kuleana parcels in 'Ualapu'e have been awarded to someone named Kana.

KA HAE HAWAII, MEI 19, 1858. 27

PAPA INOA O KE KULA NUI O LAHAINALUNA.

E na haumana o Lahainaluna, i puka iwaho, a e kau liilii ana ma Hawaii nei a puni, eia no malalo nei ka Papainoa o ia Kulanui, mai 1831, a 1854, e nana oukou, i ka poe ola, a me ka poe make i keia wa; a e hai mai i ka poe ola a hiki i keia wa, a me ka lakou hana, a me ko lakou ano, a me ko lakou noho ana, e paiia no ma ka Hae, i maopopo ka hua oia laau kiekie, a me ka malumalu.

KOMO 6. MAKAHIKI 1838

NA INOA. Kahi i hele mai ai, Kahi e noho nei, a me ka oihana, Na makahiki ma ke kula.
Lono Halawa Molokai Honolulu Oahu# 3
Maui Kaanapali Maui Kaanapali Maui+ 3
Malaihi Waialua Oahu Waialua Oahu#
Mahoe Halawa Molokai Halawa Molokai+ 4
Mahoe 2 Hana Maui Hana Maui+ 3
Mahulu Kaneohe Oahu Kaneohe Oahu# 3
Makaku Waipio Hawaii Waipio Hawaii+ 4
Nailiili Honolulu Oahu Kalihi Oahu# 3
Naiwieha Honolulu Oahu Honolulu Oahu# 3
Nahina Ualapue Molokai Ualapue Molokai* 2
Nalaepaa Ewa Oahu Ewa Oahu+ 3
Naiuahi, Waikiki Oahu Waikiki Oahu+ 2
Niau Kohala Hawaii Kohala Hawaii* 1
Paele Hilo Hawaii Kahakuloa Maui + 3
Pohaku Wailuku Maui Hilo Hawaii+ 3 3/4
Poki Kaluaaha Molokai Honolulu Oahu# 3
Waiwaiole Waihee Maui Lahainaluna Maui** 4

Wiliama H. Waikapu Maui Waikapu Maui # 3
Geogi R. Waikapu Maui Lahainaluna Maui** 4
I ka hui ana 56.

This article shows the roster of names of former students at Lahainaluna School throughout the years. In 1838, there was a student by the name of Nahina who was from 'Ualapu'e, and at the time of this article's printing, Nahina had already left Lahaninaluna, had gone back to 'Ualapu'e and was living there again.

KA HAE HAWAII, IANUARI 30, 1861. 181
Ian. 24, ma Ualapue, Molokai, make o Kamauoha k. he mai maoli kona mai i make ai.

This is a death announcement for a man from 'Ualapu'e named Kamauoha.

KA HAE HAWAII, MARAKI 20, 1861.

OLELO HOOLAHA.

NO KA MEA, ua noiia mai ka mea nona ka inoa malalo nei, e Kawaiino a me Kuapuu, no ke koho ana i Luna Hooponopono waiwai o Puupau, no Ualapue, Molokai, i make aku nei. Nolaila, ke hoike ia'ku nei i na mea a pau, i pili, o ka poakolu, oia ka la 10 o Aperila, i ka hora 11 o kakahiaka, oia ka la a me ka hora i oleloia no ka hoolohe ana i ka mea i noiiamai a me ka poe hoole e hoike ia ka, aia ma ka Hale Hookolokolo ma Lahaina, Maui, kahi e hana ai.
F. W. HUTCHINSON.
Lunakanawai Kaapuni. Lahaina, Maui, Maraki 14, 1861. 51-3t

This is an announcement letting people know that the estate of a person from 'Ualapu'e named Puupau, who had passed away, was going to be settled at the courthouse in Lahaina, Maui.

KA HAE HAWAII, IUNE 12, 1861. 43

Iune 3, ma Ualapue, Molokai, make o Kuahine k, he wela kona mai i make ai.

This is a death announcement for a man from 'Ualapu'e named Kuahine. He appears to have died from a fever.

KA LAHUI HAWAII. Buke 2, Helu 49, Aoao 1. Novemaba 30, 1876.
30 Nowemapa 1876

Na hana ma ka la hanau o ka Moi ma Molokai.

E KA LAHUI HAWAII E; Aloha oe:—
Oiai, ma ka la hanau o ka Moi, ka la 16 hoi o keia malama, ua hoohiluhilu ia na hana oia la no ka hoomanao ana no ka la i hanau ai ko kakou lani Moi Kalakaua. A o kekahi paha keia o na hana makamua i hana ia i ke au o ko kakou Moi, aole hoi mamua aku.
Heihei Waapa.—Ua hoomaka ka heihei mawaena o ka hora 9 a me ka hora 10. O kahi i hoomaka ia ai keia hana, aia no ma Ualapue, o kahi e hoomaka ai, mai Ualapue aku a hiki i Pukoo. I ka hoomaka ana e heihei, ua ku like na waapa, a hoomaka aku la e holo, a i ka hiki ana i kuanalu

mawaho aku, ua huki ia ae la na pea iluna, holo aku la na waapa iloko iwaho e luwaiele ia ana e na ale o ka moana. Ia manawa i ike ia aku ai ka holo o Maunalou, a haule iho hoi o Kilauea ihope, hiki e hoi o Maunaloa i ka pahu hopu a lilo iho la ka $8.00 i ka mea nona ka waapa.
Lulu.—Mahope o ka hora 12, ua hoomaka ia ka lulu ana, a ua hana hoi kela a me keia elike me ka hiki iaia. O ka mea i lulu ia he, "Wati," a o ka waiwai io o ua wati nei, he $40.00, a ua lilo ke eo na J. K. Kaiheopulani.
Heihei Lio.—Ma ka auina la, ua hooheihei ia na lio, a he nui wale na lio i holo i ka heihei ana. I ka hoomaka ana o ka heihei, ku like na lio a pau ma kahi hookahi, a kahea no hoi ka mea nana e kahea e like me ka mea mau.
A i ka pau ana o ke kahea ia ana, ua holo aku ua poe lio heihei nei, a oili aku la elua mau lio mai loko aku o ka heluna lehulehu o lakou. A o na lio no hoi keia i holo a hiki i ka pahu hopu. A ia manawa no i ulu mai ai ka hoopaapaa mawaena o ka poe nona ka lio.
Aia ma ka la 28 o keia malama no, e heihei hou ai keia mau waapa. Me ka mahalo. J. K. MEKULAMA.
Ualapue, Nov. 17, 1876.

This is an article written by J. K. Mekulama of ʻUalapuʻe which talks about the planned festivities to praise and remember King Kalākaua on his birthday. Among the events planned is a boatrace from ʻUalapuʻe to Pūkoʻo.

KA LAHUI HAWAII. Buke 3, Helu 11, Aoao 1. Maraki 15, 1877.
15 Malaki 1877

Pane i ka moolelo a E. Kekoa.
Helu 2.

No ka hiki ana mai o Kekoa i Molokai nei—I ka malama o Iulai, m. h. 1874, ua hiki mai o Kekoa ma Molokai nei, ma Kaunakakai kona lele mua ana mai, a ua halawai me na hoahanau o ia apana, a ua kaohi iki lakou iaia e lawelawe i ka hana a ka Haku ma ka halawai awakea, oiai, he la Sabati ia. I ke ahiahi o ia la, hora 5 a oi aku, ua halawai pu me ka mea e hoopuka aku nei i keia olelo pane, a me na hoahanau i akoakoa pu ma ia halawai, a me na lunakahiko, o S. Pukila a me Kalua Kuheleloa, kekahi mau kiai o ka Ekalesia o Kaluaaha, maloko o ka halehalawai o Pupukanioe, apana o Kamalo, ua lulu lima pu me ke aloha pumehana, a, iaia no ka halawai ma ia keena, a pau ia halawai, ua kuu ka luhi o ka hele ana mai ma ka home o Pukila no ia po, a i ke ao ana'e, ua kia pololei ka ihu no Kaluaaha, a malaila ka hoonanea ana no kahi mau hebedoma, e hele ana i o a i o e nana i kona kihapai maikai, a iloko no o ia mahina, ua hoi hou o Kekoa i Honolulu. A i ka malama o Augate, o ia makahiki no, ua hoi hou mai me kona ohana a me na ukana pu. E kali iki ka poe e heluhelu ana maanei.
E hoike aku au ia oukou i kahi mea nani nui maikai loa a keia Ekalesia i hanaia no E. Kekoa a me kona ohana, a me na ukana pu no hoi.
Ma ka halawai luna o keia Ekalesia iloko o ka la 5 o Iune, 1874, ua hooholo na luna a pau mai Honomuni a hiki i Kalae, e lulu dala lakou, i mea e hoolimalima aku ai i ka moku no ka lawe ana mai ia E. Kekoa me kona ohana a me na ukana, mai Kahana, Oahu, a hiki i Honolulu, a mai Honolulu hoi a hiki i Pukoo, Molokai, a mai Pukoo mai a hiki i ka hale o ka Ekalesia e ku nei ma Kaluaaha.
Eia ka nui o na dala i lulu ia e na apana no ia hana lokomaikai :
Na apana o Honomuni, $4.00, Pukoo, $2.00, Mapulehu, $2.00, Kaluaaha, $1.50, Ualapue, $3.00, Manawai, $2.00, Kaamola, $1.50, Kamalo, $3.50, Kawela, $1.50, Kaunakakai, $3.00, Palaau & Kalae, $2.00, huina, $25.50.
I na la kinohi i hiki mai ai o Kekoa i Molokai nei, ua haawiia keia mau dala ma kona lima, he mau dala ia no ka lawe ana mai a ka moku iaia me kona ohana a me na ukana, mai Honolulu mai a hiki

i Molokai nei. Aka, pane mai la o Kekoa i na luna, aia no ko maua mau wahi ukana i Kahana, olelo aku na luna, na makou no ia e uku aku i ka moku i ka lawe ana'e a hiki i Honolulu.
Hooholoia.—Na na hoahanau e kokua hou no ia pilikia, oia he $6.00. Huina pau o na dala i kokua waleia ia E. Kekoa, he $31.50, no ia mau mea a pau i hoike ia maluna.
I ka hoi mua ana a Kekoa i Honolulu mahope iho o kona hiki ana i kinohi i Molokai nei, ua haawi hou mai la ka manawalea o na hoahanau ia Kekoa i kona kau ana iluna o ka moku, he mau pahu uala, he mau pai-ai, he mau kauna hee, he mau kaau amaama, he amu pu-a ko, he mau ipukai limu, a he mau kenikeni no hoi ka kekahi poe, a he nui aku no.
O keia kokua ana, aole ia i komo iloko o ka uku makahiki o ke ola kahu, aia loa keia mawaho o ka lokomaikai kiekie o na hoahanau o keia Ekalesia. Aloha no ia hana lokomaikai.
E hoomaka hou kakou e heluhelu i ke koena o ko Kekoa hiki ana mai.
I kona hiki ana mai me kona ohana a me kona mau ukana pu, ma ka malama o Augate, 1874. I ka hoomaka ana a Kekoa e lawelawe i kona kihapai, he olu wale no ua hoa paahana, he like loa ka huki ana i ke kaula o ka pono.
Ma ka halawai luna o Novemaba 6, 1874, ua kohoia o Kalua Kuheleloa i elele no keia Ekalesia e hele pu me Kekoa i Wailuku i ka la 18 o ia malama, ma ka halawai lunakahiko o ka mokupuni o Maui.
Aia maloko o ia Ahahui, ua hoouna ia'ku kekahi palapala noi e keia Ekalesia i kakau inoa ia e na hoahanau, mamuli o ko lakou makemake e lilo o Kekoa i kahu no keia Ekalesia, malalo o $200 no ke ola kahu i ka makahiki hookahi. Ua hanaia keia palapala noi malalo o na rula o ia aha, aka, i ka hiki ana o Kekoa a me ka elele i Wailuku; ua noi mai ka lunahoomalu o ka aha i ua palapala la, wahi a Kekoa, aole kuleana o keia aha e noi mai ai i keia palapala, oiai, na'u ponoi no keia palapala.
Ma keia mea, ua hoohokaia ka Ahahui Lunakahiko e Kekoa, a ua hoonele ia makou i ka manaolana piha nona, a mai ia manawa mai a hiki i ka wa i haalele mai ai, aole oia he kahu no keia Ekalesia. Nolaila, ua komo koke ka nune i na hoahanau o keia Ekalesia, me ka olelo iho, he wahi kanaka akamai ka keia ma ke ano kanawai, ko ke akamai hoi paha ia la, hoole ia'ku nei ka mana o ka Ahahui Lunakahiko o na mokupuni o Maui e Kekoa, e papapau ana paha kakou i ka pilikia i keia wahi kanaka. Kai noa he kio-pali, eia ka he oiaio no ka pilikia.
(Aole i pau.)

This article recounts a portion of the travels and works done by a minister by the name of Kekoa. In June of 1874, the leaders of the church decided to raise money to rent a boat to bring Kekoa and his family from Kahana, O‘ahu to Honolulu, then from Honolulu to Pūko‘o, Moloka‘i, and finally from Pūko‘o to the church at Kalua‘aha. Of the monies raised for this, $3.00 came from ‘Ualapu‘e.

KA
NUPEPA KUOKOA:
BUKE XVIII. HELU 21 POAONO, MEI 24, 1879. NA HELU A PAU 912.

Ma ke kauoha.

Keena Aina, Oihana Kalaiaina Honolulu, Mei 1, 1879. Ua makaukau no ka hoopuka aku na Palapala Sila Nui e waiho nei ma ke Keena Kalaiaina o na Aina malalo nei : SAM'L G WILDER. Kuhina Kalaiaina.

MAUI.

Palapala
Sila Nui INOA AINA
3088 Kanakahou Honuaula

1483 Maaweki "
2133 Mahiai "
2138 Kaimu "
1491 Kihuluhulu "
1507 Kahula "
1482 Nahualalaau "
1505 Puukoa "
1493 Kane "
1487 Mahiai 1 "
2132 1/2 Pai "
1484 Kaleo "
2139 Imihaku "
1495 Kukaheku 2 "
1481 Kaku "
1506 Kaihelani "
1508 Makahanohano "
1226 Kihuluhulu &c. "
1494 Kupaa "
1472 Kahaleokanu "
1490 Keoni & Kalahili "
1476 Kenui "
1480 Kawahapaa "
1475 Kaaea "
3930 Nakilu "
5004 Kihuluhulu "
1269 Kapawa Hana
1759 E Rooke "
2548 Kealo Kaupo
3597 J A Kuakini "
2141 Keawe Kipahulu
1569 J A L Willis "
5965 Keawe "
1681 Mahoe & Kamaka Waikapu
1514 " " "
1511 Keaka "
1512 Pakele "
4091 Kanakaloa "
1518 Kekua "
1516 Koa "
4948 Hakiki "
4937 Kahinu Waihee
6196 Kuanea "
1217 Helehua Kula
1205 M Burns "
1207 Napela "
5176 Kekapoi "
2125 Naoopu Hamakualoa
2630 Keahi "
1078 Wanaoa "
1085 Kamoekolohe "
1079 Puowaina "
1087 Hanakahi "

1258 Piho "
3355 Kamauu "
3660 Namokuelua "
5394 Pilali Kaanapali
4633 Nahinu "
5969 Kahula "
2910 1/2 Holoua Lahaina
5660 Kalaipaihala "
5633 J S Kaawa "
2998 Wm. Ap. Jones "
4398 B Mamakaeha "
4377 Kaekae "
4557 Kauhihewa "
4561 Kapu "
3534 Kaweawea "
1869 B Kaai "
5005 Kalaipaihala Olowalu
1483 Maaweiki Moloa
2133 Mahiai Papanui
2138 Kaimu "
3088 Kanakahou Mooiki

MOLOKAI.

1133 Kupanihi Honouli
2581 Kalawaianui Waikolu
1132 Kuhio Honouli
6037 Luaaka Manowai
6062 Kaneheana Kumueli
6312 Makaholo Pelekunu
5549 Pihi "
2970 Waimea Mapulehu
4139 Kauhanui Kumimi
3944 Lawelawe Honouliwai
5203 Ailaau "
6113 Kaleo Honoulimaloo
6050 Ohule Kupeke
6160 Piapia Puaahala
3649 Kaauhaukini Ualapue
6365 Hauhalale Kalaupapa
6036 Kekuhi Pukoo
3870 Kahueia "
6038 Pua " 2
6257 Kalino Kalamaula
6274 Kahapuu Kawele

This is a decree stating that royal patents have been issued in the Land Commission[?] Offfice in Honolulu. For the island of Moloka‘i, Royal Patent #3649 has been issued to a person named Kaauhaukini for land in ‘Ualapu‘e.

Ma Ke Kauoha.
Kuahaua Koho Baloka Laula
I kulike ai me ke kanawai, owau
o Wallace R. Farrington, Kiaaina o
ke Teritore o Hawaii, ma keia ke
ke Teritore o Hawaii, ma keia ke
kakala aku nei, he koho baloka lau-
no ka Elele i ka Hale o na Luna-
makaainana o ka Ahaolelo o na
Mokuaina Huiia o Amerika, a no
Senatoa ame na Lunamakaaina-
na no ka Ahaolelo o ke Teritore o
Hawaii ke malamaia ana ma ka
Poalua ka la 2 o Novemaba, A. D.
1926 apuni ke Teritore, mawaena
o na hora ewalu a. m. ame ka hora
elima p. m.
O na Apana Senatoa ame ka helu-
na o na Senatoa e kohoia ai maloko
olaila penei iho ia: APANA EKAHI— Mokupuni o
Hawaii — Elua.

APANA ELUA— Mokupuni o
Maui, Molokai, Lanai ame Kahoo-
lawe— Hookahi.
APANA EKOLU— Mokupuni o
Oahu— Ekolu no ke kau piha o eha
makahiki; Elua no ka hoopiha ana.
i na hakahaka mamuli o ka haa-
lele ana mai o na Senatoa Charles
N. Arnold ame Charles H. Rose.
APANA EHA— Mokupuni o Kauai
ame Niihau — Hookahi.
O na Lunamakaainana e kohoia
aku ai penei no ia:
Iloko o ka APANA EKAHI— Eha.
Iloko o ka APANA ELUA— Eha.
Iloko o ka APANA EKOLU—
Eono.
Iloko o ka APANA EHA— Eono.
Iloko o ka APANA ELIMA—
Eono.

Iloko o ka APANA EONO— Eha.
Na Apana Lunamakaainana, na
Mahele Koho ame na Wahi Koho,
penei iho no ia:
APANA LUNAMAKAAINANA
EKAHI— HAPA O KA APANA

SENATOA EKAHI— NA APANA O PUNA, HILO HEMA, HILO AKAU AME HAMAKUA, MO-KUPUNI A KALANA O HA-WAII.

MAHELE EKAHI— Kalapana. O ka hapa o ka Apana o Puna ma ka hema o Keaau a ma ke komohana o ka palena komohana o Kehena ame ka laina e hooloihi ana ahiki i ke kihi komohana hema o na Aina Hoo-kuonoono o Kaohe, alaila ma ka palena komohana o na aina Hooku-onoono o Kaohe ame ia laina e hoo-. lihi ana ahiki i ka palena hema o Keaau. Wahi koho, ma ka Halekula o Kalapana.

MAHELE IWAKALUA— O ka hapa o ka Mokupuni o Molokai e hoopuniia ana ma ka hikinia e ka Mahele Umikumamaiwa a ma ke komohana e ka palena hikina o Kawela ame ka Apana o Kalawao. Wahi koho, ma ka Hale Hookolokolo o Ualapue.

This is a declaration from the governor of the Territory of Hawai'i at the time, Gov. Farrington, explaining some of the details for the upcoming election for Hawai'i's delegate to the United States and also for Senators and Representatives for the various districts within the Hawaiian Islands. District 20 comprises of part of Moloka'i Island,bordered by District 19 in the east and bordered by the eastern boundary of Kawela and Kalawao in the west. The voting place for this district is at the court house in 'Ualapu'e.

Kalua'aha Articles

Note that there were more than 200 Hawaiian language newspaper articles pertaining to Kalua'aha. The selection below includes the earliest writings.

KA LAMA HAWAII. Makahiki 1, Helu 2, Aoao 1. Feberuari 21, 1834.
21 Pepeluali 1834

KALUAAHA. Molokai Feb. 16. 1834. Palapala mai kolaila misionari penei. "Ua hoike iho nei na hale kula o keia moku. Ua mahuahua na haumana i keia manawa. Ua oi aku ka pono o keia hoike, mamua o kela hoike ana mamua. Ua nui ka poe i kii mai i ka pepa. Ua pau kela pepa i hooiliia mai mamua. Nolaila, ea, e haawi hou mai i pepa na na haumana o Molokai…

Out of Kalua'aha comes this article that highlights the thoughts of the missionary(s) remarking on the schools of Moloka'i. The students throughout Moloka'i are praised for their continued growth which at this point goes far beyond any previous years.

KE KUMU HAWAII. Buke 1, Pepa 1, Aoao 1. Nov. 12, 1834.
12 Nowemapa 1834

MOLOKAI - Palapala mai H. R. H., peneia:—
Kaluaaha, Sep. 27, 1834.
Ua hoomau kekahi poe ma ka pono. Ua pule mau kakou i kela kakahiaka keia kakahiaka. Nui na kanaka i halawai pu. Ke imi ikaika nei kekahi poe i ke ola, a ua ao mai ka Uhane Hemolele i kekahi poe e mihi. Ua kokoke e piha ka hale ma ka Sabati.
Elua a'u mau kula; no na kumu Piapa kekahi, no na kamalii kekahi. Ua ikaika kekahi poe o lakou i ka noonoo, a ua mahuahua no ko lakou ike. Eia na mea a ke kula kamalii e ao mai nei, o ka Hoikehonua, o ka heluhelu, o ka palapala lima o ka Helunaau, o ka Ai o ka La. He maikai keia kula. He naauao wawe na haumana ke ku paa i ke ao ana…

Here is another article out of Kalua'aha which praises the progress of the people in learning the ways of the church and praises the children for their success in the schools.

KE KUMU HAWAII. Buke 1, Pepa 2, Aoao 9. Nov. 26, 1834.
26 Nowemapa 1834

MOLOKAI. Palapala mai ka misionari ma Kaluaaha. Aole i hoi hope ka hana ma keia wahi; ua piha ka hale pule i na la Sabati; ua akoakoa nui mai na mea pule kakahiaka; a ua nui no hoi ka poe i noonoo i na mea o ka uhane me ka weliweli; pela ka nana 'ku. O ka pule a na hoahanau a pau ka mea i makemake nui ia, i ikaika ko makou kino, i nui mai hoi ke aloha o ke Akua, i pono ai ka hana nui a makou e hana'i; a i holo lea hoi ka hana a ke Akua i waiho mai ma ko makou mau lima…

According to this article, the missionary being quoted is in Kalua'aha. The missionary remarks that their work there has led to full churches every Sunday, and the masses of people gathering for morning prayers and meditating on the ways of the spirit.

KE KUMU HAWAII. Buke 1, Pepa 16, Aoao 121. Augate 5, 1835.
5 'Aukake 1835

NO KA PAE ANA O KA MISIONARI HOU.

I ke ono o ka la o Iune pae mai maanei na misionari hou ewalu, ekolu kane me ka lakou mau wahine, ekolu; a elua wahine kane ole. O kekahi o laua, he kumu ao palapala o Elizabeta Hitekoke kona inoa, ke kaikuwahine Mi. Hitekoke, ke kahuna pule ma Kaluaaha i Molokai. A o kela mea o laua, o Liula Berona ka inoa, he kumu hana lole. O na kane, Mi. Koana, he kahuna pule; o Mi. Daimana, he kumu hana buke; o Mi. Hala, he kumu pai palapala. O lakou nei ka poe hou, me makou ka poe kahiko, ma kane, na wahine, a me na kamalii, hookahi haneri a me kumamaha. Ina i huiia ka poe i hiki ole mai, o makou a pau me lakou, hookahi haneri a me ka iwakalua kumamaha…

This article notes the arrival of eight missionaries. One of them, the minister at Kalua'aha, is named Hitekoke [Hitchcock].

KE KUMU HAWAII. Buke 1, Pepa 16, Aoao 121. Augate 5, 1835.
5 'Aukake 1835

NO KA HOONOHO I NA MISIONARI HOU.

Eia hoi kahi hana a makou i hana'i. O ka hoonoho i na misionari hou i puka mai nei.
O Mi. Daimana, a me Mi. Hala, ua hoonohoia laua ma Honolulu nei e malama i ka laua mau oihana maanei. O na wahine kane ole, o kekahi, ua hoonohoia oia ma Kaluaaha i Molokai; a o kekahi ma Wailuku i Maui, e malama i ka laua oihana ma ia mau wahi. O Mi. Koana, ua hoonohoia oia ma Hilo i Hawaii, e hapai pu me Mi. Laimana i ka oihana a ka Haku i haawi mai ai ia laua malaila…

This article mentions that new missionaries have been placed in various towns around the islands such as Honolulu, Wailuku, and Hilo. At Kalua'aha, the missionary placed there is an unmarried woman. Her name is not given here.

KE KUMU HAWAII. Buke 1, Pepa 25, Aoao 193. Detemaba 9, 1835.
9 Kekemapa 1835

KE KULA NUI.

He Papainoa no na Kahu, a me na Kumu, a me na Haumana, o ke Kulanui o Hawaii nei, ma Lahainaluna i Maui. 1835.

NA KAHU.

Rev. Messrs. William Richards, Jonathan S. Green, Richard Armstrong, Hervy R. Hitchcock, Lorrin Andrews, Ephraim W. Clark, Sheldon Dibble.

NA KUMU.

Rev.Mesrs. Lorrin Andrews, Ephraim W. Clark, Sheldon Dibble.

NA HAUMANA.
Papa 1.

Na Inoa Na Papa e noho ai Na moku…

Papa 3.

Hae, Punahoa, Hawaii,
Olomana, Lahainaluna, Maui,
Haanio, Punahoa, Hawaii,
Haalelea, Lahaina, Maui,
Haleoleo, Lahainaluna, Maui,
Holopololei, Ukumehame, Maui,
Kaapa, Pueo, Hawaii,
Kanakaahuahu, Ponahawai, Hawaii,
Kaiana, Ponahawai, Hawaii,
Kaianui, Honouli, Molokai,
Kaiaikawaha, Waialua, Oahu,
Kailua, Lahaina, Maui,
Kaluna, Kaluaaha, Molokai,
Kaelemakule, Kaawaloa, Hawaii,
Kahema, Kawela, Hawaii,

Kahuena, Palawai, Lanai,
Kauhi, Palawai, Lanai,
Kauakahi, Lumahai, Kauai,
Kalaniauiwahinamoku, Waialua, Oahu,
Kalamawaiawaawa, Lahaina, Maui,
Kale, Lahaina, Maui,
Kaleua, Lahaina, Maui,
Kamai, Lahaina, Maui,
Kawaihalau, Lahaina, Maui,
Kawainui, Keawenui, Molokai,
Keaoku, Lahaina, Maui,
Keola, Lahaina, Maui,
Lahaina, Ponahawai, Hawaii,
Leleiohoku, Lahaina, Maui,
Mahu, Wailuku, Maui,
Makaiheekona, Kukuihaele, Hawaii,
Maakuia, Kamoku, Lanai,
Maawaiki, Punahoa, Hawaii,
Miki, Waimea, Hawaii,
Moo, Pueo, Hawaii,
Maolo, Wailuku, Maui,
Nakipi, Waimea, Kauai,
Paahana, Kapalama, Oahu,
Paku, Oloalu, Maui,
Peiho, Wainiha, Kauai,
Puaenaena, Punahoa, Hawaii,
Wana, Waioli, Kauai.
I ka hui ana 42

This is a class roster for teachers and students at Lahainaluna school. In Class #3, there is a student from Kalua'aha named Kaluna.

KE KUMU HAWAII. Buke 1, Pepa 25, Aoao 193. Detemaba 9, 1835.
9 Kekemapa 1835

196 KUMU HAWAII. (DETEMABA,

Makeia papainoa, eia ka nui o na haumana mai kela wahi keia wahi i

NIIHAU Puuwai, 1

KAUAI, Waimea, 7
Koloa, 1
Kapaa, 1
Hanalei, 1
Lumahai, 1
Wainiha, 1
Waioli, 1
13

OAHU, Honolulu, 14
Kapalama, 2
Waialua, 3
Ewa, 1
20

MOLOKAI, Honouli, 1
Kaluaaha, 1
Keawanui, 1
3

Here is part of a list showing the number of students from every island and where each is from. In contrast to 14 students on O'ahu and 7 students on Kaua'i, Moloka'i has only 3 students, one of which is from Kalua'aha.

KUMU HAWAII, Buke 2, Helu 6, Aoao 21, March 16, 1836.
16 Malaki 1836

WAILUKU, Feb. 8, 1836.

Aloha oe e Tineka. Akahi no loaa ia'u ka wa kaawale ke palapala aku ia oe. E lealea ana au i ka hai ana aku ia oe kekahi mau mea no ko makou noho ana ma Molokai i keia manawa.

Ke manao nei au ua mahuahua iki paha ka pono maanei i keia mau hebedoma i hala iho nei. Eia hoi ke kumu o kuu manao ana, o ka mahuahua ana o na kanaka ma ka pule ma ka la Sabati a me ka mahuahua ana o na haumana kamalii i ke kula.

O ka manawa i hoolaaia ka luakini hou mai ia hope mai a hiki i keia wa, ua piha ka hale i kanaka ma ka la Sabati. He poe makaikai wale ka nui o lakou, he poe noonoo ole, a me ka makau ole i ke Akua he poe aia no - a me ka hoomaloka loa - a me ka puhi paka. Oia ke ano paha o ka nui o ka aha kanaka o ka la Sabati, aka e aho iki paha kekahi poe. Ua hele pu lakou me ko lakou naau — me ka makemake - o ko'u nana ana ia lakou ua noho malia, aole nae ma ka nanea — aole loa he hiamoe — ua haka pono mai ia'u ke hai aku au i ka ke Akua olelo. Aole la i poina wawe ka ke Akua olelo ia lakou. O ko'u oluolu no lakou a me ko'u lealea, a me ko'u pomaikai.

Aka o na kala kamalii ka mea i manao nui ia e makou i keia manawa. Ua kokua mai na lii mamuli o keia hana a me na makua. I ka manawa mamua aole i manaoia ke kula he pono i na kamalii. Aka i keia wa he mea pono ke kula ia lakou. O na kula makua ua koke i ka haaleleia. Aka o ke kula kamalii ke mahuahua ae nei no.

Ma ka po akolu i hala iho nei he hoike kula ko makou. O na hau mana kamalii ka i hoike mua a mahope na haumana makua, maloko o ka hale pule hou i hoike ai. Eono no haneri keiki a ma na keiki keu umikumamalua a o na haumana makua 613. Elima paha haneri o keia poe ka i ike i ka heluhelu, he wahi i ka ike. Ua oi loa ka ke akamai o na kamalii mamua o ko na makua.

O ke kula kamalii ma Kaluaaha oia ka nui elua haneri me kanalima keiki ma ia kula hookahi no — Pau loa lakou i ka ike ana i na hua he iwakalua wale no i koe i ka ike ole. E hiki wawe ana lakou i ke ao i kela palapala i keia palapala. He akamai loa kekahi poe i ka heluhelu i keia manawa. He maikai hoi ka palapala lima ana o kekahi poe o lakou. He paipoe maikai na hua he nemonemo - a he aiai no. Ka hana la kekahi poe ma ka helu ana. Aia ma ka houluulu kekahi, ma ka helu lawe kekahi a ma ka hoonui kekahi.

Here is an excerpt from an article which talks about, among other things, the state of church and school affairs on Moloka'i. A paragraph is dedicated to giving an account of the elementary school at Kalua'aha. There are 250 children at that school, all very smart and excelling in the various subjects being taught.

KE KUMU HAWAII. Buke 2, Pepa 12, Aoao 45. Iune 8, 1836.
8 Iune 1836

NO KO MAKOU PII ANA I KA PALI A ME KA HOI ANA I KALUAAHA.

Ua nui ka mea kupanaha i ikeia o makou i keia holo ana, aole e pau ia'u i ka palapalaia i keia wa; moe makou ia po ma Kalaupapa--- He aina kanaka ia---he maikai ke awa. Malaila paha e noho ana ka misionari hou ke hiki mai. Ala ae la makou i kakahiaka nana mawaho he makani ka! ua manaoia aole au e pono ke holo hou i ka waa. Nolaila haalele au i ka waa a pii mai i ka pali o na kanaka ehapa pu me au---He ino ke alapai, ua pakika i ka ua, kala aku au i na kamaa a pii no, aole au i nana mope o poniuniu ke poo a haule iho. Pii no makou a hiki i kekahi pohaku e ku pololei ana iluna. He haiki loa kahi e ku ai ka wawae, aole hoi kahi pono e kalele ai na lima, aole loa i hiki owau wale no ia wahi. Paulele no wau i na kanaka i maa i ka hele ma ia wahi a hiki no, ma ko'u pii ana ma ia wahi ino, loaa ia'u keia noonoo. Ua like pu au me ka mea e makemake ana e pii i ka lani. Ina i manao oia e hiki ia ia wale iho no o kona haule i ka po no ia, aka ina i manao oia aole i hiki ia ia wale no ke pii i ka lani, a paulele ia Iesu, o ka hiki iho la no ia. Loaa ia'u ko luna iho koke no i kai i Kalamaula, maloeloe no---moe malaila, kakahiaka ae hiki i Kaluaaha nei.

This is an account of someone's travels. After having their boat pulled into Kalaupapa, this person and others made the difficult climb up the cliff to the top side of Moloka'i, and from there, they slept at Kalama'ula then arrived at Kalua'aha the next morning.

KE KUMU HAWAII. Buke 2, Pepa 14, Aoao 53. Iulai 6, 1836.
6 Iulai 1836

MARRIED,
At Molokai July 12, by Rev. Titus Coan, Mr. EDMUND H. ROGERS of Lahainaluna to Miss ELIZABETH M. HITCHCOCK, of Kaluaaha.

This is a wedding announcement for Elizabeth Hitchcock of Kalua'aha and Edmund Rogers of Lahainaluna.

KE KUMU HAWAII. Buke 4, Pepa 9, Aoao 33. Sepatemaba 26, 1838.
26 Kepakemapa 1838

HOIKE MA KALUAAHA.

Kane. Wahine. Poe hiki mai. Poe hiki ole mai. Pau loa. Ike heluhelu. Hoomakai i ka heluhelu. Kakaulima. Helunaau. Helu. Hookui i na hua eha. Olelo honua. Ike heluhelu i kela makahiki. Ke kela ana. Ke emi ana. Ike hua. Ike ole.

Kaluaaha. 116 143 259 23 284 102 50 10 76 5 40 112 10 53 49
Halawa. 100 77 177 14 191 76 19 76 11 16 55 21 33 22
Moakea. 9 15 24 4 28 9 3 1 0 9 7 4

Waialua. 55 50 105 31 136 17 19 28 14 3 23 31
Kamaloo. 59 38 97 8 105 19 15 10 4 27
Kalae. 42 52 94 31 125 13 45 22 0 13 33 1
Pelekunu. 20 25 45 3 48 8 11 19 0 5 10 0
Kalaupapa. 56 63 119 64 185 25 9 66 12 13 15 4
Kawela. 9 10 19 1 20 2 4 5 0 2 7 1

Ka hoike o na kula kamalii a Mi. Mana. Ma ka la 13 a me 14 o Augate nei ka hoike ana. Pakela ka ike o na haumana ma keia hoike ana. Ma kahi e hoolakoia i na kumu mai Lahainaluna mai, malaila ka oi nui ana. Hookahi wale no mea hemahema o na kamalii ma ka Lae, o ke kumu ole. Aka ua hele aku kekahi kumu malaila o Kualoa. Aka ke hilahila nei au i ka pololi ana o na kumuao—aole aloha iki mai na makua i na kumu i na mea e ao ana i na keiki a lakou. He hewa loa ia. I ko'u manao ea, he kanawai pono loa keia ke hoahewa mai na'lii i na makua aloha ole, malama ole i na kumu.
Auhea oukou, e na'lii a pau loa, e pono no ia kakou e aloha nui aku i na kumu e ao ana i na keiki a kakou.
BETUELA MANA.

This article commends the progress of some of the children's schools across Moloka'i and reminds the people to take care of their children's teachers. Kalua'aha is one of many places listed where the children are being educated in the schools.

KA LAMA HAWAII. Buke 2, Helu 1, Aoao 1. Ianuari 1, 1841.
1 Ianuali 1841

NO KE KULANUI.

Eia kekahi mau mea no ke Kulanui ma Lahainaluna, O ka Papainoa malalo iho ka mea e hoike mai i na inoa o na Kahu a me na Kumu a me na Haumana, ma Ianuari 1, 1841.

NA KAHU.

REV. LORRIN ANDREWS.
" EPHRAIM W. CLARK.
" SHELDON DIBBLE.
" HARVEY R. HITCHCOCK.
"JONATHAN S. GREEN.

NA KUMU.

REV. LORRIN ANDREWS.
" EPHRAIM W. CLARK.
" SHELDON DIBBLE.

NA HAUMANA.
PAPA 1.

NA INOA. Na wahi e noho ai. Na Moku.
Kaiaikai, Lahainaluna, Maui.
Kaumaka, Kaneohe, Oahu.
Kauwahi, Kipahulu, Maui.
Kekaulahao, Honolulu, Oahu.

Nuuanu, Lahainaluna, Maui.
I ka hui ana 5.

PAPA 2.

Aumai, Kaawaloa, Hawaii.
Aka, Waimea, Kauai.

Na Inoa. Na wahi e noho ai. Na Moku.
Hoaai, Hilo, Hawaii.
Kaaikaula, Wailuku, Maui.
Kaaiawaawa, Hilo, Hawaii.
Kaauwaepaa, Kaawaloa, Hawaii.
Kaehu, Anahola, Kauai.
Kaiawa, Waikiki, Oahu.
Kauku, Ohia, Molokai.
Kaumaea, Lahaina, Maui.
Kahulanui, Wailuku, Maui.
Kaka, Honuaula, Maui.
Kalepo, Hilo, Hawaii.
Kaluau, Mapulehu, Molokai.
Kamali, Waimea, Kauai.
Kamiki, Hilo, Hawaii.
Kapeau, Honolulu, Oahu.
Keaka, Honolulu, Oahu.
Keaku, Lahaina, Maui.
Kou, Ewa, Oahu.
Lilikalani, Kaawaloa, Hawaii.
Naue, Waialua, Oahu.
Wana, Waimea, Kauai.
Samuela, Hilo, Hawaii.
I ka hui ana 24.

PAPA 3.

Ua, Punaluu, Oahu.
Uia, Kohala, Hawaii.
Hooilo, Kaluaaha, Molokai.
Hoepaepa, Keauhou, Hawaii.
Kaainahuna, Kailua, Hawaii.
Kaea, Kula, Maui.
Kaiakuaaina, Honolulu, Oahu.
Kaina, Kaneohe, Oahu.
Kauhiahiwa, Kau, Hawaii.
Kauwe, Kohala, Hawaii.
Kauwealoha, Hilo, Hawaii.
Kahananui, Hamakua, Hawaii.
Kahiona, Kailua, Hawaii.
Kahue, Honolulu, Oahu.
Kahue 2, Kaluaaha, Molokai.
Kahula, Kaluaaha, Molokai.
Kalama, Kula, Maui.
Kalama 2, Lahaina, Maui.
Kalani, Lahaina, Maui.

Kaleohano, Kau, Hawaii.
Kalawaia, Maunalei, Lanai.
Kaluaipu, Wailuku, Maui.
Kamakahelu, Koloa, Kauai.
Kanakaole, Wailuku, Maui.
Kanealii, Waialua, Oahu.
Kanehailua, Waipio, Hawaii.
Kapela, Kaawaloa, Hawaii.
Kapoi, Honuaula, Maui.
Kapua, Kau, Hawaii.
Kapaakea, Honuaula, Maui.
Kekela, Waialua, Oahu.
Kekohai, Ewa, Oahu.
Koaehulukea, Kaneohe, Oahu.
Kuaaina, Lahaina, Maui.
Keliiaihue, Kailua, Hawaii.
Maalaiki, Lahaina, Maui.
Maikai, Honolulu, Oahu.
Mahi, Honolulu, Oahu.
Makaonini, Honolulu, Oahu.
Makapo, Kaluaaha, Molokai.
Maoheau, Lahaina, Maui.
Naaha, Honolulu, Oahu.
Naiapaakai, Kohala, Hawaii.
Naoka, Hilo, Hawaii.
Nakaa, Kaluaaha, Molokai
Paaoao, Waioli, Kauai.
Paehewa, Koloa, Kauai.
Peahi, Lahaina, Maui.
Pikao, Lahaina, Maui.
Pipa, Kohala, Hawaii.
Pualewa, Palawai, Lanai.
Wahinealii, Honolulu, Oahu.
Wiwi, Kaawaloa, Hawaii.
I ka hui ana 53.

This is a class roster for teachers and students at Lahainaluna school. In Class #3, there are 5 students from Kalua'aha: Hooilo, Kahue, Kahula, Makapo, and Nakaa.

KA NONANONA. Buke 2, Pepa 15, Aoao 73. Dekemaba 20, 1842.
20 Kekemapa 1842

KULA KAIKAMAHINE, WAILUKU, MAUI.

Na Kahu.

REV. EPHRAIM W. CLARK.
" SHELDON DIBBLE.
" HARVEY R. HITCHCOCK.
" DWIGHT BALDWIN.
" JONATHAN S. GREEN.

" JOHN S. EMERSON.
Mr. EDWARD BAILEY.

Na Kumu.

Mr. EDWARD BAILEY.
Mrs. CAROLINE H. BAILEY.
Miss MARIA OGDEN.
MALAIHI, kumu kokua.

He Papa Inoa no na Haumana.
PAPA 1.

Na Inoa. Na wahi a noho ai. Na Moku.
Hana Kaneohe, Oahu.
Kaai, Wailuku, Maui.
Kahale, Wailuku, Maui.
Kamaka, Honuaula, Maui.
K meo, Kaluaaha, Molokai.
K paalua, Mapulehu, Molokai.
K kiaha, Waiehu, Maui.
Laea, Waihee, Maui.
Lapauli, Waikapu, Maui.
Makaulia, Honuaula, Maui.
Mahoe, Kailua, Hawaii.

Na Inoa. Na wahi e noho ai. Na Moku.
Mikahala, Lahaina, Maui.
Peenahele, Kaluaaha, Molokai.

This class roster is for a girls' school in Wailuku. Again, students at the school come from Kalua'aha on Moloka'i.

KA NONANONA. Buke 2, Pepa 17, Aoao 81. Ianuari 17, 1843.
17 Ianuali 1843

HE HANA MANAWALEA.

Honolulu, Ianuari 10, 1842.
Auhea oe e Limaikaika. Pono ia oe ke hoike aku ma ka Nonanona i ka hana lokomaikai o na kanaka ma ka ekalesia 2, o Honolulu i hana iho nei. Ua makana wale mai lakou no ka luakini hou ma Kaluaaha i na dala he kanawalu. Ma keia lokomaikai o lakou, ua kalaia kekahi pilikia o ko lakou poe hoahanau ma Molokai. A ke hai aku nei au i kuu aloha ia lakou no keia kokua maikai, a ke pule nei au i ke Akua nona ka waiwai a pau e hooko maoli mai maluna o lakou i kana i olelo mai ai, "O ka mea manawalea aku e momona ia." Na'u na HIKIKOKE.

In this letter from Hikikoke [Rev. Hitchcock] to the Nonanona newspaper, Hikikoke thanks the people of a church in Honolulu for their generous gift of $80 to the new church at Kalua'aha.

KA NONANONA. Buke 4, Pepa 19, Aoao 89. Ianuari 7, 1845.
7 Ianuali 1845

Kaluaaha, Molokai, Dek. 10, 1844.

Aloha oe e Nonanona;
Ua ike iho nei makou i kau, e ka elele mama ma Hawaii nei, a ua hoike mai oe i ka lilo o ka makou kumu ia Wailuku.
Eia ka makou ia oukou, e ko Wailuku, aole e loaa ia oukou ka makou kumu, no ka mea, aole pau o ko makou hemahema. He mai pinepine o Hikikoke; eia kona mai, he eha kona puu, he maimai no hoi ke kino, pono i kekahi wa, pono ole i kekahi wa. He nawaliwali pinepine kona kino.
Eia kekahi, he nawaliwali no hoi o Kulika; he eha kona poo, he nawaliwali no hoi kona kino, he maimai pinepine no hoi.
Eia kekahi, ua lako oukou i na kumu, he kula nui ko oukou, aohe a makou kula nui. Aole anei ia la he hemahema no makou e ko Wailuku? a no ia mau hemahema o makou, nonoi aku la makou i ke Akua.
Eia kekahi; aohe no e loaa aku ka makou kumu ia oukou, ina e manao ana o Aneru e uku, aohe na oukou na makou e uku.
Eia kekahi; ua pau anei ko oukou uku ia Bele ma laua me Kalaka? aohe anei mea i koe? ua haawi anei oukou ia laua i ka laua mea a pau? aole anei oukou i aie ia laua?
Eia kekahi; he poe waiwai loa anei oukou mamua o makou? nui no na kumu ia oukou? e hiki no ia makou ke uku ia Aneru.
Eia kekahi, ia oukou wale no anei na keiki? aole anei a makou mau keiki? eia no ko Kaluaaha mau keiki he nui no; eia ko lakou nui, elua o lakou haneri me ka hapa a ke hookokoke aku nei i ka ekolu haneri.
Eia kekahi; ua lako no ka mokupuni o Maui i na kumu, aia ma Hana kekahi, aia ma Makawao kekahi, aia ma Lahaina kekahi. Aia ma Lahainaluna kekahi, nolaila ua makaukau ko oukou mokupuni.
Aohe o makou makaukau; nui ko makou wahi hemahema, hookahi wale no o makou wahi makaukau o Kaluaaha. Aole a makou kumu ma Kalae, aole a makou kumu ma Halawa. Hemahema loa ia mau wahi o makou, nolaila, ke aua nei no makou i ka makou kumu no ia mau hemahema no, pono i ka ai, pono i na mea a pau, o ke kumu wale no ka hemahema nui loa, ua pau ka'u, o kau mai koe. Na'u na KALUNA.

In this letter, the author contrasts the situation on Moloka'i which is in serious need of more teachers compared to that of Maui where they have teachers all over the island. The author states that there are so many places on Moloka'i which are lacking, but the one exception to that is Kalua'aha where there are close to 300 children to be educated, and where, we are led to believe, the educational needs of the children are being met.

Ka Elele Hawaii. Buke 4, Pepa 5, Aoao 17. Iulai 14, 1848.
14 Iulai 1848

KA ELELE HAWAII, IULAI 14,1848. 19

Inoa o na Aina.	*Ahupuaa.*	*Kalana.*	*Mokupuni.*
Kipaikini,	Ahupuaa,	Kipahulu,	Maui,
Kapuaikini,	Ahupuaa,	Kipahulu,	Maui,
Kaehoeho,	Ahupuaa,	Kipahulu,	Maui,
Poponui,	Ahupuaa,	Kipahulu,	Maui,
Kakanoni,	Ahupuaa,	Kipahulu,	Maui,

Maulili,	Ahupuaa,	Kipahulu,	Maui,
Kikoo,	Ahupuaa,	Kipahulu,	Maui,
Kalena,	Ahupuaa,	Kipahulu,	Maui,
Kalenaiki,	Ahupuaa,	Kipahulu,	Maui,
Halemano,	Ahupuaa,	Kipahulu,	Maui,
Nailiilipoko 1,	Ahupuaa,	Kipahulu,	Maui,
Nailiilipoko 2,	Ahupuaa,	Kipahulu,	Maui,
Wailamaoa, aoao ma Hana,	Ahupuaa	Kipahulu,	Maui,
Wailamoa, aoao ma Kaupo,	Ahupuaa	Kipahulu,	Maui,
Kakalahale 1,	Ahupuaa,	Kipahulu,	Maui,
Kakalahale 2,	Ahupuaa,	Kipahulu,	Maui,
Alae,	Ahupuaa,	Kipahulu,	Maui,
Kaumakani,	Ahupuaa,	Kipahulu,	Maui,
Koanawai,	Ahupuaa,	Kipahulu,	Maui,
Koali,	Ahupuaa,	Hana,	Maui,
Maakaalae,	Ahupuaa,	Hana,	Maui,
Wananalua 1,	Ahupuaa,	Hana,	Maui,
Wakiu,	Ahupuaa,	Hana,	Maui,
½ Honomaele,	Ahupuaa,	Hana,	Maui,
Koolau,	Ahupuaa,	Koolau,	Maui,
Keaa,	Ahupuaa,	Koolau,	Maui,
Hanawana,	Ahupuaa,	Hamakualoa,	Maui,
Hoalua,	Ahupuaa,	Hamakualoa,	Maui,
Hanehoi 1,	Ahupuaa,	Hamakualoa,	Maui,
Hanehoi 2,	Ahupuaa,	Hamakualoa,	Maui,
Poulua 1,	Ahupuaa,	Hamakualoa,	Maui,
Poulua 2,	Ahupuaa,	Hamakualoa,	Maui,
Honokala,	Ahupuaa,	Hamakualoa,	Maui,
Papaaea,	Ahupuaa,	Hamakualoa,	Maui,
Holowa,	Ahupuaa,	Hamakualoa,	Maui,
Kuiaha,	Ahupuaa,	Hamakualoa,	Maui,
Honopou,	Ahupuaa,	Hamakualoa,	Maui,
Pauwela,	Ahupuaa,	Hamakualoa,	Maui,
Ouaoa,	Ahupuaa,	Hamakualoa,	Maui,
Peahi 1,	Ahupuaa,	Hamakualoa,	Maui,
Peahi 2,	Ahupuaa,	Hamakualoa,	Maui,
½ Hamakuapoko,	½ Hikina,	Hamakuapoko,	Maui,
Paniau,	Ahupuaa,	Hamakuapoko,	Maui,
Makawao,	Ahupuaa,	Kula,	Maui,
Kealakekua,	Ahupuaa,	Kula,	Maui,
Kapalaia,	Ahupuaa,	Kula,	Maui,
Kealia,	Ahupuaa,	Kula,	Maui,
Honokohau,	Ahupuaa,	Kaanapali,	Maui,
Kahana 1,	Ahupuaa,	Kaanapali,	Maui,
Kahana 2,	Ahupuaa,	Kaanapali,	Maui,
Mahinahina 1,	Ahupuaa,	Kaanapali,	Maui,
Mahinahina 2,	Ahupuaa,	Kaanapali,	Maui,
Mahinahina 3,	Ahupuaa,	Kaanapali,	Maui,
Lupehu,	Ahupuaa,	Kona,	Molokai,
Onoulimaloo,	Ahupuaa,	Kona,	Molokai,
Moanui,	Ahupuaa,	Kona,	Molokai,
Poniuohua,	Ahupuaa,	Kona,	Molokai,

½ Poniuohua,	Ahupuaa,	Kona,	Molokai,
Kawaikapu,	Ahupuaa,	Kona,	Molokai,
½ Kamanoni,	Ahupuaa,	Kona,	Molokai,
½ Ahaino,	Ahupuaa,	Kona,	Molokai,
Pukoa 2,	Ahupuaa,	Kona,	Molokai,
Pukoa 1,	Ahupuaa,	Kona,	Molokai,
Kaluaaha,	Ahupuaa,	Kona,	Molokai,
½ Kaluaaha,	Ahupuaa,	Kona,	Molokai,
Ohia 1, *Hikina*,	Ahupuaa,	Kona,	Molokai,
Kaamola 1,	Ahupuaa,	Kona,	Molokai,
Kaamola 2,	Ahupuaa,	Kona,	Molokai,
Kaamola 3,	Ahupuaa,	Kona,	Molokai,
Kaamola 4,	Ahupuaa,	Kona,	Molokai,
½ Kaamola 5,	Ahupuaa,	Kona,	Molokai,
½ Kaamola 6,	Ahupuaa,	Kona,	Molokai,
Keanaokuino,	Ahupuaa,	Kona,	Molokai,
Makakupaianui,	Ahupuaa,	Kona,	Molokai,
½ Kamiloloa,	Ahupuaa,	Kona,	Molokai,
½ Kahanui,	Ahupuaa,	Kona,	Molokai,
Hoolehua,	Ahupuaa,	Kona,	Molokai,
Kaluakoi 1,	Ahupuaa,	Kaluakoi,	Molokai,
Kaluakoi 2,	Ahupuaa,	Kaluakoi,	Molokai,
Manowainui,	Ahupuaa,	Kalae,	Molokai,
Kipu,	Ahupuaa,	Kalae,	Molokai,
Mahulile,	Ahupuaa,	Koolau,	Molokai,
Pohakuloa,	Ahupuaa,	Koolau,	Molokai,
Kawaluna,	Ahupuaa,	Koolau,	Molokai,
Kalawao,	Ahupuaa,	Koolau,	Molokai,
Manienie, *Ili o Wai-*	Ahupuaa,	Koolau,	Molokai,
Kaulei,	Ahupuaa,	Koolau,	Molokai,
Kainalu,	Ahupuaa,	Koolau,	Molokai,
Kahoolawe,	Mokupuni Okoa,	Koolau,	Kahoolawe

This is a partial 1848 list of the various land divisions throughout the islands. On Moloka'i, Kalua'aha is listed as being in the kalana or larger land division of Kona.

Ka Elele Hawaii. Buke 4, Pepa 6, Aoao 21. Augate 5, 1848.
5 'Aukake 1848

Kaluaaha, Molokai, Iulai 4, 1848.

Aloha oe, e ka Elele, ua hala iho nei ka pule mahina hou. Penei ko makou hana ana ma Molokai nei ia la. I ke kakahiaka nui aole i puka mai ka la holo au i kamaloo a halawai me na kanaka malaila. Aole au i hiki aku ua halawai e lakou mamua, a ua hoomaka ia ka hana. Hiki aku au, lawe nui mai la na mea kokua i ko lakou waiwai no ka mahina hou; he dala ka kekahi poe, he papale a he mea, a he kaula a he hua moa, a pau ko lakou waiwai i ke kakau ia e au, a o ka waiwai a pau loa i loaa mai ma Kamaloo ua elima dala a keu, oluolu loa na kanaka o ia wahi i ke kokua mahina.

Ia wa hookahi no holo o Anelu i Wailua a halawai ae la me kolaila apana. Piha ka hale, kakau ae la hoi ia i na inoa o ka poe kokua malaila kanahiku lakou a keu a o ka waiwai i loaa mai, ua kokoke like me ko Kamaloo.

Ahiahi ae la ka pule mahina ma Kaluaaha nei. He la hana luhi loa ia no'u. pau ke kula kamalii hele mai na haumana me ko lakou kokua; he kaula, a he uala, a he wahie, a pau na kamalii hele mai na kanaka makua a paapu au i ke kakau ko lakou makana a aui loa ka la ilalo. Ua hikilele loa na hoahanau a me na hooikaika i keia hana, a ua umi kala ko lakou kokua a keu, a o ka huina o na kala a pau i loaa mai ai la ua 24 a keu.

Pau ke kokua waiwai ana, hele ae la iloko o ka luakini, a he halawai maikai loa ia, ua pule na hoahanau no ko na aina pouli e loaa mai ai ia lakou ka olelo a ke Akua. E maliu ana ke Akua i ko lakou pule ana ia ia ke pule lakou me ka manaoio a me ke aloha maoli i ka uhane e make ana.

Auhea oukou e na hoahanau a pau o Hawaii nei, aole anei he pono ia kakou a pau e hapai oluolu i keia hana maikai a e kokua ma ka mahina hou i piha ko ke Akua waihona kala, i mea e hoolaha nui aku ma na aina pouli i keia pono ka mea a kakou i hoopomaikaiia nei? H.

This is an account of various community works that the author participated in at several locales around Moloka'i. First at Kamaloo, then at Wailua, this person ends at Kalua'aha where the children help out by bringing rope and sweet potatoes and firewood. They are joined by the adults of the community, and everyone helps out in the work until the sun goes down. The work done is not specified, but it appears to be church related, and after all the help is received, the author says that they pray and receive the word of God.

KA HAE HAWAII. Buke I, Helu 15, Aoao 57. Iune 11, 1856.
11 Iune 1856

Na Kula Beretania ma Hawaii nei.—He 18 ia mau kula ma Kailua, Kuapehu, Waiohinu, Hilo, Lahaina, Kaneohe, Manoa, Kawaiahao, Maemae, Kaluaaha, Waialua, Ewa, Koloa, Lihue. Iloko o ia mau kula he 849 haumana, e ao ana i ka olelo Beretania. Ua holo malie keia hana; aole holo loa; no ka mea, he olelo paakiki keia i na kamalii Hawaii. Mamuli loaa nae ke hoomanawanui.
Na manao maopopo—

1. Ua holo mua ka naauao ma Hawai nei i ka makahiki 1856. Ke ola no ia o keia lahui kanaka.
2. Ua holo iki ka hanalima; ua hui na kanaka ma ka mahiai; e loaa ana nei kekahi pono malaila.
3. Nui ka hemahema i koe i na kanaka Hawaii; eia, nui ka naaupo i koe; hemahema ka noonoo ana, a me ka hana ana a kanaka; aole loa pau.
   Nui hoi ka palaualelo, noho wale; hawawa i ka hana; nolaila, hune, pilikia, lapuwale. Pahea la e pau ai ka palaualelo?
4. Mahuahua ka hana kolohe i keia makahiki i hala; 4,941 na lawehala i hoopaiia iloko o 1855! Auwe! Heaha ke kumu o keia ulu nui ana o ka hewa? No ke aupuni anei? No na kanaka anei?
5. Pahea ka pono? E ala ka poe aloha ia Hawaii nei, e noonoo, e hana, e imi, i ole e haunaele loa.

This article talks briefly about the success and challenges of the English language schools in Hawai'i. It is mentioned that there are 18 English language schools throughout the islands, and Kalua'aha is one of those places where such a school has been established.

KA HAE HAWAII. Buke I, Helu 22, Aoao 85. Iulai 30, 1856.
30 Iulai 1856

OLELO HOOLAHA.

Keena Kalaiaina, la 25 o Iulai, 1856.

KE KAUOHA ia'ku nei ua mea a pau o na inoa malalo nei, e kii koke mai i ko lakou mau kuleana e waiho nei malalo o keia Keena, he mau kuleana ua hooko ia, nolaila, e pono ia oukou e kii koke mai i ko oukou mau kuleana. Ina ua make ka mea nona ke kuleana, e kii mai na hooilina.

MOLOKAI.
Nunuonea, Koolau, Kalaupapa,
Piikoi, " "
Puailelewale, " "
Kauhi, "
Kaluoku, " "
Keawe, " "
Nanaonokueha, " "
Naale, " "
Ihu, Kona, Kumimi,
Penopeno, " "
Pahupu, " Keawanui,
Kaailepo, " "
Hapuku, " Kapualei,
Nakeleawe, " "
Kanakaokai, " "
Nuipohiwa, " "
Kawaihoa, " "
Peinoa, " "
Nahauna, " "
Lipali, " "
Kauhi, " Moanaui,
Waimoe, " "
Nahoeha, " "
Kauhanui, " "
Koa, Koolau, Waikolu,
Kahakahaka, " "
Napela, Kona, Manawai,
Kalamaika, " "
Kane no Hau, Koolau, Halawa,
Kelohanui, Kona, Honouliwai,
Kamoku, " Kaluaaha,
Kualualu, " "
Kapela, " Kahananui,
Naluau, 3, " "
Kaiu, " "
Kehinolau, " Makanalua,
Lili, " Kupeke,
Maalahia, " Ohia,
Kaahoowaha, " "
Koenakaia, " Ualapue,
Paluhi, " "
Kaupe, " "
Kawelo, " "
Leleiohoku, " Kamalo,
Kekauonohi, " Moakea Naiwa, a me Makaulalua
KAUAI.

This is an announcement listing those who have been awarded kuleana lands. For those listed who have passed away, their heirs are asked to come forth. The list shows two kuleanas awarded in Kalua'aha. One is to a person named Kamoku, and the other is to a person named Kualualu.

KA HAE HAWAII. Buke I, Helu 28, Aoao 109. Sepetemaba 10, 1856.
10 Kepakemapa 1856

KA NU HOU MA MOLOKAI
KALUAAHA, Sep. 5, 1856.

E ka Hae Hawaii.
Ua nui ka hana maikai ma Molokai I keia mau la iho nei. I ka la mua iho nei, ua hoike na kula mai Halawa a Kaaunakakai he 11 kula me 299 haumana maloko. Ua hoike nui lakou ma ka heluhelu, helu, kakaulima palapala aina, hoailonahelu, pa ko li, a pela aku I ka Poalua hoi ua hoike na kula o Molokai nei, ma Halawa a Palaau, 6 Kula, me 116 haumana, a ua like ka hana ana me kela mau kula maluna iho. I ka Poakolu, ua hoike na kula pa ko li, a me na papamua o kela kula keia kula, a me ke kula ma ka olelo Beretania o D. H. Hikikoke. He 31 haumana iloko o ia kula, a ua hui hou mai I keia la me na kula he 54 haumana, I hiki ole mai mamua Hui na haumana a pau loa I keia hoike ana, ua 530.
Ma ka nana i keia hoike ana, ua maopopo ka ike o na haumana. Ua maikai ka heluhelu buke ana; he mea nui ia, o ka heluhelu pololei, no ka mea, ma ka heluhelu loaa mai i ke kanaka ka ike, ka nu hou, na manao hou, a me ka manao lana. a me ka olioli no hoi. He waiwai nui ia. Ina hemahema ka heluhelu, o ke kumu ia e hemahema ai ka ike, ka noonoo, a me ka hana no hoi. Nolaila, ua olioli au i ka nana i ka heluhelu buke o na haumana o Molokai nei, ua akamai ka nui malaila.
Ma ka huina helu wale no ka hoike ana ma ka helu, a ua makaukau kekahi poe ma ia buke mai ka mua a i ka hope; hemahema nae kekahi. I ka nana aku, aole makaukau loa kekahi poe kumu ma ia buke, nolaila ka hemahema o na haumana.
Ma ke kakaulima ua nui ka poe akamai; ua oi aku nae ke kula o Kamala malaila. Maikai maoli ka palapala lima o kekahi poe haumana o Molokai nei.
Ma ka palapala aina, aole nui loa ka ike, no ka mea, ua loihi ka waiho ana o ia hana no ka buka ole. I keia makahiki iho nei wale no ka loaa ana o ka palapala aina hou. Ua aoia nae ma Molokai nei, a e pono e hoikaika malaila ma keia hope aku, i ikeia ke ano o kela aina keia aina a ka honua nei, a me na moana, na mauna, na muliwai me na kanaka o kela ano keia ano. He mea nui loa keia.
Inehinei, oia ka la pualiinu wai, he la nui ia, he la olioli. I kakahiaka, hora eiwa, he huakai hele ko na haumana, a komo iloko o ka luakini, a piha loa i na makua a me na keiki, a hu iwaho. Ua hele mai kekahi poe hanohano, no kahi e mai, e nana i keia hana.
O Limaikaika, o loane Richardson, Bako, Jones no Lahaina, a me na haole e ae. Ku o Limaikaika a pule, alaila mele ka papa himene me ka leo maikai, a me ke akamai, alaila nui wale na olelo, na kamakamailio, haimanao, na mele kahiko, he kanalima a keu, mai ka hora 9 a i ka hora elua o ke ahiahi ka hana ana; no na mea kahiko o Hawaii nei, a me na mea hou; noloko mai o ka Baibala kekahi, noloko mai o ka noonoo o lakou ilio no kekahi o keia maii olelo. Olioli loa na kanaka i ka lohe ana, piha loa i ka olioli, aole okana mai o ka akaaka, a me ka lealea i kekahi manawa. Aole paopao aho iki na kanaka i ka lohe a hiki i ke ahiahi O ka papa himene kekahi mea i mahalo nui ia, a ua ao nui ia na kula o Molokai nei i ka pa ko li, a me na leo mele maikai.
A i ka pau ana o ka hana, ku kekahi poe a paipai aku, oia hoi o Limaikaika, I Richardson, Lokomaikai, Kamaipilikane, Pika nele. Olelo o Ioane, e paa mau aku ka manao o ko Molokai, ma ka puali inu wai, a me ka imi naauao; e wawahi i kela olelo a ke kahi poe, e olelo ana, aole e hoomau aku na kanaka Hawaii ma ka pono, he poe lauwili, hoi hope. E lilo ia olelo i mea wahahee, ma ka hana mau ana e like me keia.
Olelo hoi o Limaikaika ia lakou, ua akaka ka holo mua o ka naauao ma Molokai nei, aole nae pau i ka loaa, nui loa koe; e hoikaika a pau loa ka naaupo, ka ilihune ka noho pilikia, a noho kuonoono

ko Molokai nei iloko o na hale maikai, me ka lako i ka lole, ka ai, ka ia, a pela aku. Hooholo hui ia ka olelo e kupaa ma ka puali inu wai. Paipai no hoi o Limaikaika e hui i ka mahiai a me na hana e ae, me ka imi naauao. Pau keia, he wahi ahaaina i hoomakaukauia e Kuaita me Davida, me na keiki a Hikikoke, ekolu papa aina iloko o ka hale kula; maemae no hoi, maikai ka ai. O na malihini nae ka poe ei, aole nui o na kamaaina, oia ka hemahema a'u i ike ai iloko o keia hana Kainoa, e lawe like mai na makoa i ka ai na ka lakou poe keiki, e ai pu ma keia puali inu wai. Eia ka, o Kuaika me Hikikoke wale no na mea hana i ka ai. Aole pela mamua, he hui na makua mamua.
Pau ka ahaaina ana, ma ke kahea ana o Limaikaika, halawai na kanaka e kukulu i ahahui mahiai no Molokai nei. Ua kohoia o Lokomaikai, a o ---- i kakauolelo. Hoike nui o Limaikaika no ke kanu uala maoli maikai, e waiho loa aku i ka uala kahiko, he uala popopo koke ia, hoowahawaha na haole. O ka uala hou, uala paa, popopo ole, ka pono. E kanu nui a lawe no na moku, a me Kaliponia; he mea makemake nui ia malaila. Hookahi hewa, o ka hapa o ka uala maikai e laweia aku ilaila.
O ka papapa kekahi mea e kanu ia ; he nui ke kumu kuai; he mea makemake nui ia maluna o na moku O ka hanai hipa kekahi mea kupono ma Molokai; makemake ka hipa i ka aina pali, aa, uuku ka weuweu, e like me keia mau pali.
O ka huita kekahi mea kupono ma Kalae. Hoike no hoi oia i ka pono o ka hui ma ka mahiai; oia ka mea e ikaika ai; e like me na rope liilii owili ia a loaa ke kaula paa. Aole ikaika ke hana liilii, kela mea keia mea ma kona manao iho. E hui ka pono, e kukapu, e kokua kekahi i kekahi. Pau keia, ua hooholoiaa koho i mau Komite e imi i Kumukanawai no ka Ahahui Mahiai, o Molokai nei. O Kuaita, o D. H. Hikikoke, a me Lokomaikai na Komite. O ka pau no ia o ka hana.
Eia kekahi ; ua hanaia a maikai loa ka luakini ma Kaluaaha; ua paa i ka noho, a ua pau i ke pena ia; a ua hookelekele ia i ka puna maloko a ma waho, keokeo maoli a me ka maemae ; hanohano maoli ke nana'ku. Ua hanaia no hoiha halepule maikai, hale paa, ma na wahi e ae, ma Uala pue, Manawai, a me Mapulehu.
Eia kekahi ; ua paa i ka lole na kino a keia mau kamalii, he 530 i hoike ae nei ; he lole maikai, kuoonoono ke nui; ua oi aku ka maikai mamua o na makahiki i hala. No ka mea, ua hooikaika na makua e imi i ka lako no ka lakou poe keiki . Nolaila, ua holo io no ka naauao ma Molokai.
I ka la pule iho nei, ua malama ia ka ahaaina a ka i aku maanei; ue piha loa ka hale pule; maikai ka hana ana ke nana'ku. He hemahema nae no ke Kahuhipa ole hana e huai i keia ohana maikai? L.

This article tells of the various news items of the day concerning Moloka'i. It begins by praising the progress on the education front with the number of schools and enrolled students on Moloka'i, and commends the students for their exemplary progress in reading, math, writing, geography, music and other subjects. The article then goes on to mention other news: visiting missionaries from Maui; the raising of sheep on Moloka'i; the growing of wheat at Kalae. Regarding Kalua'aha, the author praises the beautiful church that has been built there and also praises the churches built in 'Ualapu'e, Manawai, and Mapulehu.

KA HAE HAWAII. Buke I, Helu 37, Aoao 145. Novemaba 12, 1856.
12 Nowemapa 1856

KE KAAPUNl ANA O KE ALII.

Olioli paiia ka lehulehu e lohe i ka holoholo ana o na 'lii mamua iho nei. I ka la 7 o Aug., iho nei, holo aku; o ka holo no ia a hiki i ka la 30 o Okakoba. Penei ka holo ana. Mai Honolulu a Waimea, Kauai; mai laila aku i Niihau, a Kaula; holo aku i Lehua; mai Lehua a Waimea mai laila mai a Hanapepe, me Koloa, me Nawiliwili, Anahola, Hanalei; mai laila ae a Haena, me Nualolo, a hoi hou i Hanalei. Malaila a Honolulu, hookahi la wale no maanei a holo aku i Hilo; mai Hilo a Kawaihae, a pii iuka i Waimea; hoi hou i Kawaihae a holo mai i Lahaina; mai laila ae i Lahaina hoi hou i Lahaina. Malaila i Kaluaaha, Molokai, i Halawa, me Kalaupapa, a hoi loa mai i

Honolulu, i ka la 30 o Okakoba iho nei. Elua malama me na la he 23 ka holo ana. Ua maikai ka holo ana; aole pilikia. Hookahi mea kaumaha wale no o keia kaapuni ana, oia hoi ka make o Sarai Hiwauli, ka wahine aloha a J. Ii.
Aole i lohe nui ia ka olelo a ke Alii i na kanaka ma kela wahi, keia wahi; hookahi wale no, ma Hilo. He halawai me na kanaka a me na haole malaila; a ua paipai ke Alii i na kanaka ma na hana maikai a pau; e hooikaika ma ka mahiai, i pau ka pilikia, i nui ka loaa, i hanaia na hale maikai, i hoonaauao ia na keiki, a i kuonoono ka noho ana.
Ua hai aku no hoi ke Alii i kona mamao i na haole o Hilo; eia ke ano nui wale no, aia i na haole ka pono a me ka poino o na kanaka Hawaii;. ina noho pohu a hana pono na haole, he mea ia e pono ai no kanaka Hawaii; a ina hoi hewa na haole, he mea ia e ino ai ka noho ana o na kanaka Hawaii.
No ka aina naauao oukou, a nolaila, ua manao nui ia oukou e na kanaka; aole hoi i emi ia manao nui ana, a hiki i keia la, no ko oukou ike me ke akamai. Nolaila, e like me ua olelo a ko'u maii kupuna, ke olelo aku nei au ia oukou, e hele mai a e noho mai na kanaka keokeo ma Hawaii nei. Ua hooponoponoia ko'u aupuni ma ke ano naauao, ma muli o ke Kumukanawaii a me na Kanawai aole hoi he kaumaha ka auhau ana, i mea e pono ai na hana a ke aupuni.
Nolaila, ea, e hele mai oukou a noho mai me makou; o hele mai me ko oukou dala, me ko oukou naauao, me ko oukou ikaika i ka hana, a me ko oukou malama ana i ke Akua E mahi i na wahi momona o makou; e kanu i ke ko, i ka waina, i ke kope, i ike makou i ke ano o ka oukou hana ana ma na aina naau ao, a me na mea mahiai i puka ma ka oukou hooikaika ana.
Aka, ea, aole o makou makemake i na haole ino, mamua o ko makou ino, e noho maanei; aole o makou makemake i na haole, hana i na mea hilahila ma ko lakou aina, o hilahila auanei makou ia lakou. Olioli nae au i ka hai aku, aole nui loa ia poe.
Olioli no hoi au i ka hai aku ia oukou, na kanaka o Hilo, ua kaulana ko oukou wahi. no ka hookipa i na malihini, a me na hana maikai ana, ua maikai ko oukou wahi, na alanui, me na hale, mamua o kela wa a'u i holo mai ai mamua.

This article talks about a trip around the islands that the ali‘i took from August 7 to October 30, 1856. Kalua‘aha is one of the specific places listed on the itinerary of the ali‘i between a stop at Lahaina, Maui and a stop at Hālawa, East Moloka‘i. Kalaupapa is the only other place on Moloka‘i also listed as one of the stops.

KA HAE HAWAII. Buke I, Helu 52, Aoao 205. Feberuari 25, 1857.
25 Pepeluali 1857

LOKO IA KUAI !

I KA LA 1 o Aperila 1857, e kuai ia make Kudala ma kona hale ma Lahaina, no ka Papa Hoonaauao ka loko ia nui ma Kaluaaha, Molokai. E haawi koke ia mai ka hapalua o ke dala, i ka la a kuai, a o kekahi hapalua iloko o na malama eono. Aia kaa ke dala, e haawiia ka Palapala Sila Nui.
J. F COLBORN. Luna Kudala.
Lahaina, 52-1mth

In this announcement, a large fishpond at Kalua‘aha is bought at an auction for one dollar, half paid on the day of purchase, and the other half paid within 6 months.

KA HAE HAWAII. Buke 2, Ano Hou.---Helu 11, Aoao 41. Iune 10, 1857.
10 Iune 1857

MARE.

I ka la 19 o Aperila, ma Kaluaaha, Molokai, ua mare ia o A. Kalauli me E. Namaielua, na S. G. Dwight laua i mare.

This is a marriage announcement between A. Kalauli and E. Namaielua at Kalua'aha, Moloka'i.

KA HAE HAWAII. Buke 2, Ano Hou.---Helu 12, Aoao 45. Iune 17, 1857.
17 Iune 1857

Ua mare o Kahea me Kelupaina, i ka la 1 o Mei, ma Kaluaaha, na Duaita laua i mare.
Ap. 15, ma Kaluaaha, ua mare o Hahea me Neau, na Duaita laua i mare.
Iune 5, ma Kaluaaha, Kiaimakani me Maioholani, na Duaita laua i mare.

Three marriages were performed in Kalua'aha by someone named Duaita: On May 1, Kahea married Kelupaina; on April 15, Hahea married Neau; and on June 5, Kiaimakani married Maioholani.

KA HAE HAWAII. Buke 2, Ano Hou.---Helu 13, Aoao 49. Iune 24, 1857.
24 Iune 1857

OLELO HOOLAHA.

O NA mea a pau i kuleana i ka waiwai o Hikikoke, ka mea i make no Kaluaaha, i Molokai, e like me na mea aie, a me na mea i pili ma ka hanau ana a ma ke ano e ae paha, ke kauohaia'ku nei lakou e hele mai imua o'u ma ka Hale Hookolokolo ma Waikapu, Maui, i ka poakahi oia ka la 6 o Iulai, M. H. 1857, i ka hora 10 o kakahiaka, e nana i na palapala aie a ka Lunahooponopono i hoonohoia maluna oia waiwai, a e hoole paha ia mau palapala ke loaa ke kumu pono e hoole ai. A pela e hoopauia'i ka hana a ua Luna la. IOANE RICHARDSON.
Luna Kanawai Kaapuni.
Waikapu, Maui, Iune 15, 1857.—13-2t

This is an announcement inviting all those with interests in the estate of the recently deceased Hikikoke of Kalua'aha to go to the court at Waikapu to settle these matters. This might be the same Hikikoke who is named as a minister of the church at Kalua'aha in an earlier newspaper article.

KA HAE HAWAII. Buke 2, Ano Hou.---Helu 20, Aoao 77. Augake 12, 1857.
12 Iulai 1857

KALUAAHA, Iulai 30, 1857.
Aloha oe e ka Hae.—Ke manao nei au e hai aku ia oe i na mea i hanaia ma Molokai nei i ka la 9 o keia malama; no ka mea, oia ka la hauoli o ka Pualiinuwai o keia Mokupuni.
Ia la no ua hui ia na haumana a pau o Molokai elua haneri a keu ma Kaluaaha iloko o ka Halepule a makaukau lakou, hele aku ma ka paha a puni i kekahi mau hale, a nani ke nana aku i keia puali; no ka mea, ua maemae ka lole, a olinolino na maka o na kamalii. Pau ia i ka hora 8 kakahiaka hoomaka na keiki i ka hana iloko o ka Halepule, a haiolelo, a himeni, a hai aku na mea o ka wa kahiko, a me na mea o ka wa hou, a hiki i ka hora 2 o ke ahiahi. Mahalo nui na kanaka i na hana o kamalii, a akaaka hoi. O ke kula oi i ka naauao o ka nui oia ke kula o Daniela ma Waialua, maikai loa ka lakou Himeni ana.
Pau ka hana a kamalii ua hoike aku o Mr. Bartow, WM A. Jones, a me Mr. Webster, na Luna hooholo i na mea oi ma na mea mahiai i hoikeia na kanaka a ua hooholo lakou.
Na Haole o Ahaino $2.00 no ke kalo oi aku.
Na Haole o Ahaino $.00 " " uala " ".
Na H. R. Hikikoke o Kuluaaha $1.00 no na papapa oi aku.

Na Kaaikupala o Honomuni $1.00 no na akaakai oi aku.
Na Kauwekahi o Palaau $1.00 no ke kulina oi aku.
Na Mele Ninihua o Kaluaaha $1.00 no na pua nani loa.
Na S. Luuloa o Kalae $1.00 no ka waiu baka oi aku.
Na S. Luuloa o Kalae $1.00 no na pu oi aku.
Na Pehialii $1.00 na ka palule oi aku.
Na Kauweaina $1.00 no ka palule kokoke like no.
Na Keaumalahia $0.50 no ka palule ana.
Pau ia kamailio iki na malihini a me na makua, alaila noho lakou a ahaaina olioli a hoi aku me ka olioli o ka manao a me ka mahalo i keia la hana ma Molokai nei.
Aloha oe, owau no. MALIHINI.

This article celebrates the support for the Pualiinuwai on Moloka'i. This was an organization which championed the prohibition of alcohol. There was a gathering of over 200 at the church in Kalua'aha, and after the services, there was a joyous feast in appreciation for all the support and good works there on Moloka'i.

KA HAE HAWAII. Buke 2, Ano Hou.---Helu 18, Aoao 69. Iulai 29, 1857.
29 Iulai 1857

HE KANIKAU NO D. LOKOMAIKAI.

Kuu kane mai ka malu o ka Hale.
Mai ka malu hale o Pohakumauna,
Kuu hoa mai ka la ku kanono o Kaamola,
Mai na makani paio lua o ka aina,
I pili ai maua me ke aloha,
Hele aku la oe ma ke ala hoi ole mai,
Noho au me ka u, me ka minamina.
Me ka eha o ka naau e nohoho nei,
E loku nei ka manao, hana ke aloha iloko,
Ua palamimo palanehe kou hele ana,
Ke imi nei wau ma na lumi o kaua,
A ma na wahi a kaua i pili ai aole oe,
E hoi mai e,—e ke hoa—e.
Kuu kane mai ka la kanaka nui o Kaluaaha,
Mai ua pono uai aholo nei o ke Akua,
Pau kau ku ana mai iluna e hai i ka pono,
Kani ulili mai la i ka awai,

This is a chant of lamentation for someone named D. Lokomaikai. In this chant, he is called a "great man of Kaluaaha".

KA HAE HAWAII, SEPETEMABA 30, 1857. 107

KEENA KALAIAINA, la 15 o Sepetemaba 1857.

KE KAUOHA IA'KU na mea a pau o na inoa malalo nei, e kii koke mai i ko lakou mau kuleana e waiho nei maloko o keia keena, he mau kuleana ua hooko ia, nolaila, e pono ia oukou e kii koke mai i ko oukou mau kuleana. Ina ua make ka mea nona ke kuleana, e kii mai na hooilina.

MOLOKAI.
Kaaukaokai, Kapualei, Kalamaika, "
Niupohiwi, " Naale, Kalaupapa,
Kawaihoa, " Keawe, "
Peinoa, " Puailelewale, "
Nahauna, " Kauhi, "
Lipali, " Kauhanui, Moanui,
Nakeleawe, " Nahoiha, "
Hapuku, " Waimoe, "
Kelohanui, Honouliwai, Kauhi, "
Paluhi, Ualapue, Maalahia, Ohia,
Kawelo, " Kahoowaha, "
Kaupe, " Kaiu, Kahananui,
Koenakaia, " Kaluau, "
Kaailepo, Keawanui, Napela, "
Pahupu, " Kuaiualu, Kaluaaha,
Kane [Hau] Halawa, Koa, Waikolu,
Penopeno, Kumimi, Kahakahaka, Waikolu,
Napela, Manawai, Puhi, Kapuaokoolau.

This is an announcement listing those who have been awarded kuleana lands. For those listed who have passed away, their heirs are asked to come forth. The list shows one kuleana in Kalua'aha awarded to Kuaiualu.

KA HAE HAWAII, IANUARI 27, 1858. 175

HANAU.

Ian. 8, 1858, Kukanaka, Honolulu, Oahu, hanau o Kahili w, na Kahoino me Mahu.
Ian. 16, Kawaiahao, Honolulu, Oahu, hanau o H. Kaleohano w, na S. Makulu me E. Kaili.
Ian. 13, Waialu, Oahu, hanau o Kaikilani w, na Kana me Kailiohae.
Ian. 15, Paala, Waialua, Oahu, hanau o Hii k, na Keonenui me Keino.
Oct. 23, Puueo, Hawaii, hanau o Kamai k, na Makapaa me Keakuku.
Oct. Puueo, Hawai, hanau o Kalohinui k, na Kuoi me Kalanui.
Ian. 5, Waialua, Oahu, hanau o E. Malaea w, na D. L. Hale me E. Malaea kalaauala.
Nov. 6, Waialua, Oahu, hanau he keiki manuahi na Akuku.
Iulai 13, 1856, Kaluaaha, Molokai, hanau o Iohn L. Kaluaipuunui k, na Keopuhiwa.
Oct. 22, 1857, Kaluaaha, Molokai, hanau o Mokuohai w, na Maria Kuewa.
Ian. 8, Kainalu, Molokai, hanau o Nahola k, na Iosepa Holmes me Kapahulumanu.

These are birth announcements. In Kalua'aha, a baby boy named Iohn L. Kaluaipuunui was born to Keopuhiwa, and a baby girl named Mokuohai was born to Maria Kuewa.

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26 KA HAE HAWAII, MEI 19, 1858.

PAPA INOA O KE KULA NUI O LAHAINALUNA.

E na haumana o Lahainaluna, i puka iwaho, a e kau liilii ana ma Hawaii nei a puni, eia no malalo nei ka Papainoa o ia Kulanui, mai 1831, a 1854, e nana oukou, i ka poe ola, a me ka poe make i

keia wa; a e hai mai i ka poe ola a hiki i keia wa, a me ka lakou hana, a me ko lakou ano, a me ko lakou noho ana, e paiia no ma ka Hae, i maopopo ka hua oia laau kiekie, a me ka malumalu.

KOMO 1.----MAKAHIKI 1831.

NA INOA Kahi i hele mai ai. Kahi e noho nei, a me ka oihana. Na makahiki ma ke kula.
Oliva, Waimea, Kauai, Wailua, Kauai,* 4
Opunui, Honolulu, Oahu, Honolulu, Oahu,* 4
Ukikihi, Lahaina, Maui, Kaluaaha, Molokai,b 4
Hopu, Koolau, Maui, Hana, Maui,++ 4
Kaanaana, Koloa, Kani, Koloa, Kauai,++ 4
Kaaukai, Waipio, Hawaii, Waikiki, Oahu,* 4
Kaelemakule, Wailuku, Maui, Koloa, Kauai,++ 4
Kauhihape, Lahaina, Maui, Lahaina, Maui,* 4
Kaio, Honolulu, Oahu, Honolulu, Oahu,* 4
Kaili, Waikapu, Maui, Honuaula, Maui,+ 4
Kaikaina, Lanihau, Hawaii, Honolulu, Oahu,* 4
Kahele, Wailuku, Maui, Waikapu, Maui,* 4
Kahookui, Lahaina, Maui, Koloa, Kauai,++ 4
Kamanowai, Lahaina, Maui, Lahaina, Maui,# 4
Kapa, Kailua, Hawaii Kaawaloa, Hawaii,++ 4
Kapaekukui, Puuwai, Niihau, Lihue, Kauai,+ 4
Kapena, Honolulu, Oahu, Honolulu, Oahu,++ 4
Kawaihoa, Kona, Hawaii, Holualoa, Hawaii,* 4
Kawailepolepo, Honolulu, Oahu, Wailuku,Maui,* 2
Keliiwaiwaiole, Honolulu, Oahu, Hauula, Oahu,b 4
Kekahuna, Wailuku, Maui, Wailuku,Maui,* 4
Kekapa, Keanae, Maui, Mokulau, Maui,+ 4
Kuaana, Kapalama, Oahu, Kaneohe, Oahu,* 4
Kekapa 2, Lahaina Maui Oloalu, Maui,* 4
Kilauea, Halawa, Hawaii, Halawa, Hawaii,b 4
Kuhawaii, Hana, Maui, Hana, Maui,* 4
Kupaka, Kona, Hawaii, Keauhou, Hawaii,b 4
Kulepe, Honolulu, Oahu, Waianae, Oahu,++ 4
Kuluwailehua, Honolulu, Oahu, Honolulu, Oahu,* 4
Mahune, Honolulu, Oahu, Honolulu, Oahu,* 4
Malaihi, Kula, Maui, Wailuku, Maui,+ 4
Maluaikoo, Waimea, Kauai, Waimea, Kauai + 4
Malulu, Kaunolu, Lanai, Kaunolu, Lanai,* 4
Malo, Lahaina,Maui, Lahaina, Maui, * 4
Moku, Lahaina, Maui, Lahaina, Maui,+ 4
Naumu, Waimea, Kauai, Waimea, Kauai,++ 4
Nahuilele, Honolulu, Oahu, Kaaawa, Oahu, # 4
Nakou, Kaawaloa, Hawaii, Kau, Hawaii,+ 4
Nana, Waipio, Hawaii, Waipio, Hawaii,# 4
Napela, Olowalu, Maui, Wailuku,Maui, # 4
Naleipuleho, Lahaina, Maui, Wailuku, Maui,# 4
Puapua, Hamakualoa, Maui, Waialua, Oahu,* 4
Puuloa, Kailua, Hawaii, Hilo, Hawaii,++ 4
Wahakane, Waimea, Hawaii, Waimea, Hawaii,/ 4
I ka hui ana 44.

NA INOA Kahi i hele mai ai. Kahi e noho nei, a me ka oihana. Na makahiki ma ke kula.
Kaianui, Honouli,Molokai, Waikolu, Molokai 2
Kaiaikawaha, Waialua, Oahu, Waialua, Oahu,+ 4
Kailua, Lahaina, Maui, Puueo, Hawaii,* 3
Kaluna, Kaluaaha, Molokai, Kaluaaha, Molokai+ 2
Kaelemakule, Kaawaloa, Hawaii, Koloa, Kauai,# 3
Kahema, Kawele, Hawaii, Kamalo,Molokai+ 4
Kahoena, Palawai, Lanai, Moakea, Molokai,+ 4
Kauhi, Palawai, Lanai, Kalaupapa, Molokai,+ 4
Kauakahi,(ku, Lumahai, Kauai, Moloa a, Kauai,++ 4
Kalaniwahinamo Waialua, Oahu Maemae, Oahu* 4
Kalama, Lahaina Maui, Koloa, Kauai,# 5
Kale, Lahaina, Maui, Lahaina, Maui,b 3
Kalena, Lahaina, Maui, Honaunau, Hawaii,* 4
Kamai, Lahaina, Maui, Halawa, Molokai,# 3
Kawaihalau, Lahaina, Maui, Lahaina, Maui, # 3
Kawainui, Keawanui, Molokai, Keawanui, Molokai * 3
Keaoku, Lahaina, Maui, Wailuku, Maui,* 4
Keola, Lahaina, Maui, Kailua, Hawaii,* 1
Lahaina, Ponahawai, Hawaii, Hilo, Hawaii,# 3
Leleiohoku, Lahaina, Maui, Kailua, Hawaii* 1
Mahu, Wailuku, Maui, Hamakuapoko,M., ++ 4
Makaihekona, Kukuihaele, Hawaii, Halawa, Oahu,+ 4
Maakuia, Kamoku, Lanai, Honouliuli, Oahu,+ 4
Maaweiki, Punahoa, Hawaii, Honuaula, Maui, + 4
Miki, Waimea, Hawaii, Hana, Maui,+ 4
Moo, Puueo, Hawaii Ukumehame, Maui,* 4
Muolo, Wailuku, Maui, Wailuku, Maui,# 2
Nakipi, Waimea, Kauai, Lahainaluna,Maui,* 3
Paahana, Kapalama, Oahu, Waiawa, Oahu,* 4
Paku, Oloalu, Maui, Honolulu, Oahu,+ 6
Peiho, Wainiha, Kauai, Wainiha, Kauai,+ 4
Puaenaena, Punahoa, Hawaii, Makahanaloa, Haw, + 4
Wana, Waioli, Kauai, Waioli, Kauai,++ 4
I ka hui ana 42.

KOMO MAKAHIKI 1837.

Aumai, Kaawaloa, Hawaii, Hilo, Hawaii,++ 4
Aka, Waimea, Kauai, Waimea, Kauai,+ 4
Hoaai, Hilo, Hawaii, Hilo, Hawaii,+ 4
Kaaikaula, Wailuku, Wailuku, Maui,* 4
Kaaiawaawa, Hilo, Hawaii, Hilo, Hawaii,# 4
Kaaipuaa, Honolulu, Oahu, Laie, Oahu,* 4
Kaauwaepaa, Kawaloa, Hawaii, Honolulu, Oahu,/ 4
Kaehu, Anahola, Kauai, Kealia, Kauai,# 4
Kaiawa, Waikiki, Oahu, Honolulu, Oahu,* 4
Kauku, Ohia, Molokai, Kalae, Molokai, + 4
Kaumaea, Lahaina, Maui, Lahaina, Maui,+ 4
Kahulanui, Wailuku, Maui, Wailuku, Maui,+ 4
Kaka, Honuaula, Maui, Kahiki,# 4
Kalepo, Hilo, Hawaii, Holualoa, Hawaii,+ 4
Kaluau, Kaluaaha, Molokai, Kaluaaha, Molokai # 4

Kamali, Waimea, Kauai, Niihau, Niihau,+ 4
Kamiki, Hilo, Hawaii, Hakalau, Hawaii, + 4
Kapeau, Honolulu, Oahu, Honolulu, Oahu,++ 4
Keaka, Honolulu, Oahu, Honolulu, Oahu,* 4
Keaku, Lahaina, Maui, Lahaina,Maui,+ 4
Kou, Ewa, Oahu, Ewa Oahu,# 4
Laiana, Honolulu, Oahu, Lahaina,Maui,* 4
Lilikalani, Kaawaloa, Hawaii, Kaawaloa, Hawaii,* 4
Naue, Waialua, Oahu, Kapaka, Oahu, ++ 4
Wana, Waimea, Kauai, Waioli, Kauai, + 4
Samuela, Hilo, Hawaii, Hilo,Hawaii,+ 4
ka hui ana 26.

KOMO 6.---MAKAHIKI 1838.

NA INOA. Kahi i hele mai ai, Kahi e noho nei, a me ka oihana, Na makahiki ma ke kula.
Ua, Punaluu, Oahu, Lahainaluna, Maui,* 7
Kaina, Kaneohe, Oahu, Kaneone, Oahu,+ 4
Kapaakea, Honuaula, Maui, Lahainaluna, Maui,** 6
Kekela, Waialua, Oahu, Lahainaluna, Maui,** 7
Makapo, Kaluaalia, Molokai, Halawa, Molokai,+ 5
Paehewa 1839, Koloa, Kauai, Honolulu, Oahu,# 4
I ka hui ana 6.

KOMO 7.----MAKAHIKI 1840.

Ua, Kohala Hawaii Hilo Hawaii+ 5
Hooilo, Kaluaaha Molokai Kaluaaha Molokai* 3
Hoepaepa, Keauhou Hawaii Lahaina Maui + 3
Kaainahuna, Kailua Hawaii Honolulu Oahu++ 3
Kaea, Kula Maui Keanae Maui+ 4
Kaiakuaaina, Honolulu Oahu Honolulu Oahu # 3
Kauhiahiwa, Kau Hawaii Lahainaluna Maui * 3
Kauwe, Kohala Hawaii Iole Hawaii+ 1
Kauwealoha, Hilo Hawaii Lahainaluna Maui** 3
Kahanaui, Hamakua Hawaii Honolulu Oahu b 5
Kahiona, Kailua Hawaii Honolulu Oahu# 5
Kahue Honolulu Oahu Honolulu Oahu# 3
Kahue 2 Kaluaaha Molokai Kamalo Molokai+ 1
Kahula Kaluaaha Molokai Halawa Molokai++ 3
Kalama Kula Maui Makawao Maui+ 3
Kalama2 Lahaina Maui Lahaina Maui# 3
Kalani Lahaina Maui Honolulu Oahu# 4
Kaleohano Kau Hawaii Wailuku Maui+ 4
Kalawaia Maunalei Lanai Waianae Oahu+ 3
Kaluaipu Wailuku Maui Waiehu Maui+ 3
Kamahahalu Koloa Kauai Koloa Kauai+ 3
Kanakaole Wailuku Maui Waikapu Maui+ 3
Kanealii, Waialua Oahu Lahainaluna Maui* 4
Kanehailua, Waipio Hawaii Lahaina Maui# 1
Kapela Kaawaloa Hawaii Honouli Molokai* 2
Kapoi Honuaula Maui Honuaula Maui+ 4
Kapua Kau Hawaii Kau Hawaii+ 4

Kekohai Ewa Oahu Wailupe Oahu+ 4
Koohulukea Kaneohe Oahu, Kaneohe Oahu++ 4
Kuaaina LahainaMaui Lahaina Maui* 2
Kealiiaihue Kailua Hawaii Kona Hawaii+ 4
Maalaiki, Lahaina Maui Ukumehame Maui + 2 1/2
Maikai Honolulu Oahu Honolulu Oahu++ 4
Mahi Honolulu Oahu Kau Hawaii+ 3
Makaonini Honolulu Oahu Maemae Oahu+ 4
Maoheau Lahaina Maui Hilo Hawaii b 5
Naaha Honolulu Oahu Kalihi Oahu* 3
Naiapaakai Kohala Hawaii Lahainaluna Maui** 5
Naoha Hilo Hawaii Puue Hawaii+ 4
Nakaa Kaluaaha Molokai Manowai Molokai* 4
Paaoao Waioli Kauai Ewa Oahu,+ 4
Peahi Lahaina Maui Lahaina Maui* 3
Pikao Lahaina Maui Lahaina Maui** 4
Pipa Kohala Hawaii Kohala Hawaii+ 4
Pualewa Palawai Lanai Kalaupapa Molokai+ 4
Wahinealii Honolulu Oahu, Honolulu Oahu* 4
Wiwi Kaawaloa Hawaii Kaawaloa Hawaii+ 4
I ka hui ana 47.

KOMO 8,----MAKAHIKI 1841.

Aikake Waioli Kauai Waioli Kauai+ 4
Adamu Kaanapali Maui Lahaina Maui# 4
Elia Lahaina Maui, Makawao Maui+ 4
Ioane R., Waikapu Maui Lahainaluna Maui** 4
Haalou Waipio Hawaii Lahainaluna Maui** 4
Haia Waialua Oahu Lahainaluna Maui ** 4
Haleole Kohala Hawaii Kohala Hawaii# 1
Halemanu Hilo Hawaii Hilo Hawaii+ 3
Hooliliamanu Honolulu Oahu Honolulu Oahu* 3
Kaanaana Ewa Oahu Waipio Oahu+ 3
Kaehu Honolulu Oahu Honolulu Oahu b 3
Kaele Waimea Hawaii, Waimea Kauai+ 4
Kaikawaha, Oloalu Maui Kaupo Maui + 2
Kailihalapia Kohala Hawaii Kohala Hawaii+ 1
Kaona Kailua Hawaii Lahainaluna Maui** 4
Kaonanui Kau Hawaii, Honolulu Oahu# 3
Kaluhi Waialua Oahu Pukoa Molokai# 3
Kauahi Waipio Hawaii Lahainaluna Maui** 4
Kahema Ewa Oahu Ewa Oahu+ 3
Kahoalii Keauhou Hawaii Lahaina Maui# 4
Kahukaimulili Halawa Molokai Poniuohua Molakai+ 4
Kahulia Kailua Hawaii Honolulu Oahu# 3 3/4
Kalanikahua Honolulu Oahu Lahainaluna Maui** 4
Kalehua Waioli Kauai, Waioli Kauai* 3
Kamai Lahaina Maui Lahaina Maui+ 3
Kapuaa Lahaina Maui Kahana Maui# 4
Keau Lahaina Maui Lahaina Maui# 3
Keaupuni, Kaupo Maui Koloa Kauai# 3
Keanu Waikapu Maui Kula Maui+

Kealakai Kipahulu Maui Kipahulu Maui + 4
Keamaka Honolulu Oahu Moanalua Oahu# 4
Keoni Hilo Hawaii Hilo Hawaii + 4
Kekipi Waikapu Maui Waikapu Maui*
Kepua Hilo Hawaii Waialua Molokai+ 3
Kuau Waipio Hawaii Waipio Hawaii+ 4
Kupa Lahaina Maui Kula Maui+ 4
Kupanea Honolulu Oahu Lahainaluna Maui** 4

KOMO 6. MAKAHIKI 1838

NA INOA. Kahi i hele mai ai, Kahi e noho nei, a me ka oihana, Na makahiki ma ke kula.
Lono Halawa Molokai Honolulu Oahu# 3
Maui Kaanapali Maui Kaanapali Maui+ 3
Malaihi Waialua Oahu Waialua Oahu#
Mahoe Halawa Molokai Halawa Molokai+ 4
Mahoe 2 Hana Maui Hana Maui+ 3
Mahulu Kaneohe Oahu Kaneohe Oahu# 3
Makaku Waipio Hawaii Waipio Hawaii+ 4
Nailiili Honolulu Oahu Kalihi Oahu# 3
Naiwieha Honolulu Oahu Honolulu Oahu# 3
Nahina Ualapue Molokai Ualapue Molokai* 2
Nalaepaa Ewa Oahu Ewa Oahu+ 3
Naiuahi, Waikiki Oahu Waikiki Oahu+ 2
Niau Kohala Hawaii Kohala Hawaii* 1
Paele Hilo Hawaii Kahakuloa Maui + 3
Pohaku Wailuku Maui Hilo Hawaii+ 3 3/4
Poki Kaluaaha Molokai Honolulu Oahu# 3
Waiwaiole Waihee Maui Lahainaluna Maui** 4
Wiliama H. Waikapu Maui Waikapu Maui # 3
Geogi R. Waikapu Maui Lahainaluna Maui** 4
I ka hui ana 56.

KOMO 9.-—MAKAHIKI 1843.

Alohikea Hamakua Hawaii Lahainaluna Maui**
Isaaka, Honolulu Oahu Waialae Oahu+
Uaua Lahaina Maui Lahainaluna Maui **
Haaheo Hamakua Hawaii Lahainaluna Maui**
Haia Hana Maui Kaupo Maui+ 2
Halemano Kaanapali Maui Lahainaluna Maui**
Kanea Hilo Hawaii Lahainaluna Maui**
Kaaina Pawili Lanai Pawili Lanai 2
Kaelele Wailuku Maui Kaohai Lanai+ 2
Kaiwi Waimea Kauai Hanapepe Kauai+ 2
Kauai Hana Maui Lahainaluna Maui**
Kahale, Koloa Kauai Wailuku Maui+ 2
Kahalelaau Waialua Oahu Waialua Oahu **
Kahaleluhi Kaumalumalu Hawaii 2
Kahele Waianae Oahu
Kahionamaka, Puna Hawaii 2
Kahiwalani Honolulu Oahu Lahainaluna Maui**
Kahoohuli Kohala Hawaii Lahaina Maui +

Kaholokahiki Honolulu Oahu Honolulu Oahu #
Kalaaukane Kona Hawaii Lahainaluna Maui**
Kaleikau Hamakua Hawaii LahainaMaui*
Kamalo Kailua Hawaii Lahainaluna Maui**
Kanaka Lahaina Maui Lahaina Maui# 2
Kanakaole 2 Keauhou Hawaii Keauhou Hawaii# 2
Kanakalawaia Kumueli Molokai 2
Kanewai Waimea Kauai 2
Kapala 2 Kohala Hawaii Lahainaluna Maui **
Kawaa Waikiki Oahu Lahaina Maui# 1
Keai Hamakua Hawaii 2
Keawe Oloalu Maui
Keawehunahala Puna Hawaii Waialua Oahu++
Kealohanui Halawa Molokai 2
Kekahio Kaupo Maui Lahaina Maui+ 2
Kiolea Kaneohe Oahu 2
Kukonalaa Wailuku Maui 2
Leinaholo Puna Hawaii
Lukua Punahoa Hawaii 2
Maialapo Kohala Hawaii Lahainaluna Maui**
Mahoe 3 Kaanapali Maui Lahainaluna Maui**
Makaike Kailua Hawaii Lahainaluna Maui **
Makaiwa Hanalei Kauai 2
Makalena Waikapu Maui Lahainaluna Maui**
Makole Puna Hawaii 2
Mamaki Moakea Molokai
Manaku Honolulu Oahu Lahainaluna Maui**
Nahale Polapola Molokai Lahainaluna Maui**
Nahinu Waihee Maui Wailuku Maui / 1
Paele 2 Kaneohe Oahu Kaneohe Oahu +
Peleineka Hana Maui Lahainaluna Maui**
Pika Ewa Oahu Ewa Oahu# 1
Waiwaiole Waikapu Maui Maalaea Maui# 1
Waikele Ewa Oahu Lahainaluna Maui **
Waikuaaala Puueo Hawaii 2
Daniela Ualapue Molokai 1
Geogi 2 Waikiki Oahu Lahainaluna Maui **
Samuela Honolulu Oahu Lahainaluna Maui * 2
I ka hui ana 56.

KA POE I KOMO HOPE I KEIA MAKAHIKI 1845.

KOMO----- MAKAHIKI 1849.

Maikai Maikai Maui
Maui Honolulu Oahu
Mahelona Honolulu Oahu Loio,
Mahi Ewa Oahu, Kakukula,
Malema Lahaina Maui, mahiai.
Naili Koolauloa Oahu mahiai.
Noa Honolulu Oahu mahai,
Nui Makawao Maui Kumu ao.
Nuuhiwa Waioli Kauai, hai olelo a ke Akua.

Pahuaina Kaluaaha Molokai, Kalepa,
Palaile Kauai, Kumu ao,
Poikai Wailuku Maui Kalepa,
Kauahi Waialua Oahu
Polapola Waialua Oahu Kakauolelo,
Pelu
Waiwaiole Waihee Maui mahiai.
Kea Honolulu Ohu Kakauolelo Loio Kumu ao.
Kakani Kipahulu Maui Loio Lunamakaainana.
Polani Waikane Oahu Kumu ao,

KOMO-— MAKAHIKI 1852.

Alapai Kaluaaha Molokai, kumuao
Adamu Pupuhi Honolulu Oahu, kumuao
Halulu Honolulu Oahu, kakauolelo no ke K.
Kaeka Lahaina Maui, mahiai
Kailua Halawa Molokai, kumuao
Kahele Alapai
Homaikai Kona Hema, Hawaii, make
Kanoa Ewa Oahu
Kapalauhulu Kauai, make ma Lahainaluna
Kekalohe Lahaina Maui, kumuao
Kui
Lalau Kauai
Lulana Kaneohe Oahu, kumuao
Mahu Kaneohe Oahu
Malikai Kauai, kumuao
Maluna
Nahaku Kaanapali Maui, mahiai & lawaia (Akua
Nueku Honuaula Maui, Kahukula & Haiolelo a ke
Pilipo Kona A. Hawaii " " "
Poohina Hilo Hawaii, make
Waiau Hamakua Hawaii, make
Daniela Kauai

This is a roster of students who attended Lahainaluna school from 1831 to 1854. Although the roster shows that the students came from all of the various Hawaiian Islands, it is interesting that the hometown of Kalua'aha, Moloka'i is represented in several of the classes.

KA HAE HAWAII. Buke 3, Ano Hou.---Helu 9, Aoao 33. Iune 2, 1858.
2 Iune 1858

OOOLELO HAWAII---Helu 9.
No ka Puuhonua.

He lehulehu na oihana e poino ai ka noho ana o na kanaka ma ka pae aina o Hawaii nei i ka wa kahiko, aole nae pela ka Puuhonua, he wahi mea ia e pomaikai ai ka noho ana. He wahi ia e pakele ai na kanaka i ka make. Ina i holo aku ka mea lawehala, ka pepehi kanaka paha, ka aihue paha, a me ka mea nana ka hana ana i kekahi kolohe e ae, a komo aku iloko o ua Puuhonua la, alaila, palekana oia, aole pono iki ke komo ana o ka mea hoopai hewa iloko ola.la, a e hoopai aku i ka lawehala, no ka mea, aia ka lawehala maloko iho o ka malu o ke akua o ua wahi la. Ma ia wahi no hoi ka noho malu ana o ka poe hele ole i ke kaua. O ka poe noho kokoke ana i kahi e kaua ai, aole

nae komo ae lakou i ke kaua, hele lakou a komo aku i ka Puuhonua o na kane, na wahine, na keiki, a noho maluhia lakou malaila a pau ke kaua, alaila, hoi hou lakou i ko lakou aina ponoi. O ka poe pio ma ke kaua, oia kekahi poe e holo ana malaila, a komo iloko, a ua palekana lakou. Ina i komo aku ke alii, a ka alihikaua paha iloko olaila me ka manao e hoopai i ka poe pio, a pepehi paha ia lakou, alaila, pepehi kuke na kahuna nana ka malama ana i ka Puuhonua i ua alii la a make oia, aole ona pakele, no ka mea, ua manao paa ia o ka poe pio e komo ana iloko o ka Puuhonua, aia lakou malalo o ka malu o ka mea nona ka Puuhonua, a maloko o ia wahi kekahi mau hale a lakou i noho ai a make ke alii, alaila, hoi lakou, a noho ma ko lakou aina. Aia ma na Mokupuni a pau o Hawaii nei ka Puuhonua. Ma Kauai kekahi, ma Maui kekahi, ma Molokai kekahi, a pela aku no. O ka hale o Keawe kekahi Puuhonua kaulana loa, pela no ka Puuhonua ma Waipio, aia ma ka Mokupuni o Hawaii laua elua.
He wahi akea no kahale o Keawe, a ua puniia i na pa pohaku kiekie a laula. He huina aha loa ke ano ili a 119 anana ka loa, a 67 ana na ka laula, a 2 anana ke kiekie, a 2 1/2 anana ka manoanoa o ka pohaku. A maluna o ua pohaku nei ua kauia na kii he nui wale a puni, a maloko o ka pa ekolu mau heiau, he 21 anana ka loa o kekahi heiau, a he 10 anana ka laula, a me kona kiekie 1 1/3 anana no ia. Ua oleloia, ua kukulu ia ae keia Puuhonua i ke kau ia Keawe, he 270 makahiki mamua aku i keia waa kakou e noho nei, no ia mea, ua kapaia mai oia ka hale o Keawe.
Eia kekahi; ma kekahi mau Mokupuni, ua hookaawale ia kekahi mau aina, a ua kapa ia lakou na Puuhonua. Pela o Kaluaaha, a me Mapuleha, a me na aina e ae o Molokai. I ka wa ia Kamehameha I , ua holo mai kekahi, poe kanaka mai Hawaii mai, a pae ma Molokai, ua pepehi wale ia kekahi poo o lakou, a ua holo aku kekahi poe ma ka nahelehele, a pee aku no ka makau i ka make - aka, i kekahi poe, ua holo aku lakou ma Kalaiaha, a komo ma ua aina la, ua pakele no lakou, aole make, aole hoopai ia, no ka mea, he Puuhonua o Kaluaaha.
O Olokui, oia kekahi Puuhonua ma Molokai, aia no ia ma Koolau o Pelekunu, he wahi puu ia, malaila no e pakele ai kekahi poe ma ke kaua ana. Penei i olelo ia, i ka wa i kaua ai na kanaka ma Pelekunu, o Molokai me ko Maui, i ka manawa aole i huipu ia o Molokai me Maui, ia wa holo aku na kanaka o Maui i Molokai, kaua pu no a hiki ma Pelekunu, a hee ko laila poe, pii aku no lakou iluna o ua puu la, aka, ike ka poe i lanakila e pii ana na kanaka iluna o ka puu, hahai aku lakou mahope, a i ko lakou pii ana aku mahope, olokaa mai na kanaka maluna i ka pohaku, alaila, pau loa i ka make ka poe e pii ana mahope, a pela i pakele ai lakou a pau, nolaila, kipa ia mai ua puu la ka Puuhonua.
O ko Maui poe Puuhonua, o Lahaina kekahi, a o Olowalu kekahi, a o Poopuupaa ma Waihee kekahi. Ma ia mau wahi no e pakele ai na kanaka ke komo. Aia ma Kauai o Keoneakahaamaluihi ka Puuhonua no Waimea, a me Mana, a me na aina e pili ana ma Kona. O Wailua ka Puuhonua ma Puna a me Koolau a me Haalelea, a me Napali…

In this article, there is a discussion about various places of refuge around the islands where people could run to escape from punishment for their infractions. Regarding the island of Moloka'i, Kalua'aha is one of those districts, along with Mapuleha [Mapulehu?] and Oloku'i, in which places of refuge have been designated.

KA HAE HAWAII. Buke 3, Ano Hou.---Helu 13, Aoao 49. Iune 30, 1858.
30 Iune 1858

OLELO HOOLAHA.

E KUDALAIA MA KALUAAHA, MOLOKAI. i ka Poakolu, ka la 14 o Iulai, i ka hora 12 Awakea, ka Hale o S. G. Duaita, a me ka palapala hoolimalima aina hona a me ka Hale kuai, na Lio, na Bipi, na Bila aie o kanaka. C. S. BATOW. Luna Kudala.

This is a notice for an auction which will be taking place in Kalua'aha.

OLELO HOOLAHA.

NO KA MEA, ua noiia mai au, e Edward G. Hitchcock , no ka hooiaio ana i ka palapala kauoha a P. Halulu, o Kaluaaha, Mokupuni o Molokai i make aku nei : Nolaila, ua hoikeia i na mea a pau i pili o ka poalua, oia ka la 19 o Augate, i ka hora 19 o kakahiaka, oia ka la a meka hora i olelo ia no ka hoolohe i ka oiaio o keia noi ana mai, a me na mea hoole i hoikeia, aia ma ka Hale Hookolokolo ma Lahaina, Mokupuni o Maui, kahi e hana ai.

This is an announcement that the will of the deceased P. Halulu of Kalua'aha will be verified in Lahaina.

IOANE RICHARDSON, L.K. Kauoha. Kaluaaha, Molokai, Iulai 17, 1858.17-2t

OLELO HOOLAHA.

NO KA MEA, ua noiia mai au, e Moa, no ka hooiaio ana i ka palapala kauoha a W. Kaluna, o Kaluaaha, Mokupuni o Molokai, i make aku nei: Nolaila, ke hoike ia aku nei i na mea a pau i pili o ka poalua, oia ka la 19 o Augate, i ka hora 19 kakahiaka, oia ka la a me ka hora i oleloia no ka hoolohe ana i ka mea i noiia mai, a me na mea hoole e hoike ia aku, aia ma ka Hale Hookolokolo ma Lahaina, Mokupuni o Maui, kahi e hana ai.
IOANE RIOHARDSON, L. K. kauoha.
Kaluaaha, Molokai, Iulai 17, 1858.17-2t.

This is an announcement that the will of the deceased W. Kaluna of Kalua'aha will be verified in Lahaina.

KA HAE HAWAII, SEPATEMABA 29, 1858. 103

Iulai 6, ma Kaluaaha, Molokai, mare o Kaahanui me Hua, na S. G. Duaika laua i mare.

This is an announcement of the marriage of Kaahanui and Hua in Kalua'aha.

OLELO HOOLAHA.

KE HAI AKU NEI AU I NA MEA A PAU i aie ia Kauohilo, i make aku nei ma Molokai, e hookaa koke mai i ka mea nona ka inoa malalo ; a ina ua aie o Kauohilo i kekahi, e hai koke mai ia aie mamua o ka la 8 o Okatoba, e kokoke mai ana. E hooili ia mai na palapala no keia mau mea ia'u ma Kaluaaha, Molokai.
ED. G. HITCHCOCK.
Luna Hooponopono Waiwai.
Kaluaaha, Molokai. Sept. 13, 1858. 26-2t

This is an announcement asking all those who owe a debt to the deceased Kauohilo, to please settle these debts, and also to all those whom Kauohilo owed, to say something so that those debts may be paid off as well. The papers dealing with this person's last will and testament are with the writer of this announcement at Kalua'aha.

KA HAE HAWAII. Buke 5, Ano Hou.--Helu 10, Aoao 41. Iune 6, 1860.

6 Iune 1860

Kudala ma Molokai.

MA ka hora 19 a ka la 28 o Iune, e hiki mai ana, e kudalaia kekahi Hale laau ma Kaluaaha, Mokupuni o Molokai. O kela Hale oia no ka Hale Kuai o S. G. Dwight Esq., e noho nei ma ka la kudala e hoakaka ia'i ke ano o ke kuai ana.
E. G. HITCHCOCK. OPUNUI MAKAEO.
Na Luna Hooponopono Waiwai o S. Makapo. Kaluaaha, Molokai, Mei 28, 1860. 10-3t

This announcement says that a wooden house in Kalua'aha will be up for sale.

KA HAE HAWAII. Buke 5, Ano Hou.--Helu 44, Aoao 179. Ianuari 30, 1861.
30 Ianuali 1861

MAKE.

Ian. 12, ma Honolulu, make o Kaiana w, no Kaluaaha, Molokai, oia mamua.

This is a death announcement for a woman from Kalua'aha named Kaiana.

KA HAE HAWAII. Buke 5, Ano Hou.--Helu 47, Aoao 191. Feberuari 20, 1861.
20 Pepeluali 1861

Feb. 11, ma Kaluaaha, Olowalu, Maui, hanau o Kaopukaha k, na Maria me Kaili.

This is a birth announcement for a baby boy named Kaopukaha born in Kalua'aha to Maria and Kaili.

KA HAE HAWAII. Buke 5, Ano Hou.--Helu 49, Aoao 199. Maraki 6, 1861.
6 Malaki 1861

OLELO HOOLAHA.

UA hoopii o Kaukana, kue i kana kane o C. Burmaud, no Kaluaaha, Molokai, mamua, e hooki i ko laua mare ana, no ka haalele wale ana no na makahiki eha, o C. Burmaud i kaua wahine. E hanaia keia hoopii imiia o ka mea Hanohano John Ii, ka Lunakanawai o ka Aha Kiekie o ka poakolu oia ka la 29 o Maraki, i ka hora 9 o kakahiaka, aia ma ka Hale Hookolokolo ma Honolulu, Oahu.
JNO E. BARNARD.
Kakauolelo o ka Aha Kiekie.
Honolulu, Feb. 25, 1861. 49-2t

This is an announcement saying that Kaukana has sought a divorce from her husband C. Burmaud of Kalua'aha.

KA HAE HAWAII. Buke 6, Ano Hou.--Helu 6, Aoao 21. Mei 8, 1861.
8 Mei 1861

OLELO HOOLAHA.

NO KA MEA, ua noiia mai au, e E G. Hitchcock a me Opunui Makapo, na luna hooponopono no ka waiwai o S. Makapo, o Mapulehu, Molokai, i make aku nei, e koho aku i kekahi la e hoolohe i kona palapala hoike hope loa, a e hookuu ia ia mai kona oihana luna hooponopono ae. Nolaila, ke hoikeia'ku nei i na kanaka a pau, ke pili, o ka poalua, oia ka la 28 o Mei, i ka hora 10 kakahiaka, oia ka la a me ka hora i oleloia no ka hoolohe i ka oiaio o keia noi ana mai a me na mea hoole i hoikeia, aia ma Kaluaaha, Molokai, kahi e hana ai.
FRED. W. HUTCHISON.
Lunakanawai Kaapuni o ka Apana Elua.
Lahaina, Maui, Ap. 29, 1861. 6-3t

This announcement states that the matters of estate of the recently deceased S. Makapo of Mapulehu will be settled soon in Kalua'aha.

OLELO HOOLAHA.

NO KA MEA, ua noiia mai au, e E. G. Hitchcock, ka luna hooponopono no ka waiwai o Keawe, o Wawaia, Molokai, i make aku nei, e koho aku i kekahi lae hoolohe i kona palapala hoike hope loa, a e hookuu ia ia mai kana oihana luna hooponopono ae. Nolaila, ke hoikeia'ku nei i na kanaka a pau loa, ke pili, o ka poalua, oia ka la 28 o Mei, i ka hora 10 o kakahiaka, oia ka la a me ka hora i oleloia no ka hoolohe i ka oiaio o keia noi ana mai a me na mea hoole i hoikeia, aia ma Kaluaaha, Molokai, kahi e hana ai. FRED. W. HUTCHISON.
Lunakanawai Kaapuni o ka Apana Elua.
Lahaina, Maui. Ap. 29, 1861. 6-3t

This announcement states that the matters of estate of the recently deceased Keawe of Wāwā'ia will be settled soon in Kalua'aha.

Ka Hoku Loa. Buke 3, Helu 1, Aoao 1. Iulai, 1861.
0 Iulai 1861

AHAHUI HAIPULE.

I ka Ahaolelo ana o na Misionari Hawaii ma Kawaiahao, Mei 1861, ua hooholo ia ka manao e pule lakou i kela la keia la no na Luna Misionari hole pope, a me na misionari ka i holo aku i ko Maikonisia Pae Aina, a me ko Nuuhiva Par Aina, a me ko Hawaii nei Pae Aina; no ka Ahahui Misionari Makua hoi ma Amerika, a me na misionari a lakou ma Aferika, a ma Asia, a ma Europa. Ua koho lakou i wahi Komite e hoomakaukau i kekahi palapala, e kuhikuhi i ke ano o keia hana, a e pai ia mea iloko o ka "Hoku Loa;" a e paipai i na Luna Ekalesia a pau, a me na hoahanau haipule a pau ma keia pae aina, e hapai pu i keia hana maikai iloko o na pule ohana, i kela la i keia la; e hoomaka ana i ka la akahi o Iulai, 1861; penei;

Ahahui Haipule.

Iulai 1. No na misionari ma Ponape,(Ascension,) Maikonisia,
2. No na misionari ma Ualana (Strong Island) a me Apiang, a me Tarawa, (King Mills,) Maikonisia,

3. No na misionari ma Ebone, (marshall Islands,) Maikonisia,
4. No na misionari ma ko Nuuhiva Pae Aina, Marquesas,
5. No na misionari ma Hilo, Hawaii,
6. No na misionari ma Kau, Hawaii,
7. No na misionari ma Kealakekua, Hawaii,
8. No na misionari ma Kailua, Hawaii,
9. No na misionari ma Waimea, Hawaii,
10. No na misionari ma Kohala, Hawaii,
11. No na misionari ma Hana, Maui,
12. No na misionari ma Makawao, Maui,
13. No na misionari ma Wailuku, Maui,
14. No na misionari ma Lahaina, Maui,
15. No na misionari ma Lahainaluna, Maui,
16. No na misionari ma Kaluaaha, Molokai
17. No na misionari ma Waioli, Kauai,
18. No na misionari ma Koloa, a me Lihue, Kauai,
19. No na misionari ma Waimea, Kauai,
20. No na misionari ma Ewa a me Waianae, Oahu,
21. No na misionari ma Waialua, a me Hauulu, Oahu,
22. No na misionari ma Kaneohe, Oahu,
23. No na misionari ma Kaumakapili, (Honolulu,) Oahu,
24. No na misionari ma Kawaiahao, (Honolulu,) Oahu,
25. No ke kumu o na Luina, Polelewa, (Honolulu,) Oahu,
26. No ke kumu ma Fort Street, (Honolulu,) Oahu,
27. No ke kula ma Punahou, a me Makiki, (Honolulu,) Oahu,
28. No na Luna o ka Ahahui Misionari ma Oahu,
29. No na misionari ma, Aferika,
30. No na misionari ma, Asia,
31. No na misionari ma, Europa.

A pau ka hana ana pela i kekahi malama, alaila e hoi houm hoomaka hou, pela e hana'i kela malama keia malama.

This article talks about a gathering of missionaries at Kawaiaha'o and their reaffirmed support of their fellow missionaries throughout the Hawaiian Islands, in the Marquesas, in Micronesia, and around the world. Kalua'aha is listed as one of those places where their missionary work is being done.

KA HAE HAWAII. Buke 6, Ano Hou.--Helu 16, Aoao 61. Iulai 17, 1861.
17 Iulai 1861

MARE.

Iune 15, ma Kaluaaha, Molokai, mare o Kauewa k, me Nakai, na A. O. Forebe laua i mare.

This is an announcement of the marriage in Kalua'aha between Kauewa and Nakai.

APPENDIX B: AGREEMENT TO PARTICIPATE

Agreement to Participate in the Cultural Assessments and Consultation for the Pāku‘i Fence Line Project on the Island of Moloka‘i

Pūlama Lima Ethnographer, Keala Pono Archaeological Consulting

You are invited to participate in a Cultural Impact Assessment for the Pāku‘i Fence line Project that will span across the following land areas on the island of Moloka‘i: Pua‘ahala, Ka‘amola, Keawa Nui, West ‘Ōhi‘a, East ‘Ōhi‘a, Manawai, Kahananui, ‘Ualapu‘e, and Kalua‘aha (herein referred to as "the Project"). The Project is being conducted by Keala Pono Archaeological Consulting (Keala Pono), a cultural resource management firm, on behalf of The Nature Conservancy (TNC). The ethnographer will explain the purpose of the Project, the procedures that will be followed, and the potential benefits and risks of participating. A brief description of the Project is written below. Feel free to ask the ethnographer questions if the Project or procedures need further clarification. If you decide to participate in the Project, please sign the attached Consent Form. A copy of this form will be provided for you to keep.

Description of the Project

This Cultural Impact Assessment is being conducted to collect information about the land areas of: Pua‘ahala, Ka‘amola, Keawa Nui, West ‘Ōhi‘a, East ‘Ōhi‘a, Manawai, Kahananui, ‘Ualapu‘e, and Kalua‘aha, located in the Kona district on the island of Moloka‘i, through interviews with individuals who are knowledgeable about this area, and/or about information including (but not limited to) cultural practices and beliefs, mo‘olelo, mele, or oli associated with this area. The goal of this Project is to identify and understand the importance of any traditional Hawaiian and/or historic cultural resources, or traditional cultural practices on the current subject property. This Cultural Impact Assessment will also attempt to identify any affects that the proposed project may have on cultural resources, or cultural practices within the Project area, and will attempt to identify measures that will mitigate such effects.

Procedures

After agreeing to participate in the Project and signing the Consent Form, the ethnographer will digitally record your interview and it may be transcribed in part or in full. The transcript will be sent to you for editing and final approval. Data from the interview will be used for the Cultural Impact Assessment report for this project and transcripts may be included in part or in full as an appendix to the report. The ethnographer may take notes and photographs and ask you to spell out names or unfamiliar words.

Discomforts and Risks

Possible risks and/or discomforts resulting from participation in this Project may include, but are not limited to the following: being interviewed and recorded; having to speak loudly for the recorder; providing information for reports which may be used in the future as a public reference; your uncompensated dedication of time; possible misunderstanding in the transcribing of information; loss of privacy; and worry that your comments may not be understood in the same way you understand them. It is not possible to identify all potential risks, although reasonable safeguards have been taken to minimize them.

Benefits

This Project will give you the opportunity to express your thoughts and opinions and share your knowledge, which will be considered, shared, and documented for future generations. Your sharing of knowledge may be instrumental in the preservation of cultural resources, practices, and information.

Confidentiality

Your rights of privacy, confidentiality and/or anonymity will be protected upon request. You may request, for example, that your name and/or sex not be mentioned in Project material, such as in written notes, on tape, and in reports; or you may request that some of the information you provide remain off-the-record and not be recorded in any way. To ensure protection of your privacy, confidentiality and/or anonymity, you should immediately inform the ethnographer of your requests. The ethnographer will ask you to specify the method of protection, and note it on the attached Consent Form.

Refusal/Withdrawal

At any time during the interview process, you may choose to not participate any further and ask the ethnographer for the tape and/or notes. If the transcription of your interview is to be included in the report, you will be given an opportunity to review your transcript, and to revise or delete any part of the interview.

APPENDIX C: CONSENT FORM

Consent Form

Keala Pono Archaeological Consulting appreciates the generosity of the kūpuna and kamaʻāina who are willing to share their knowledge of cultural and historic properties, and experiences of the past and present cultural practices of East Molokaʻi.

I, _____, am willing to participate in the Cultural Impact Assessment for the Pākuʻi Fence line Project on the island of Molokaʻi (herein referred to as "the Project"). I understand that the purpose of the Project is to conduct interviews with individuals knowledgeable about the subject property and the following land areas of the Pākuʻi fence unit on the island of Molokaʻi: Puaʻahala, Kaʻamola, Keawa Nui, West ʻŌhiʻa, East ʻŌhiʻa, Manawai, Kahananui, ʻUalapuʻe, and Kaluaʻaha

I understand that Keala Pono Archaeological Consulting, and/or The Nature Conservancy will retain the product of my participation (digital recording, transcripts of interviews, etc.) as part of their permanent collection and that the materials may be used for scholarly, educational, land management, and other purposes.

_____ I hereby grant to Keala Pono, and/or The Nature Conservancy the physical property delivered to the institution and the right to use the property that is the product of my participation (e.g., my interview, photographs, and written materials) as stated above. By giving permission, I understand that I do not give up any copyright or performance rights that I may hold.

_____ I also grant Keala Pono, and/or The Nature Conservancy my consent for any photographs provided by me or taken of me in the course of my participation in the Project to be used, published, and copied by Keala Pono and The Department of Hawaiian Home Lands and its assignees in any medium for purposes of the Project.

_____ I agree that Keala Pono, and/or The Nature Conservancy may use my name, photographic image, biographical information, statements, and voice reproduction for this Project without further approval on my part.

_____ If transcriptions are to be included in the report, I understand that I will have the opportunity to review my transcripts to ensure that they accurately depict what I meant to convey. I also understand that if I do not return the revised transcripts after two weeks from the date of receipt, my signature below will indicate my release of information for the draft report, although I will still have the opportunity to make revisions during the draft review process.

By signing this permission form, I am acknowledging that I have been informed about the purpose of this Project, the procedure, how the data will be gathered, and how the data will be analyzed. I understand that my participation is strictly voluntary, and that I may withdraw from participation at any time without consequence.

_____

Consultant Signature **Date**

_____

Print Name **Phone**

_____

Address

Thank you for participating in this valuable study.

APPENDIX D: TRANSCRIPT RELEASE

Transcript Release

I, _____, am a participant in the Cultural Assessment and Consultation for The Pāku‘i Fence Line Project on the island of Moloka‘i (herein referred to as “Project”) and was interviewed for the Project. I have reviewed the transcripts of the interview and agree that the transcript is complete and accurate except for those matters delineated below under the heading “CLARIFICATION, CORRECTIONS, ADDITIONS, DELETIONS.”

I agree that Keala Pono Archaeological Consulting, and/or The Nature Conservancy (TNC) may use and release my identity, biographical information, and other interview information, for the purpose of including such information in a report to be made public, subject to my specific objections, to release as set forth below under the heading “OBJECTIONS TO RELEASE OF INTERVIEW MATERIALS.”

CLARIFICATION, CORRECTIONS, ADDITIONS, DELETIONS:

OBJECTIONS TO RELEASE OF INTERVIEW MATERIALS:

_____

Consultant Signature **Date**

_____

Print Name **Phone**

_____

Address

APPENDIX E: INTERVIEW WITH BILLY AKUTAGAWA

TALKING STORY WITH

BILLY AKUTAGAWA (BA)

Oral History for the Pāku‘i Fencline Project by Pūlama Lima (PL)
For Keala Pono 5/20/2015
----- [inaudible on recording]

PL: Today is May 20, 2015, and I'm here today with Uncle Billy Akutagawa for the Pāku‘i Fence Line Project. Okay so Uncle, before we start, if you can just tell us about yourself, your name, where you were born and grew up as well as your parents' names.

BA: Okay, sure. My name is William Akutagawa. I was born here on Molokai. I've been a lifelong resident of Molokai. My parents are William and Catherine Akutagawa.

PL: And where do you reside now?

BA: I reside in Kaunakakai, right in the town itself.

PL: Okay, and then your occupation.

BA: I'm the executive director for the Native Hawaiian health care system, Nā Pu‘uwai.

PL: Okay, and do you have any personal or ‘ohana connections to the ahupua‘a that the proposed fence line is gonna go through?

It's right here, Pua‘ahala, Ka‘amola, Keawa Nui, ‘Ōhi‘a, Manawanui, Kahananui, ‘Ualapu‘e, and Kalua‘aha.

BA: Yeah, my family connection is between Keawa Nui and Kahananui in a place called Manawai. My great-grandmother, that's where she was born and raised. Her name was Hamau Halape.

PL: Halape?

BA: Halape. And she was raised there, and then my grandmother used to talk about her mother, which is Hamau, how they used to live up in Manawai in the valley.

PL: Oh.

BA: Actually between ‘Ōhi‘a and Kahananui.

PL: Wow.

BA: So the places go like this. It's Ka‘amola, and then you have Keawa Nui, then you have ‘Ōhi‘a, then after ‘Ōhi‘a comes Manawai, and then Kahananui.

PL: Okay, so Manawai is right before Kilohana School.

BA: It is before Kahananui. Kahananui is the one just before Kilohana School.

PL: Okay, so when you taking that turn then.

BA: When you go out and you look up the mountain, you gonna see a heiau, Kahokukano, okay.
PL: Kahokukano Heiau.

BA: Kahokukano. Then to the left of Kahokukano, in the valley, was where they lived. Then the next one over is Kahananui. And then where Kilohana School is, is ʻUalapuʻe.

PL: Ohhh, k, okay. I guess we kinda went through that.

Do you have any memories of what existed in that area before?

BA: When I used to hunt in those regions, I came across couple heiaus. In Keawa Nui was Kukui Heiau. In Manawai, there's Kaluakapiʻioho Heiau, it's on the flank of Manawai on the left hand side. And then Kahokukano. Pakui is the fortress above Kahokukano. And then in the bottom, there's a heiau in Kahananui just above the graveyard.

PL: Wow, that's a lot in one, all along.

BA: It's like I think it's a complex, how the way it was written for ʻUalapuʻe, the fishpond. They said it was the Kahokukano complex.

PL: Oh, okay, I see, I see.

BA: People used to talk to me about it, the old timers. They always mentioned that Kahokukano is the head, the poʻo, okay. The shoulders are Kaluakapiʻioho and the one in Kahananui. And I didn't quite understand, but the ʻōpū, or the stomach, is under Kilohana School.

PL: Oh.

BA: So they always say, "Kilohana School, night time, there's a lot of stories about it."

PL: [laughs]

BA: And then the feet goes out into the ocean. On the side where that resort is, not resort.

PL: Ke Nani Kai?

BA: No

PL: Not Ke Nani Kai. Wavecrest.

BA: Wavecrest.

PL: Yeah.

BA: If you go out into the ocean, maybe about the 10, 12 foot level, there's an ahu under the ocean. So they said, "That's the foot."

PL: Foot.

BA: But I could never understand. They call it the wāwae. I could never understand where the left foot stay. That's the right foot, but where's the left foot?

So in trying to dive outside of several areas outside there, we used to dive, I was always on the lookout trying to figure out whea the thing stay.

PL: Wow, that's interesting.

BA: I never did find out what it was, but I asked the archaeologist for the state at the time, Buddy Neller.

PL: Oh okay.

BA: And Buddy said, "Oh, there's nothing."

I said, "Well, somebody should come out here and take a look at it."

PL: Mm hmm.

BA: The old timers knew, the people who used to dive. It's like a flat, it's not in a tidal surge, it's a flat area, then all of a sudden, [the] thing pop out, this ahu. And it's made of boulders from inland. And they constructed it in a round, there's a slight slope there, but you can see it's…

PL: So people have seen it?

BA: Most of the divers have seen it, but I don't think other people seen the thing. So I don't know what it is. I don't know if it's how they say is the foot. Generally it's a man lying down with his head, shoulders, and the foot go out into the ocean. That's what the old timers say, but archaeologists, they just discount the whole thing. They only talk about Kahokukano. But most of the people in 'Ualapu'e and Kahananui say that's the po'o. You can see it.

PL: Yeah. Uncle, I can see that book right there? [laughs]

BA: Which one? This one?

PL: Yeah, I like try see it in my head 'cause I know it's in here yeah?

Over here then you talking about, yeah?

BA: What is that one now?

PL: Right there.

BA: Wait, let me see.

Yeah, you see this, right inside here?

PL: Yeah

BA: Wait, ah.

PL: Did any kupunas tell you any of the associated mo'olelo?

BA: Some of them told me about it, but you know, those people are gone already.

So I think this one yeah?

PL: Oh wow, that's helpful! That's too good!

BA: The staff, they don't know anything, and before I leave, I have to kinda do this.

PL: Aw man, I like one presentation. [laughs]

BA: [laughs] Not even completed yet.

We going east yet. This is Ka‘amola yeah?

PL: Yeah.

BA: The fishpond. This is Kaluakapi‘ioho. You know the heiau?

PL: Yeah.

BA: It's an unusual heiau.

PL: It is flat.

BA: There's this man here, you see 'em?

PL: Yeah.

BA: This is Stokes, yeah? The picture. What happens, it rises about 30-something feet up.

PL: Ohhhh.

BA: And it's built into the sloping wall. I trying to figure out whea that thing stay.

PL: Right dea.

BA: Yeah it's right in there. And Pakui is above.

PL: Oh that's Kahokukano?

BA: Yeah and then inside there get this. And then Kapi‘ioho was on the other side.

PL: So that's the head right there, Kahokukano?

BA: Yeah, they call this the po‘o. They don't call Pakui.

PL: The po‘o.

BA: The po‘o. They call this the po‘o.

PL: Oh okay.

BA: Once you get on top here, it has a commanding view of the area.

PL: Area. Oh okay and the one behind Kilohana is the ōpū?

BA: Yeah.

PL: How his ōpū stay over there?

BA: The ōpū, I don't know how the head stay over here, the shoulders in here, but Kilohana school is over here. But they always talked about it, the ōpū, because 'Ualapu'e began as a hospital.

PL: Yeah.

BA: And they ran into so many problems. And my grandmother used to work there as a practical nurse. And she said they would shut the doors certain nights because they can hear footsteps. And the patient stay in the room, so they close it. And then, some of the other people, one was my teacher. He was working late one night, then he could hear.

PL: A drum?

BA: Like a chanting going on. And he never could figure that out what it was yeah? So you know, people talk about the thing was cursed as a hospital, why they built it yeah?

The other thing is, where my parents live, my mother now, where she lives, is the property next door, my grandma gave up that property about three feet of it because it was a…

PL: Hi. Sorry, my stuff.

[interruption by unidentified person]

BA: Oh, I had to go up there and stay about a month.

PL: With my grandma them?

BA: No, I was living upstairs in Puko'o with Murphy.

PL: Oh [laughs] yeah.

BA: And then, you know, actually had everybody else down on the bottom portion.

PL: In Puko'o?

BA: In Puko'o. They was renting one house inside there.

PL: Ohhhh.

BA: You know where the right-o-way? You go down. Puko'o, there's a right-o-way yeah, in there get one house right across, now get one house there, but I don't know if anybody living there. But inside there had one house at the end, and they were renting.

PL: Oh, what year was this?

BA: This was '66.

PL: Yeah, my mom probably remember.

BA: Yeah, I remember them.

PL: Yeah, my mom used to tell me that my grandma them used to take in everybody.

BA: Oh yeah. We used to go over there, and they [say], "Oh just come." And Murphy used to work Kahoku Ranch.

PL: Ohhh.

BA: And then I go dive for get fish. He bring back, I think beef from up there. You know when they give out whatever, and then he bring down.

PL: He behave after. [laughs]

BA: Yeah, you know, I was staying here waiting for the draft.

PL: Ohhh.

BA: And then what happen is you gotta do something. So I said, "I just no like go school." I had 12 years of schooling, I'm sick and tired of schooling already. [laughs] That was the reason why I stayed back because no drafts were being taken. I could have been in war.

PL: Yeah, yeah, yeah.

BA: So I just was waiting.

PL: Did you end up going?

BA: This guy got me in the National Guard.

PL: Ohhh.

BA: So I went to Basic Training in Fort Ord. And then I came back at the tail end of 1967. 1968 we were pulling the military already. We were activated. So I should have gone straight in, instead of doing that. So that was the circumstance of it. And then they were probably taking quotas out from Vietnam already, the total unit, we had about 3,800 people in there. So we was taking about 200 a month I think, or something, so just one of those things.

PL: Yeah, yeah.

BA: Yeah, you wanna go on?

PL: Yeah, oh sorry. I forget what we was talking about.

BA: We were just talking about Manawai.

PL: Yes.

BA: My great-grandmother came from there.

PL: So your mother, you said something about they gave up three feet of?

BA: They gave up three feet of her property where she stay now. She gave it to these people, the Kalois, they were living there. And when I ask my mom how come they gave that, she said, "Well go out there and look at the stone." You going see set stones. I think her mother told her, "You should never interfere with that stones." Because the people at Kahokukano, the royalty would come down at night to go to the ocean, so you don't block the path. And they would come at night because daytime, if they going walk, the shadow fall on people and whatever, so they would always come in the evening or night. And that was the pathway to get to the ocean.

PL: Ohhh.

BA: It was, I think according to her, it was like a pathway or whatever. And the chiefs, chiefess, would all walk on that path down.

PL: From Kahokukano Heiau?

BA: Yeah.

PL: From the one.

BA: From the one on the mountain, the head.

PL: At the top.

BA: And then she said that no one should block it. And then she didn't want it so she gave that portion away. So it was more in our property. Did she voluntarily put it down in like a report? ----- …I went back, I see the rock. It's like set stones. Part of it is covered though. So was that the trail that came down and went under the school? Why was it there? Nobody seems to know.

PL: Mm hmm.

BA: So that's the circumstances of it.

PL: What about like place names? Do they ever talk to you about place names, any associations with the names, how the area was named?

BA: Not really.

PL: Not really.

BA: The only, not place name, but all I remember is when I used to go up there hunt and go Manawai or Kahananui, orange trees.

PL: Orange trees?

BA: Yeah. So the old timers told me, "If you go up there, you going find get Hawaiian oranges inside there." That fed the people that were living in there. And if you look at the trees, look at the trees away from the main street[?] because it's kind of thick inside there, you gonna find one hook hanging on one of the branches. That's for people who know, so they go up and they hook the oranges. And then in the bottom had lot of coffee trees, ti leaves, coffee trees. And I just ask what the coffee doing [there], they say, "Oh they love their kope."

PL: [laughs]

BA: They used to drink that. They used to use the beans to make. So those are the things I remember.

Then also, you know where Kapiʻioho is? Before you get inside Manawai, this is right at the opening, there's a kapa heiau.

PL: A kapa heiau?

BA: Kapa heiau.

PL: And what?

BA: It was used for the purpose of blessing kapa.

PL: Wow.

BA: And so you know the one that the Maui king…

PL: The kava festival?

BA: You know the one that they found so many burials?

PL: Oh Piʻilani? Piʻilani.

BA: No. It's facing…

PL: No, not Piʻilani, so sorry. Ritz Carlton.

BA: Get the Ritz Carlton over there.

PL: Yeah.

BA: Okay, that particular purpose, to rebury all of the bones, they had to make kapa and go to a kapa heiau to bless it. So Puanani Van Dorp, she came to Molokaʻi. And a blessing was at that kapa heiau. But you know, get one road go in, not to the heiau itself, but it goes to a fence line right in front, and the heiau is right over the fence. So they could go in and you know, take whatever kapa they made and bless it there.

PL: Wow.

BA: So that's part of the history of that place.

PL: Mm hmm.

BA: And even Kahananui, when we used to hunt in there, go in for pigs, come out for deer, always had that heiau right past the graveyard. You went in there already?

PL: Mm-mm ["No"].

BA: I had to go back. Some years ago I had to help transport, oh what's his name, they did one video on that.

PL: [says a name]

BA: The name escapes me, but you know, I used to know him. The first time I met him, I think, Kahoʻolawe. Moloka'i boy.

PL: [says another name]

BA: He did all the chants like that.

PL: Not Josh Pastrana?

BA: John Kaʻimikaua.

PL: Oh John, yeah, Kumu John, okay.

BA: So John had to help transport his troop up there.

PL: Oh, the halau.

BA: To go on to the heiau to dance. And he was on the bottom. And I think he was the one that said that with the overthrow of the kapu, the kahunas got on the top and started chanting. Somewhere around 1819, I think, they chanted. That generally was the demise of the Kamehameha line, you know, so many generations that they'll be gone. And then so many years after that would start reclamation for Hawaiians. The renaissance would start so many, maybe I don't know hundred years after the last Kamehameha, which was Lot yeah, would come back. But that's sort of like my understanding of the place. So that's partially what I know.

The other places I went to hunt, especially in the Keawa Nui area, there is this ridge that comes down, it's called Piʻā. And there's a smaller ridge that breaks off to the east end, and it's called Small Piʻā. And you remember when had that helicopter went crash up there or whatever? My bruddah had to go up because the chopper went into the mountain, and the dirt, you know the rotor, and then one of the game guys, the game warden, had to go up because part of it was in state lands. A skull had come out of the ground.

PL: Wow.

BA: So my bruddah had to go rebury the thing again. By that time I was out of the…

PL: Was this the recent one, the most recent one?

BA: Yeah, couple years ago the thing happened up there.

PL: So right behind Kilohana School right?

BA: Yeah. About four or five people .

PL: The family, yeah?

BA: Died. But he had to go up. That was the first I heard had one burial there. But other than that, I used to go up that mountain Pi‘ā to hunt. So we go as far in as can ‘til we hit one fence line. Probably all broken already the fence line. But ‘Oboy Pedro told me that after the fence line it’s forestry, state forestry or whatever. So they try not to let cattle get beyond that into the forestry area.

PL: Well bringing up cattle, do you know anything about any past agricultural uses in the area?

BA: Yeah, couple people was raising cattle inside there. One was Pearl, but she had bought the…

PL: Pearl?

BA: Pearl Petro, Friel at the time.

PL: Oh okay, okay.

BA: She had cattle in there, but she was leasing the place from the state. And then so many years after that, Decoite, any way this guy Decoite was raising cattle in there because they assumed the state lease.

The other side, where Pedro’s is, get one small road going in. Sam Pedro used to manage that. And then Edmund Wond came back. He get one small parcel. Edmund get a bigger parcel in there. And so Edmund Wond built his house in there, and he came back, and both of them were good friends, and he just said, “I not going put cattle inside there anymore.” But the cattle used to run around inside there. Some people say, “Oh the cattle wreck the stone walls,” and that kind of stuff. So cattle production was on the Kahananui side. Mike Decoite built one pen to bring the cattle down, brand, and then same thing with Pedro, he had one place on the other side in ‘Ōhi‘a, Keawa Nui, he had one place where he bring the cattle in. So they were raising cattle inside there.

PL: So probably went from the road all the way up.

BA: Yeah, all the way to the end, inside, go as far as can in the valley. Then after that, on the Pi‘ā side, I don’t think the cattle can get up.

PL: Too steep.

BA: Inside there. So they would kind of like stay down. Yeah that’s about it.

And then I know, after a while, somebody made one road go up on top Pi‘ā. In the days when we were going Kilohana School, the upper Ka‘amola lands were managed by Norman Mcguire. He had a ranch, so he ran cattle up there. Then he had Sam Pedro, and I not sure about Edmund Wond, working for him. And then he put one pipe all the way across to Pi‘ā, so it crosses Keawa Nui. It goes on to Pi‘ā because he wanted to put water there for cattle if they ever go up. And then he kind of opened the place so cattle could go up. And then that long pipeline, Sam told me what they did was they run one wire across, okay they anchored a wire on the other end, and they make loops. And they push the galvanized pipe across. And it’s an enormous stretch you know. So when we at Kilohana School in the morning we can see the pipeline, even though the pipe was maybe about 1 inch, but you can see ’em in the early morning light, the thing span the gulch.

PL: Wow.

BA: And then they put one trough on the other end. And then when Norman died, the land went back to, a hui was leasing it from Bishop Estate. So Bishop Estate get upper Ka‘amola, not the whole Ka‘amola, but one section, they get one fence line running up. And they get that, and the thing go down into Keawa Nui, up the other side they get up to Pi‘ā, then after Pi‘ā, I think belong to, any way it’s in ‘Ōhi‘a any way, where other lands were, I think that’s where Edmund Wond and Sam Pedro managed.

And then Pearl had cattle in the bottom portion, but it was all the way up to the fence line. That’s why the fence line was built. You know where the kapa heiau is, that’s why the fence line was built, to prevent the cattle from going more up.

PL: Ohhh, okay okay okay. Oh that makes sense ’cause when you said get the fence right up to the heiau, I was thinking to myself, “Was that boundary?” Oh, that’s for cattle.

BA: Yup, that’s primarily to keep the cattle on the bottom portion.

PL: Oh okay.

BA: So the [project] fence line going stop at Kahananui?

PL: Going stop at Kalua‘aha.

BA: Oh, so the thing going cross on top ‘Ualapu‘e.

PL: Yeah, going through ‘Ualapu‘e, and end at the end of Kalua‘aha.

BA: It’s kind of a rough terrain.

PL: Terrain.

BA: On the top. If you get above ‘Ualapu‘e, then get little bit flatter until you get to the next gulch. And then the next gulch onward belongs to Kalua‘aha.

PL: You ever been hunting on that side or come across any sites like far up by Kalua‘aha behind?

BA: Yeah, I hunted on top there when I was younger, just when I graduated from school, went in that valley behind, go inside there, climb all the way up.

PL: Oh wow.

BA: On the top, then climb back down on the Mapulehu side.

PL: Oh okay.

BA: So I know how the terrain is up there. It’s difficult. Even when you go in the valley in the back of the pink store, the thing split, and there’s a central ridge come down. So putting one fence, can be done, because over there is not like Ka‘amola side dry, it’s kind of rainy, easy to dig into the soil and just cut one path.

So that’s the extent of it. Beyond Kahananui on the opposite side, in that valley I was telling you about, there’s a heiau, Kuila, get some further in the valley. And then when you get on top, somebody told me Kalua‘aha was a wahi pana or something, a sacred place.

PL: Mm hmm.

BA: That's about the extent of what I know.

PL: You know that's good. [laughs] That's more than what the majority of the people know these days. You know what I mean?

BA: Well the thing is I used to hunt. Especially, my mother said, "Don't fool around by the sacred places. Just let it go." You know, you just passing through. I said, "Yeah, we just passing through. We not going make any kine." I know better than that too. As Hawaiians we believe that, we just don't upset anything.

But I seen the damage that cattle does. That's why there's some bad things about cattle, like ungulates. Like the purpose of the fence line is to stop the incursion of goats going up, that they don't go east. So I heard had pigs before, then after a while neva have pigs in that area. Then Mike Decoite came in, and he put pigs. And pigs, they travel. They went all the way to Ka'amola. Beyond Ka'amola Gulch, get pigs already. But that's what happens when you put pigs in the area. The thing just multiply.

PL: Well, since we moving in that direction, you have anything to say about the fence line project? If you agree, disagree, have any concerns?

BA: I agree with the fence line project, but like I said in the video they did is that it's alright to put a fence up, but you have to stop the incursion of goats going east-west. See because when they did the fence line, above Keawa Nui I thought I seen goats. They never came there before. So they migrating over from Ka'amola because you cannot go up yeah?

PL: Oh 'cause the fence.

BA: The fence running this way. So the goats cannot go up. But they start going this way. And I think they was telling me if they put the fence line they going keep that in mind. Maybe they gotta run lateral fences up, stop migration.

PL: And then just trap 'em into one area?

BA: Yeah it's more manageable, and then you can go inside and cull the goat herd, and kill the goats before they get more multiplied inside that area.

PL: You think anybody going have issues with like gathering and hunting in that area?

BA: I don't think so because most of the people hunt in the lowland areas. They no go that far up. My nephew hunts a lot, but he doesn't go way up into the forested area.

One interesting thing about the Ka'amola side is, as I was talking about that guy Norman Mcguire, his son came back maybe 15, 20 years ago I think. He came back, and he just wanted to go hiking and stuff like that. He went up, and he came down with Hawaiian snails. Apparently had plenty up there. He never thought it would survive up there, but I was looking at it too. It's endemic, and it's endangered. You not supposed to…

PL: Touch 'em.

BA: But had quite a bit from above Kaʻamola. At least get native species up there.

PL: Right, right.

BA: Probably get native plants too, probably up in the higher reaches yeah? We neva had any reason to go beyond hunting pig on the bottom. When you go up the mountain, you hit pig, you just bring the pig from up there.

PL: Down.

BA: Down. Same thing with the deer.

PL: Okay, sorry I don't remember if we talked about this, but if you know any legends or stories about the places? Maybe I did.

BA: Not really. Only the heiau, Kapiʻioho. Apparently he was killed on this side by…

PL: Who was killed?

BA: Down by Kawela. He was killed there because he had brought his force from Oʻahu. And the Molokaʻi chiefs were never strong. They didn't have large contingent, but they were part of Alapaʻinui's, from the Big Island, and Alapaʻinui said he going come and assist them. And so they killed Kapiʻioho and routed the army, but they took his remains up, and I think that's why they built the heiau.

PL: Ohhh.

BA: 'Cause, Kalua [pause] Kapiʻioho. They went kālua him inside there. That's about the only thing I heard. And then with the people talking about the place, the old timers, most of them gone already, but they used to talk about it, spirits passing through the places.

I mentioned ʻUalapuʻe. You know, besides ʻUalapuʻe, Kahananui. Kahananui is kind of interesting because there was this family who was taken to court because they were gonna claim the ahupuaʻa, one half of it, because Kaʻiliwai I think was the chief who had the ahupuaʻa of Kahananui. And they are descendants of Kaʻiliwai, and they can prove it. But going for the thing, there was so much family, that they were going to settle for half of it, because the rest of the family no more money. And they just going ride on the coattails of everybody else, so whatever. So I think there were like 6 in the family that were gonna. I don't know where the court case went. This was like recent, the last 5 years or 6 years.

PL: And the family is here on Molokaʻi, or from off-island?

BA: I think they had to go to court either on Maui or on Oʻahu. I don't know what's the…

PL: Outcome.

BA: Yeah outcome. The only thing was the person staying here said that she took care of all, you know get the graveyard inside Kahananui.

PL: Yeah behind the school.

BA: When you go across there and you see the graveyard, it's a county graveyard, they county guys go clean 'em.

PL: Where is this?

BA: When you go Kilohana School?

PL: Yeah.

BA: Okay, just before Kilohana School, get one road going up. You take that dirt road.

PL: It's by the river.

BA: It's just past the river.

PL: Oh yeah, yeah ,yeah, get plenty kukui trees yeah?

BA: Inside, you went inside there already?

PL: I only went up to the fence.

BA: Okay.

PL: I mean by the gate, get the gate in there.

BA: It's open.

PL: It's open now?

BA: It's open because they only put the gate for the cattle.

PL: Ohhh okay.

BA: But since they went back to state…

PL: They had to leave 'em open.

BA: And I don't know why they did it because you put the gate over there, but the county graveyard is supposed to be for the county. Actually the thing supposed to be for Mana'e people, but ever since I was young, I think I went couple times up there. It's rocky.

PL: Yeah.

BA: It's really, really rocky.

PL: I always wanted to go, because you know Uncle Biggie?

BA: Yeah.

PL: Uncle Biggie's twin, he was a twin when he was born, but the twin passed away. He's buried at that cemetery.

BA: Billy? Pili?

PL: Biggie Lima. Lionel.

BA: Oh Biggie, yeah, Lionel.

PL: Yeah, he was born a twin.

BA: He's buried in there?

PL: Mm hmm.

BA: Hu boy I tell you.

PL: So we always wanted to go see. But every time we go the gate is closed, and we neva know who had access, or who take care of the place but.

BA: Well the lady, Charlene Tinau, she's a descendant of Ka'iliwai.

PL: Oh okay.

BA: And so she took care of the grave, but she went move up with the daughter, up in Vegas. The daughter get cancer or something. But she used to take care of the graveyard.

PL: Ohhh.

BA: I said, "Why you taking care of that? The county guys supposed to take care of that."

But you know, ever since I was young, when we used to go over there, I look. Huu, the ground. One time I went up there, they was going bury one old timer, when you dig, all the rocks fall down inside again, all da kine small rocks, so how they did it? But had to get down to the guy's wife.

PL: Yeah, yeah.

BA: Who died some 30, 40 years ago.

PL: Ohhh, bury on top.

BA: Bury on top. I get some pictures inside. I took somebody because I wanted to take more the heiau and stuff like that. She was taking picture of the graveyard.

I took my nephew, he wanted to go shoot rats and stuff.

PL: [laughs]

BA: We go shoot, we go take a 22, and we go shoot, but it's in the kiawe trees yeah. 'Cause I used to do that when I was young. So I took him up there. And before we was stopping where get kiawe trees by the beach, and we go look for rats. So we went up there. By the time we got up there was evening time. And I told him, "Ah we go up here we go take a look." So we went across that river, and then we come across by the graves, had one lady by the entrance, white-haired lady, in white. So I went past the graves. And then my nephew said, "Eh uncle, you neva see the lady over there?"

I told him, "What lady?" He said, "Get one lady over there." I said, "I don't think so. We go just stay up here little while."

PL: [laughs]

BA: And then we came back down, maybe about 20 minutes, we came back down, the lady wasn't there. So I told him, "No moa one lady." [laughs] We got kind of frightened.

PL: [laughs]

BA: I said, "Nah." They just come and go. They no stay long. But anyway, that's a grave. I always figured, why this grave like that because it's so rocky. I don't know if the back end get the stream.

PL: Maybe it is the path.

BA: Coming through there. And I don't know how they built the heiau because on the opposite side would be that small stream coming down yeah.

So that's like the story of the grave. But I always knew that was a county graveyard. So we don't have like Kapaʻakea only. But nobody take care the one on the top. And I think the reason why they don't take care is that get that stream yeah, and they went try cement on top, but every time the stream run, the thing going broke the pieces of the concrete and stuff like that. I don't know how they did it back there.

But Hawaiians before, they bury at home yeah?

PL: Mm hmm.

BA: Right outside the house they bury.

PL: Interesting. You know if get any caretakers for the heiau, the different heiau that you mentioned?

BA: No. Somebody said that Philip Kalipi them was starting to manage and telling people to no go and all that kind stuff. But probably the most interesting thing you should read is Billy Kalipi, ʻŌhiʻa, you know he used to poach.

PL: [laughs]

BA: He got caught in there. And they were gonna throw the book at him, I think, Sam Pedro, Pearl at the time, and I think somebody else. He decided to take it to court. Okay, that is the first case of gathering rights. Billy Kalipi versus…

PL: Billy Kalipi versus the State.

BA: Although at some point, they had proven that Billy Kalipi is not from the ahupuaʻa of ʻŌhiʻa where this thing took place. He wasn't. But his case, Kalipi versus State is the first that challenged the right of owners to keep people out. So you can go get native stuff. I think there's about seven articles you know, from thatching to the wood for the hale and all that kind stuff. So he started that. After that, maybe about so many years after that, another case came up, I think that was on the Big Island.

PL: They went use his case?

BA: Where they were building hotels and stuff. You cannot prevent people from accessing the beach, the beach access and stuff like that.

That's the only thing I remember. I know Billy because he was maybe couple years older than me ah? But we always did that. We always poached.

Aikamanu[?] Boy.

PL: [laughs] I just saw him yesterday too.

BA: Boy. You know when I was high school, Boy was younger than me ah? I tell him, "Eh we gotta go hunt." He say, "Okay we go." I think we went by Kupeke Pond, going up, get one house now on top there, we went up, go across, shot something, bring 'em down, put 'em on my car, take 'em to my grandmother's house. And Boy telling me, "Eh Billy, you can hurry up?" "Why?" "I gotta go Kaunakakai, and you go take me down." I said, "We gotta go bathe." He said, "No, no, no, I gotta go Kaunakakai."

PL: [laughs]

BA: Then when I was living in O'ahu, he came down, stay with me. He never did work. [laughs] He wanted to come with me because I finally went back college yeah? So he came with me, and he carry his guitar ah? He come with me to the University of Hawai'i, he follow me, then I stay sitting in this class, you know da kine big amphitheater?

PL: Yeah, yeah.

BA: He stay over there. He look. And I was sitting next to him. And he reach over and he touch this one, and he say, "What's your major?" [laughs] Ho this boy.

PL: [laughs]

BA: And he don't work too. He never worked all the whole time he stayed down there with me. He said, "Billy, I clean the house. No worry, no worry. When you come back from school, the thing all cleaned." I come back, it's not cleaned. He's playing guitar, and he's talking to somebody outside. Ladat yeah?

PL: He still the same. He too much. We tell him all the time, "It's a skill that you got this far." [laughs]

BA: [laughs] He neva did work. Ho boy, I tell you. And then especially, he like go have a good time, he like go Kaunakakai. He said, "I no can stay up here. We gotta go down, Billy. How's about your car? We can go down in your car?" I said, "Okay." We go down, and I don't know, he meet all the wahines, he talking to 'em. I said, "Eh Boy, we gotta go home you know." Anyway, that's your uncle.

PL: [laughs] Yeah. He still the same.

BA: Good fun, yeah?

PL: Yeah.

BA: Well anyway, getting back, I always heard about this ʻulu maika field in ʻUalapuʻe. I told people, "Where the maika?" And it wasn't for accuracy like to go between two…

PL: Two poles.

BA: Pegs, yeah. It was for distance. So the maika field started at the beginning of Kaluaʻaha, get one stone wall that run in. I think when you go just before the top of the hill, you see one stone wall running in. That stone wall divides ʻUalapuʻe from Kaluaʻaha. It began there, and it's probably one sloping course that run to Kahananui stream. If you go get the ʻulu maika up the side of Kahananui, on the west side of Kahananui, then you'll be declared the winner. Somebody said it was around there. I forget who told me, but was all covered up. But my uncle who work in the taro patch where Damon Place them live, Kaʻupu, he found a maika, and he gave me the maika.

PL: Wow.

BA: It's not your regular maika.

PL: Really?

BA: It's huge.

PL: Like one ball shape?

BA: No, no, no, it's like a maika.

PL: Disc?

BA: Maika, but it's big. And he said, "Can you imagine the guy's hand going around this?"

PL: Yeah.

BA: And I said, "Well get one maika field around here. Maybe the thing is attached to the field." He said he don't know. He was digging the loʻi on the side, the bank, and the thing fell out. So he gave 'em to me because you know he was already clearing the banks, kinda like widening the loʻi in the back there. And then he gave me that thing. I told him, "I think this place, I read somewhere it's called Kaʻeke or something, and something about Kamehameha tried his hand at rolling the maika for distance."

PL: Over there?

BA: Yeah.

PL: Wow, I never heard of that. I going look that up.

You heard of any other makahiki practices that happened in that area?

BA: Not really, not down that side, except for the maika field, nothing else. The people from that area were kind of interesting. When I hunted in the back, Kaluaʻaha, in that valley, I was hunting by myself, and I was going through the trees on the side. I came across the cowrie shell with the two holes inside. That was used for the heʻe lure. I just buried it there because Kaʻamola, I found one too. Actually, Kaʻamola one, I went put 'em inside one rock ahu, put it back, was from the

surrounding, was on the ground, and this one, I went put 'em back over there. Years later, down the ocean side by my mother's place, I found the stone for it. You know with the groove go in, so the stone is like this, and the cowrie shell on top.

PL: Like one nut yeah?

BA: Yeah. So actually, supposed to be the rat yeah?

PL: Mm hmm.

BA: You know how they tell the story ah? The thing was sinking, the canoe was sinking, I think the rat jumped off the canoe.

PL: Oh I never heard of that.

BA: He was drowning ah? So he called for help. So the he'e came, and he tell 'em, "Come on top me. I take you in." So he took the rat, but before he reached the shore, the rat went jump off. But the claw of the rat caused the he'e to get all that, you know when you look at the he'e, get all that almost like bumps or whatever. They said that from that time on, the he'e hate the rat, the 'iole, and he going pounce on 'em any time. That's of course this story. But then the scientific fact is that the he'e love cowrie ah, because he pounce on the cowrie, and then he get the tentacles go inside there, and then he pull 'em, pull the thing out. They love to eat that. But I don't know.

So I seen that, and then I said, "Eh, these people must have been fishing long, long ago down there." But somebody told me, yes, sometimes they bury the cowrie with the person. I was thinking, "Chee," I wasn't in the mood to look if get bones or anything, just put it away, and then that was it. But that came from that general vicinity. So must have had a larger population because my mother told me that my grandmother said that before it wasn't like this, all the kiawe trees. You can yell, and they hear you on the opposite side. And then they used to take the clothes go up, go wash, 'cause the river no run all the time yeah?

PL: Mm hmm.

BA: What happen is the thing running from the top, and she sink in the ground yeah? But they used to go up there and wash the clothes and bring the clothes back down. I said, "Must be, yeah, because they gotta wash." In the old days, neva had piping or anything like that. But the old folks used to live up there, so they yell across to each other. Never had all these kind places where get all the kiawe trees, now just overgrown yeah, get lantana and all that, never had that before.

PL: Wow, can you imagine they have to carry the laundry all the way. [laughs]

BA: The bottom portion used to have taro fields. You know where Wavecrest stay? You know where the tennis courts stay?

PL: Yeah.

BA: Had taro fields inside.

PL: Oh wow, so had springs?

BA: Had spring water come up and had taro down there.

The other thing too is, you know in Kahananui, the upper portion, my mother said that part of the family come from inside there. And then she carries the middle name of the family, Kalua.

PL: Oh okay.

BA: So they used to live on that side, get Manawai, and get Kahananui, but they come from inside there.

PL: Wow, must have so much.

BA: Plenty people was living at the time.

PL: You neva did come across any house foundation inside the valley?

BA: No, because the thing was more overgrown yeah?

PL: Ohhh, yeah, yeah, yeah.

BA: The only thing why we used to go up there a lot beside the hunting, was for go pick pepeiao.

PL: Oh okay.

BA: Kahananui especially, Kahananui is pretty well-known for that. Actually where you see get kukui nut trees that fall down, or get plenty kukui nut trees, go inside there because the pepeiao is inside there. Every time rainy season, get plenny pepeiao. So we just take 'em off the fall down log, but you gotta know what to pick. Get two other fungus, but the pepeiao, if people know where you get the pepeiao from, I no think they like eat because you know when you take 'em off the rotten log, the thing get all the bugs all come out ah? So you know what we do? We take 'em home, we soak 'em in water.

PL: The thing no absorb the water?

BA: No, no, no, it's more rubbery kinda.

PL: Ohhh.

BA: And then you soak 'em in the water, and then if you like keep 'em for long time, you clean 'em, and they you put 'em in one dry box. You dry 'em, and then you put 'em in one package. But I generally like to eat pepeiao fresh. You know, after you pau clean everything, and that's the only way you can tell. No wonder the Hawaiians call 'em pepeiao, because it's like your ear. When you stretch the thing like that, the other two fungus going start falling apart. But this one, when you stretch the thing like that, you see, just like rubbery like the ear. I don't know who else pick pepeiao, but in Kahananui was the place for that, pepeiao. And Hawaiians knew that too, so they would pick the pepeiao too.

PL: Wow, and it's not too far up. I keep thinking that's real, the moʻo. [laughs]

BA: Oh no, no, no, that's not real. That's not real.

PL: I trying to imagine how they would live up in the valley and the river.

BA: Well the river run, but I think on the side, who told me…

PL: Get big banks.

BA: They had small plots that they raised taro inside there.

PL: Wow.

BA: And I said, "Wow, what kind taro that? Is that the variety that you know the corm?" Yeah, they used to raise 'em inside there, because further up the valley, I came across this taro they call keʻokeʻo, no more the corm you know? It has a rooting system that run.

PL: Wow.

BA: But I generally like that taro, because get one white piko yeah? I like that taro because that taro, you don't have to cook 'em really good.

PL: The luʻau?

BA: Yeah. You wrap the meat inside that one because the thing good yeah? The other ones you gotta be careful.

PL: Itchy.

BA: Get itchy yeah? So when we used to pick before when we was working up Wailua side, you look for the one that curl, the leaf that curl inside, like the young shoot, not as bad as the big one, the older one.

One time I was hunting in Kamalō, in this place called Kua, in Wawaiʻa. And so we came down one steep, steep area for go down. The boy with me was thirsty, so somehow we gotta go down, we gotta get down to the bottom. So we reached the bottom of Kua, and then we walked up to the end, and at the end, get one small little falls that coming down. I said, "We go drink water over here." That time I neva know about keʻokeʻo. So I saw taro inside, yeah, growing, so I said, "Oh, I gotta pick this and take 'em with me." So I pick because I was thinking I going plant. So when I went pick the taro, he was drinking the water, he just went against the mountain, drink the water coming down, just like one rifle shot, when I thought about it, I started to run to the side, because had two sounds like that, and this boulder came down, went bust in the stream. So I told him we gotta get out of here. So we ran down to get to the main Wawaiʻa to come out. And this I said, "Chee." I talked to one Hawaiian lady yeah? The Hawaiian lady told me, "Did you ask for it?" I said, "No." She said, "The gods put it there for man in time of famine." And supposedly, keʻokeʻo, you take 'em down, you always go back and plant the keiki up there. You take that down, through successive generations, the thing come into the taro with the corm. I said, "Aw, I neva ask." She said, "Well next time you gotta go ask. Either that, or take the keiki back up." I said, "Ho, man, I don't know if I can take it back up, kind of spooky the place." 'Cause you gotta climb over kukui nut trees, fall down, just to get to the end, so was really bad. Anyway, I never did take the keiki. But that's what they told me. The gods put it there for us.

PL: During famine, I never heard that one before.

BA: And I'm sure get other places inside that area, Manawai, I tried to look for that place, I only found 'em on the opposite side, but my uncle, one time we was hiking back to Wailau, and he pointed up the slope. I forget what the name of that. Anyway, get one area, he said, "You see up there. Get banana and get taro up there." But it's, you know on top of the mountain, get places

where it comes down into one dip, and then go over yeah, whenever the thing rain. He said, "Get banana, get taro, get everything up there." That's for people in times of war, they gotta eat, so they pull away from the lowlands, and they go up, and they hike up, and the thing is there, but you just gotta remember that the gods put it there for them in times of famine.

PL: Famine.

BA: Stuff like that, so I said, "Oh yeah, and then the opposite side, on 'Ualapu'e, on the top, I was hunting one day, and I was looking down, and I said, "Hey, this kind of look like one nice place where had some plants growing in side there." I said, "I wonder if this is the kind place that they deliberately put plants and stuff like that away from the general population, so they can go up there, and they can get keiki when they like and bring 'em back down." So I seen that.

PL: Like the reserves, yeah?

BA: Yeah. So it's always intriguing when you walk, and you see these things yeah? Much like where I came from, Kamalō. Although I used to go up my grandmother's house, she's from 'Ualapu'e yeah? We down Kamalō. And then we go up, and we stay with her. So we used to go in the back, Kilohana School, walking all over the place, just for look. I don't think kids do that nowadays.

PL: Yeah.

BA: I said, "What's beyond the road?" I no think they like go beyond the road unless they one hunter. You like go beyond that, but people no.

PL: Aww man.

BA: You grew up where?

PL: Well, after my mom moved from Mana'e to town. She lived over here in Manila Camp. So that's where I lived, but we would always go up Mana'e, go visit the family, and stuff like that, go venturing. [laughs]

BA: Yeah.

PL: But not coming out as far as you guys went. I like though. I keep asking my cousin to take me with them go hunting, but they said, "That's baggage." [laughs]

BA: Funny yeah? The heiau Kaluakapi'ioho, and the heiau down by Kamalō where I used to hunt in the back, before you get into Kapualei, get couple heiaus inside there. Kapualei Heiau is where Ka'akeaakawelewele, you know tales of the night rainbow? She get one heiau inside there. But there's another one closer to the mouth where Kapualei come right into Kamalō, and that heiau get the same kind flower I seen growing up there. It's kind of like a yellowish flower. It's kind of a unusual flower, but I seen 'em on top which is kind of weird.

You know Kamehameha Schools, there's a stone wall that run to Kapahu. We used to follow that stone wall because if you hunting, and [it's] late, you go for that stone wall and come down. I never did understand how the stone wall run all the way down to the end, but that's a dividing line between Kamalō and Kapualei.

PL: Oh wow.

BA: And then we come down there, and get this strong mint smell when you come along there. But we used to come down. And the thing go up Kapahu, it climbs up Kapahu so far up the middle of the ridge, then after that, no more. And so I understand that one half of Kapahu belongs to Kapualei, the other half belongs to Kamalō.

And then the entire Kamalō Ahupuaʻa belongs to Kamehameha Schools. 3,972 acres belong to them. Had one small section on the bottom where the McCoristons used to live, but they bought it out couple years ago. So now the thing fall in line with the stone wall going all the way up. So Kamehameha Schools own that whole ahupuaʻa.

PL: And then the top of Kaʻamola.

BA: Yeah. And then, they get burials, you know. When I was helping Kamalō Ranch, the boy same age with me told me, "We gotta go up. We gotta put the rocks again." It's on the side of Kahananui. The thing keep rolling down. I told him, "Ho, look at that, all the rocks." What you pile up, eventually going roll down. But we tried to cover as much of the cave as possible, because I think it's a royal burial cave. And the grandfather told him always, "When you up there, go cover 'em up, 'cause."

PL: People hana ʻino.

BA: People nīele, ah? People look ah? But sometimes, caves, you no think get anything inside there, but you look, you go inside, and the thing go li' this, look like get one wall right there. Ah no more nothing inside there.

PL: Just like the one in Hana yeah? You gotta go underneath.

BA: Yeah, yeah. And then you get back on top. I suspect that even going east, get burial caves too. But some of them are hidden. And when you get up to the Kaʻamola side, and you get into Keawa Nui, ʻŌhiʻa, little bit more foliage, greenery, so the thing hide the cave. 'Cause I found one cave, hunting one time, I found one cave inside ʻŌhiʻa, where the split off between Keawa Nui and ʻŌhiʻa, hunting pig inside, I was going with the dogs. And then we looking for the dogs, because we hear 'em barking, and then we go up, and then sound like they was on the side. So we went on the side like that and found one cave. I said, "Ah, just leave 'em. No go inside. Just leave the cave li' that." Main thing we get the dog and can come back out yeah?

PL: Interesting.

BA: So that's probably the gist of my knowledge about, you know.

PL: Mahalo.

BA: No, any time.

PL: Do you know anybody else that you could recommend, talk to any other kūpuna, people that would, you know?

BA: Gee, most of them died already. Ho, there's a whole lot of them that died, you know. We never picked their brains enough. That's the only thing, and so they probably carried the knowledge to their grave. But for commoners, the idea was, you live in harmony with the land, whatever you plant there. Same thing with the ocean resources.

And you know, I had a good friend, and he told me that once you grasp Christianity, you put the old stuff aside. You don't talk about it. You only can go one way. You cannot straddle the path, I think. One is Christianity; one is the old religion, kapus, and everything. You cannot go two. You have to go one side, you know, and then, that's what he told me. I said, "But you know, us guys, when we go school ah, we learn more. This is [?] to find out more, and there's two ways to find out. One is through research, the literature, whatever you get. And the other side is the oral side when you talk to people."

So my mother is like that. She's more the oral side. It's funny what she told me, and then when I went back to college, and then getting into social work. Many things she told me came out in *Nānā I Ke Kumu.* So I went back, I went tell her, "How did you know this?" She said, "They pass down. They talk." So she had this lady that she lived with, her cousin, she was a young girl. She didn't want to do lauhala. My grandma is all lauhala. And she lived with this lady, her cousin, her name was Kupo Hapa [?]. And Hapa is the one that taught her most of the stuff. They would come down Kaunakakai on horse, and they would go back. And then sometimes the horse stop. She said, "One of the places the horse stop is right before you get to the Meyers', going east, you come over that hump."

PL: By rice patch.

BA: She was a young girl in the back, about 11, 12 years old. And she tell Hapa, "What's a matter?" And Hapa said, "The horse sense that the spirits are back, and just wait. When they pass, the horse going go. If not, no push the horse, just do that." So you know, she kind of remembers the old things, what happened.

PL: Mm hmm.

BA: So she's not a learned person, but it's just the way that they listen to their kūpuna before. Kids nowadays different ah? You know, we never capture enough. The one thing happened is Davianna McGregor, she called me one time, and she was finishing a book, *Kua'āina.* And she said, "Your grandmother is in there, you know." She translating from the transcript, from recordings. So Mary Kawena Pukui came up here to talk to the people up East End. And some of the names I remember. And she said when she was listening to the tape, it wasn't clear enough. I said, "Ahh, probably was the tape they had back then yeah?" But she asked her about where she was living yeah? And then my grandmother spoke Hawaiian yeah? So she was telling her in Hawaiian that, there's fishpond over there, you know, everybody call 'em 'Ualapu'e Fishpond, but probably had one different name. When she was young, she was walking over there, and I think she said the huaka'i went pull her hair, you know, like pull her hair in the back. And she kind of understood what it meant. When you get your menstrual period, you don't go near the loko kuapā. And years later, her daughter had the same thing went happen to her. And so my mother said that's how she knew about the place, you know, about the pathway and stuff like that, and 'Ualapu'e, you go little bit more and you get da kine. I used to go in there with her when I was small because she go pick lauhala ah?

PL: Mm hmm.

BA: And they get the bunch, and they weave all the end, and then I gotta go pull the bunch to the house. And when we used to go inside the hala or the pandanus grove, I used to tell her, "Oh grandma, I no like come inside here. This place spooky."

PL: [laughs]

BA: So she tell me, "No. You stay right hea until I finish." And then I pull the thing all the way to the house. And ugh oh boy I tell you, who like go inside da kine, dark place yeah?

PL: [laughs] And lucky, though, because now you know how.

BA: Oh boy.

I had to go up there, and it's interesting because I used to help her when I was younger yeah? They said, "Oh you go with grandma, you go up there." Oh boy, I tell you, we go up.

It's interesting because when she died, I had to come back from the service. You know, they called me and said, "Come back." And so I came back, you know, and I said, "I only get two days, and I gotta go." And so when they had the place where she was for viewing, I heard somebody crying. So I didn't say nothing. I was looking all around, [for] who crying. Nobody was crying. Everybody had their head down. Then I look at the casket. The thing was coming out of the casket. So I neva say anything. And then when time for me go back, I told my moddah, after they buried her and everything, they had everything. I told my moddah, "I thought I heard crying." She said, "I heard the crying too." I said, "Well what does this mean?" [She said,] "I told her, 'Go Mama. This place is for the living. Go and don't come back.'" And then I told her, "How come you didn't say anything to anybody?" She said, "Who I going talk to?" I said, "Oh, okay."

So is there a reason things like this happen? Is it our imagination or whatever? And she was always pragmatic about it. She just said, "No." Sometimes, people no like leave. They feel they get one foot stuck. If they stay, they create mischief. That's not good.

PL: Mm hmm.

BA: This world is for the living, and when a person die, it's pau already. So I said, "Okay, I understand that." So you know, it's just one of those things. I asked my braddah about it. My braddah said, "No. I neva hear nothing." I said, "Ho boy, I tell you." But they have this saying that the spirit some time become restless, yeah?

PL: Mm hmm.

BA: Even when I was in the burial council, and we buried all that, we neva bury them, the one that's found at the glass house. We put it away, and then Alapa'i Hanapi said, "You know, I gotta keep 'em covered under my cubby. You don't keep it covered, they play mischief, they go out. The spirit come out of the thing and go." So I told him, "Yeah, you know, all that bones we recovered, yeah?" We have to somehow get it back in there. It was bulldozed, yeah? Hu, that was a hard project. Even now they thinking, the council went ask me ah, "What we going do with 'em? What we going do with the place?" I said, "Well, originally what we said, one person came and do a site plan and said, 'Let's consecrate this place. Leave it as a park, and then we know the burials are there and even more than that. But just leave it, and so people can come there and contemplate and talk to the spirits or whatever, or talk to the ancestors or whatever.'" And they said they was going do that, but they never did that. The thing went sell to the next person. The person got rid of it and sell to the next person.

PL: Isn't it…

BA: Until the county bought it.

PL: Oh, oh.

BA: The county subsidized it through the CDBG grant, the Community Development Block Grant. They did it. And so what happen is they asking, "What should we do?" I said, "Ho, back to the same thing again. Make it a park. Let OHA put money down to purchase the thing." That's the way it should be left. You know, but I don't know where the thing gonna go. It's still on the books of the county. And Stacy represent us, yeah? So that's why it's…
----- recording stops-----

APPENDIX F: INTERVIEW WITH APRIL KEALOHA

TALKING STORY WITH

APRIL KEALOHA (AK)

Oral History for the Pakui fence line project by Pūlama Lima (PL)
For Keala Pono 9/1/2015
----- [inaudible on recording]

PL: So this is Pūlama Lima, and we're here today at Kaunakakai with Aunty April Kealoha. So Aunty, just to start, if you can please tell us about yourself, your name, where you were born, your parents, where you grew up.

AK: Okay, my name is April Kealoha, but my maiden name is Morgan. And I was born in Kaneʻohe, Haiku Road. It's actually the ahupuaʻa of Haiku to Heʻeia Kea. And my mom is Loretta Halualani Morgan, and my father is Donald Morgan. Right now I'm married to Samuel Kealoha and have two daughters, Joy Hanaunani Kealoha and Haliu Kealoha. We live on the ʻāina Kaʻamola, now we've been there from 1980. And my older sister, Corrine Helm, has been there from 1974.

Kaʻamola ʻāina is given to us by my uncle, Clement Levi Halualani, and my grandfather, Solomon ʻUlaʻula Halualani. So we cleared the property. We have at least 24 acres, mauka to makai, and with the fish trap in front, by the oceanside. Okay, and we've been there ever since.

PL: Perfect.

Okay, Aunty, and if you can, is there anything that you would like to say about the general history of the Kaʻamola area.

AK: You know, since we went, when we moved there, we knew the meeting people, especially that lived along the area. 'Cause you know when you first move to someplace from another place, we relocate, so of course, the community there would see who are you and what are you doing here. But you get to learn, you get to live with them alongside, and then learn the things that was happening in Kaʻamola.

Part of my resources is from Uncle John Kalilikane and Aunty Gabby, she's a Duvauchelle, and Aunty Anna Goodhue. And they used to tell us of a Japanese family, people that lived there, 'cause we did find a house site and with a toilet and all that.

But there's a lot of fresh water springs, and there was a lot of taro planting over there. So now my husband continues to plant the kalo over there. And accordingly, the family used to raise livestock, like pigs, goats.

PL: And this is on the mauka or makai side?

AK: Makai side.

PL: Makai side.

AK: Yeah, makai side. I tell you that because somebody complained. They wanted us to stop raising the pigs. So I had to get letters from these elderly kupunas telling us what was happening there at Kaʻamola and what the family was doing.

By that, then when my husband would clear the taro patches, then we would come across a lot of bottles. So those bottles were old bottles, a lot of ’em was rice, rice bottles.

PL: Rice bottles?

AK: Yeah, had Yuen on top. It was like little bottles with covers with the lid.

PL: Ohhhh.

AK: And it had to be special. It’s not like a normal bottle.

PL: Yeah, I never seen rice bottles.

AK: But that was the Yuen’s which I know that they lived down the road from us. They might have been there too. I don’t know how those bottles all got in the loʻis, but just by digging up the loʻis, the dirt.

PL: Aunty, your guys’ loʻi is the one, the bigger one? Not the one Uncle Ata mālamas, but the one further up?

AK: Right by where we live. You know where the get the goats?

PL: Oh okay.

AK: Okay yeah, yeah.

PL: Yeah, yeah, yeah. ’Cause Uncle actually, he’s been harvesting this past month, and he harvested yesterday ’cause it’s time to harvest yeah? He try to plant where you can harvest, monthly kind of thing, so…

AK: Yeah, that’s the loʻi. And it has a big fresh water spring.

PL: Ohhh.

AK: And that’s where he gets his water from.

PL: Awesome.

AK: Mmhmm.

One more thing, yeah, when we first moved there, get special rocks up there, and they look like koa [koʻa] shrines. In fact, what we did is just kind of still stood them up and leave them as so, and looks like a, what you call that shape, a triangle but it’s huge, and so we placed it just where it was…

PL: It was.

AK: Placed it on another rock and leaved it like that.

PL: Was it like upright kinda?

AK: Upright.

PL: Was upright?

AK: Upright, so we found out while as we were talking with Aunty Corrine and Uncle Adolph that it was like a koa [ko‘a] shrine up there for fishing. For us it didn’t matter. It was something that was there. We just placed it there and left it like that.

When we first built our house too, our first shack [laughs], there was like a kinda concrete, look like a heiau kind of thing, and it was half built. So Uncle went continue it, and so it’s a square.

PL: Oh how nice.

AK: And it’s about maybe a foot off the ground or maybe higher, and then he just finished it. And then we left it like that.

So there’s a lot of different kind of rocks and boulders up there, interesting kind. And then the other thing that I do know, of course down below, is the limu ‘ele‘ele grounds yeah?

PL: Mmhmm, mmhmm.

AK: So once I started getting into that, then some family, like Aunty Hala Pali, and Aunty Gabby, go out, and my niece we used to take all the time. And then we gather crab and go fish and all that kind of stuff, all the good stuff out there.

PL: And that’s all makai.

AK: All makai.

PL: You guys use the upper areas?

AK: The upper areas, we use the upper areas, but what we did was, Uncle Sam fenced, because of the dryness and drought, what he did is put the goats, let them go around so they eat down the shrubs, so you know, in case of a big fire or something like that, which never happened, you know, but just to be cautious that something like that might happen. We make sure that the shrubs are eaten down ’cause usually by winter then he move the goats mauka.

PL: Mauka.

AK: Right now they’re all makai.

PL: Mmhmm.

AK: But come winter, when get plenty rain, and it’s greener, then he push them up.

PL: And when he’s up there, you guys see any other cultural sites, or did you guys notice?

AK: Well up where at the house was, that’s where we got that shrine.

PL: Shrine.

AK: The shrine.

PL: Yeah.

AK: And that's where we found the rocks. So it's, you know, another thing, and I don't know if this happens, but the akule guys, you know, like Uncle Kapae and Uncle Joe, they always come up and go look fish. So they come up.

PL: Oh 'cause can see.

AK: 'Cause you can see. So the reason they come up, so they can look in the ocean. And they come with the binoculars too. And they just park up there. They know. They tell us that they going come up, so they park up by the house, and they look for fish.

PL: Aww, cool.

AK: And they do that when the season, and they all come up, also the Kalimas, Uncle John Duvauchelle, das the ones that always come up, yeah.

PL: Oh wow. What about, Aunty, if you know of any cultural events that existed in the Ka‘amola, or even in the surrounding ahupua‘a? From Ka‘amola to even Kalua‘aha and in between, the whole in between area, you know of any cultural events?

AK: You know, I don't know. I mean, if you going history, I don't know that far. All I know is, 'cause the stories that we hear, like the Keawa Nui used to be owned by certain ranch, Diamond Ranch, and used to have workers that go over there, and they ended up at Kamehameha Schools. Keawa Nui School ----- long ago in the '80s, 'cause we were there when the school was there.

And you know, I am not really sure about any cultural events. I wish we had those kupunas that I knew living, and I'm sure they would know something. One other person might be Aunty Marie.

PL: Aunty Marie Place?

AK: Yeah, or Aunty Kitty Akutagawa.

PL: Oh yeah, we spoke to Uncle Billy. So he helped, you know, put a lot of cultural context to some of the cultural sites, but Aunty Kay would be good.

AK: For us, we just, you know, just was a place to live. And you know you could subsistence.

PL: Right, right.

AK: Because you have the kalo, you have the fish, the gathering the limu, and now, we raise the pigs. Uncle raise the pigs and the goats.

PL: Do you, Aunty, remember any mo‘olelo, since we're on that topic, any mo‘olelo about the places?

AK: You know, the mostly, the only one is the Kapualei, the mo‘o, and that's more on Kamalō side, you know, that area, that's the only. Then I hear about the night marchers, you know. There's a lot of people that talk about, in fact even I remember Aunty Gabby used to talk about that, the night marchers that go along the mountain tops.

PL: From where?

AK: From Kamalō.

PL: And they come towards Ka‘amola?

AK: Yeah, you know, oh I wish, aww ’cause I remember, and you know they, you no bother too, you know what I mean? Listen, because you still yet young yet thinking, “Wow,” you know, they talking, and then, you know, that’s just something, but you should talk with Aunty Hala, I think, ’cause Aunty Hala is at the age that she might know, and her grandma.

PL: Aunty Hala.

AK: Yeah, Aunty Hala Pali. I was trying to get ahold of her.

PL: K.

AK: Mmhmm.

But that’s the only mo‘olelos I heard of, the night marchers, ’cause I remember Aunty Gabby used to mention that. And the Kapualei, you know, the mo‘o that went down into Pu‘ohala. But you know, we did used to hear stories about that Pu‘ohala, by the beachside, the fishpond. Then they tried to do construction or something, and about the mo‘o came out of the ocean and…

PL: Went flip the tractors.

AK: Yeah. And then someone died or something? I not really sure. Was something like that, but even Aunty Corrine told me that. And that was the story about that, Pu‘ohala. I don’t know, but there must be all the connections, yeah, ’cause it’s right down the road, yeah?

PL: Do you remember what they was trying to build? Or they was trying to fill the fishpond?

AK: No, they trying to dredge and build, I think they wanted to do one marina. In fact, I might have the records ’cause I was part, them trying to stop that when I came here [laughs]. And I might have it somewhere.

PL: [laughs]

AK: And the I go pull it out for you. Yeah, ’cause I actually was part of that trying to stop it.

PL: Oh, so cool yeah?

AK: Mmhmm.

PL: How the mo‘olelo, yeah, I heard different variations of the mo‘olelo, but they all kind of match the same. Mahalo.

Do you know anybody that is involved in any gathering, whether it’s fishing, hunting of plants up in the mauka areas, or even makai areas too?

AK: The only mauka area, that’s where the, like the fencing, yeah, trying to restore it yeah? That’s the only thing I would know mauka that side. I don’t know who else ’cause the people next to us

is, what's this thing, now, but they bought that property out. They own the manapua stand in Honolulu, Downtown.

PL: Oh?

AK: Yeah. So they own right next to us.

PL: Going Manaʻe side or Kaunakakai?

AK: Manaʻe side. It's up the hill. They get that driveway, the concrete driveway, the expensive driveway.

And then if you go further, this, the only other people that live in, like Lisa Willings, they bought a place before ʻŌhiʻa. So, and then the Wond's, I think the son went build, is building one place up there. But that's about it that I know that is mauka. And the only other person that would be too is the Meyer land where Dorothy Curtis, that's across the Catholic church, Father Damien church.

AK: Oh and then you know who else own next to us is Tacker.

PL: Tacker?

AK: Yeah.

PL: Yeah.

AK: That's the ones that went let, they let have the fencing up there too.

PL: Okay, k.

AK: They own like 600 acres.

PL: No, and they own by the pond too yeah? Or the pond is incorporated in their property?

AK: Yeah, in their property.

PL: Okay.

AK: And actually, where our property is, we own from the road to the coconut trees. But my husband took care of the area over dea, Uncle Sam, like konohiki. You know, because he's the one that take watch yeah?

PL: Okay, and then, Aunty, if you, okay, so we just go down, go ahead into the effects or any concerns that you have with this. What are your general thoughts about the fence line?

AK: I thinking the fence line is, if it helps to restore the native plants, and it helps to, you know, for me the overall look in the long run, you know, the more greenery, the more trees, maybe draw more rain, I mean, I'm thinking, this should all, it's all good, like I see it as all good because to just let it go, and not take ahold on controlling the growth up there, and just allowing the animals, yeah, so like our goats, it's all fenced.

PL: Right.

AK: And they only can eat within the areas.

PL: The area.

AK: Yeah. And I think you might be good to control further up. Even the deers, they come down a lot, like every day. And they barking now.

PL: You guys see a lot of people hunting up behind?

AK: Well, we hear some shots way up, but we don't let anybody come through our area 'cause if you going let one, you going…

PL: Yeah.

AK: Let them all.

PL: Yeah, yeah, yeah.

AK: Only special people can, like Kanoho.

PL: [laughs]

AK: Das about the only one [laughs]. But which Uncle Sam no like let because you going let one, then everybody…

PL: Yeah.

AK: Going come, 'cause easy access, yeah, so they gotta do the hard way. And the you get some, you know, 'īhepas that fire night time from the road, and more so, das getting stupid. They really should go away…

PL: Away, yeah.

AK: From the houses 'cause we live up there.

PL: You know of any reason why anybody would have any issues, if it would affect any cultural significance or?

AK: Cultural significance? ----- When we first came here, and we first moved on the land, I took the walk up there. Sam and I were, in fact, everybody, I'm sure Aunty Corrine did that, you first do, you gonna take the walk up the mountain. And we went up and up. And we coming down, you had to come the gulch.

PL: Oh yeah, yeah, yeah.

AK: Walk up and come down, and so, it wasn't the easiest thing, but. Then one time, I would never go back up. I never did [both laughing] because that was it, you know.

PL: Yeah, too steep too.

AK: Yeah, and then, here you can be up there and the scenery, and you know, you can get, it's beautiful, and I'm sure there's a lot of native plants at that time, but I don't know why I would be up there so, you know, even we at one point wanted to trade our property, make it wider.

PL: Mmhmm

AK: And give Tacker, you know what I mean, go with Tacker, give him more of the top, but he really not, I don't know why he holding on to the property. Bishop Estate, they get the cows, yeah, with the Pedros, because it's mostly kiawe. And I think at a certain level, if you go higher, you get different types of trees.

PL: Trees, yeah.

AK: Yeah, but I don't see an issue. I think the project is good 'cause we need restoration and if it can keep things and affect, you know what I mean, be a better effect…

PL: For the long term.

AK: For the long term then hey, we gotta go for it. Right now we got a changed way of thinking yeah?

PL: Yeah.

AK: Yeah, 'cause the world, global warming, and all that stuff.

PL: Yeah.

AK: You gotta do things.

PL: The watershed.

AK: That's gonna help the watershed exactly and all that. Lucky we get the meter because the Maus, they get one tank up there. I'm sure they might have a meter, but they do have a water tank 'cause they're little bit higher than us.

And when Uncle Sam and I first wanted to build, we were gonna go up, but if we did go up, we gonna need a water tank, and that was already too costly.

PL: That's not conservation, that area below?

AK: The below is conservation. The up is ag.

PL: Ag. Got it.

AK: Ag because I deal with the tax office guys. The taxes was high, but we got it to be ag, but that's why we get the fencing.

PL: But as part of conservation, you can still have loʻi and stuff like that?

AK: That did not matter to us, 'cause that was there anyway.

PL: Oh, right, right, right.

AK: And like the animals was all grandfathered in, because the Maui County got a hold of us.

PL: Ohhh.

AK: That we shouldn't be raising pigs, because they were running all over. I mean, like they wasn't wild. They were domestic, but some, you know Haoles they, I think it was from ----- because they neva like the idea that they were just loose, and Uncle Sam was eating 'em. At one point we had 38 pigs, so now it went down. We got rid of the two big ones that went up to the party the other week.

PL: Yeah, yeah, yeah, yeah.

AK: But it's all, everything is all grandfathered in -----

PL: Right, right, right.

AK: You cannot change that, you know.

PL: Wow, that's so cool.

AK: And they shouldn't [laughs]. Yeah. K?

PL: Aunty, you get any other manaʻo or anything else that you'd like to share about Kaʻamola, the surrounding ahupuaʻa, or like just the spiritual, or not just spiritual, but just the feeling of the place?

AK: Well I think the feeling is really good. When Uncle and I first lived there to, we just kind of moved, you know, with no job, no nothing, and just moved, and lucky Aunty Corrine and Uncle Adolph was there. So when we did get around, we used to walk up to her house 'cause that's the only way we could do it, with the trail. And sometimes we used to walk pitch dark, but I mean, it was all good 'cause I just felt that my ancestors…

PL: Kupuna.

AK: At this property where we staying, and I knew nothing could happen, which was good. And yeah I think the feeling was good and more so now that Uncle does the loʻi, and you know, I can go out, 'cause we went crabbing, right, the other week [laughs] and did all kind stuffs so.

Right now, Uncle is, he fenced down, I mean, he lock gate now down below, 'cause too many people, I mean after, what they told us, County said, because some people thought was a right-of-way. The County said, "Once a year, put the gate up and the lock, so it cannot be a right-of-way." 'Cause we had talk like, "Oh what are we doing, you know, blocking off," and this and that. And people that live here, we don't stop anybody from ----- a lotta, when get abuse.

PL: Yeah, yeah, no I know.

AK: Yeah then just cut the line.

PL: Yeah, my mom them all grew up in that area, that's why too.

AK: In that area too?

PL: Yeah. The lo‘is where Uncle Ata guys take care of now.

AK: That’s going towards…

PL: By town, Kaunakakai side.

AK: Kaunakakai side.

PL: Yeah.

AK: Ohhh.

PL: So that’s our ‘ohana lo‘i, and my mom remembers, you know, walking, or going the lo‘i, and then she remember going down go pick limu and stuff like that with my grandma.

AK: Uh huh.

PL: So I was like, it’s cool to hear all the stories.

AK: Yeah, I remember Mrs. Place used to pick ’cause I first went with her, and then Aunty Hala and Aunty Gabby, so you kind of see different limu pickers, and from way back yeah.

PL: Yeah, yeah, yeah.

AK: You know, now a lot of ’em is all gone, and you know, even Aunty Marie, she not really doing that well, but she cannot go out gather anymore. It’s all stopped already. So it’s good to keep up.

PL: Yeah, yeah, yeah

AK: Things.

PL: Pass it down too.

AK: And pass it down, yeah, because who going do ’em next right?

PL: And do ’em right.

AK: Right.

PL: ’Cause get right ways to do it, and then there’s wrong ways to do it.

AK: Yeah, but you know, no moa workers like before yeah?

PL: [laughs]

AK: Aww these young, my kids, they not going do that too, you know.

PL: Okay, well is there any other mana‘o you would like to add?

AK: No. I just think that the project is good. And mahalo for putting this together and helping…

PL: Okay.

AK: Restore the uka.

PL: Yeah, maika‘i.

AK: Up above.

PL: Awww.

AK: Oh, we not even looking, we just [laughs].

PL: Okay, mahalo, Aunty, I go turn this off.

AK: Oh but I can let you know that the property, oh, see that’s why I wanted my genealogy because her name was Po‘ohiwi and she married Halualani. Halualani is my grandpa, and their last name is Halualani. My mother is a Halualani.

PL: Oh okay.

AK: Their family is from Keanae? Not Keanae, but…

PL: Hana?

AK: Wait, starts with a K. [pause] Kipahulu.

PL: Oh, Kipahulu.

AK: So Kipahulu, and then they had land over here, and then on O‘ahu by the Aloha Stadium. But the land over here, he met a woman named Po‘ohiwi. She is of Ka‘amola. And that is why, that is how we got the land.

PL: Is that how Po‘ohiwi got her name?

AK: Yeah, das her name, Po‘ohiwi. And my uncle, you shut that off already?

PL: No. You like me shut ’em off?

AK: Well, my uncle gave us my, ended up he had the property, and was half-half. So my uncle, because he wasn’t married and my mom took care of him, he gave his share to my mom.

PL: How nice.

AK: And then in the long run we ended up attaining the other share from my grandpa, Halualani. They both were, my mother’s maiden name is Halualani. Yeah, so.

PL: Oh, okay.

AK: But Po‘ohiwi was the woman…

PL: He married.

AK: That was here, and married into Po‘ohiwi, and that’s how they got the land. ----- tell you all of it. We had one title search, that’s why, done on it, so, yeah, we had, Aunty Corrine had that with her friend. I can’t find ’em. I know I get one copy, and I always leave it here, ’cause I do have questions when people ask, like “Where you from?” And I said, “You know, my root is right there.”

PL: Yeah.

AK: Right ----- to this, or you know.

PL: No, no, that’s awesome.

AK: Even if I was born and raised in Kane‘ohe.

PL: Yup.

AK: My mom is from there, yeah.

PL: Okay, it’s okay we turn it off?

APPENDIX G: INTERVIEW WITH HANOHANO NA‘EHU

TALKING STORY WITH

HANOHANO NAʻEHU (HN)

Oral History for the Pakui fence line project by Pūlama Lima (PL)
For Keala Pono 8/4/2015
----- [inaudible on recording]

PL: K, go ahead.

HN: No, from the meetings that we already went into the community about, the concerns that was brought up to me was ridiculous. One being, if you going fence the wao akua you going fence the watershed? You going restrict access from humans going up there and hunting and doing stuff. And in reality, once you start to learn about the people that we came from, the place that we came from, and the ahupuaʻa, you start to realize that we wasn't up dea too often. Going into our history, you start to realize that neva have wild animals that we had to go get out of our forests, you know? So the concerns that was brought up, to me, was real shallow, neva have any intellectual research or historical standing whatsoever.

And the gathering thing is ridiculous because we get so much room from the watershed down around our whole island for gather and subsist, you no understand that the ability to catch, distribute water is vital, we absolutely need that, living on one island, you know? We need water, water is life..

The other concern that I thought was kind of ridiculous was this was one attempt to fence off our watershed so that America can put more ownership over 'em and kind of like steal 'em from the Hawaiians. And I was like, "F*cken ridiculous. That is ridiculous. The thing not going anywhere." So we kept coming back to the point where, do you think times are better now, or it was better before? Because depending on what you think, we projecting into one future that gets worse, right, because of global warming, climate change, rising sea levels, or pollution in the air, I mean, that's the way we going. And as one kiaʻi loko, as one ʻAha Manaʻe Poʻo, our kupuna said, "ʻAi pōhaku," which means, "They need to eat the stone." And headed into one projected future like this, the only thing that going save us is our ʻāina. Our ʻāina was here way before, going be here way afta, but our ability for learn how for take care of 'em, know how for mālama, when for mālama, is so faded from our memory that projects like this, even though this came from one, this came from one Molokaʻi girl, you know, who's Hawaiian. And it's not coming from like somebody from the feds that don't know our place and don't know our stuff, not coming from somebody that, you know, never walked the grounds or lived the grounds, you know, or made babies ova hea, brah this is a homegirl. This is an attempt for make our ʻāina bettah for our future. And that alone, I'm all behind and supportfor, you know? I never come across one reason that was good enough for not do 'em.

PL: Right.

HN: And I've talked to most of our community, you know, if not all of 'em. All of 'em is hard, but you know, I've thrown and put the question out there and to see what was the temperature check and what everybody thinking, and a lot of people just no care. The ones that do use the resources, they like keep going. So I think the challenge was for make them understand that if we no take care, they not going be able for keep going.

PL: And when you talking about resources, you referring to?

HN: Mountain, ocean, in our environment, everything connected. So the health of one directly affects the health of the other. So people that can separate all of these sections, that's western thinking. And we gotta get back to one more Hawaiian way of thinking, a more native way of thinking, for nature.

How do we take care now, so that our kids going be alright, and yet they still gotta try and make bettah because we've gone like hundreds of years of misuse, no mālama, and…

PL: Neglect.

HN: Neglect. Yeah, so.

PL: Well, just to kind of get background information, if you can state your name and just tell us about yourself, where you from, where you were born, where you grew up, your parents.

HN: My name is Guy Hanohano Naʻehu. My parents is Sharon Uluwehi Sis Dudoit and Clayton Guy Naʻehu. My dad was hānai to the Naʻehu family, and he actually come from the Pali, Henry Pali and Emily Dudoit line. My mom comes from the Jules Dudoit and Barbara Yeda line. I Hawaiian, French, Okinawan, born and raised on this island, went to Kilohana School, went to Kamehameha School, got kick out, graduated Molokaʻi High School, participated in all kinds of sports here, world record cowboy, and then started working fishponds in 1999–2000, and ever since just become a husband, a daddy, and community activist, kiaʻi loko, fishpond guardian, conservation lobbyist, all-around good guy, you know, Manaʻe Poʻo, for the ʻAha, and Pūlama's friend and cousin.

PL: Mean, mean, mean one. K so, if you can just give one brief description of your occupation as kiaʻi loko at Keawa Nui Fishpond and how that fishpond ----- within the ahupuaʻa, and more importantly, where it's situated along the Pākuʻi fence line.

HN: So I'm a kiaʻi loko, and fishpond guardian, at Keawa Nui Fishpond. Kiaʻi lokos take care of the fishpond, but more importantly, Hawaiian resource managers, because one loko iʻa is a part of the ahupuaʻa Hawaiian land management system, actually almost one of the last parts. As a Hawaiian resource manager in the ahupuaʻa, everything comes from the top of the mountain, down through the lands, down to the shoreline, out into the fishpond, and out to the reef. Therefore, everything we do and everything we see, everything we think about, how we treat ʻāina is always interconnected. One always affects the other. We become one of the best fishpond operators in Hawaiʻi, in the world. We have the only fully functioning fishpond on the planet right now. We do aquaculture with the only licensed reef ----- producers in Hawaiʻi. We're one of the six oyster farms with one research development scientific place where we get experiments going on with the oceanic institute and mullet ----- projects, limu studies, mangrove studies. We do education with Molokaʻi schools from keiki to kupuna with people from around the state, around the world. We do culture -----, hula, lomilomi, lua, papa kilo hoku. We love our place, we love our ʻāina, and I think everything that we do give you one good example of what we talk about. Everything we do is for the care and love of our island, this place, and our people.

PL: So you touched upon the Keawa Nui Fishpond area. I was wondering if you had anything to say about the general history about the Keawa Nui Ahupuaʻa, and even the surrounding ahupuaʻa of Kaʻamola, ʻŌhiʻa.

HN: So actually, we stay in the ahupuaʻa of Kaʻamola, but if I not mistaken, around the 1400s, there was this issue between Kaʻamola and Keawa Nui. Somehow, the decision was made to give the fishpond in Kaʻamola to Keawa Nui, thus renaming it Keawa Nui. And then till now, it has

been that way, and we've never corrected it. But we not in the ahupuaʻa of Keawa Nui. So we in Kaʻamola. Above us, the Pedro family has been raising cattle for a long time. Next to us, Devon Manaba, established a shrimp farm that ended up being sold to John Austin. This is all Kamehameha Schools/Bishop Estate lands. And the cattle ranching has affected the shoreline, the fishpond, and the aquaculture that is done, and did at the shoreline of Kaʻamola and Keawa Nui Ahupuaʻas.

Keawa Nui Fishpond, we interested in the watershed project because we understand how intact our native forests are up there. We understand how precious this layers of vegetation and native habitat is critical for us to catch and disperse water down -----. We understand that get ungulates, some deer, goat that threaten the edge of this and continually, with global warming, push our forest further mauka. We like combine and see Kaʻamola as an ahupuaʻa that can be fully functioning from top to bottom. So my concern as one kiaʻi loko, as is as just a Manaʻe resident, is for actually see one of these in our lifetime.

PL: Right.

HN: For go back to the truth, for go back home. If we cannot protect the wao akua above there, then this dream not going get realized, you know, this dream not going get realized.

PL: So I just going jump ahead little bit. Do you know of any cultural sites, historic sites within that area that you can talk about, or?

HN: For me, the loko iʻa itself is one cultural site. Get springs all along the shoreline. That is how we connect to the mauka. That's one direct connect. We've identified, secured, and developed punawai right on the shoreline that is separate from the ocean, completely fresh. We see ʻoʻopu, we see hapawai, we see things and organisms, life forms, that connect us to mauka. So the punawai, along with the loko iʻa, is a sacred site. And for us, the whole wao akua is a sacred site.

Like me, personally, I no think pigs, deers, even humans belong up dea. No. It's the wao akua. I no see people hunting up dea.

PL: Right.

HN: I no even see animals, like wild animals, ravaging in dea. I see 'em pristine, clean, perfect almost, as perfect as you can get. Das what I see.

PL: What about that median area right below the fence line, right above the fishpond? What about that area, you know of any cultural site?

HN: Well cattle went destroy plenty. So we'd love to go da kine, you know, if you ever went, we would love to go with you, go cruise, check 'em out, and see what your perspective see 'cause like we no come from that perspective, and yet there are so much destruction from cattle, that that would be even a better reason than just saying, "Oh brah, I no like you raising cattle up here 'cause I stay underneath, I below you," you know? Like, I would love to have evidence that support.

This industry, and I one cowboy myself, I know went destroy plenty sites, right? And can we recover them? I don't know. And if we cannot, that's a tragedy. You know? So more reason to stop the degradation, you know, especially cattle, get 'em out.

PL: You know anybody who go up there to gather, gathering like lāʻau, or to make leis?

HN: Everywhere the cattle is, all you get is lantana, grass…

PL: Christmas berry.

HN: Kiawe, yeah like the only thing you going gather is probably deer. You know? We hardly see anything, the vegetation is all like of that sort until you reach like the proposed watershed area where you start running into our ferns, you know what I mean?

PL: Right, right, right, right.

HN: Thicker vegetation.

PL: ’Cause nobody going that high up.

HN: No, ’cause steep over there.

PL: Steep.

HN: And Pedros get access, and they go with their trucks, but they only go for monitor their cows, so. That place has been, you know, I like say, “No care,” but gotta care because, I mean, made a family their livelihood, you know? And that era coming to an end, I know, ’cause all my family, the cowboys gotta find something else for do. But it’s not a bad thing. It’s a good thing for our ‘āina for come back.

So yeah, I no see any, you know, native gathering whatsoever. I heard of da kine, like ahus that da kine, would line up fishing spots, you know, from Tubbs Kalipi, but other than that, even that was displaced from the cattle.

PL: You know of any mo‘olelo, mele, or oli that speak about Ka‘amola Ahupua‘a, any other Ahupua‘a?

HN: No, not in that area, not the ----- area. [Note: didn’t share mo’olelo at time of interview but later mentioned puhi ula, presence of kūpuna, verdict of Loko‘ia and several others.]

PL: Okay, okay. K, we already talked about mauka to makai relationships. I guess you already shared about your thoughts about the, you know, the proposed fence line. Do you think that the proposed fence line would potentially affect any cultural access to anything, whether it’s people going up to different sites to pule, whether it’s people going, I know you said that people no go that far up.

HN: Cultural access, no.

PL: No.

HN: Recreational access, yeah.

PL: Yeah.

HN: Cultural access, no.

PL: A lot of people go hunting in that area?

HN: No.

PL: No.

HN: Steep, hard.

PL: K. Do you have any further recommendations about site management or protection regarding the proposed fence line area?

HN: The fence line area, just pretty much, take out invasives, replant natives, and we interested in leaving one area below the wao akua and above the fishpond that we gotta kalai ʻāina, or recarve, but also manage our deer population. That was one gift from, you know, King Lot Kapuāiwa, from 1868 to now, so that, and the ability for us for feed our kids and our people from that, needs to be protected. So there's gotta be a balance and one understanding that, again, you know, we are the apex predators in our land. We are the wolves. We are the tigers. We are the snakes. We are the lions 'cause no more that kine animals. So we need to be vigilant and responsible for ungulates that we let go wild and we, you know, -----. And I no eva like lose that privilege or responsibility for that kine, yeah?

PL: Yeah, yeah, yeah.

HN: So in order to not lose it, the ability for manage 'em better, the ability for recognize that all of these factors are important, to me, is critical.

PL: Right.

HN: And we can do it.

PL: Okay.

You get any other manaʻo you like to add, or any other people that you recommend that we talk to?

HN: Being as humble as possible,

PL: [laughs]

HN: There's a lot of people that I've spoken to, or that either spoke or not choose to speak up,

PL: Right.

HN: That you can tell like we've been in this western mind frame, mindset, perspective for so long, that almost everything that we've gathered is all wrong. Everything that we've practiced is all wrong, is all f*ck up [laughs].

PL: [laughs]

HN: Right? So a lot of people that you talk story with, all they remember was the -----.

PL: Yeah.

HN: And they've done it that way, and it's become, you know, what we do now. And that doesn't mean that we have to continue, continually do 'em in going to the future, ah?

PL: Mmhmm.

HN: So as I think, you would like to probably get Kumu Kapuni for talk to because Kumu is one hunter that if at anything has gone and gone up in these areas and actually hunted, actually still hunt, and go up see. And not do anything cultural, but you still get…

PL: -----

HN: Yeah. You still get one…

PL: Spiritual.

HN: Point from that place that I trust, you know, his manaʻo. He no bullshit. He no make up stories, you know? It is what it is. And that would give you validation, accredibility when you get somebody's ----- we go up dea? 'Cause you no go up dea. You no go up dea. ----- you no go up dea. You know what I mean, ----- you no go up dea. Some of these guys, ----- you guys no go up dea. ----- go up dea is the f*cken -----. You know?

PL: ----- people?

HN: Yeah. Ask him what he saw. Ask him what he see. And ask him what he do. Das what they do. You know? And so instead of asking everybody, to me, you just go up to the right guys, ah?

PL: Right, right, right.

HN: And that's not saying you eliminate everybody else. But there's gotta be weight, a lot more weight, to their manaʻo than the others who just guessing or da kine, yeah? So I would say, "Him."

You went talk to Uncle Russel. Hmmm, I cannot really think.

PL: No, that's good. I definitely.

Any other manaʻo? If not?

HN: I cannot think. Yeah, was something, this is something so obvious, and yet I was so disappointed when we ran into Hawaiians who thought this was a bad idea.

PL: Right.

HN: It wasn't much, you know? That made me think, "Oh, was I like those guys stopping all these other stuff?" Then I go back, and I re-watch what we did. I was like, "No f*cken way."

PL: [laughs]

HN: ----- I went ask ----- like, "Why you no like -----"

[In a different voice] "I don't know right now, but I just no like 'em."

Cuz, right now, in 2015, das not good enough. Das not good enough. Das unacceptable, f*cken unacceptable, you know? I cannot be held back or led by people that no can da kine, validate why,

you know, why or why not they going do something. Even if was by spirit, or you said like, "Oh, my kupuna came to me in my dream, they said, this is, no can."

PL: Right. Something.

HN: That would be like Laʻilaʻi and da kine like, "Ho, da guys coming, yeah, okay, let's listen." But when no moa nothing, when easy for shoot down your concerns, we sailing. Das my manaʻo. You know? So, I remember ----- yelling at Steph at her house. I came late, yelling at her and all. I said, "Brah you f*ckah, settle down. Settle down. If that was my f*cken wife, and you was yelling at my wife, I would turn you upside down, I would ----- your f*cken ass."

And then Eric, ho, he's a nice guy too ah? He was like, "Thank you."

"Brah, period, you no treat women li' dat." And you don't yell, at ----- house, at her. ----- grab my gun and shoot you and tell you was attacking us. [laughs]

PL: [laughs]

HN: I mean that's exaggerated, but you know what I mean, ah? Like brah, that's so not Hawaiian. So, yeah, that's my manaʻo. I hope that's good enough.

PL: No, yeah, that's perfect.

HN: Try wrap 'em in one story, that was kind of long, but thorough, but not long.

PL: No, that was perfect. Mahalo.

APPENDIX H: INTERVIEW WITH RUSSEL PHIFER

TALKING STORY WITH

RUSSEL PHIFER (RP)

Oral History for the Pakui fencline project by Pūlama Lima (PL)
For Keala Pono 6/24/2015
----- [inaudible on recording]

RP: Remembah when they were working on the project at Kamalō, and they were using the helicopter, 'cause they use the helicopter to fly in and do the fence line -----, a lot of helicopter use. And when we were doing that project down there, I understood that they had to use the helicopter especially. And they had to do the fence line because of the goats. They had to do it.

PL: Right, right.

RP: But coming on this side, they don't have that problem like that. And I can see using the helicopters for shoot down the goats and everything. And then when you get 'em under control, limited helicopter use.

PL: Oh, you talking about the eradication project? They was shooting goats?

RP: Yeah.

PL: Oh.

RP: That was all involved with the fence line too.

PL: Oh okay. I don't know, I don't know if that's the same thing that they wanted. It wasn't in the project description that they gave us.

RP: Well that was the whole concern, that was the whole thing about doing the fence lines at that time. My understanding that, and I mentioned it in the meeting so that, limited helicopter use to where that they don't use helicopter at all. I really against the use of helicopters for projects like that especially. At that time they had to use it, but when the thing is all done, you no need use helicopters already. So I just was concerned about that.

PL: So for this project, your main concern…

RP: Well more so, when you going in there and making one fence line, you actually activating problems when you do that.

PL: What kind problems?

RP: Because sometimes, when you do a fence line, the pig trails only go a certain area, certain place ah? And when you cut down one whole ridge, going have to cut and trim, and make 'em ready for the fence line, so that involves a lot of activity and movement of the area, whereas by not making one fence line, you know, wouldn't damage. Making the fence line would damage a lot of stuff, more than make it good. Whereas when they were doing it up that side, for the goats, you could see that you needed one fence line because that was a big problem 'cause of the goats. But this side, you don't have that problem. I think you going create problems when you put in one fence line.

Whereas I think of the big land owners and the ranchers, they concerned about, I think, more so, of the deer, because the deer, they eating the grass for the cows. You know, the deer really is the problem. And I feel, the deer is one big problem now, 'cause, plenty deer. Yeah and the deer is a big problem. And I don't know if one fence line going help. I think the fence line ain't gonna help.

I think they should have more public access for hunting. You know, we get old trails up there, we get trails to go up and you can go gather, you know the Hawaiians, they get gathering.

PL: What you mean, gathering? Like plants? Or hunting?

RP: Plants, pigs, hunting, herbs, spiritual power you know da kine get plenty.

PL: Practitioners.

RP: Yeah da kine get heiaus all up dea, get all da kine stuff up dea.

PL: You know anything about the heiaus that they…

RP: You just walk back dea, and you see 'em.

PL: All right behind? In Ka'amola?

RP: Yeah. All up dea, all inside right back inside this gulch, go all the way up, get all…

PL: Sites.

RP: Home sites. All the way up. You walk in every valley, you going see rock formation kine, home formations and all that. And I know they had old trails to go up the mountain, go over, like even the Wailau Trail which nobody hardly use now. And the only guys who really monitor the thing, pretty much, I think, is the hunters. And the hunters, they usually get permission for go back there and hunt. You know, they give them permission for hunt. That's a good thing, because you need that to control the pigs. I just da kine concern about the fence line ain't gonna do nothing and the helicopter use big time. And I no think, das one, it's gonna create more problems than solve problems.

PL: The helicopters.

RP: I think more so, if you was to, you know, like you get roads go up, you get trails go up, and even like Bishop Estate, Pedros go all the way up and you can go see, and you can go in the ocean, and you look up in the mountain, and you can see above Bishop Estate what they did up dea. When you make one road or you clear land or you make trails or something, that going create one waterway. You get one big problem with flash flooding over dea, big rains like one time, and one big rain can do a lot of damage. You know what I mean? And we seen it already. We seen it as you go up, when we had flash floods, you look all down by Bishop Estate, mean ah? The damage that the thing did to the bridge.

And coming down by Sam's, that road going up, when every time big rain, the thing wash across the road. Every big rain, you gotta go grade ----- get one road, and all the roads, das what roads does, you know. And get old existing roads, get old, da kine, trails li'dat, but now, development now, you don't know, guys go buy property up dea, and they gotta make roads to their property, and I think they gotta go through all kinds process they get, to do that. They have to get one permit you know you gotta grade. And you gotta get runoff. Das one big problem. So das gonna create,

you know, I know, if you are a landowner and you wanna build, or you wanna make access, you probably going have to go through one big permitting just to make your road. And plenny guys did roads or did stuff already, and you get the damage afta yeah? And I think, I know, that if they go up, and they just start cutting and making trails to the path dat da kine going be destructive already, and I don't know how much really the fence line going help controlling it more so than…You know, if you was to walk up hea, and you go up, you only can go so far, and you gotta make your own trail, or even use one pig trail or one deer trail to get to whereva you like go. There's no regular trails. And one fence line ain't, you know in my own da kine, I no think going even make any sense to make a fence line.

PL: For make the fence line, for this side or for the upper side? Because I think das what they trying to do, they wanna make the fence line so that the pigs don't go more up. You think that'll help them from going up to eat the native forest? You think that would make a difference?

RP: No, I don't think the pigs can go up in the native forests.

PL: Oh yeah?

RP: Really look at it, 'cause up there is really pristine, really thick, the moss. It's really protective, protecting itself. It's so thick, you cannot even walk through. Either you gotta go over, or you gotta…

PL: Go cut through under?

RP: You gotta make one tunnel underneath. The fern is so thick. Anything above, -----. And now, ----- see this mountain ----- areas where the pigs go across and the deers go all the way up, ----- way on top dea, Kamakou, on the top dea, eh, the pigs only can go so far. And like the food is more so, you know, the mango, the plum, you know da kine, they only dig up so much stuff, and then identifying native, you know, you already, you get so much invasive already, the invasive plants already, it's incredible, like the Christmas berry, the plum, the waiawī, took over the forest already. It's already taken over, you know, you no can control 'em already. It's already invaded already.

So I feel that, you know, I remembah way back before, you could go, get trails, you could go hunt, you could go kind of way in the back. Even the Wailau Trail right now, the thing not in use. Nobody use 'em like before. I walk that trail couple times way back long time ago. The trail was in pretty good shape until maybe the '80s. Afta that, nobody went maintain 'em. Nobody -----.

PL: Where the Wailau Trail come from? From, start…

RP: Over there, the road in the back, by the river, in the ridge, get the heiau.

PL: 'Ili'ili'ōpae.

RP: 'Ili'ili'ōpae -----

PL: Oh okay. -----

RP: I feel, as a Hawaiian and stuff, I think identifying all the heiaus and all the, you know, the shrines and the places of worship, 'cause get plenty back dea. And they probably went identify before. And I think plenty guys they don't know about this kine stuff, especially our kids ah? And das good for learn ah?

PL: Yeah.

RP: ’Cause get plenty culture I mean that you can teach over dea.

PL: You know any stories, do you know of any stories that was passed down to you, talking about any of the places, place names, or different…

RP: Oh man oh I wish, ’cause every place get one name ah?

PL: Mmhmm.

RP Aww, no I don’t know all the stories. I know all the names and all the da kine, but all I know is that up there get plenty. And many of ’em was all destructed already from when they had cattle from before, ’cause das what they went raise up dea before, was cattle. All in the back dea was all cattle.

PL: Uncle, how long you guys been living here?

RP: About, gee all my life, about twenty years I was dea.

PL: And when you was born?

RP: [19] Fifty-six.

PL: 1956.

RP: I live in Kamalō all my life -----

PL: And then you guys moved over here?

RP: ----- I know about the goats ’cause I from Kamalō

PL: [laughs] -----

RP: Before wasn’t trouble like then, like now, but because nobody hunt like before. Nobody hunt goats like before. And das why the thing came one big…

PL: Problem?

RP: Problem. Like wild dogs, could control ’em. I understand the security ----- ‘cause, you know, I know that we all get something for say, but in the long run, the big land owners, they have that say ----- to think if they want the thing to be done, because it helps them protect their…..

PL: Properties?

RP: Properties, and more so, they get some kind credit on that, for their taxes, or you know.

PL: Oh I see what you mean.

RP: So they need this to happen for help protect them yeah?

PL: Yeah.

RP: ’Cause they, if I not mistaken, they get some kind breaks, tax breaks and stuff for doing this and protecting their, you know now, because everyone’s into it, protecting our native plants, our da kine, and the water shed. ----- we get droughts, we get, you know, well, we jamming up, da kine, exhaust ah?

You know, like they use our help ’cause they going, shooting out all that exhaust, you know, and we’re against you know, the greenhouse effect, you know, we trying to protect it. And they using helicopters which is throwing all, so much of that stuff that ruins our environment. So you know, that kind stuff should be considered, yeah?

PL: Yeah.

RP: You understand what I saying? And uh, they neva have da kine helicopters before. But they neva have that much invasive plants, actually it’s all invaded already, the plants, all the maile, get plenty maile up dea too. Get nice maile up dea.

PL: You know people that still go up to the forest to gather? Or to hunt? Not far up.

RP Uh just with access, like, we go hunt right up dea, we go all the way up. And you can only get so far up, and that’s it. The deer only go so much. And then she go more up into the forest where the ferns…

PL: They not…

RP: Not even the deer can go up inside dea. The deers no can go even go in dea. And then, you know. And get plenty pristine places, you know, like if you was to, you know, disrupt it, you going change something. Because I know, if you disrupt ’em, it changes.

PL: I like check through all of this. What about, sorry, I going start with the basic information. I going move back up little bit. So what is your full name, Uncle?

RP: Russel George Kaleolani Phifer.

PL: Two s, two l’s?

RP: One l.

PL: George.

RP: Kaleolani. Phifer.

PL: And where you grew up, in Kamalō?

RP. Yup.

PL: Where you was born, Uncle?

RP: In the mainland. Indiana.

PL: Oh wow. Who are your parents, Uncle?

RP: Irene.

PL: Irene?

RP: My mother. And my father was Bob, Robert Phifer.

PL: And then you said you guys lived here about 20 years, and then Ka‘amola?

RP: Yeah, ah well, yeah, give or take 20.

PL: So you said that you originally from Kamalō, what made you guys move to Ka‘amola? Your guys’ ‘ohana?

RP: Yup.

PL: You know what is funny? My mom, every time I come up here, my mom tell us stories how her uncle used to live at the house right in the front, Uncle Sam. And das where she was born ’cause my grandma and my grandpa was on the way down to go to the hospital.

RP Yeah, like da kine, ova hea was ‘ohana place, da kine with Mersberg, you know, Aunty Barbara, yeah.

PL: Yeah. So this over here too was where they, oh wowww.

RP: Yeah, in fact Boy was raised ova hea too, come down hea talk story, he used to come ova hea when he was small.

PL: Oh, then your guys’ family went purchase the property from them?

RP: Yeah we had some interest, and then -----

PL: And then, I think supposed to have one more Mersberg property over dea?

RP: Das ah…

PL: Packard?

RP: Kalohi, Kalohi. You know Dan Kalohi, the Kalohi estate? But they, the old man, used to live ova dea, Jimmy, and they were, Aunty Minnie, Minerva. Uncle Charlie used to live ova dea. They passed away already. But the owners was Kalohi estate. And then us guys over here, and then get Packard. Some of the small kuleanas inside dea, and then, that side, and then Kalilikāne was on the top, that plot.

PL: Yeah, ’cause Kalilikānes was my grandma.

RP: Mmhmm. She married a Mersberg.

PL: Yup. She married a Mersberg, and then they went adopt my real grandma, I mean, my mom’s mom.

RP: Yup, Barbara.

PL: Barbara. They went adopt her. But that was her cousin, real cousin.

RP: We all family too. Yeah, Boy was explaining to me.

PL: That one, though, you gotta take very lightly [laughs] what he tell you.

Okay, and then, is there anything else you'd like to say just about the general area.

RP: Well, you know, the general area is da kine you know…

PL: Ka‘amola.

RP: Ka‘amola and Puohala especially 'cause the damage was done, yeah, to the fishpond. Like I think there's a development firm or a development investment company that got the lease or something on this land, and they did the dredging back in the '60s ah? '70s? And look what they did, they left a big mess. They left a big mess there. They buried the dredge under hea.

PL: So this little, that, right here?

RP: Filled in yeah?

PL: Ohhhh.

RP: They dredged it. Das why get all this new channels and everything. They was gonna make a marina out hea, big time development. This was before Protect Kaho‘olawe ‘Ohana. They were doing this, and none of the landowners and kuleana home owners, das what they had to deal with, this project going on, and they couldn't do nothing about it to stop it. They just went and did it.

PL: What made it stop?

RP: The mo‘o.

PL: What mo‘o? You like talk about that? Das all related.

RP: [laughs] Das what everybody say ah? The mo‘o.

They ran out of money, and they ran out of da kine. But they couldn't really get what they wanted. ----- The kuleanas in hea, like da Kalohi's, they neva sell out. Kalilikānes, they didn't sell out. We didn't sell out. They wanted to buy us all out. If they did, they probably would have gone through with the project. That's one big concern of this, because of the right of way, easements and stuff. You know they had to do their own easements. They had to do their own, you know, their, they thought they could do whateva they like when they were hea, those developers. So that was a big thing back then. You know, that was a development before the activists came. That was the first big development that happened here that, that was before Protect Kaho‘olawe ‘Ohana. ----- this damage was already done hea.

So now, you know, what we lost is a big cultural loss ----- the fishpond.

PL: Fishpond got opened. -----

RP: And how much damage they did when they did the dredging. It's still affecting us now. You know, they didn't have no control, no pollution control, you know, it's probably polluted in dea. The dredge it still buried under dea, probably all da oil, you know. So you know, if anything, you

look at it, when you stay protecting da kine, you look at it, aww the damage done already. You cannot really do too much about it after the damage was done. How much can you do about it?

I feel the best thing you can is da kine, education, man. We gotta learn our history, learn what really disrupts our land, the Hawaiian, you know, the people who live hea that have kuleana that hanging on to their culture, and trying to live the way they like live from where how they went learn how live and carry on. But it's different, times changing, you know, and you cannot keep up with the change. Everything happen too fast. You gotta look back. You gotta step back little bit and look at what, how the change went change. What was the reason? Like even up in the mountain li' dat, you know, why ----- you know, you had sugarcane up dea.

What is the history of Mapulehu. You had one dairy up dea, lotta stuffs goin on. They was planting sugarcane. They had one sugar mill. What went happen at that kine times, how that land got changed ahold of, you know, now they doing lot of stuff, and you don't know what going happen. Before, Kaua'i was like that. That's what plenny guys gotta learn, you know, understand.

PL: Right.

RP: And same thing like over dea, the fence, that's what plenny guys don't know, what went happen, and now the damage that was done, the impacts. The thing went impact us the most, 'cause this is our place, our fishing grounds. You go ask all the

PL: Fishermen.

RP: Yeah, you know when they was doing that, there was a big impact, big destruction. And we couldn't do nothing. And everybody know that, the fishermen, the old-timers. But plenny old-timers make already. I not one old-timer yet. [laughs]

PL: [laughs] Eh, das privilege that, I would love to be kupuna status already.

Uncle, I know you said that all the way up into the valley, you know, get all cultural sites, and stuff like that. You know of anything that would potentially be all the way, any cultural sites that would be all the way at the top by where the fence line is proposing?

RP: You know, I can see that image, that area, where they putting the fence line. And I know that…

PL: 'Cause I mean the fence line going have to go down into the valley, come up, you know.

RP: I think da kine, you know, every valley, every ahupua'a, every da kine, gulch, every da kine had one significance 'cause you use 'em for one landmark direction, you use 'em for, you know, a lot of things when it gets up to there. And I don't know how far up the…

PL: Sites would be…

RP: All the sites would be, but I tell you, you start walking up dea, and you start venturing, you bump in to stuff, Let me tell you, and you blow your mind, caves and stuff that you know get something happening up dea. But you no go maha'oi, you no go. You just, alright, you know, and then you go 'cause you was taught not to go fool around. And if you do, you going run into 'em. You going find 'em, run into burial caves and all kine stuff, kind of trippy, but when you see me, when you look at 'em, you kind of like, aahhh heavy, das a heavy thing, and leave you a good feeling, yeah, for know that place was all filled with, had life, yeah, the old days, especially da kine

like, even white owl, you go all the valleys, you see 'em all. And Kalaupapa, man, Kalaupapa is amazing, unreal. That place just blows me away when I go down dea. Wow. And it's all, plenty, Hawaiian culture, Hawaiian, you know, da kine, it has, Moloka'i we get plenty you know over hea, and plenty for learn, plenty for teach.

PL: Okay, so we going…

RP: That's real important, I think, more than fence lines.

PL: [laughs]

RP: [laughs] Put the money into education and…

PL: Education, that's a good point.

RP: Yeah, and then, I think, so you can identify all that, 'cause when you go up and you really see, you going know.

PL: So I guess to kind of wrap it up then, you get any other mana'o you like add about this fence line project, or any other people you refer or that you can actually talk to?

RP: You know, you can talk to everybody.

PL: [laughs] Everybody going have -----

RP: No, who has land, and you know, live up this side, for that property and stuff. And I tell you one thing right now, it's gonna be be the helicopters, the noise, because you know, they get one flight plan, they get one flight plan, and you know, they going over hea, and you going over dea, but you no need fly right over one residential. You know, das disruptive. You know, you get helicopters [making helicopter noise] every 20 minutes, every half an hour, you know, and you get the tourist one, and you get you know the, they no moa Green Harvest like before. But I know, as for the, it's you know, they come right over hea and they fly. I know that they flying three weeks ago quite a bit, and helicopter, you get one easy -----, you know, but you no can feel 'em unless you walk 'em and go look.

And then if you going drop off, take one helicopter and go up dea and start doing your thing, you know the meaning, because every ahupua'a, every da kine, you get one trail go up dea, 'cause you get trails going up dea already, you know, hunting trails, and we always take the same trails, you know, and every one probably get one trail, you go up, you get water intakes up dea, and moa up you get good water, you get the best water ova dea, you know, or wells, really, really good water. And the monitoring should be, you know, a lot of guys, until you learn it, until you understand it, then you going feel 'em. If you just one pig hunter, and you go, you don't know, if you don't know about the plants, you don't know. But when you learn about 'em, then you going blow your mind. And then you get deeper into that, and then when you learn about the culture, you know, the Hawaiian, you know, all that, then you see all the heiaus, all the structures, everything, then you learn, you going listen to the chants and stuff. That's one whole different thing. Then you going, "Wow." Then you put old pictures together, you blow your mind.

And you look back, you can be any place, and you look, and if you understand it, you understand wow what they did, that everything had meaning, in what they, you know, everything that was done had meaning. And every place get their own meaning ah, what they had. And if you brought up in that area, you understand it. You know, you kind of, after you get older, you going tell, "Oh

das what my grandma went tell me, and my grandpa told me that." And you understand 'em, fifty years later, wow, you blow your mind. So, you know, that kind stuff is so important that our kids learn and understand that kind stuff 'cause they not going know until they get older.

But other than that, you know, I feel that it does, you get one problem with the deer. I think that deer meat is real good eating.

PL: [laughs]

RP: And, you know, Japan gave us a beer, you know. You know what is the story about the beer ah?

PL: The king yeah?

RP: Yeah, and then we should be lucky because the thing went help us out all these years, believe it or not. You know, when you no moa job, nowhea to go, and that's true, that's really true, the ocean, go fishing because we was brought up that way. And that's what we try and protect. And we have all the right to do that, because you going help us and help everybody else too. Right? Right? It does help, you know, we lucky, and, but it's really touchy, it's really delicate, you know, because now, we can, we can do so much, but it's so hard, ----- lazy, befoa you had to work, now you just [making beeping sounds] [laughs] sad, hard work.

PL: Oh yeah, guarantee.

RP: ----- [laughs] fishpond over dea, fishpond.

PL: Okay, I never knew about the fishpond. Okay.

Okay, Uncle, I just going turn this off real fast.

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DRAFT ENVIRONMENTAL ASSESSMENT

Pāku‘i Watershed Project

The Nature Conservancy, Moloka‘i Program
acting for the benefit of the
East Moloka‘i Watershed Partnership

APPENDIX 2
Traditional and Customary Practices Report for Mana‘e, Moloka‘i

Traditional & Customary Practices Report for Manaʻe, Molokaʻi

Traditional Subsistence Uses, Mālama Practices and Recommendations,
and Native Hawaiian Rights Protections of Kamaʻāina Families of
Manaʻe Moku, East Molokaʻi, Hawaiʻi

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Traditional & Customary Practices Report for Manaʻe, Molokaʻi

Traditional Subsistence Uses, Mālama Practices and Recommendations, and Native Hawaiian Rights Protections of Kamaʻāina Families of Manaʻe Moku, East Molokaʻi, Hawaiʻi

February 2016

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1. EXECUTIVE SUMMARY

1.1. PROJECT BACKGROUND

Over the years, the people of Manaʻe (East Molokaʻi) have witnessed a notable decline in the health of their watershed. A significant part of this declining health is the degradation of the mauka native forests, which has subsequently had a drastic effect on all of the ahupuaʻa of Manaʻe, from mauka to makai. Ensuring the well-being of these mauka areas is essential to the preservation and perpetuation of Native Hawaiian traditional and customary practices carried out in the moku (district), given the symbiotic relationship between the people and their ʻāina. Thus, Manaʻe residents are passionate about protecting their moku and the resources that sustain them. It is their protectiveness of their island – that often puts them at odds with each other in deciding how best to care for her – which is at the core of this report.

In 2013, the East Molokaʻi Watershed Partnership presented the draft East Slope Watershed Start-Up Management Plan ("East Slope Management Plan") to the Manaʻe community, and proposed the possibility of protecting Manaʻe's mauka rainforests with an expanded fencing project. That plan was based on the recognition that the degradation of these mauka areas was largely attributable to an influx of habitat altering invasive plant and animal species that have significantly impacted native forests, the life that inhabits them, and the freshwater they foster. The proposed fence has elicited strong reactions from the Manaʻe community – both for and against such a fence. It also has caused some community members to call for additional planning that looks at the entire moku and all of its ahupuaʻa, from mauka to makai. In response to these strong reactions, the planning process to create this report was undertaken.

The purpose of this report is to accomplish the following objectives:

a. **Recognize that the people of Manaʻe (East Molokaʻi) regularly exercise Native Hawaiian traditional and customary practices, and document those practices.**
b. **Provide an explanation of Native Hawaiian legal protections pertinent to Manaʻe kamaʻāina traditional and customary practices.**
c. **Develop a framework for a community-based Subsistence and Ahupuaʻa Management Plan for the Manaʻe Moku, Mauka to Makai.**
d. **Summarize community recommendations for the East Molokaʻi Watershed Partnership's East Slope Management Plan (January 2014 draft).**

The primary steps taken to reach these goals included:

- Documentation of residents' traditional and cultural practices in the moku of Manaʻe;
- Gathering manaʻo from key informants (kamaʻāina and other experts) regarding how best to protect these resources and practices;

- Analysis of legal protections specific to Manaʻe families exercising Native Hawaiian traditional and customary practices within their moku and ahupuaʻa;
- Reconciling varied perspectives and information where possible and finding common areas of agreement in manaʻo shared by Manaʻe families in terms of traditional and modern ʻāina stewardship and ahupuaʻa resource management;
- Identifying the recommendations that best incorporate and honor the collective manaʻo, and weaving them into a framework for a community-based Subsistence and Ahupuaʻa Management Plan for Manaʻe, Mauka to Makai.
- Summarizing community recommendations for the East Slope Management Plan.

Chapter 2 provides the following information:

- **An overview of the existing management efforts, namely the East Molokaʻi Watershed Partnership (EMoWP)**
- **A synopsis of the key points of the East Slope Management Plan (January 2014 draft)**
- **Community reactions and concerns regarding the East Slope Management Plan**
- **A description of the methods employed in the creation of this plan.**

1.2. FINDINGS

The island of Molokaʻi is historically known as " ʻĀina Momona" or "Abundant Land," referring to the bounty of food that was produced on its fertile lands and the wise governance and stewardship of these lands by the kūpuna who designed and cultivated healthy ahupuaʻa for not only themselves, but future generations.[1] Those resources continue to be available today, even if they are not as plentiful. Manaʻe is documented to be one of the most intact cultural and subsistence landscapes within Hawaiʻi.[2] An overwhelming number of kamaʻāina informants shared the sentiment that subsistence is "Very Important" for their family.[3] In addition, every ahupuaʻa in Manaʻe was identified as having various cultural, religious, and subsistence values, which indicates the extent and level of dependence that Manaʻe residents have on their resources.[4] It is clear that the entire moku of Manaʻe is vital to the subsistence lifestyle of its community and island residents. At the same time, the people of Manaʻe have witnessed a significant decline in the health and abundance of their ahupuaʻa resources, mauka to makai, which they are anxious to remedy.

Thus, any proposed conservation approach must take into account potential impacts to the subsistence lifestyle of Manaʻe residents. This chapter (3) includes an overview of the important traditional and customary practices and the resources those practices are dependent on, as identified by the kamaʻāina informants interviewed for this project. It consists of the following sections:

- **Significant Cultural Sites and Trails**
- **Nearshore Fisheries: Fishponds, Reefs, Estuaries, and Ocean Gathering Areas**
- **Hunting**
- **Degrading Watershed Health**

In addition, there is an overview of the community feedback in response to the East Slope Management Plan (January 2014 draft), and their thoughts on the proposed fencing. Based on what was presented in that draft Plan and what was shared by community in response, there are essentially five (5) primary ways this conservation effort could be pursued, which are described here, along with the main points heard regarding these options:

- **Proposed Fencing: Pua‘ahala to Hālawa**
- **Alternative 1: Fencing with Pākaikai Corridor**
- **Alternative 2: No Fence**
- **Alternative 3: Mauka-Makai Fencelines**
- **Alternative 4: Lowered Fenceline**

Finally, there was some feedback related to the fence that is summarized in the sub-section entitled: **Additional Community Mana‘o Regarding Fencing.**

1.3. LEGAL FRAMEWORK AND ANALYSIS

This chapter presents the legal framework and analysis that provides the basic legal foundation for Native Hawaiian rights law. It describes relevant constitutional and statutory provisions, as well as the body of common law developed from Hawai‘i Supreme court decisions on Native Hawaiian rights. This legal section is divided into specific areas of the law that correspond to mana‘o shared by Mana‘e kama‘āina informants. This mana‘o is analyzed within the context of the proposed expansion of the East Moloka‘i Watershed Partnership (EMoWP). It covers traditional subsistence activities in Mana‘e, religious and ceremonial protocols, and efforts to mālama ‘āina, in the following sections:

- **‘Aha Moku and Traditional Resource Management**
- **Sources of Native Hawaiian Rights Law**
- **Trails and Traditional Access**
- **Native Burials and Historic Sites Preservation**
- **Water Rights and the Public Trust Doctrine**
- **Subsistence Hunting – An Emergent Cultural Practice and Right**
- **The Value of Integrating Traditional Ecological Knowledge (TEK) in Natural Resource Management**

1.4. RECOMMENDATIONS

This final chapter focuses on the last two objectives of this report:

- **Develop a framework for a community-based Subsistence & Ahupua‘a Management Plan for the Mana‘e Moku, Mauka to Makai.**
- **Summarize community recommendations for the East Slope Management Plan**.

The majority of the kama‘āina informants interviewed do support a fence, as long as it is done with additional management efforts that are based on Native Hawaiian mālama ‘āina values and

traditional ahupuaʻa land management practices. From the manaʻo that was shared, the following overarching/foundational principles were identified:

- **Look at and consider the entire ahupuaʻa, from mauka to makai.**
- **Allow each ahupuaʻa to implement their vision for their place**.
- **Ensure access for Native Hawaiian traditional and customary practices.**
- **Implement management strategies incrementally, observe impacts, and make adjustments accordingly.**
- **Conservation efforts should include the hiring of local people and the utilization of community members in resource management.**

It is important to acknowledge that some informants are opposed to the utilization of a fence as any part of the conservation effort (reasons detailed within report). Most of those in opposition to the proposed fencing shared their ideal scenario, whereby a fence or some type of barrier would not be needed, and the people of Manaʻe could reclaim their traditional kuleana, both their rights and responsibility, to mālama (care for and manage) their land themselves. However, as many of these same informants have expressed, there are numerous challenges that make this proposition difficult.

With this in mind, the recommended approach aims to honor all manaʻo that was shared, and to weave it together into one unified framework for a community-based Subsistence and Ahupuaʻa Management Plan for the Manaʻe Moku. In addition, this report aims to strike a balance between modern conservation techniques and traditional Native Hawaiian land management practices.

Thus, it is recommended that fencing should be utilized as part of the conservation effort. However, in line with much of the input provided by the community, fencing alone is not enough. A larger Subsistence and Ahupuaʻa Management Plan should be written and implemented, and the East Slope Management Plan should be implemented with these community recommendations in mind, and through open dialogue with the community.

The recommendations are presented in the following sections:

- **Framework for a Subsistence & Ahupuaʻa Management Plan for the Manaʻe Moku, Mauka to Makai**
- **Community Recommendations for East Slope Management Plan**
- **Next Steps.**

---

[1] *A Mau A Mau (To Continue Forever): Cultural and Spiritual Traditions of Molokaʻi* (Nālani Minton and Nā Maka O Ka ʻĀina 2000) [hereinafter *A Mau A Mau*].
[2] COUNTY OF MAUI, MANAʻE GIS MAPPING PROJECT (2008) (on file with author).
[3] *See infra* Part 2.5.2.
[4] *See id.*

2. PROJECT BACKGROUND

2.1. PURPOSE

Over the years, the people of Manaʻe (East Molokaʻi) have witnessed a notable decline in the health of their watershed. A significant part of this declining health is the degradation of the mauka native forests, which has subsequently had a drastic effect on all of the ahupuaʻa of Manaʻe, from mauka to makai. Ensuring the well-being of these mauka areas is essential to the preservation and perpetuation of Native Hawaiian traditional and customary practices carried out in the moku (district), given the symbiotic relationship between the people and their ʻāina. Historically, the numerous ahupuaʻa of Manaʻe were very healthy and abundant with intact native forests that captured and stored rainfall to feed the aquifer, streams, springs, ʻauwai, fishponds, and estuaries. While these lands have become degraded over time, the ʻāina continues to support hunting, fishing, and gathering practices of Manaʻe families, which continue to be carried out regularly today. Thus, Manaʻe residents are passionate about protecting their moku and the resources that sustain them. It is their protectiveness of the land – that often puts them at odds with each other in deciding how best to care for her – which is at the core of this report.

In 2013, the possibility of protecting Manaʻe's mauka rainforests with a fence was proposed to the community through the draft East Slope Watershed Start-Up Management Plan ("East Slope Management Plan"). That plan was based on the recognition that the degradation of these mauka areas was largely attributable to an influx of habitat altering invasive plant and animal species that have significantly impacted native forests, the life that inhabits them, and the freshwater they foster. The proposed fence has elicited strong reactions from the Manaʻe community – both for and against such a fence. It also has caused some community members to call for additional planning that looks at the entire moku and all of its ahupuaʻa, from mauka to makai. In response to these strong reactions that consisted of a broad spectrum of opinions, the planning process to create this report was undertaken. (Note: a more detailed description of how this plan came to be is included in Section 2.4.)

The purpose of this report is to accomplish the following objectives:

a. **Recognize that the people of Manaʻe (East Molokaʻi) regularly exercise Native Hawaiian traditional and customary practices, and document those practices.**
b. **Provide an explanation of Native Hawaiian legal protections pertinent to Manaʻe.**
c. **Develop a framework for a community-based Subsistence and Ahupuaʻa Management Plan for Manaʻe Moku, Mauka to Makai.**
d. **Summarize community recommendations for the East Molokaʻi Watershed Partnership's East Slope Management Plan (January 2014 draft).**

The primary steps taken to reach these goals included:

- Documentation of residents' traditional and cultural practices in the moku of Manaʻe;
- Gathering manaʻo from key informants (kamaʻāina and other experts) regarding how best to protect these resources and practices;

- Analysis of legal protections specific to Manaʻe families exercising Native Hawaiian traditional and customary practices within their moku and ahupuaʻa;
- Reconciling varied perspectives and information where possible and finding common areas of agreement in manaʻo shared by Manaʻe families in terms of traditional and modern ʻāina stewardship and ahupuaʻa resource management;
- Identifying the recommendations that best incorporate and honor the collective manaʻo, and weaving them into a framework for a community-based Subsistence and Ahupuaʻa Management Plan for Manaʻe, Mauka to Makai; and
- Summarizing the community recommendations for the East Slope Management Plan.

It should be noted that the project area for this report is significantly larger than that of the East Slope Management Plan. For the purposes of that Plan, the "East Slope" is defined as the lands that "lie above the Forest Reserve boundary line between and including the ahupuaʻa of Puaʻahala to Hālawa." The project area for this report is extended to include (a) all areas makai of the Forest Reserve boundary from Puaʻahala to Hālawa, (b) west of Puaʻahala to Kamalō, and (c) the north shore, west of Hālawa to Pelekunu. Essentially, this is what was traditionally known as the "moku of Koʻolau."[5]

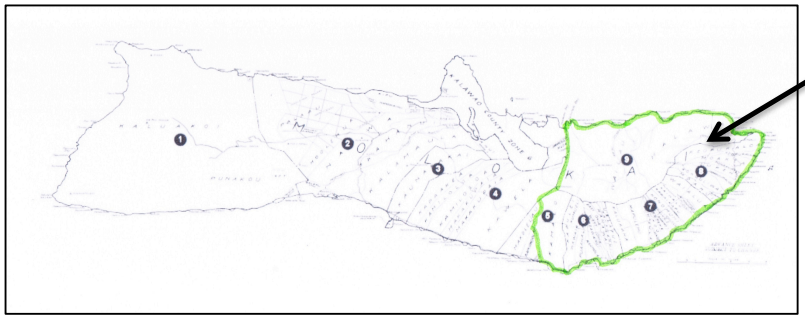


Figure 1. Map of Approximate Project Area: Moku of Koʻolau/Manaʻe.
Note: Going forward in this report, "Manaʻe Moku" generally refers to this entire area.

The reason for including the north shore (northeast) ahupuaʻa in this report is that the kamaʻāina informants expressed that what happens on the south shore may impact the north (e.g., migrational patterns of ungulates). They also shared that the mauka-makai trails that span south to north shore might be affected by the fence, which could present access issues. Additionally, the kamaʻāina informants expressed a reliance on resources located in the northeast and southeast shore, and that access between the two sides is critical. Thus, it became clear that Manaʻe could not be separated from the north shore, given the interaction and interdependence.

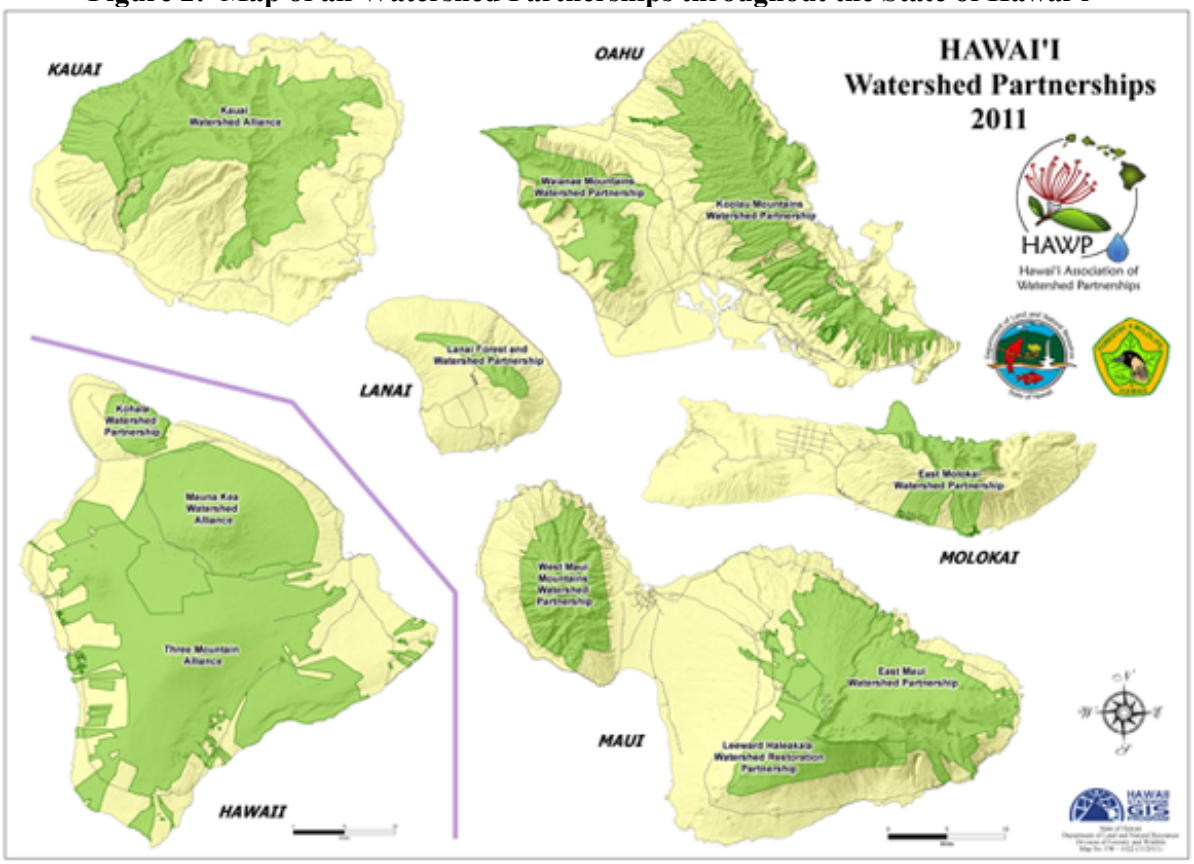
"Manaʻe" is the traditional and colloquial reference to East Molokaʻi. Literally, Ma-naʻe translates as "towards or to the east." Kamaʻāina of Manaʻe typically demarcate the boundaries of the district of Manaʻe as beginning from Kamalō ahupuaʻa (southeast), extending to the northeastern most tip of the island known as Hālawa ahupuaʻa.[6] Many families of Manaʻe trace their genealogies back to the northeast ahupuaʻa (especially Pelekunu and Wailau valleys). In ancient times, the highest concentration of Molokaʻi's population was located in the northeast ahupuaʻa due to access to the island's major water tributaries and ideal conditions for wetland taro cultivation, the staple food of early Hawaiians. As foreigners began to settle in Hawaiʻi during the Kingdom and U.S. Territorial period, the centers of early commerce on Molokaʻi began in Manaʻe, specifically in the southeast ahupuaʻa of Pukoʻo and Kamalō. As a result,

many of the north shore families of the Koʻolau (windward) region relocated to the southeast shore, yet still maintained cultural practices on both sides of the island.

2.2. THE EAST MOLOKAʻI WATERSHED PARTNERSHIP

This section provides an overview of the existing management efforts relating to and including the East Slope Management Plan. In an effort to protect the watershed areas of Molokaʻi, the East Moloka'i Watershed Partnership (EMoWP) was created in 1999 to "maintain a healthy watershed that would sustain the future quality and quantity of Molokai's water supply as well as benefit Hawaii's native flora, fauna and ecosystems."[7] The EMoWP is part of the Hawaiʻi Association of Watershed Partnerships, which comprises 11 island-based Watershed Partnerships throughout Hawaiʻi. These partnerships work collaboratively with more than 71 public and private partners on 6 islands to protect over 2.2 million acres of vital forested watershed lands. Each of these partnerships is a voluntary collaboration between the State and private landowners who are committed to protecting forested lands that provide for water recharge, the conservation of finite resources, and the promotion of healthy ecosystems through collaborative management. The first official watershed partnership began in East Maui in 1991 and grew to include projects on all major islands in the state (see Figure 2 below).[8]

Figure 2: Map of all Watershed Partnerships throughout the State of Hawaiʻi



Source: http://hawp.org/partnerships/

The Nature Conservancy ("TNC") and a grassroots community effort, which eventually led to Molokaʻi's designation as a USDA Enterprise Community (EC), played key roles in the formation of the partnership and helped carry out its first project, the Kamalō/Kapualei Watershed Project ("KKWP"). Watershed protection received the most community votes and the KKWP was the first priority project to be funded by the EC. The hallmark initiative was completed in 2001 with the establishment of the 5.5-mile KKWP fence. Since this time, the EMoWP has grown to 24 partners, which include landowners, community and conservation groups, and funders who support actions to improve and take care of Molokai's native forests. It is a voluntary alliance, of which TNC is the coordinator. The EMoWP currently protects over 30,000 acres of watershed, including north and central Molokaʻi, extending east to the ahupuaʻa of Kapualei. The EMoWP, in partnership with TNC, has utilized the method of fencing in strategic locations of mountainous regions in designated watershed management units to protect pristine native forests from grazing pressure by introduced ungulates (goat, deer, and wild pig).[9]

In the 15 years since the inception of the Kamalō/Kapualei fence project, the protected native forest has shown visible signs of recovery and regrowth. In Kawela alone, erosion has been reduced 10-fold and vegetation has gone from 0% to 75% cover (most of which is native) in just 5 years of fencing and animal control in Kawela's most denuded areas.[10] The EMoWP is looking to expand its efforts and areas of protection further east from the adjacent ahupuaʻa at Puaʻahala to the easternmost ahupuaʻa of Hālawa (located within the moku of Manaʻe. See map on page 10). Many large landowners in East Molokaʻi have requested and/or agreed to have their lands be included as part of this conservation effort.[11] The project as currently proposed would encompass approximately 14,000 acres of native forests located in the upper watershed areas with fencing material. This ambitious and extensive project has the potential to impact the rural Manaʻe community whose livelihood is largely dependent on subsistence hunting, fishing, and gathering. Manaʻe families have communicated both their hopes and fears as to how the extended fenceline may either benefit or hinder traditional practices.

Overarching Management Goals for the EMoWP

The guiding management goals for the EMoWP, including the draft East Slope Management Plan, are founded upon the understanding that East Molokaʻi's native ecosystems are important to the water resources for the island; that active management of these native ecosystems is necessary to maintain healthy watersheds in order to sustain the future quality and quantity of Molokaʻi's fresh water supply; and that effective management of these resources is best achieved through the coordinated actions of all major landowners in the watershed.[12]

The EMoWP's overarching management goal is to protect watershed integrity through the management and restoration of biological diversity in partnership lands. TNC coordinates this partnership and aims to accomplish this goal through management efforts in designated areas to: control non-native plant and animal species in designated management areas; monitor these control efforts; conduct native plant restoration; prevent and reduce wildfire; perform community outreach, and; support coastal research and management activities along East Molokai's south shore and fringing reefs.[13] It is within this framework that the draft East Slope Management Plan (January 2014 draft) is presented.

2.3. SYNOPSIS OF THE KEY POINTS OF THE "EAST SLOPE WATERSHED START-UP MANAGEMENT PLAN"

The January 2014 draft East Slope Management Plan, while basically extending the fenceline (through implementation of new fenced units) along the remaining Manaʻe ahupuaʻa, shares the same overarching management goal as the rest of the EMoWP – to protect watershed integrity through the management and restoration of biological diversity in partnership lands.[14]

The East Slope Management Plan's **Guiding Management Goals** for resource management include:

1. Control ungulate populations in watershed management units.
2. Control invasive plants and prevent the establishment of new invasive plant species in watershed management units.
3. Monitor watershed health.
4. Improve watershed management units via native biological diversity restoration.
5. Protect rare species within watershed management units through maintaining habitat and ecosystem health.
6. Prevent or suppress wildfires in watershed management units.
7. Strengthen community understanding and support for the protection and management of the East Molokai watershed.

Stephanie Dunbar-Co, *East Slope Watershed Start-Up Management Plan* 1-2 (Jan. 2014 draft).

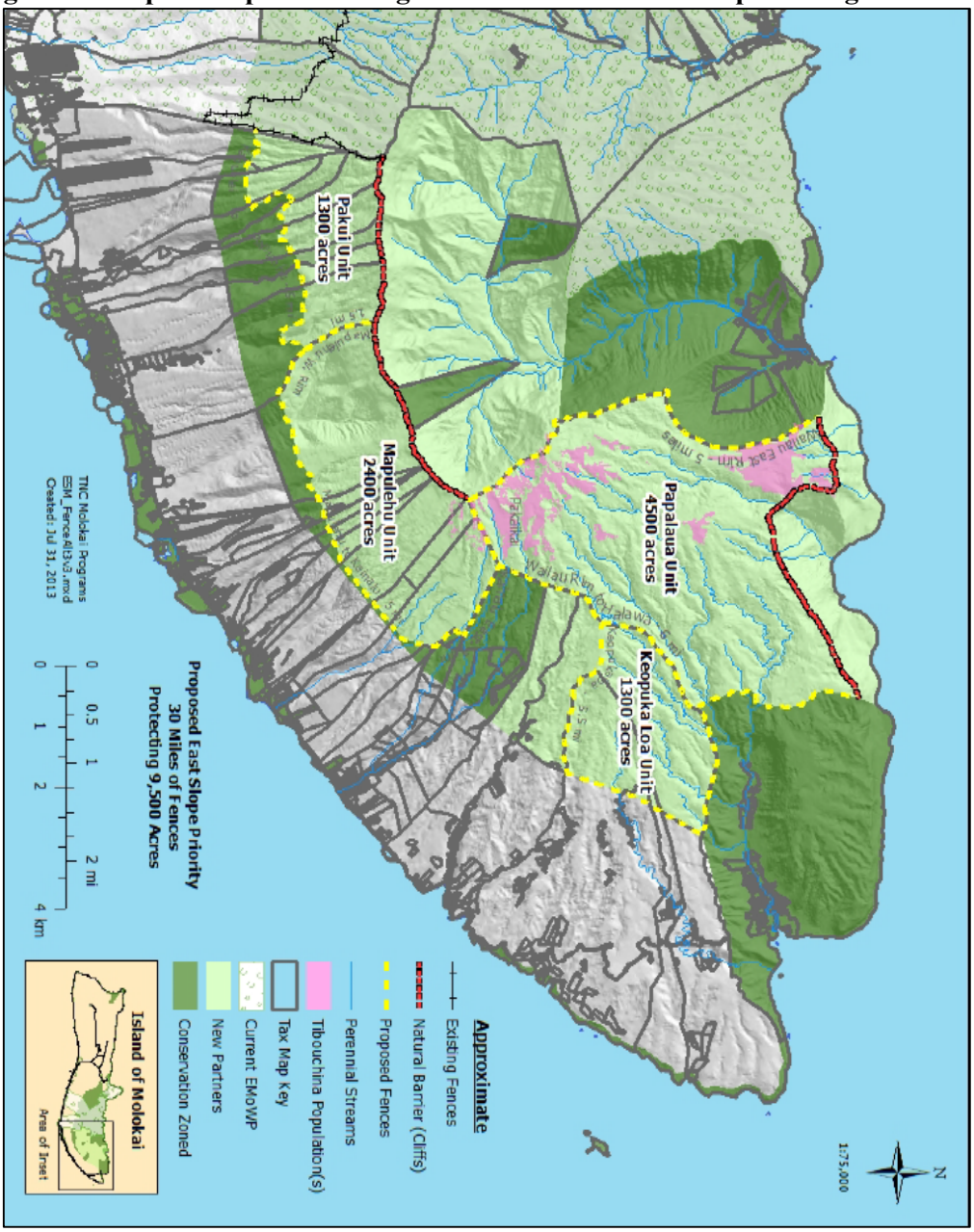
In the early stages of planning, the East Slope Management Plan proposed to erect four fencing units for watershed protection. These units were chosen because "they are hydrologically important, based on rainfall and surface water yields and … are classified as [State] priority watershed areas … contain[ing] the best remaining examples of intact, upland, native forest in East Molokai."[15] The proposed Management Units were prioritized as follows:

Table 2.1: Summary of Proposed Management Units from East Slope Management Plan

Unit	Estimated Size	Location (ahupuaʻa)	Notes from East Slope Management Plan
Pākuʻi	1,300 acres	Puaʻahala to Kaluaʻaha	Contains the most continuous, intact sections of native, mauka forest in the East slope.
Mapulehu	2,400 acres	Mapulehu to Pūniu ʻŌhua	Mix of native & degraded areas. A number of threatened & endangered single-island endemic species occur in the unit.
Keopuka Loa	1,300 acres	Honouli Maloʻo & Keopuka Loa	Makaʻeleʻele stream originates in this unit, which is the main source of freshwater for Hālawa residents. Pāpio stream provides water to Puʻu O Hoku Ranch. Mauka sections have intact native forest.
Pāpalaua	4,500 acres	Waialua to Hālawa	Owned entirely by Puʻu O Hoku Ranch. Too large, needs to be broken into sub-units. Forest health varies. Substantial degradation in Pakaikai, along eastern rim of Wailau, and behind Kahiwa Falls.

*It should be noted that the community input gathered for this report was based on these proposed four units. However, The Nature Conservancy (the implementers of the East Slope Plan), has since narrowed their focus to the first priority unit of Pāku‘i. This is in-line with what some kama‘āina informants recommended – that the plan should be implemented incrementally so the impacts of the first unit can be observed and then adjustments can be made as needed to the subsequent units.

Figure 3. Map of Proposed Management Units from East Slope Management Plan



Source: East Slope Watershed Start-Up Management Plan (January 2014 draft)

Background and community outreach efforts for East Slope Management Plan

Although this report is intended to gather community input on the East Slope Management Plan, this does *not* imply that EMoWP or TNC did not do community outreach, which they did. Instead, it is only intended to augment what they have done, including looking at aspects that are beyond their scope, such as the areas makai of the upper native forests. What follows is a brief summary of how the community has been involved, before and throughout the East Slope planning process thus far (provided by EMoWP/TNC).

- From 1999 to 2013 the EMoWP managed approximately 30,000 acres, including much of north and central Molokaʻi, and east to Kapualei (map below). The majority of the remaining native forest that is not being protected on Molokaʻi is located in Puaʻahala to Hālawa (the "East Slope") and provides a significant amount of the island's fresh water. Some Manaʻe mauka landowners wanted to see expanded protection of these native forests, so the EMoWP pursued the development of the East Slope Management Plan.
- The East Slope fenceline was first proposed to the community at the ʻAha Kiole o Molokaʻi meeting on April 2, 2013. Since that meeting, the EMoWP/TNC has worked with the ʻAha Kiole o Molokaʻi to put on and participate in five community meetings to present the project to the community and receive feedback.
- Since 2013, EMoWP has taken almost 40 community members on over 20 helicopter flights of the East Slope. They have met individually with over 50 community members (typically multiple times) to discuss the project.
- Since April 2013, information/updates and requests for participation in the East Slope planning process have appeared in Nature's NewsFlash, TNC Molokai's semi-annual outreach publication, which is sent to all post office and mailbox holders on the island.
- In May 2013, TNC initiated coordination of the Manaʻe Mauka Working Group (MMWG), a community group that was formed to help advise the East Slope planning process. The group is made up of 12 Manaʻe residents with long standing ties to the area, its people, and its resources. The group has held nine meetings thus far and continues to communicate regularly via meetings and/or email updates to discuss project details and provide community perspective.
- In October 2014, EMoWP/TNC coordinated an inter-generational community discussion on the East Slope Management Plan to provide community perspective and to help inspire others to be a part of this work. Billy Akutagawa, Malia Akutagawa, William "Tubz" Kalipi, Hano Naehu, Justin Luafalemana, and Heather Place participated. The discussion was filmed and is currently being aired on Akaku, Maui County's public access community television.
- Between November 2014 and January 2015, TNC developed and distributed outreach folders with easy to read information on the East Slope Management Plan (current status and future direction), EMoWP, TNC, resource protection, and requests for input and participation. Folders were first given to residents of the ahupuaʻa that make up the Pākuʻi Unit, and then handed out more broadly, directly engaging 90+ community members. Folders were intended to support previous one-on-one community interactions and reach community members who either didn't attend or stopped attending community meetings. Distributing folders usually led to casual opportunities to talk story about the project and get feedback.

Below are maps distributed in the most recent Nature's Newsflash, update as of October 2014, which as stated above, reflect EMoWP/TNC's immediate priority of the Pākuʻi Unit.

Figure 4. Map of East Molokai Watershed Partnership Partners and Native Ecosystems

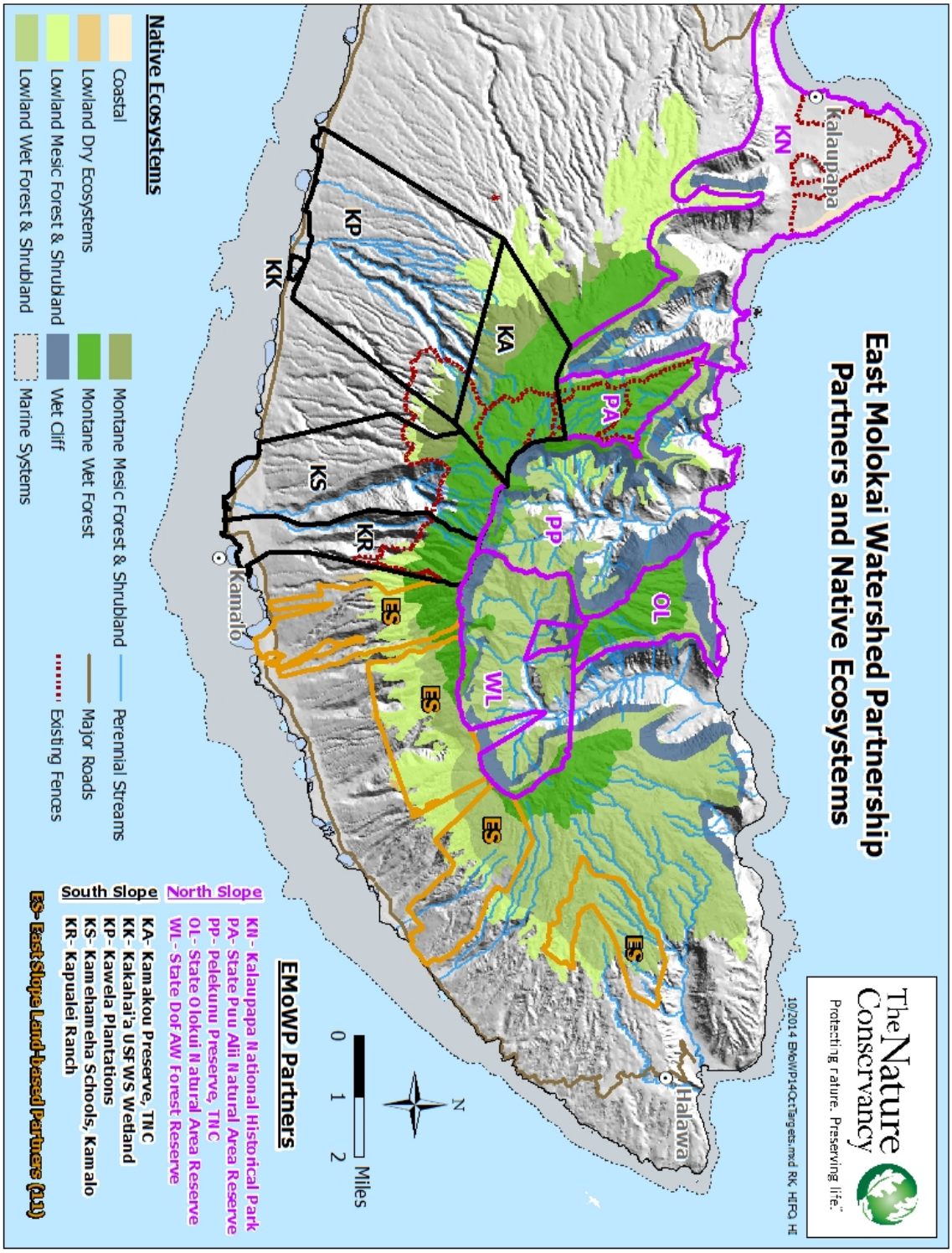
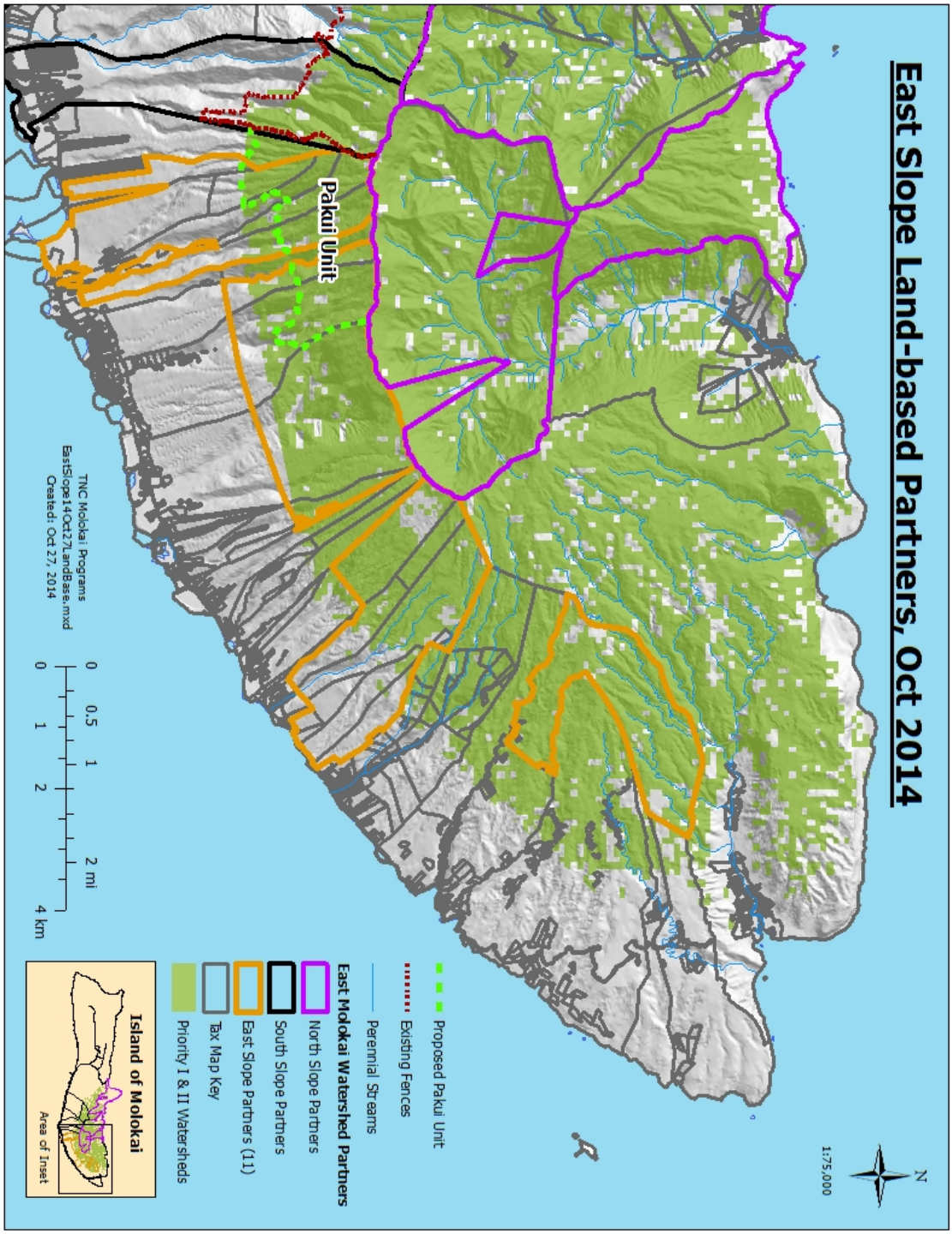


Figure 5. Map of East Slope Land-based Partners, October 2014



2.4. COMMUNITY REACTION & CONCERNS

What did the community ask for?

In November 2013, community members belonging to the ʻAha Kiole o Molokaʻi – Manaʻe Moku reviewed the draft East Slope Management Plan.[16] The ʻAha Kiole o Molokaʻi – Manaʻe Moku is an indigenous governance system for East Molokaʻi, and a branch of the ʻAha Kiole o Molokaʻi, which is part of the Statewide ʻAha Moku network that serves in an advisory capacity to the State Department of Land and Natural Resources (DLNR). The ʻAha Moku system is explained further in Section 4.1. At its November 26, 2013 ʻAha Kiole o Molokaʻi – Manaʻe Moku meeting, there was a general consensus amongst community members that something needed to be done to protect the watershed. Residents acknowledged that the proposed fence was a conservation tool, but expressed that they felt it was not the only tool for natural resource management.

While the ʻAha Kiole o Molokaʻi – Manaʻe Moku acknowledged that the proposed East Slope Management Plan was a good starting point, the ʻAha determined that a more comprehensive and integrated management approach was needed that not only protects the upper forested watershed, but addresses the interconnections between all natural and geographical elements of East Molokaʻi's multiple ahupuaʻa. The community requested a cultural management plan that acknowledges the ʻike kūpuna (ancestral knowledge) passed down through the generations of the ecological and cultural links found within each aspect of the ahupuaʻa from the mountaintop known as wao akua (sacred realm of the gods); to the wao kānaka (people's realm) that comprised the kula lands and hunting grounds; the loʻi irrigated by ʻauwai; the spring and stream-fed fishponds, limu beds, crab grounds, and estuaries; and the reef and nearshore fisheries. The community also urged that the cultural subsistence practices of long-time kamaʻāina families be documented as a foundation from which to address their protectable legal rights of access and mālama in accordance with hoaʻāina and konohiki-based traditional ecological knowledge (TEK) utilized in natural resource management.

A group of Manaʻe residents who oppose the proposed East Slope Management Plan and also feel that the ʻAha leadership within the Manaʻe Moku is predisposed towards supporting the expanded fenceline, convened separately to form Hui Aloha ʻĀina o Manaʻe ("the Hui"). While the Hui supports ahupuaʻa based management and the concept for a cultural management plan, they reject the ʻAha Kiole o Molokaʻi – Manaʻe Moku as a body that represents their concerns. Members of the Hui consider themselves to have the traditional ʻike to mālama their own ahupuaʻa irrespective of the ʻAha Kiole o Molokaʻi. This concept is generally in-line with kūpuna traditions that utilized the ʻike from ʻAha Ahupuaʻa, whereby by long-time ʻohana that held an intimate knowledge of their place and the resources therein oversaw the management of their own ahupuaʻa.

Specifically, members of Hui Aloha ʻĀina o Manaʻe oppose the expanded fenceline for the following reasons (what follows is a summary of their manaʻo):

- The existing Kamalō/Kapualei fence has created negative impacts to unfenced ahupuaʻa immediately east of this area. If more fencing is erected, but other areas left unprotected, ungulate migration will push further east and cause harm to these neighboring ahupuaʻa (e.g., spread of invasive plants, increased erosion and run-off into the streams and oceans). It has

also created a pathway just makai of the fenceline where ungulates travel. This new ungulate path/route has created additional erosion and run-off.

- An expanded fenceline will block access to subsistence hunters and gatherers from lands important to them. Native Hawaiian access rights will be threatened.
- Not all landowners have agreed to dedicate their conservation lands to the watershed partnership. Their non-participation jeopardizes ahupuaʻa that are left unfenced, such as the potential corridor between Waialua and the north shore, which includes the traditional Pākaikai.[17] The result will be that important cultural sites and wahi pana (sacred sites) will be destroyed by increased ungulate traffic. Moreover, important Manaʻe streams will be contaminated and human health will be compromised, especially for residents of Waialua, Honouliwai, Honoulimaloʻo, and Hālawa who rely exclusively on stream water for domestic and agricultural needs.
- The current proposed East Slope Management plan does not demonstrate a firm commitment to hire locally for conservation work and traditional ahupuaʻa management; to in-source local hunters exclusively for ungulate control; and to support small, home-grown businesses that could be utilized for purchasing native plant cultivars and other local enterprises that could benefit directly or indirectly by this project.
- The proposed East Slope Management plan is not ahupuaʻa-based, mauka-a-makai natural resource management. Rather, the watershed is narrowly and erroneously defined as the intact and diminished upper native forest. This type of management will not by itself restore the entire watershed and multiple ahupuaʻa of Manaʻe.
- Several members of the hui also harbor either a general or specific distrust and resentment towards large landowners. Hui members have communicated anger and frustration with large landowners who have called law enforcement authorities to arrest them for trespassing even though they are merely hunting and gathering for subsistence as an extension of hoaʻāina (ahupuaʻa tenant) rights. They are also frustrated with large landowners who have not been good stewards of the land: those who conduct ranching on steep slopes; degrade forest habitat; erode landscapes and cause flash flooding that destroys sensitive aquatic life such as oʻopu and hihiwai; divert water resources; grade, grub, and develop within sensitive ecosystems; and threaten ahupuaʻa resources critical to traditional subsistence.

Despite personal disagreements between community members and some distrust towards certain large landowners, it is apparent that the community, ʻAha Kiole or otherwise, individually or collectively, want and need a holistic ahupuaʻa-based management plan. It should be noted that while the East Slope Management Plan is intended to address the mauka watershed primarily, the implementer of that Plan, TNC, has expressed a willingness to work with other entities to incorporate their efforts into a larger mauka to makai watershed plan.

Thus, this report develops a framework for a community-based Subsistence and Ahupuaʻa Management Plan that incorporates the East Slope Management Plan, as well as the areas makai of that project area (also extending west to Kamalō, and along the north shore, from Hālawa to Pelekunu). This report aims to accurately reflect community manaʻo and inform government and public and private investors on what activities Manaʻe families support and consider culturally appropriate. It is our hope that the integration of Hawaiian traditional knowledge and practices; the free, prior, and informed consent of kamaʻāina families of Manaʻe; and their full participation in managing and caring for their ahupuaʻa are honored, respected, compensated, and valued in

tangible forms of exchange and collaboration to develop a stronger East Slope Management Plan, as well as a community-based Subsistence and Ahupuaʻa Management Plan.

2.5. METHODS EMPLOYED

2.5.1. Involvement of the University of Hawaiʻi's William S. Richardson School of Law Native Hawaiian Rights Clinic & Markline LLC

As discussed in the previous section, at the November 2013 ʻAha Kiole o Molokaʻi – Manaʻe Moku meeting, there was a general consensus by attendees that a more comprehensive ahupuaʻa-based watershed management plan was desired. Earlier that month, Malia Akutagawa, Assistant Professor of Law at the University of Hawaiʻi William S. Richardson School of Law and Hawaiʻinuiākea School of Hawaiian Knowledge, and her Fall 2013 Native Hawaiian Rights Clinic held a Traditional & Customary Native Hawaiian Rights Primer workshop[18] for the ʻAha Kiole. Because this legal information was shared (e.g., access rights and rights to mālama), the community requested assistance with assessing the impacts that the fencing project might have on native rights and practices. The attendees specifically wanted to know their legal rights with respect to subsistence and how to protect their ability to hunt, fish, farm, and gather.

The Office of Hawaiian Affairs (OHA), on behalf of the ʻAha Kiole o Molokaʻi – Manaʻe Moku, also met with Chair William Aila of DLNR, Leimana DaMate, Executive Director of the Statewide ʻAha Moku Advisory Committee (AMAC), and specific staff charged with administering the Watershed Management Partnership program. These State agency representatives discussed the possibility of supplementing or expanding the scope of the East Slope Management Plan to include integrated, community-based management, mauka to makai, along the entire span of the multiple ahupuaʻa of the Manaʻe Moku. Recognizing that Molokaʻi is a cultural kīpuka, a rural and native stronghold of traditional subsistence practitioners, and that the ʻAha Kiole on Molokaʻi has been operating as a system of local governance and decision-making, these State agencies agreed to support a watershed management approach more consistent with Hawaiian konohiki resource governance and mālama practices of hoaʻāina.

At both the Manaʻe community's request and OHA's urging, Malia Akutagawa organized her law students ("clinicians") enrolled in the Spring 2014 Native Hawaiian Rights Clinic to focus on this project. The Clinic traveled to Molokaʻi in February 2014 to conduct interviews and focus group discussions among Manaʻe families and to map important cultural sites and areas for traditional subsistence. Care was taken also to collaborate with and exchange information with Stephanie Dunbar-Co, Principal Investigator for TNC and author of the East Slope Management Plan. At the end of the semester, the clinicians completed a rough draft of their preliminary findings and recommendations based on the interviews, focus groups, and intake data gathered. They provided sectional rough drafts of Chapter 4 of this report, summarizing common law decisions and State constitutional and statutory protections of Native Hawaiian rights relevant to specific traditional practices of kamaʻāina families of Manaʻe. Over the summer, Malia Akutagawa's legal research assistant, Shaelene Kamakaʻala did further edits and supplemented sections in Chapter 4 of the draft report. She prepared a powerpoint presentation of the Clinic's preliminary findings and recommendations for the Manaʻe community at its ʻAha Kiole o Molokaʻi – Manaʻe Moku meeting in August 2014.

The next step was to find funding to hire a professional planner to conduct additional interviews, get more intake forms completed, and to finalize this report. Harmonee Williams of Markline LLC was contracted by OHA to complete this work. She is an environmental and community planner residing on Molokaʻi. She has authored and co-authored several community plans, needs assessments, and resource guides with various community groups on Molokaʻi.[19]

Malia Akutagawa agreed to remain on the project pro bono as a legal consultant and traditional knowledge holder to fulfill her personal kuleana as a Molokai-born kamaʻāina raised in Manaʻe with long-held genealogical ties to this ʻāina. Her knowledge of the land, relationships and connection to many of the ʻohana of Manaʻe, and neutral approach with respect to gathering and accurately reporting community manaʻo have helped to diffuse some of the internal conflicts and distrust existing between families belonging to Hui Aloha ʻĀina o Manaʻe, members of the ʻAha Kiole o Molokaʻi – Manaʻe Moku, and conservation-minded proponents of the proposed fenceline. Malia worked with Harmonee to edit and finalize all chapters.

The following sub-sections provide greater detail as to the methods utilized to compile this report.

2.5.2. Outreach, Interviews, Mapping, Meetings & Presentations

The planning team of the Native Hawaiian Rights Clinic and Markline LLC combined efforts to do extensive community outreach throughout 2014. Malia Akutagawa and her law clinicians traveled to Molokaʻi from February 14-16, and with Harmonee Williams, conducted community interviews and gathered manaʻo from key informants (kamaʻāina and other experts). Over 70 informants from Manaʻe were identified and contacted. The list of interviewees was also compiled with the assistance of Stephanie Dunbar-Co of TNC. Of the 70 individuals contacted, 27 were able to commit the time to meet in February during the 3-day period that the Clinic and Harmonee Williams were able to conduct interviews and focus group sessions. Follow-up interviews with other ahupuaʻa informants were also conducted by Malia Akutagawa and Harmonee Williams between August and December, for a total of 44 informants (this includes individual interviews, focus groups, and those who filled out intake forms).

In order to ensure that the informants represented the entire Manaʻe moku, care and due diligence were taken to identify and contact key individuals and ʻohana from the many ahupuaʻa throughout the moku who possess extensive knowledge of their ʻāina. These informants included subsistence hunters, gatherers, lāʻau lapaʻau (Hawaiian medicine) practitioners, lei makers, lawaiʻa (fishermen), mahiai (farmers), kiaʻi loko (fishpond experts), limu (seaweed) gatherers and cultivators, traditional artists crafters and sculptors who carve kiʻi, weave lauhala, and make kapa, kūpuna, and other ʻike (traditional knowledge) holders. It should be noted that those interviewees who are kamaʻāina are specifically referred to as "kamaʻāina informants" because the law recognizes kamaʻāina expertise in authenticating customary practices that also qualify as statutorily and constitutionally protected rights.[20] In addition, the planning team understood that kamaʻāina knowledge is key to creating a plan like this since kamaʻāina possess intimate knowledge of their place and are vital to maintaining ahupuaʻa health.

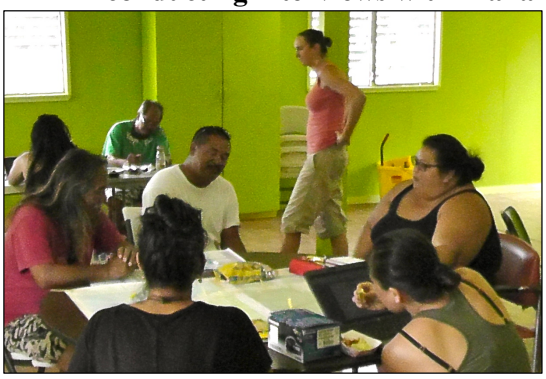
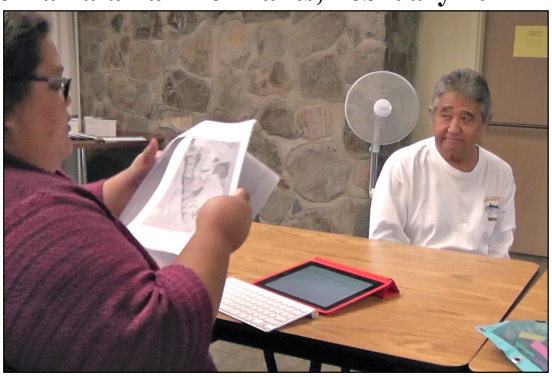
The key informants are listed below. As stated above, the majority are kamaʻāina informants. In addition, experts on native species related to terrestrial, marine, and aquatic environments were interviewed as well. Relevant excerpts from these interviews are included throughout the report, but kept anonymous. Notes from the interviews will be kept on file with OHA.

Key Informants (including Kamaʻāina Informants and other experts):

1. Clinton Akiona
2. William M. Akutagawa, Jr.
3. Robert "Bobby" Alcain
4. Lori Buchanan
5. William Caster
6. Eric Co
7. Frances Maka Cobb-Adams
8. Jeffrey Davis
9. Tracy Ann Davis
10. Stephanie Dunbar-Co
11. Sonny Dunnam
12. Steven Eminger
13. Alapai Hanapi
14. Mililani Hanapi
15. Raymond B. Kalilikane, Sr.
16. Allen Kalima
17. Mary Ipolani Kalima-Moses
18. Bronson "Duke" Kalipi
19. William "Tubz" Kalipi, Jr.
20. Zaidarene "Toochi" Kalipi
21. Russell Kallstrom
22. April Kealoha
23. Billy Kekahuna
24. Zallarina Kekahuna
25. Justin Luafalemana
26. Vernette "Penny" Rawlins Martin
27. Steven Moses
28. Guy Hanohano Naehu
29. Palmer Naki
30. Raymond "Leimana" Naki
31. Walter Naki
32. Mary "Hala" Pale
33. Peter Pale
34. Lacey Leiala N. Phifer
35. Milton Place
36. William K. Puleloa
37. Kalaniua Ritte
38. Loretta Ritte
39. Walter Ritte
40. Gandharva Mahina Hou Ross

41. Tammy Lynn Ross
42. Charlotte Leinaʻala Kaʻahanui Seales
43. Edward "Eddie" Tanaka
44. Matt Yamashita

Legal Clinic, Malia Akutagawa, & Harmonee Williams conducting interviews with Manaʻe Kamaʻāina Informants, February 2014

Photos by Oliver Manglona, Legal Clinician

The process to interview the kamaʻāina informants consisted of asking them to (1) fill out an Intake Form; (2) share their manaʻo regarding the resources and traditional and customary practices of Manaʻe, the proposed East Slope Management Plan, and how their moku should be managed (see questions below); and (3) map important sites.

The Intake Form utilized many of the questions from the 1994 *Governor's Molokaʻi Subsistence Task Force Study* as a template and baseline to provide comparative value. These forms collected data on informants' employment; household income; household size; level of education; ethinicity; place of birth; ahupuaʻa and moku of residence; identification of additional ahupuaʻa in Manaʻe which they have ancestral and genealogical ties; how they define subsistence and whether they engage in subsistence activities; how important subsistence is to them; what, when, and from which ahupuaʻa they gather ocean, stream, and mountain resources; plants or crops they grow and animals they farm; whether they support, oppose, or have concerns about the proposed fencing project; and what additional local and traditional strategies they recommend for resource management and watershed restoration. A sample of the Intake Form is provided in *Appendix A*.

The following interview questions and other follow-up questions were asked as appropriate:

1. What are some critical areas for Native Hawaiian traditional subsistence (fishing, hunting, ocean and land gathering, farming) and spiritual, religious, and ceremonial activities? (You may also indicate this information on the map)
2. What are some of the mele (songs), ʻoli (chants), moʻolelo (stories), significant place names, wind names, etc. about Manaʻe that are key to cultural understanding of the ʻāina?
3. What are some of the values and traditions passed down from your makua and kupuna re: how to treat the ʻāina, plant, harvest, and mālama the resources?

4. Do you feel that the proposed watershed management plan, including fencing of the upper areas of the native forest, is consistent with those traditional values and practices that you learned and pass down to the next generation? Do they fit within your understanding of traditional ahupua'a access and management?
5. What needs to be done to renew, maintain, and perpetuate traditional subsistence, religious, spiritual, and ceremonial practices in Mana'e for future generations?
6. What do you see your role being in the mālama of Mana'e?
7. Do you see yourself, your 'ohana, and the community-at-large taking an active role alongside formal conservationists and their work to restore the watershed of Mana'e? If so, what would that role be? How can the community co-manage the resources? How would you add to or amend the present draft watershed management plan?

Kama'āina informants also participated in a mapping exercise with a coded symbols and color pencils to identify traditional agriculture and food production sites (e.g., lo'i kalo and fishponds); general areas important for land, stream, and ocean gathering; ko'a (fishing grounds with corresponding land markers) and fisheries; major hunting areas; and important wahi pana (sacred sites) and trails critical to access, religious and ceremonial uses, and subsistence practices. Understanding the sensitive nature of special fishing and hunting grounds and places for gathering, kama'āina informants were informed that they had the following options:

- To not provide mapping information as a way to preserve confidentiality.
- To put a notation of a generalized area for subsistence practices that would not reveal specific locations of secret fishing, hunting, and gathering spots.

In addition, the purpose of the mapping exercise was explained, which was to indicate important traditional use zones for access, subsistence, and religious and ceremonial practices; especially where kama'āina express concerns that the proposed East Slope Management Plan could potentially impact these areas.

Mapping Exercise, February 2014

Photo by Oliver Manglona, Legal Clinician

2.5.3. Legal Analysis & Recommendations

Students participating in the Native Hawaiian Rights Clinic compiled the data gathered from the intake forms, mapping, and kamaʻāina interviews to determine the extent to which Manaʻe families rely on natural and cultural resources for traditional subsistence and religious practices. These practices were also analyzed within the context of statutory, constitutional, and common law protections of Native Hawaiian rights to not only access important biocultural resources but to mālama these resources and the ʻāina that sustains Manaʻe families and their culture. Groups of clinicians were assigned to draft sections of the report that covered specialized areas of Native Hawaiian rights law; they include:

- **ʻAha Moku and Traditional Resource Management**
- **Sources of Native Hawaiian Rights Law**
- **Trails and Traditional Access**
- **Native Burials and Historic Sites Preservation**
- **Water Rights and the Public Trust Doctrine**
- **Subsistence Hunting – An Emergent Cultural Practice and Right**
- **The Value of Integrating Traditional Ecological Knowledge (TEK) in Natural Resource Management**

This analysis comprises Chapter 4, whereby Malia Akutagawa and the law clinicians provide a detailed discussion of the legal rights and protections available to the Manaʻe community.

Lastly, the planning team documented, compiled, and reported the findings and recommendations. The findings are described and illustrated in Chapter 3 of this report. Chapter 5 then provides a more detailed discussion of the recommendations provided by the cultural informants, analyzed by the Law Clinic, and synthesized by Markline LLC. It should be noted that a significant portion of the writing of Chapter 4 and edits to the initial Clinic report were done during the summer of 2014 and throughout 2015 by Shaelene Kamakaʻala, a Research Assistant and law student enrolled in an independent study project with Malia Akutagawa. Additional guidance, research, and writing was provided by Malia Akutagawa throughout the process.

2.5.4. Meetings & Presentations

<u>OHA Meeting – August 5, 2014</u>
On August 5, 2014, Malia Akutagawa, her law students Shaelene Kamakaʻala and Keani Rawlins-Fernandez, and Harmonee Williams of Markline LLC attended a meeting with the Office of Hawaiian Affairs ("OHA") and members of Hui Aloha ʻĀina o Manaʻe. The meeting was hosted by OHA with Molokaʻi/Lanaʻi Trustee and former Board Chairperson Colette Machado, OHA Senior Public Policy Advocate Jocelyn Doane, OHA Community Outreach Coordinator Gayla Haliniak-Lloyd, and University of Hawaiʻi Department of Ethnic Studies Professor Davianna McGregor present. Those present from the Hui included Harry Ann Aki and her husband *(did not sign in),* Gandharva Mahina Hou Ross and his wife Tammy Lynn Ross, Raymond "Leimana" Naki, and Shaeralee Manosa.

The purpose of the meeting was to address concerns that were raised by the Hui to OHA in regards to the East Slope Management Plan, the involvement of the ʻAha Kiole o Molokaʻi – Manaʻe Moku, the role played by Malia Akutagawa and the Native Hawaiian Rights Clinic, and the qualifications of Harmonee Williams of Markline LLC.

Most of the Hui members present had already been interviewed by the Clinic earlier in the year (February 2014). However, due to a growing distrust of the ʻAha Kiole o Molokaʻi core leadership, the representatives of the ʻAha Kiole o Molokaʻi – Manaʻe Moku, and some of the watershed management partners (some large private landowners), the Hui were also skeptical about OHA's contract with Markline LLC and the role of Malia Akutagawa and her Native Hawaiian Rights Clinic. The Hui seemingly misunderstood the intent of drafting a community-based subsistence and ahupuaʻa management plan; that it was undertaken largely to fulfill the Hui's own request for a more comprehensive, traditional and integrated management strategy that engages community in the work. All of these issues were discussed, as was the process to hire Markline LLC, and OHA's strict procurement and bidding process to do so.

Malia Akutagawa shared with the Hui some of the Clinic's preliminary findings and recommendations that addressed some of their main concerns about the proposed East Slope Management Plan. Hui members expressed appreciation of these findings and recommendations and acknowledged that their manaʻo was accurately reflected in the Clinic's report. Malia Akutagawa encouraged Hui members to also attend the Clinic's full presentation scheduled for that evening before the ʻAha Kiole o Molokaʻi – Manaʻe Moku and also provided a digital copy of the presentation to one of its members. Some of the Hui members decided to attend and expressed positive feedback. Chair Machado was also invited and attended the Clinic's presentation to get the full scope of the Clinic's work and findings.

Since that time, members of the Hui have directly contacted Malia Akutagawa and Harmonee Williams to provide additional manaʻo. Thus, several more interviews with Hui members have been conducted at their homes. Finally, the authors participated in a site visit to Ka Ulu Kukui o Lanikaula to learn about this sacred wahi pana and its important historic role in sustaining the Manaʻe watershed.

<u>Clinic Presentation to the ʻAha Kiole o Molokaʻi – Manaʻe Moku on August 5, 2014</u>
The Law Clinic's presentation to the ʻAha Kiole o Molokaʻi – Manaʻe Moku had a relatively low attendance (approximately 15), but the preliminary findings and recommendations were well received by those who did attend. Long-standing issues between the Hui and the ʻAha Kiole o Molokaʻi – Manaʻe Moku were discussed, and Hui members in attendance expressed a renewed hope and desire to participate in the ʻAha process and provide ahupuaʻa leadership on the council. The Native Hawaiian Rights Clinic officially ended in May 2014 and completed its final deliverables through this presentation and a preliminary report. Malia Akutagawa re-committed herself to remain involved in the process; to provide assistance to Harmonee Williams in conducting future interviews; to cultivate greater trust in the process and mediate any potential tensions that may arise in the future given the sensitive nature of relationships within the Manaʻe community; and to assist in writing and editing the final plan, particularly the legal section (Chapter 4).

[5] *A Mau A Mau*, *supra* note 1.
[6] However, in ancient times, the Kawela (Kona) moku included Kamalō ahupuaʻa and several ahupuaʻa west of Kamalō into the area that is known as Kaunakakai today. This is a dry part of the island. The landscape was not as arid as it is today. The introduction of ungulates (cattle, deer, and goat) have transformed and eroded the landscape. Whole-scale water diversions by Molokai Ranch from Kawela to Kaunakakai and in the Palaʻau region to feed west Molokaʻi lands have also altered the landscape and impacted the productivity and health of watersheds in Kawela moku. These events have altered colloquial understandings of moku or districts demarcations on Molokaʻi. Today, Manaʻe is known to the people as including the ahupuaʻa of Kamalō where the air first becomes distinctly cooler and the landscape begins to green.
[7] HAWAIʻI ASSOCIATION OF WATERSHED PARTNERSHIP, http://hawp.org/partnerships/ (last visited Dec. 29, 2016).
[8] *Id.*
[9] Stephanie Dunbar-Co, *East Slope Watershed Start-Up Management Plan* 3 (Jan. 2014 draft).
[10] Interview by Harmonee Williams with Russell Kallstrom, Stephanie Dunbar-Co & Wailana Moses, Staff, The Nature Conservancy Molokai, in Hoʻolehua, Haw. (Dec. 18, 2014).
[11] Dunbar-Co, *supra* note 9.
[12] *Id.* at 5.
[13] *Id.* at 5-10.
[14] *Id.* at 10.
[15] *Id.* at 18.
[16] The Aha Kiole o Molokaʻi, which oversees all councils on Molokai, has a list of those individuals who have officially registered as members. This does not, however, preclude non-members from participating in ʻAha Kiole meetings. Any reference to "ʻAha Kiole o Molokaʻi – Manaʻe Moku members" reflects those who are actually registered. However, in more general terms, "the Moku" refers to those residing within that moku. Thus, any reference to "Manaʻe community" indicates residents geographically located within Manaʻe who may or may not be registered as official members.
[17] It should be noted that today, Pākaikai is commonly used to refer to a hunting area that abuts the back eastern bowl of Wailau Valley, which differs in location from the traditional Pākaikai (Kamehameha nui's birthplace).
[18] An informative workshop on the laws protecting Iwi Kūpuna and Hawaiian Traditional and Customary Rights, was conducted by Malia Akutagawa, Associate Professor of Law with Ka Huli Ao Center for Excellence in Native Hawaiian Law, University of Hawaiʻi at Mānoa, William S. Richardson School of Law. The workshop was sponsored by the Office of Hawaiian Affairs for the benefit of Kānaka Maoli communities throughout the islands.
[19] Authored and co-authored works by Malia Akutagawa include: *Molokaʻi Energy Needs Assessment* (2014), *Molokaʻi Go Local! Business Directory* (2014), *Sust ʻāina ble Molokai Resource Guide* (2009), *Mapulehu Glass House Feasibility Study* (2009), *Molokai Future of a Hawaiian Island* (2008), *Manaʻe GIS Mapping Project* (2008), and Ka Honua Momona, Int'l (KHMI) *Fishpond Management Plans* (2006-2010).
[20] In re Application of Ashford, 50 Haw. 314, 440 P.2d 76 (1968).

3. FINDINGS

3.1. IMPORTANCE OF SUBSISTENCE TO MANAʻE RESIDENTS

The island of Molokaʻi is historically known as "ʻĀina Momona" (Abundant Land or Land of Plenty), referring to the bounty of food that was produced on its fertile and fruitful lands.[21] The name honors Molokaʻi as the land of "fat fish and kukui nut relish." The "fat fish" are raised in the many loko iʻa (fishponds). The "kukui nut relish" is used to flavor the fish and speaks to the abundance of lush resources of Molokaʻi. Because these resources were so plentiful, chiefs of Maui and Oʻahu often fought for control of the island.[22] Manaʻe in particular was home to 35 of Molokaʻi's 53 fishponds, as well as forty lush valleys, well-suited for growing taro, sweet potato, and other vegetables.[23]

These resources continue to be available today, even if they are not as plentiful. Manaʻe is documented to be one of the most intact cultural and subsistence landscapes within Hawaiʻi.[24] Many Manaʻe families continue to rely upon subsistence fishing, hunting, gathering, and/or cultivation for a significant portion of their food. The *Governor's Molokaʻi Subsistence Task Force Study* (1994) reported that twenty-eight percent (28%) percent of Molokaʻi families' food was acquired through subsistence activities, and thirty-eight percent (38%) among Native Hawaiian families.[25] A strong continuation of traditional and cultural practices was expressed throughout many of the interviews conducted for this TCP Report, from hunting deer, to catching fish, to gathering flowers to make lei, to mālama of heiau. Details of those practices are described and documented in the following sections. This chapter then summarizes the manaʻo shared by community members, including kamaʻāina informants and other experts, on the overall watershed health of Manaʻe and on the proposed East Slope Management Plan, as well as the potential impacts of these issues on their ability to carry out those traditional and customary practices. As stated previously, manaʻo from these informants is shared throughout this report, but is kept anonymous. (A list of key informants can be found in Section 2.5, on pages 18-19.)

An overwhelming number of kamaʻāina informants shared the sentiment that subsistence is "Very Important" for their family on their Intake Forms.[26] As described in the Methods (Section 2.5) of this report, these informants were asked to fill out an Intake Form in order to document the amount and location of subsistence practices occurring in Manaʻe. The following two tables summarize that information. The first is entitled "Manaʻe Resource Usage Data by Ahupuaʻa" (Table 3.1), which tabulates the number of informants who reported doing various subsistence activities, and in which ahupuaʻa. As shown, every ahupuaʻa in Manaʻe was identified as having various cultural, religious, and subsistence values, which indicates the extent and level of dependence that Manaʻe residents' subsistence lifestyle has on the area's resources. The second table, "Vital Subsistence Resources in Manaʻe Moku" (Table 3.2), lists the species and kinds of fish, plants, animals, stream life, ocean resources, etc. that are currently gathered, fished, hunted, and/or farmed by the 30 kamaʻāina informants that completed an Intake Form.

It is clear that the entire moku of Manaʻe is essential to the subsistence lifestyle of its community and island residents. At the same time, the people of Manaʻe have witnessed a significant decline in the health and abundance of its ahupuaʻa resources, mauka to makai. Thus, any proposed conservation approach must take into account the impacts of the strategy, with a particular focus on the impacts to the subsistence lifestyle of Manaʻe residents.

Table 3.1: Manaʻe Resource Usage Data by Ahupuaʻa

Informants' responses to the question: Within Manaʻe, which ahupuaʻa do you access for traditional, religious, ceremonial purposes and/or to gather, fish, farm, and/or hunt for subsistence?								
Ahupuaʻa Name	**Religious & ceremonial practices**	**Hunting**	**Land gathering**	**Stream gathering**	**Fishing & ocean gathering**	**Farming, Gardening**	**Fishpond, aquaculture**	**Raising livestock**
Kamalō	2	9	7	1	13	2	1	1
Kapualei	1	6	5	1	6	2	1	1
Kumueli	1	3	4		5			
Wawaia	1	3	4		5			
Puaʻahala	1	6	5	1	7	1		1
Kaʻamola	2	8	8	1	10	4	3	2
Keawanui	2	8	5	1	9			
West ʻOhia	2	8	6	2	7	1	1	1
East ʻOhia	2	8	6	2	7	2	1	1
Manawai	1	7	5	1	6	1		
Kahananui	1	9	6	1	6			
ʻUalapuʻe	2	10	6	2	9	2	2	1
Kaluaʻaha	1	8	5	1	7	3		1
Mapulehu	3	11	6	1	12		1	1
Punaula	1	4	4		5			
Pukoʻo	2	5	3		10		2	1
Kupeke	1	5	3		7		1	
Ahaino 1	1	4	2		5			
Ahaino 2	1	4	2		5			
Kailiula	1	3	2		5			
Honomuni	1	6	2		6			
Kawaikapu	1	7	2		8			
Kainalu	1	6	3		7			
Puniuohua 2	1	5	3		6			
Puniuohua 1	2	5	3		7	1		1
Waialua	2	5	4		9			
Moanui	4	5	5	1	9	1	1	
Kumimi	4	5	4	2	9	2		
Honouliwai	3	6	4	2	11	1	2	
Honoulimaloʻo	2	5	3	1	9	1		
Keahuoku	1	4	3		6			
Lupehu	2	4	4	1	9	1		
Pohakupili	2	4	4	1	8	1		
Moakea	2	4	4	1	6	1		
Keopukauuku	2	4	4	1	6	1		
Keopukaloa	3	5	5	1	6	1		
Koaliʻi	2	5	3	1	6	1		
Hālawa	5	7	8	8	12	1		
Wailau	3	5	8	8	9	1		
Pelekunu	3	3	5	6	8			

*This table shows that, based on the input of the 30 kamaʻāina informants that completed an Intake Form, every ahupuaʻa in Manaʻe is important for cultural, religious, and/or subsistence practices. The table shows that every ahupuaʻa is utilized and it only takes one individual to have standing to assert their rights and warrant legal protections for those rights. It should be noted that this table does not encompass every individual in Manaʻe or Molokaʻi that engages in these practices, only those that filled out an Intake Form.

Table 3.2: Vital Subsistence Resources in the Manaʻe Moku

Religious & ceremonial practices	Hunting	Land Gathering	Stream Gathering	Fishing & Ocean Gathering	Farming & Gardening	Fishpond/ Aquaculture	Raising Livestock
**cultural informants participate in various religious & ceremonial practices in Manaʻe, but they were not asked to specify what their practices are.*	- Axis Deer -Black buck - Goats - Pigs	ʻAʻaliʻi ʻĀhinahina Ahuhu ʻĀkala Alaheʻe ʻAloe ʻAwa Guava Hala Hāpuʻu fern Hau Haʻoui Hōʻio ʻIliahi (scarce) ʻIlima Kaunaʻoa Kī Kiawe Koa Koali Koʻokoʻolau Kope Kou Kukui Laukahi Liko/Lehua Liliko'i Loulu Maiʻa Maile Māmaki Māmane Mangrove Maunaloa Milo Moa Niu Noni Oranges Pakalana Papaya Paria Pepeiao Papaya Pīkake Plum Pōpolo Puakenikeni Squash	Āholehole ʻAmaʻama Crabs (some) Hīhīwai (scarce; rarely) ʻŌpae ʻOʻopu Prawns Pūpū	Reef fish ʻAhi Akule Āholehole ʻAmaʻama Awa Aweoweo Crab/Pāpaʻi (ʻAʻama, Black crab, Blue pincher, Samoan) Enenue Hāʻukeʻuke Heʻe Hīnālea Kākū Kala Kawakawa Kūpeʻe Kūpipi Kole Kumu Lai Leho Limu (all types; ʻEleʻele, Huluhuluwaena, Kohu, Lipeʻe, Manauea, Ogo, Pālahalaha, Wāwaeʻiole) Loli Mahimahi Mamo Manini Menpachi Moana Moi Mu ʻŌʻio Onaga Ono ʻŌpae ʻŌpakapaka ʻŌpelu ʻOpihi Paʻakai Palani Pipipi	ʻAloe ʻAwa Avocado Chili pepper Fig Gandule Green onion Guava Herbs Hwn. Orange Honohono grass Kale Kalo (poi and luʻau leaf) Kī Koʻokoʻolau Kukui Lāʻī Lemon Lemon-grass Lettuce Lūʻau Luffa Macademia nut Maiʻa Māmaki Mango Mountain apple Malunggay Niu Noni Okra ʻŌlena Papaya Pōpolo Sour sap Starfruit String beans Tangerine Tomato ʻUala ʻUhaloa ʻUlu	**cultural informants participate in fishpond practices in Manaʻe, but they were not asked to specify what their practices are.*	Cows (meat) Eggs Fighting cocks Goats Pigs Rabbits

Table 3.2: Vital Subsistence Resources in the Manaʻe Moku (continued)

Religious & ceremonial practices	Hunting	Land Gathering	Stream Gathering	Fishing & Ocean Gathering	Farming & Gardening	Fishpond/ Aquaculture	Raising Livestock
		Lāʻī ʻUhaloa ʻUlu Hawaiian oranges *Gather seeds from wild fruits/plants		Pāpio/Ulua Rainbow runner Shells Taʻape Toau Uhu Ula Uouoa Wana Weke	Wāpinē Wiliwili		

*This table shows the species and kinds of fish, plants, stream life, ocean resources, etc. that are currently fished, hunted, gathered, or raised by the 30 kamaʻāina informants that completed an Intake Form. It should be noted this table does not capture every species in Manaʻe that is important for cultural, religious, or subsistence practices, but only those identified by the informants that participated in this process. Also, it was recommended that in the future (i.e., in the Subsistence & Ahupuaʻa Management Plan) such a table include Latin names for species.

The information in these two tables, gathered from kamaʻāina informants, provides a good indication as to how widespread traditional and cultural practices are in Manaʻe. It is critical that this type of information be communicated clearly throughout any conservation efforts so that such resources and practices can be recognized and protected. It is also vital that practitioners know their rights and act to protect them. This will be discussed in more detail in the legal section of this report (Chapter 4). In short, both practitioners and conservationists need to acknowledge what traditional and customary practices exist in Manaʻe today, and then cooperatively decide how to best manage the area with cultural and traditional resources and rights in mind.

The following sections describe these cultural and subsistence resources in more detail. This information is based on input from those who participated in this process. As conservation efforts progress, individuals from each ahupuaʻa should participate to ensure all important resources and practices are identified and considered. It should be noted that TNC will be conducting a Cultural Impact Assessment (CIA) and an Environmental Assessment (EA) for each unit proposed, beginning with the Pākuʻi Unit (underway in 2015-16). That process should result in a more thorough identification of natural and cultural resources.

3.2. SIGNIFICANT CULTURAL SITES AND TRAILS

"Pana" – to pulsate, throb, like that of a heartbeat. So intelligently combined with the term "wahi," to refer to a legendary place or more precisely, places that live through our memory. Wahi pana are those that flourished because of the inhabitants who dwelled there, our kūpuna, but perhaps more importantly allowed those who lived within them to prosper. Scholar Noʻeau Peralto asserts,

> It has been said that we are all branches of the genealogical trees established long ago by our kūpuna who birthed us in to existence. I ulu nō ka lālā i ke kumu. Nourished and sustained by the many piko that connect us to those kūpuna who came before, we, indeed, are the living embodiments of the sacrifices of their labor.[27]

It is because of this realization that the concept of aloha ʻāina was and is manifested in the lives of Kānaka Maoli (indigenous Hawaiians) everywhere. Samuel Elbert recounts the abundance of aloha ʻāina sayings in the fact that they can be found in moʻolelo, mele, moʻokūʻauhau, etc. Elbert states, "they name illustrious chiefs and places, important rains, seas, winds, and distinctive features."[28] The use and knowledge of such place names are the epitome of aloha ʻāina and strengthen our connections to our glorious past. These types of resources have been identified as "essential for the expression and perpetuation of Hawaiian culture, religion, and language."[29]

This section provides a brief description of just some of the multitude of historical and cultural sites identified, along with concerns and possible effects that the fencing project may have on Manaʻe's historical sites and burials. Section 4.4 sets forth legal protections for historic sites and burials, along with a preliminary recommendation for the Manaʻe community to ensure maximum legal protections are followed and respected.

The following descriptions and associated map are not meant to provide a comprehensive identification of all cultural sites, rather it is intended to show that amongst the 40+ kamaʻāina informants, a multitude of such sites are still in existence today throughout the entire Manaʻe moku, and warrant the attention and protection of those involved in work that may pose a threat to these sites. With that in mind, some examples of historical and cultural sites that were identified include:

Heiau:

- Pākuʻi Heiau – part of a larger complex of the heiau called Ka Hokukano, located within the Manawai and Kahananui ahupuaʻa. A kamaʻāina family has been cleaning and caring for this heiau complex for many years. A dream was re-counted by a kupuna of stars above these heiau, which may be connected to the name Ka Hokukano (hoku meaning stars). Pākuʻi was specifically noted by the late Kumu Hula John Kaimikaua as the site where a prophecy about the future of the Hawaiian people and the islands was made at the time when the edict abolishing the ʻai kapu was issued by Kaʻahumanu and Liholiho. Kaʻahumanu's soldiers traveled to every island to enforce the edict. When they arrived on the shores of ʻUalapuʻe, a mock battle ensued. The kahuna who cared for the Pākui heiau were said to have moved the kiʻi and artifacts from the heiau and sealed them in a cave somewhere in the ahupuaʻa of ʻŌhia. When Kaʻahumanuʻs soldiers arrived to burn down the heiau, the kahuna prophesied at Pākui that the high born would fall, and the land and the Hawaiian people would suffer, and that it would be the people of the land that would rise once more to restore pono (goodness, righteous). It is said that we are living in that time now, as marked by the beginning of a Hawaiian Renaissance (restoration of the language, non-instrument navigational voyaging, the aloha ʻāina movement, etc). A resounding chant in the prophecy is "Hōʻale ka lepo popolo." Lepo popolo is a metaphor for the common people of the land who rise out of the taro patch with mud on their legs.

Hōʻale represents the highest reach of the wave as it crests. Kamaʻāina of that area speak of the numerous heiau as comprising a kino (body). With the head, shoulders, upper torso along the mountain and upper lowlands, and the feet located in the ocean as a circular platform. Fishermen recount that this heiau "walks" or travels, and can be seen in one place during a certain time of the year, and then gone when they return to the area, only to show up again at a later time.

- A kapa making heiau in Manawai indicates the presence of wauke in the area, helping to identify important resources to protect or restore. It is a heiau exclusive to women and the making of kapa.
- ʻIliʻiliʻōpae Heiau – Located in the Pūkoʻo area, ʻIliʻiliʻōpae is known as the second largest heiau throughout Hawaiʻi. There are many moʻolelo about this sacred place.
- Another heiau, located adjacent to the streambed, has a pit (imu) where a chief from Oʻahu was killed. It was recounted that his body was burned there.
- A fishing heiau was identified mauka of the main road in Kaʻamola by a local family that has been cleaning and caring for it for many years.
- An agricultural heiau and an ocean heiau were identified in the ahupuaʻa of Kaluaʻaha.
- Certain heiau and ahupuaʻa boundary markers may have been destroyed by heavy equipment operations, according to a kamaʻāina informant. One such stone formation that was destroyed was described to have the face of a mahi-mahi fish. The kapa heiau may have been partially destroyed by the heavy equipment as well.
- There are numerous other heiau within Manaʻe. Some have been identified by the State Historic Preservation Division (SHPD). Additional heiau were identified in the *Manaʻe GIS Mapping Project* (County of Maui, 2008). Still others are known, but were not identified for protection.

<u>Loʻi Kalo, Important Water Sources, Pristine Forested Areas, and related resources:</u>

- The ahupuaʻa of Honomuni is significant because of the large loʻi kalo (irrigated terraces for taro) established by the Mōʻī, King Kamehameha I.
- Pākaikai – Also known as "Queen's bath", this area has a great abundance of loʻi terracing that indicate the cultivation that went on in here in the past.
- Numerous loʻi terraces identified in the ahupuaʻa of Kaʻamola, ʻUalapuʻe, Kaluaʻaha, Waialua, Halawa, among others.
- Ka Ulu Kukui o Lanikaula – Today it is a small grove, but it was once a huge forest of kukui trees (some say 600 acres), which were essential for bringing rains to Manaʻe. The rainclouds were said to travel from Hakaʻano, a northeast ahupuaʻa, move through Ulu Kukui o Lanikaula, and further along all the ahupuaʻa of East Molokaʻi, until they reached Kamalō, and moved out to sea towards Lānaʻi.
- Pristine, intact native forest in upper ʻŌhia and Kahananui (within the Pākuʻi Unit).
- Kahuli snail found in Kumuʻeli and along the north side cliffs.
- Pōhakupili – There are many springs located in this area that begin their flow from mauka and flow all the way down to the various fishponds makai. If the top sources are clogged or dry, the springs down below will also dry-up. This is the epitome of what has been happening with the watershed in Manaʻe. Protecting and restoring the Pōhakupili area warrants attention and care.
- Kapoʻokoʻolau – One kamaʻāina informant said "There's a place, Waikuʻilani, that goes to Kapoʻokoʻolau. There used to be a waterfall going into the gulch that sank down into

the ground, not into the ocean. But along the ocean portion, it formed springs. Each fishpond on east Molokaʻi has 2-3 springs."

- Waiakeaʻakua – identified as "the birthplace of waters," and described as "the most important water source because it feeds every stream on that side of the island." It's critical that area be protected because it acts like a sponge that soaks up the moisture, like Kamakou Bog; its health is vital to the overall watershed health.
- Hālawa – A plethora of cultural sites have been located within this valley, as it was heavily inhabited and used for the cultivation of kalo and other native plants. A full report of all sites within it can be read through Dr. Patrick Kirch's Hālawa Study.[30]
- Wailau – Much like its neighbor valleys (Pelekunu to the west and Hālawa to the east), Wailau was made up of extensive loʻi complexes. These were documented and discussed in Dr. Windy McElroy's dissertation.[31] Wailau is also known for its rocks lying offshore and its relevance to the Moʻolelo of Kana.
- Pelekunu – Much like other surrounding valleys, Pelekunu is known for its plethora of loʻi that were cultivated here. One of its associated islands, Mōkapu, is known for its role in the Moʻolelo of Haʻehaʻekū. A north-south traditional trail is known to have gone from Pelekunu valley through to Kamalō.

Burials:

- Kumimi and Moanui were identified as having aliʻi burials located there.
- Caves in Moanui are also historically and traditionally significant, but landslides have destroyed at least some of these caves.

Other Historic Sites and Moʻolelo:

- The traditional Pākaikai area was identified to be Kamehameha nui's birthplace, and to have a large number of historical sites such as the Queen's bath, an area of rocks with bowls carved into them and used for making ʻawa (see image below).[32] An alternative presented in the East Slope Management Plan would create a corridor through this area, inviting a high concentration of ungulate migration, which could potentially negatively impact important historical sites.[33]

ʻAwa cups in the traditional Pākaikai area. If the alternative consisting of a corridor is implemented, sites such as these would be threatened by heavily concentrated ungulate traffic.

Photo: Ted Kanemitsu

- Moʻolelo of Lanikaula – It was said that the great prophet of Molokaʻi, Lanikaula lived in the 15th century. His bones are believed to rest in Ka Ulu Kukui o Lanikaula (kukui grove of Lanikaula). Several informants mentioned that this site is the second most sacred place in all of Hawaiʻi.
- Moʻolelo of ʻAnini – the magic hala tree and hala mat that carried and saved a baby during heavy floods. This indicates an abundance of freshwater from Honouliwai and presence of important lauhala groves.
- Moʻolelo of Kana – "The rocks of Kana" located outside of Wailau Valley symbolize Kana's body lying in the ocean.
- ʻAhaʻino/Honomuni area – local puʻu one (inland fishpond), whose spring has been impacted by mauka earth moving activities. Coral lanes extending from mākāhā planted in ancient times to attract fish. Also, underwater ahu and reef gardens with the names of women in early Hawaii who tended them. Families related to these women can trace their genealogy and rights of stewardship to these underwater garden plots.
- Hina's Cave – Hina is known as the mother of Molokaʻi island. Also known for famous wind gourd used to restore pono with the people and the land. The location of this important site was not shared for its protection.

Important Trails:

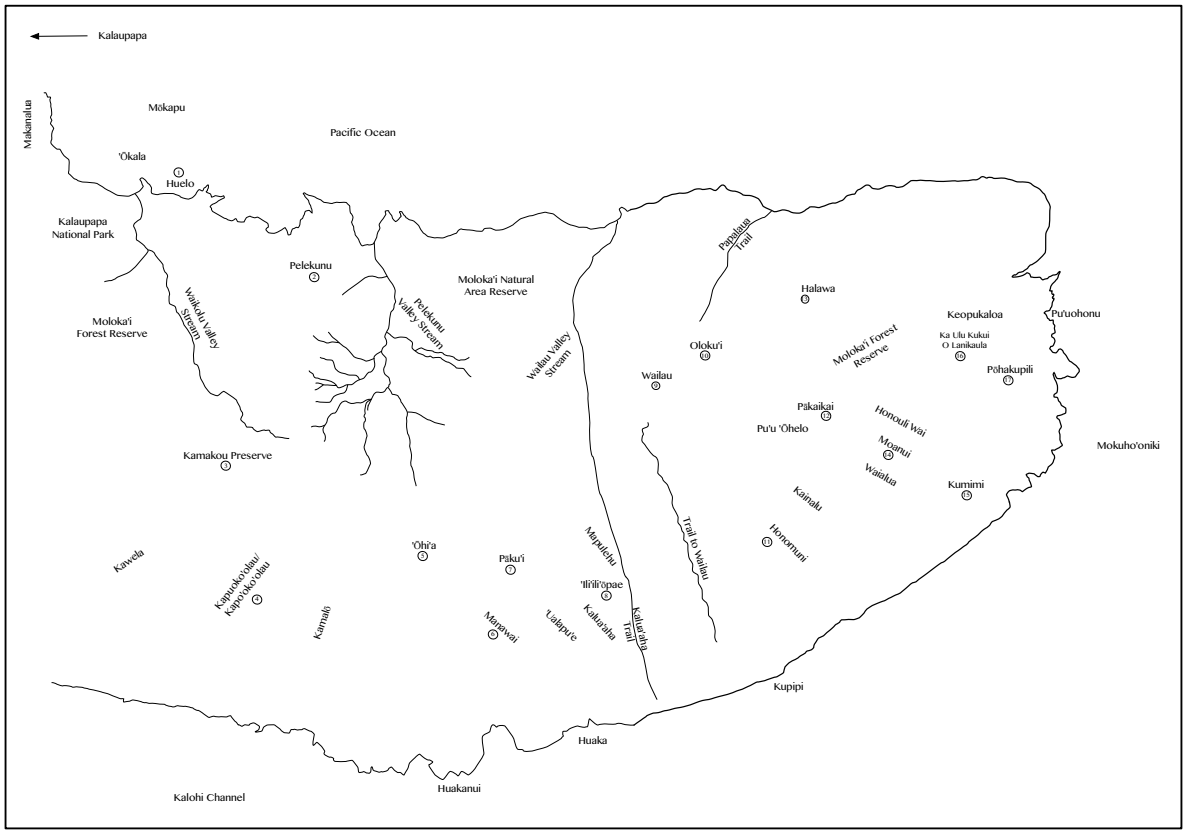
- Wailau Trail – historic trail that leads out from Wailau and cuts towards Mapulehu is still used today. One informant added, "the Wailau Trail was serious. It was categorized as a government road. That is how much people used this road. Uncles were the postal service. There are stories of them delivering mail to Pelekunu. It was the only way to get into town from the backside."
- Pelekunu trail – begins at Makole. There was documentation of this trail in 1960.
- A few kamaʻāina informants mentioned an underground lava tube connecting south shore to north shore, from Kamalō to Pelekunu, although the exact location is unknown. This trail is also mentioned in Aunty Harriet Ne's *Tales of Molokai*.
- Other trails mentioned include the Kaluaʻaha Trail and Papalaua Trail.

Map of Identified Cultural Sites and Trails in Manaʻe

The following map provides an illustration of the multitude of historic sites and trails that the kamaʻāina informants identified throughout Manaʻe. Please note that this map does not encompass all of Manaʻe's historic sites and trails, only those identified by the kamaʻāina informants interviewed by the Native Hawaiian Rights Clinic in February. Thus, this map was prepared by the clinicians, based on the sites identified at that time. Each site is numbered and corresponds to a more detailed description, which is provided in *Appendix B*.

It should be noted that TNC will be conducting a Cultural Impact Assessment (along with an Environmental Assessment) for each unit proposed, beginning with the Pākuʻi Unit (the process for which began in 2015). That process should result in a more thorough identification of sites.

Figure 6. Map of cultural sites and trails in Manaʻe identified by kamaʻāina informants



Source: UH Native Hawaiian Rights Clinic, Spring 2014.

Recommendations regarding cultural sites and trails, springs, and loʻi kalo include, but are not limited to the following (a more complete list of recommendations is included in Chapter 5, but these are listed here, as they relate to the map and information collected by the Clinicians):

- Cultural sites should be taken care of and maintained, and whenever possible, such mālama should be carried out by ʻohana who know the place intimately.
- Trails should be maintained and access should be allowed; ensure they are not blocked by a fence.
- Invasive plants should be removed from streams, especially those that soak up a significant amount of water, such as Java Plum.
- Streams should be maintained, cleared of debris.
- Stream bank should be replanted with native riparian plants.
- Wherever possible, native species should be re-introduced (fish and plants).
- Monitor in-stream flow.
- Loʻi and ʻauwai should be restored, re-opened, and planted for production. Use them as siltation traps to reduce run-off.

3.3. NEARSHORE FISHERIES: FISHPONDS, REEFS, ESTUARIES, AND OCEAN GATHERING AREAS

Traditionally, an ahupuaʻa ran from the top of the mountain down to the shoreline and out to the edge of the reef. *In Re Kamakana* (1978) says "an ahupuaʻa in ancient Hawaiʻi generally ran from the mountain to the sea. This afforded to the chief of the ahupuaʻa and his people a fishery residence at the warm seaside, together with the products of the highlands, such as fuel, canoe timber, mountain birds, and the right of way to the same, and all the varied products of the intermediate land. Consistent with the concept of the ahupuaʻa as a self-sufficient land unit, both inland and shore fishponds were considered to be part of the ahupuaʻa within its boundaries." Based on this, modern-day law recognizes that fishponds and konohiki fisheries are part of the ahupuaʻa, as are submerged lands.

Numerous kamaʻāina informants discussed the importance of Manaʻe's ocean resources, along with the fishing practices they carry out there, which includes a wide variety of techniques. Several informants mentioned limu (seaweed) gathering as an important part of their traditional and customary practices. They also talked about how the ocean resources have been negatively impacted by the degradation of the watershed. Namely, erosion has caused run-off and siltation of the nearshore waters and the reef. In addition, some of their koʻa (fishing markers) have been impacted by invasive vegetation, such as kiawe, that has hidden their line of sight; thus, impacting their ability to locate certain fishing grounds. Another direct impact of a degraded watershed on the nearshore waters is that certain springs have stopped flowing, which are essential for fishponds to function as they were meant to, since they provide muliwai (brackish water) that feeds the loko iʻa and provides a micro-ecosystem valued by herbivorous fish, such as mullet and milkfish. Thus, there is a very clear correlation between the health of the mauka watershed and health of the nearshore fishing and gathering areas.

In addition, there have been numerous efforts to restore fishponds on Molokaʻi. One such effort currently underway in Manaʻe is Hui o Kuapā – Keawanui Fishpond, formerly known as the Hawaiian Learning Center, under the direction of Walter Ritte, Kalaniui Ritte, and Hano Naehu. They manage Keawanui Fishpond and Kamehameha lands surrounding that pond. They have been restoring and maintaining Keawanui Fishpond since 1999. Through years of hard work, this program has successfully restored this fishpond to being functional again. They are re-opening springs that were covered by mangrove that naturally feed the fishpond and provide muliwai (the brackish water that attracts and feeds fish), rebuilding the stonewalls, as well as restoring the mauka areas to reduce run-off and siltation in the pond. In addition, they use their loko iʻa as an outdoor hands-on classroom to teach others about this resource.

Numerous other informants discussed the importance of restoring and maintaining Manaʻe's fishponds, as a cultural practice and a source of healthy, local food, which was started in the 1980s & 1890s. Right now the law allows for more streamlined permitting for fishponds. An environmental assessment and a Finding of No Significant Impact (FONSI) was issued recently and allows for restoration of fishponds, as well as streamlines the permitting system, which makes it easier for practitioners. This supports the community desire to do additional restoration of loko iʻa.

The following table identifies the twenty-five (25) State-owned and private fishponds in Manaʻe that are considered viable for restoration. The location of these ponds span the length of approximately 11 miles of shoreline beginning from the ahupuaʻa of Kamalō and terminating in the ahupuaʻa of Honouliwai. This information was gathered from the Molokaʻi Fishpond Master CDUA Project provided by the University of Hawaiʻi Department of Urban & Regional Planning Practicum Class in December, 1993.

Table 3.3: East Molokaʻi Fishponds Proposed for Restoration[34]

*Site No.	TMK No.	Name of Pond	Ownership
156	5-6-09	Name Unknown	State
157	5-6-08:20	Kalokoʻiki	Private
160	5-6-05:22	Kainaʻohe	Private
162	5-6-06:9	Mikiawa	State
163	5-6-06:8	Keawanui	Private
165	5-6-04:28	Kaunahikoʻoku	Private
166	5-6-06	Unknown	State
170	5-6-06	Wehelauʻulu	State
184	5-6-03:35	Halemahana	State
185	5-6-01:1	Ualapue	State
188	5-7-11	Kaluaʻaha	State
189	5-7-10:31	Mahilika	State
190	5-7-09:01	Kaʻopeʻahina	Private
192	5-7-07:8	Niʻauhala	Private
193	5-7-08	Unknown	State
202	5-7-07:22	Panahaha	State
206	5-7-06:1	Kupeke	Private
212	5-7-06:22	Kihaloko	Private
213	5-7-06:27	Waihilahila	Private
214	5-7-04:34	Kulaʻalamihi	Private
219	5-7-04:5	Ipukaʻiole	Private
220	5-7-04	Kainalu	State
226B	5-7-01 and 03	Unknown	State
No assigned site number	5-7-03:70	Unknown	State
231	5-8-01:3	ʻOhalahala	State

* Site numbers correspond with Summers' cultural sites inventory.[35]

Below is a quote that captures the privilege that many kamaʻāina feel towards the importance of restoring Manaʻe's fishponds:

Hoʻolaulima ku na kupuna,
Malama no i ka loko iʻa
E hoʻomau i neia waiwai hoʻoilina

Let us work in the manner of our ancestors,
Let us preserve the fishponds
To continue this part of our heritage[36]

In addition to fishponds, Manaʻe has relatively healthy fishing grounds that residents utilize regularly. However, they are not the only ones who know of this resource. There have been numerous incidents over the years, including recently, whereby outsiders have come to fish in Manaʻe and have gotten into conflicts with locals over their right to be there. As a model, a Community-Based Subsistence Fishing Area (CBSFA) designation is something that the Manaʻe communities may want to consider to create its own fisheries management plan.[37] The community has discussed the creation of a CBSFA in the past and it may be time to re-visit the idea, along with looking at other legal designations.

In sum, the people of Manaʻe were "mahiʻai o ka ʻāina me ke kai," farmers of land and sea, which is the motto of Molokaʻi High School. The building of fishponds and other activities of our kupuna, such as creating fishpond gardens and fish houses, and planting coral to coincide with mākāhā, indicate that there is a rich heritage of mālama, of caring for the resources, and of farming these resources, both on land and in the sea. Some of this can happen once more, if these practices are renewed.

Recommendations regarding konohiki fisheries and fishponds include:

- Fishponds should be protected and restored, not only for raising fish, but for their protection of springs and the muliwai created there.
- Remove invasives, such as gorilla ogo limu, and invasive fish like roi.
- All fishing and ocean gathering activities need a healthy watershed, which directly impacts ocean/reef resources.
- Shoreline monitoring should be implemented, as well as offshore monitoring.
- Look into obtaining a Community-Based Subsistence Fishing Area designation.

3.4. HUNTING

Hunting is a large part of Molokaʻi's subsistence lifestyle, as pigs, deer, and goats have become an integral part of Molokaʻi and Manaʻe families' diet. Numerous kamaʻāina informants shared their fear that any fence might negatively impact their ability to continue subsistence hunting. One kamaʻāina informant shared that he has been jumping over fences to hunt and feed his family all is life and he does not want to see any more fences. However, other viewpoints were heard, such as one informant who said that when kamaʻāina are asked what his or her main purpose is, the appropriate response should be "to take care of Hina (the island of Molokaʻi)," which should outweigh the need to protect hunting. He shared that there are some things that should not be compromised and if we take care of the ʻāina, the momona will come back.

Another major concern is the waning respect that some hunters have for the ʻāina and for subsistence practices. Specifically, many Manaʻe hunters who consider themselves "the older generation" agreed that the younger generation of hunters have a different mindset than they do. Some of the members of this older generation said that many hunters now-a-days do it for sport, as shown by them posting their prize bucks on the Internet (Facebook). In addition, it was shared that "some hunters don't participate in mālama anymore, they are getting selective and discarding much of the meat." Some informants observed that some young hunters go in to a place with disrespect – loud, on 4-wheelers, they only take the rack and prime cuts, and then

leave the carcass on the land. Older hunters said they were taught to take every part, not to waste, and not to pollute. They would take as much meat as they could, and then bury the remains. Unfortunately, those cultural values and practices are eroding.

These concerns among the hunters have become personal because it has given them a negative reputation in the community in terms of conservation and aloha ʻāina practices. Recommendations for addressing this erosion of values were shared by a few informants, such as including mālama ʻāina values in hunter education programs, which should be mandatory for all hunters. These recommendations are discussed in more detail in Chapter 5.

Recommendations related to hunting include:

- Figure out what is a sustainable yield and base hunts on this (knowing how many can be harvested without threatening the population).
- Coordinate community hunts (specific techniques elaborated upon below).
- Since all hunters have to go through the Hawaiʻi Hunter Education Course ("hunter course") to purchase a hunting license in order to hunt in the State, the hunter course could be augmented to include conservational approaches and mālama ʻāina values and practices. Young hunters can be taught cultural values and also be expected to do some of this conservation work so they develop a good ethic early on.
- Permission should be asked for safety issues, as well as a matter of courtesy. That is a Hawaiian value, even though the requirement to do so was eliminated as part of the Kuleana Act. As a community we want to adhere to those values, whether it's required or not.
- Form a hunting hui or cooperative, through which hunters could get liability insurance, organize their hunts, and possibly do conservation work as well. This way large landowners would be protected, and it would minimize the worry of lawsuits and liability.
- Several community informants suggested the strategic placement of hunting cabins in mauka areas (just below fenceline) to allow for organized hunts. The placement of hunting cabins at the edge of the fences is suggested so these scheduled community hunts could allow hunting to happen directionally down the hill, instead of always up. The cabins could also be used for conservation efforts, which could be carried out by hunters and/or others.
- For community hunts, implement a technique modeled along surround-net fishing or loko ʻumeiki fishtrap. Some fishermen use a bullpen-style technique with a net in the shape of a heʻe, or octopus. The net opens outward like the legs or tentacles of the octopus. Fishermen then paepae, or slap the water, or do certain movements to herd fish into the net, into the head of the heʻe. The net is then pinched off at the base of the head after the fish are herded in there. It was suggested that we could apply the same concept on the land for community hunts. To do so, stakes would be put in the ground at intervals of 10 feet in the shape of a heʻe. And whenever the community was ready to begin its hunt, a cargo net could be erected along these stakes. Then community hunters could then work together to get deer, goat, or pigs into the head of net. (Note: there is further discussion on this proposed technique in Table 5.3 "Community Suggestion" #8 in Chapter 5.)

3.5. DEGRADING WATERSHED HEALTH IN MANAʻE

As stated previously, the people of Molokaʻi have witnessed a notable decline in the health of their watersheds. A significant part of this declining health is the degradation of the mauka native forests, which has subsequently had a drastic effect on all of the ahupuaʻa of Manaʻe, from mauka to makai. Some of the specific conditions observed by kamaʻāina informants include the following:

- An overall degradation and/or reduction of resources.
- Animals (wild ungulates and domesticated pigs, cows, etc.) have destroyed much of the native forest. This has allowed non-native invasive species to move in. The native forest has/had various elements – groundcover, sub-canopy, canopy, etc. – the features of succession. All of these elements together form a healthy ecosystem, which holds the soil in place and captures rainwater. However, when this is removed or damaged, the non-native vegetation isn't as effective at holding the soil together or capturing rainwater.
- When new elements are introduced, such as ironwood or kiawe, they are not good at integrating into the ecosystem. One informant called them "Ilikea plants" – indicating that they are selfish, like some haʻole (newcomers) who cannot live in partnership with other plants. A healthy ecosystem consists of biodiversity, whereby all these elements live together. The informants said that the entire system needs to be restored.
- Pigs spread waiawī (strawberry guava) and other invasives; they remove the ground cover, so when the rain comes, the soil washes down.
- Silt in fishponds. The staff at Keawanui Fishpond reported that the pond has plenty of siltation. They believe that much of it was caused by cattle that graze mauka of the pond. In response, they have created berms to prevent the silt from coming down and affecting their operations.
- Several informants talked about native limu dying out in some areas, while coming back in others, such as Kaʻamola.
- Springs are dying out because non-native plants suck up water, which makes loʻi inoperable. Part of the recommendation is to re-open loʻi because they transport nutrients that re-enter the stream. Loʻi are sinks for silt, they let silt settle out, so by the time the water reaches the ocean, the silt is filtered out. Loʻi also provide ecological niches for opae (shrimp) and ʻoʻopu (fish). Their waste feeds the loʻi, the ʻauwai (ditch) carries the nutrients down through the system, which then feed the fishpond with nutrient rich water. This feeds the algal-mats. As the water is slowed down, it builds the water table, which gets filled up, and then gushes out at the springs. These springs emerge along the shoreline. When konohiki engineered fishponds, they looked for this "sweet water" from springs, since it attracts fish.
- In ʻAhaʻino, it was also noted that the waters off the shore were important mating grounds for turtle, known as honu hoʻoipoipo (turtles make love). One informant has witnessed the nesting of turtles along the shoreline where she lives in ʻAhaʻino. She has been distressed by the clearing of the land above the ʻāina where they live, creating run-off. This run-off has affected the turtles that used to lay their eggs along the shore. What has essentially happened is that the beach sand has now turned to mud. The turtle hatchlings have been unable to emerge through the mud, and they have perished.

- One informant talked about the waters called Waiakeaʻakua, which is like a mauka water bowl that fed/feeds the streams. Several years ago, when access was open, she walked along the ridgeline from Puʻu o Hoku Ranch to ʻAhaʻino. Compared to today, the resources were more lush then, and there were more native plants. Currently, resources are dwindling as well as the land being noticeably drier now. She fears the mauka water bowl is a critical water source that is in danger and needs to be protected.
- Several interviewees mentioned that the number of hīhīwai (endemic grainy snail) in the streams is depleting. Some kamaʻāina informants noted that in Pāpio Stream there is no hīhīwai because there is not enough water. One informant mentioned that within the last 12 years, the spring water died at Honouliwai Stream so the interviewee needed to run a pipe further up the stream to get water. Many community members also rely on the freshwater for loʻi. Waialua and Pāpio were specifically mentioned as having loʻi along their banks. Several Manaʻe communty members also recognized the cultural importance of the streams in the area. Waialua Stream, for example, is in many oli and mele.

In regards to overall watershed health, informants also talked about impacts by large landowners, and the need for more open dialogue and relationship building with certain landowners within Manaʻe. Some specific concerns and comments included the following:

- Several informants mentioned stream diversions by landowners as a concern. Some were seen first-hand, but not all. Some were reported as happening currently, and others in the past. For example, one interviewee mentioned that Moanui Stream does not run anymore, which they believe is due to a diversion above (not verified).
- Numerous informants were concerned about poor ranching practices by some landowners, which are causing erosion and run-off into the ocean.
- It was reported that one large landowner in ʻAhaʻino has done extensive earthwork, which has created landslides and brought silt downstream and into the ocean. It is also believed that he punctured a major water vein, which was critical to feeding a spring that fed a local puʻu one (inland pond). According to informants who live makai of this landowner, the stream waters have since turned foul and stagnant. As mentioned previously, this run-off has also affected the turtles that used to lay their eggs along the shore in ʻAhaʻino. What has happened is that the beach sand has now turned to mud, the turtle hatchlings have been unable to emerge through the mud, and they have perished.
- One informant suspected chemical applications have been applied mauka because native trees have begun to wither, especially the lauhala. This was noted as being detrimental to her cultural practices and livelihood because she utilizes wauke to make traditional Hawaiian cloths and native plants for designs. She also weaves lauhala, so the health of these plants is critical to her.
- It was reported that one large landowner has also made the mauka area into his personal golf course. Hundreds of golf balls have migrated down the stream and into the ocean. This has caused concern in terms of the environment and marine organisms being impacted by the golf balls and other ocean pollution.
- One Native Hawaiian subsistence hunter reported having been arrested on numerous occasions, hand-cuffed and taken to the precinct, but not charged with a crime, for accessing private lands to hunt.

- Several informants were troubled by the fact that Puʻu o Hoku Ranch is currently allowing commercial deer hunts on their land. They are concerned that making deer a commodity will encourage people to hunt more than they need. However, other informants saw deer meat and deer by-products as a possible economic engine for restoration work. Both sides agreed it would be helpful to know the approximate number of deer in Manaʻe, and what a sustainable number might be.
- Numerous informants mentioned the ecological and spiritual importance of Ka Ulu Kukui o Lanikaula, the sacred kukui grove (located on Puʻu o Hoku Ranch lands) and how critical it was that this grove be restored. Traditionally, it was known as a place that gathered the rains of Hina. These rains would begin from Hakaʻano, make their way across several ahupuaʻa to the kukui forest of Lanikaula. These rains traversed the multiple ahupuaʻa of Manaʻe and terminated at the bend of Kamalō, where they extended out to the sea. Several informants expressed a strong desire for Puʻu o Hoku Ranch to work with the community to allow and support restoration of this place. Specifically, several members of Hui Aloha ʻĀina o Manaʻe had begun re-planting the kukui grove in the past, but they had encountered obstacles to completing such work (such as access to irrigation water). As mentioned above, many informants noted that Ka Ulu Kukui o Lanikaula was the second most sacred place in all of Hawaiʻi, and it is imperative that it be taken care of – for ecological and cultural reasons.

From these discussions, it is apparent that much work needs to be done to hoʻoponopono (to make right) relationships that have soured, or that have never been productive. The strong distrust that some informants have, including members of Hui Aloha ʻĀina o Manaʻe, has been caused by what they consider to be bad faith actions by some large landowners in Manaʻe. Those landowners that display a general disregard for the ʻāina, kai, and places that are special and sacred for hoaʻāina, have soured their view for any type of "Watershed Partnership" – that consists of agreements between the state and large landowners. This is a systemic problem that threatens to impede the work that is needed to restore the health of Manaʻe's watersheds mauka to makai.

When kamaʻāina informants were asked about The Nature Conservancy (TNC)'s efforts in the upland native forest to protect the remnant pristine forest, most supported it. Those that were not in complete agreement with the proposed fence, seemed to have more of an issue with what they perceived to be TNC's general approach to conservation. What was expressed was a discomfort based on the belief that TNC seems to rely more on conventional western conservation strategies, and does not give equal regard to traditional native knowledge. The fact that their Native Hawaiian ancient ancestors had created a very abundant ahupuaʻa needs to be acknowledged by modern scientists and conservationists, which should result in more discussions on the diversity of conservation modalities, especially integration of traditional indigenous knowledge and management practices. Some informants also acknowledged that while they would love to see kamaʻāina manage their ahupuaʻa and moku without a fence, they felt the biggest obstacle would be getting the Manaʻe community to work together to implement such a strategy.

From one kamaʻāina's perspective, in traditional times, while the aliʻi (the mōʻī or the chiefs) had management/stewardship control of the land, they also had a duty to treat the people fairly,

and to maintain the abundance of the land. If they breached that, then they were no longer fit to rule. Those that lived there and were under the rule of the aliʻi or konohiki of that area were free to move to a place that was better for them if they felt those in charge were unfit. Thus, the aliʻi knew well that to mistreat the people, meant that the land would also suffer, and not be abundant. ʻĀina momona, therefore, was an indication of pono and lokahi (balance and harmony) between the aliʻi or konohiki and the makaʻāinana or hoaʻāina (native tenants of land) – between stewardship control and those who worked the land. If the land was unproductive, then it indicated that there was no pono between the aliʻi and the makaʻāinana.

Now in this modern day with private ownership, with large landowners in possession of huge tracts of land, there is an expectation by Native Hawaiian families, that these large landowners honor that trust, and manage in such a way that includes family and that values their knowledge and traditional practices. At the heart of this is kuleana, which is a sacred responsibility to the ʻāina and the people. When that is not recognized or rejected by the large landowners, then the land suffers and the people suffer.

For those informants with strong feelings of distrust towards some large landowners in Manaʻe, it is essential that those landowners demonstrate that they have respect for Native Hawaiian rights, such as access, that they respect their traditional knowledge, and they themselves begin to adopt pono practices on the land.

Additional recommendations regarding ahupuaʻa management and watershed restoration include:

- Upper forest should be respected and largely left alone. Manage ungulates in order to protect the critical water resources located there. Native plants should be re-planted, and invasives removed as feasible.
- Restore the lower forest, which has become very degraded in many areas. Native plants should be planted and protected. May need to enclose small, newly planted ones with smaller fences so animals don't eat them.
- Fishing koʻa (markers) should be restored, as well as the line-of-sight to them from the ocean. Doing so would revitalize, or bring back the practices of utilizing fishing koʻa. What happens mauka also affects makai, not just in resources, but also in our ability to perpetuate the practice. Non-native plant species on the land affect fishing practices in the ocean, which exemplifies how the ahupuaʻa must be looked at as a whole.
- Establish native nurseries with mauka and makai species.
- May need to remove some invasives to allow native plants to flourish.
- Support sustainable farming for personal and commercial production.

3.6. SUMMARY OF FEEDBACK ON THE EAST SLOPE MANAGEMENT PLAN (JANUARY 2014 DRAFT)

When interviewing the kamaʻāina informants, one of the main questions asked was, "Do you support the proposed fence? Why or why not?" While a wide variety of answers were provided, the overwhelming majority said "Yes." However, even those who said yes had a variety of manaʻo on exactly how and where that fenceline should be implemented. Based on the East

Slope Management Plan (January 2014 draft) and the community's feedback, there are essentially five (5) discernible ways this conservation effort could be pursued:

- **Proposed Fencing: Pua‘ahala to Hālawa**
- **Alternative #1: Fencing with Pākaikai Corridor**
- **Alternative #2: No Fencing**
- **Alternative #3: Mauka-Makai Fencelines**
- **Alternative #4: Lowered Fenceline**

In addition, there was some feedback related to the fence that is summarized in the sub-section entitled: **Additional Community Mana‘o Regarding Fencing.**

*It should be noted that since the time when the majority of the interviews for this report were done (early 2014), TNC has stated (in October 2014) that the Pāku‘i Unit is their priority and they are focusing on that for now. The Pāku‘i Unit consists of the native forests atop the ahupua‘a of Pua‘ahala to Kalua‘aha.[38] However, the mana‘o is presented here in the way it was shared with the authors of this report.

3.6.1. Proposed Fencing: Pua‘ahala to Hālawa

As stated previously, the majority of the informants interviewed support the fencing as proposed in the East Slope Management Plan. Among those Mana‘e residents who are in support of the fencing project as proposed, there is general agreement that its goals – to protect and revitalize our critical mauka watersheds – are important and pono. However, there is also a strong sentiment that there must be a balance between the conservation efforts and the protected rights to carry out traditional and customary practices. There is agreement that access to enclosed managed areas must be provided to both hunters and gatherers. As part of the proposal, "step-overs" are included in the East Slope Plan that would ensure such access. There is also recognition that blocking access of the ungulates in managed areas via fencing means that the animals will inevitably migrate to unfenced areas (i.e., change their migration patterns), thus further degrading those areas. While those who support the fencing project as proposed generally recognize these two issues as challenges, the belief is that they can be overcome with the participation and involvement of the community, especially hunters.

Some experienced community hunters believe that the fence would actually make hunting easier, as it is likely that the ungulates will forage along the fenceline (as seen in the Kamalō fencing project), and will have more predictable patterns of movement. There are also some who believe that erecting a fence is akin to the traditional kapu system and argue that preservation of traditional and customary rights necessarily means that sacrifices are needed to be made today to ensure that future generations of Native Hawaiians have a healthy ‘āina where they can practice traditional and customary rights. It was also mentioned that it is incorrect to say that fencing is contrary to Native Hawaiian culture. The loko kuapā (fishpond made by building a wall on a reef) was given as an example.

Overall, the proposed fencing from Pua‘ahala to Hālawa has substantial support by the kama‘āina informants, as long as access for traditional and customary practices is ensured with the implementation of step-overs, and additional management is included for the areas

makai of the fenceline. They would also like to see mitigation efforts for unfenced areas and/or areas impacted by changed migration patterns. However, not every ahupuaʻa supports the fence, as detailed below (specific ahupuaʻa identified in Chapter 5). Thus, it is recommended that the fence be implemented in those areas that support it.

3.6.2. Alternative #1: Fencing with Pākaikai Corridor

The East Slope Management Plan (January 2014 draft) as proposed includes four priority management units extending from the west in the Pākuʻi region to the northeast in the Pāpalaua region. In between, the Mapulehu and Keopuka Loa Units will also be covered by the East Slope Plan. However, due to the lack of native vegetation and the benefit of continued use as a hunting area, the East Slope Plan alternatively proposes to exclude the Pākaikai sub-unit of Papalaua. This alternative proposal would create a corridor between the adjoining Papalaua and Keopuka Loa Units and the Mapulehu Unit.[39] This alternative approach has created some contentions among community members who view this strategy as counter-intuitive to EMoWP's commitment to protect the mauka forested watersheds.

Several of our informants expressed that their main concern with this alternative is the corridor that it will create through Waialua and Honoulimaloʻo. One of the informants shared their belief that having this corridor would create heavy ungulate traffic, which would deteriorate a number of important streams that supply freshwater to families that rely on them for agriculture and domestic needs. Other informants shared their concerns that increased ungulate activity in the unfenced area would do more harm than good, especially in that it would impact the intact native ecosystems there, such as the native plant species, birds, insects, and fish. Another area of concern is how this alternative would impact some sensitive cultural sites that may be trampled by ungulates, such as the awa cups and aliʻi baths, as well as the Pākaikai agricultural complex of Kamehamehamehanuiʻailuau.

The East Slope Management Plan identified key areas where ungulate activities are most active and where hunting is primarily concentrated. These areas include the mauka watersheds east of Mapulehu in the Pākaikai and Hākaʻaʻano areas.[40] Axis deer dominate the Pākaikai area, while Axis deer and pigs are also found in the Hākaʻaʻano area.[41] Because much of the ungulate activity is concentrated in the area along the corridor that is excluded in the East Slope Plan's alternative fencing control program, some hunters are reluctant to support the proposed Watershed Plan. One cultural informant stated his belief that if all of the areas between Pākuʻi and Pāpalaua are left un-fenced, it would be better to not have any fence at all.

Another major concern for hunters regarding the deterioration of the Waialua and Honoulimaloʻo region is the waning respect that other hunters have for their ʻāina, as discussed previously. The generational divide between the new and old hunters is thus worrisome for traditional hunters who view the East Slope Plan's Pākaikai Corridor Alternative as potentially setting off an unintended ecological disaster in the isolated corridor in Molokaʻi's far east side. The potential for the discarded meat to wash down into the streams is a major concern, and so is the run-off that would be created when hunters access the trails by all terrain-vehicles in the upper-reaches of the corridor.

Overall, "Alternative #1: Fencing with Pākaikai Corridor" has very little community support, due to the potential negative impacts to the land within the corridor, and therefore, should not be pursued.

3.6.3. Alternative #2: No Fence

While there is recognition that something needs to be done to help revitalize the native forest and protect the watersheds in the mauka areas, some informants – who are grounded in practicing the traditional and customary way of conservation or mālama – find the proposed fencing plan to be contrary to Native Hawaiian values. They believe the focus should instead be placed on reinstituting traditional values in the community through education.

These informants say that symbolically, the fence itself represents a continued movement away from traditional values of exercising one's responsibility or kuleana to care for or mālama the ʻāina. Moreover, the fence historically represents the idea that people should "keep out" which has prevented some kamaʻāina from exercising their traditional and customary rights in certain areas. Even with the proposed step-overs, there is lingering concern that erecting a fence will have an implication on the rights of hunting and gathering. Two additional arguments against the use of a fence include mistrust of large landowners and having to work with them (as discussed previously), and having a man-made metal structure in nature.

Informants also expressed their belief that the fenceline as proposed is contrary to the traditional ahupuaʻa management practices of their kūpuna, which encompassed mauka to makai. Some said that one area should not be identified as being more important than another (i.e., mauka vs. makai), and encouraged instead, that there be a holistic approach to take care of all the resources in all the areas of the Manaʻe moku.

Overall, there are a few ahupuaʻa where the over-riding sentiment of those residents is "no fence" (specific ahupuaʻa identified in Chapter 5). Thus, it is recommended that the people of those areas begin and continue a dialogue with the implementers of the fence (TNC) about their desire to manage their place themselves. It is possible, that as the fence west of them is implemented, the impacts may be seen as positive and worth implementing.

3.6.4. Alternative #3: Mauka-Makai Fencelines

This alternative is related to the previous one (No Fence). The reason for this connection is that if certain areas choose not to implement a fence in their ahupuaʻa (or ahupuaʻa cluster), then it may cause greater harm to that area if a corridor is created. Thus, a mauka-makai fenceline was suggested to prevent migration of ungulates further east. However, some of those residents who are opposed to the fence also do not want a metal man-made structure in their natural areas. Such a mauka-makai fence may actually increase the amount of metal structures surrounding their land. Furthermore, initial feedback from TNC is that mauka-makai fences may be too expensive, and not economically feasible for them to implement. Thus, further discussion is needed if there is interest in pursuing this alternative.

Overall, mauka-makai fences may be considered as a possible alternative in certain areas where the proposed fence is opposed. However, it should only be pursued through open dialogue between kamaʻāina, large landowners, TNC, all other key partners involved, and with careful consideration to costs, potential impacts, and alternative management methods.

3.6.5. Alternative #4: Lowered Fenceline

One informant said, "Why are we relegating ourselves to the remnant native forest? Why don't we bring the fenceline down to allow the native forest to regrow into the areas where it used to be?" Several informants agreed with this sentiment, and some recommended moving the fenceline one or two miles below the receding forest line to allow complete rejuvenation of the forest. One informant suggested lowering the fenceline below the Kamakou flats.

However, some large landowners are only comfortable with including the lands that are within the forest reserve boundary line because these lands fall within the Conservation zone, rather than their Agricultural zoned land. Another potential challenge associated with this proposal is that additional landowners would have to become members of the EMoWP.

Overall, this alternative should be considered in areas where the kamaʻāina and large landowners are interested in doing so. It has the potential to have an even greater impact to the health of the overall ahupuaʻa.

3.6.6. Additional Community Manaʻo Regarding Fencing

While informants generally support the concept of fencing, some interviews of key informants elicited strategies that could augment the proposed plan. The recommendations heard most commonly are described below and summarized in the Recommendations section (Chapter 5) of this report.

Smaller and More Manageable Sub-Units

The draft East Slope Management Plan currently depicts Management Units that are very large, and that would most likely be difficult to manage. A recommendation shared by some key informants was to build smaller and more manageable sub-units. A strong sentiment from an experienced fencer from the Manaʻe community was to make sure to build what you can manage and manage what you can build; building bigger and not being able to manage it in the long run reduces the effectiveness of protecting the watershed within the fenceline. It should be noted that while the draft East Slope Plan has maps that depict large units, which is what this input was based on, the Plan also includes language that supports this recommendation: "Given the large size of the unit, it will be necessary to break it apart into smaller 'subunits' that can be managed more effectively."[42]

Active Engagement and Inclusion of the Community and Hunters

Several informants expressed that they would support the fence if fencing is considered to be only one part of a larger conservation effort. This larger effort should solicit active community participation, whereby participants are compensated. A recommendation was also made that management of the fenced areas should include compensated positions for community members

to participate in erecting the fence, eradication of invasive plant species, and control of invasive animal species. These recommendations are also supported by the East Slope Plan.

Traditional Fishing Methods Adapted to Land in order to Manage Ungulate Populations

To help manage ungulate populations, and where needed, to prevent eastern migration of ungulates, it was suggested to build a loko umeʻiki, a traditional style of fish traps, on land to help guide the migration of ungulates into a bullpen contraption, in the shape of a heʻe (octopus). For the bullpen, you would set up stakes in a specific formation to attract the controlled flow of ungulates from the loko ʻumeʻiki. When ready, you would hang up cargo nets along the pins that are staked in the ground, forming the bullpen, to round up and catch ungulates. It was stated that this recommendation would probably work best for goats, but could be tried with deer and pigs.

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[21] DAVIANNA PŌMAIKAʻI MCGREGOR, NĀ KUAʻĀINA: LIVING HAWAIIAN CULTURE 6-8 (2007) [hereinafter MCGREGOR, NĀ KUAʻĀINA].
[22] *Id.* at 193.
[23] *Id.* at 208.
[24] MANAʻE GIS MAPPING PROJECT, *supra* note 2.
[25] Jon Matsuoka, Davianna P. McGregor & Luciano Minerbi, *Governor's Molokaʻi Subsistence Task Force Final Report* (1994).
[26] *See supra*, Section 2.5.2.
[27] Leon Noʻeau Peralto, *Mauna a Wākea: Hānau ka mauna, the Piko of Our Ea*, A NATION RISING: HAWAIIAN MOVEMENTS FOR LIFE, LAND, AND SOVEREIGNTY 233 (Noelani Goodyear-Kaʻōpua et al. eds., 2014).
[28] Samuel Elbert, *Connotative Values of Hawaiian Place Names*, DIRECTIONS IN PACIFIC TRADITIONAL LITERATURE: ESSAYS IN HONOR OF KATHARINE LUOMALA 121 (Adrienne L. Kepler & Harry Nimmo eds., 1976).
[29] DAVIANNA MCGREGOR, THE NATURE CONSERVANCY, CULTURAL ASSESSMENT FOR THE KAMAKOU PRESERVE, MAKAKUPAʻIA AND KAWELA, ISLAND OF MOLOKAʻI 24 (2006) [hereinafter MCGREGOR, CULTURAL ASSESSMENT FOR THE KAMAKOU PRESERVE].
[30] *Prehistory and Ecology in a Windward Hawaiian Valley: Hālawa Valley, Molokai*, 24 PACIFIC ANTHROPOLOGICAL RECORDS 167 (Patrick Kirch & Marion Kelly eds., 1975).
[31] Windy McElroy, *The Development of Irrigated Agriculture in Wailau Valley, Molokaʻi Island, Hawaiʻi* (Aug. 2007) (unpublished Ph.D. dissertation, University of Hawaii at Mānoa).
[32] It should be noted that today Pākaikai is commonly used to refer to a hunting area that abuts the back eastern bowl of Wailau Valley, which differs in location from the traditional Pākaikai.
[33] TNC has stated that it will fence the native rainforest in Waialua if the EMoWP gets landowner support.
[34] UNIV. OF HAW. DEP'T OF URBAN & REG'L PLAN., FISHPOND MASTER CDUA PROJECT 22-23, 25-27 (1993).
[35] *Id.* (citing CATHERINE C. SUMMERS, MOLOKAI: A SITE SURVEY (1971)).
[36] Graydon "Buddy" Keala et al., Loko Iʻa: A Manual on Hawaiian Fishpond Restoration and Management 6 (2007) (citation omitted), www.ctahr.hawaii.edu/oc/freepubs/pdf/Loko%20I'a%20Full%20Publication.pdf.
[37] A state law passed in 1992 (HRS § 188-22.6) allows marine areas in Hawaiʻi to be designated as a Community-based Subsistence Fishing Area (CBSFA), intended to protect fishing practices "customarily and traditionally exercised for the purposes of native Hawaiian subsistence, culture, and religion." Haw. Rev. Stat. § 188-22.6 (1995).
[38] *Summary Update of the East Slope Watershed Project*, NATURE'S NEWSFLASH 2014 (The Nature Conservancy Molokaʻi Program, Kualapuʻu, Haw.), Oct. 2014.
[39] Dunbar-Co, *supra* note 9 at 20.
[40] *Id.* at 14.
[41] *Id.*
[42] *Id.* at 19.

4. Legal Framework and Analysis

The following analysis provides the basic legal foundation for Native Hawaiian rights law. It describes relevant constitutional and statutory provisions, as well as the body of common law developed from Hawaiʻi Supreme court decisions on Native Hawaiian rights. This legal section is divided into specific areas of the law that correspond to manaʻo shared by Manaʻe kamaʻāina informants. This manaʻo is analyzed within the context of the proposed expansion of the East Molokaʻi Watershed Partnership (EMoWP). It covers traditional subsistence activities in Manaʻe, religious and ceremonial protocols, and efforts to mālama ʻāina. This section describes kamaʻāina perspectives on the impact, both beneficial and adverse, of the proposed fenceline expansion on their traditional practices. This section touches upon the overall watershed management recommendations within the ethic of mālama ʻāina and a holistic understanding of restoring ahupuaʻa health from mauka to makai. A more detailed account of management recommendations is covered in Chapter 5.

This section describes the history behind the formation of ʻaha councils to govern the people and manage the ʻāina within moku (regions or districts on each island) and smaller land divisions called ahupuaʻa. It explains the modern application of this ancient system into the legislatively created Statewide ʻAha Moku Advisory Committee (AMAC) and the initiative taken at the grassroots level to re-activate local ʻaha councils on Molokai. This section focuses specifically on the affirmative role the Koʻolau/Manaʻe moku has taken in providing a local and indigenous framework for free, prior, and informed consent as the community considers the implications, both positive and negative, of the proposed East Slope Watershed Start-Up Management Plan and determines its role in caring for ahupuaʻa resources from mauka to makai.

Other sub-sections will cover the status of hunting as a customary practice, protections afforded to trails and historic sites, traditional fisheries and fishponds, water rights and the public trust, and certain environmental legal protections available to the Manaʻe community.

4.1. ʻAHA MOKU AND TRADITIONAL RESOURCE MANAGEMENT

There is no man familiar with fishing least he fishes and becomes an expert.
There is no man familiar with the soil least he plants and becomes an expert.
There is no man familiar with hōʻola least he be trained as a kahuna and becomes expert at it.
That mana`o was the standard that kupuna went by in determining who would sit on the councils …
Through the `aha councils with multiple expertise woven into a strong cord, the people established lōkahi.
Lōkahi is the balance between the land, the people that lived upon the land, and the akua.
The result of lōkahi was pono, the spiritual balance in all things.
The ʻaha represents the binding and the pono that is created for the land that will sustain life.
This prepares the way spiritually for the land physically …
The manifestation of pono is the land and people flourishing abundantly with food and many descendants.
This comes from understanding the concept of the ʻaha.

- Kumu Hula John Kaʻimikaua[43]

4.1.1. Statewide ‘Aha Moku Advisory Committee

In recent years, the State of Hawai‘i has acknowledged the need to integrate Hawaiian traditional ecological knowledge into natural resource management. In 2006 and 2007, a series of conferences titled *Ho‘ohanohano I Na Kupuna Puwalu* convened to gather input from Maoli cultural practitioners on natural resource management as part of an initiative sponsored by the Office of Hawaiian Affairs (OHA), the Association of Hawaiian Civic Clubs, the Hawai`i Tourism Authority (HTA), Hawai`i Coastal Zone Management Program, Kamehameha Schools, and the Western Pacific Regional Fishery Management Council. Legislators and governmental agencies were also invited.

These gatherings resulted in the passage of Act 212 by the State legislature and approval by former Governor Lingle on June 27, 2007. Act 212 “initiat[ed] a process to create a system of best practices that is based upon the indigenous resource management practices of moku (regional boundaries), which acknowledges the natural contours of land, the specific resources located within those areas, and the methodology necessary to sustain resources and the community.”[44] Eight representatives from each island, nominated by the Association of Hawaiian Civic Clubs and appointed by Governor Lingle were chosen as part of the Statewide ‘Aha Moku Advisory Committee to begin working on this framework together and on their respective islands. As early as 2008, Moloka‘i worked proactively to establish ‘aha leadership at the moku level. In 2012, the State passed Act 288 to establish the ‘Aha Moku Advisory Committee (AMAC) within the State Department of Land and Natural Resources (DLNR) for the purpose of integrating traditional Hawaiian resource conservation practices on all islands.

Specifically, these Acts charge AMAC with:

1) Integrating indigenous resource management practices with western management practices in each moku;
2) Identifying a comprehensive set of indigenous practices for natural resource management;
3) Fostering the understanding and practical use of native Hawaiian resource knowledge, methodology, and expertise;
4) Sustaining the State’s marine, land, cultural, agricultural, and natural resources;
5) Providing community education and fostering cultural awareness on the benefits of the ‘Aha Moku system;
6) Fostering protection and conservation of the State’s natural resources; and
7) Developing an administrative structure that oversees the ‘Aha Moku system.[45]

At the urging of the late Kumu Hula John Ka‘imikaua and those who perpetuate his legacy and teachings, Moloka‘i has taken leadership in organizing its ‘aha councils. Of the islands, Moloka‘i has had the most experience in utilizing its ‘aha councils for local decision-making, working with private entities, and interfacing with State and County agencies. Moloka‘i for the most part has also stayed true to the original intent for which the ‘aha councils were formed i ka wā kahiko (in ancient times).

4.1.2. The ‘Aha Councils Historically

According to Kumu John Ka‘imikaua the purpose of the ‘aha councils was to utilize the expertise of those with ‘ike (knowledge) to mālama ‘āina, to care for the natural resources, and to produce food in abundance not just for the people, but for successive generations. ‘Aha council leadership was determined by the people who collectively understood who the experts were in their community. These were experts in fisheries management, hydrology and water distribution, astronomy and navigation, architecture, farming, healing arts, etc. As Kumu John explained, the common Molokai saying was, “There is no man familiar with fishing least he fishes and becomes an expert. There is no man familiar with the soil least he plants and becomes an expert. There is no man familiar with hō‘ola least he be trained as a kahuna and becomes expert at it."[46] Thus, leaders who governed the people and managed the resources were those who were actual practitioners; those who had gained a comprehensive and masterful understanding of the biological, physical, and spiritual aspects of the ‘āina. The kūpuna metaphorically ascribed these councils and the weaving of various ‘ike, or knowledge streams, as an ‘aha. The individual aho or threads made from the bark of the olonā shrub were woven together to make strong cordage, called ‘aha. Thus the early Hawaiians referred to their councils as ‘aha to represent the strong leadership created when acknowledged ‘ike holders came together to weave their varied expertise for collective decision-making that benefitted the people, land, and natural resources. The term kiole described the abundant human population, likened to the ‘iole or large schools of pua (fish fingerlings) that shrouded the coastline en masse. Thus, Moloka‘i’s councils were called ‘Aha Kiole, the people’s councils.[47]

The 8 Resource Realms and the Decision-Making Matrix under the ‘Aha Councils. Historically, there were certain resource realms that the ‘aha councils of Moloka‘i considered before making their decisions.[48] The eight resource realms included the following:

1) ***Moana-Nui-Ākea*** – the farthest out to sea or along the ocean’s horizon one could perceive from atop the highest vantage point in one’s area.
2) ***Kahakai Pepeiao*** – where the high tide is to where the lepo (soil) starts. This is typically the splash zone where crab, limu (seaweed), and ‘opihi (limpet) may be located; sea cliffs; or a gentle shoreline dotted with a coastal strand of vegetation; sands where turtles and seabirds nest; or extensive sand dune environs.
3) ***Ma Uka*** – from the point where the lepo (soil) starts to the top of the mountain.
4) ***Nā Muliwai*** – all the sources of fresh water, ground/artesian water, rivers, streams, springs, including springs along the coastline that mix with seawater.
5) ***Ka Lewalani*** – everything above the land, the air, the sky, the clouds, the birds, the rainbows.
6) ***Kanaka Hōnua*** – the natural resources important to sustain people. However, management is based on providing for the benefit of the resources themselves rather than from the standpoint of how they serve people.
7) ***Papahelōlona*** – knowledge and intellect that is a valuable resource to be respected, maintained, and managed properly. This is the knowledge of the kahuna, the astronomers, the healers, and other carriers of ‘ike.
8) ***Ke ‘Ihi‘ihi*** – elements that maintain the sanctity or sacredness of certain places.[49]

The ‘aha councils held themselves accountable to make wise decisions on behalf of these eight resource realms. They recognized that more than just good intentions were necessary for making sound decisions. The ‘aha as a collective considered every idea along the eight resource realms. Potential solutions were weighed according to how beneficial or detrimental they were to each realm. If a proposed solution was determined to be good overall to each of the resource realms, “honor[ed] the ancestral past, address[ed] the needs of the present, and set up future generations to have more abundance” then that measure was adopted for implementation.[50] Kumu John Ka‘imikaua expressed that this wise management resulted in lōkahi, “the balance between the land, the people that lived upon the land and the akua (gods).” In turn, lōkahi manifested “pono, the spiritual balance in all things.”[51]

Each island was divided into moku and ‘aha councils customized their leadership and management in ways that were most appropriate for their place. The common denominator among these councils was the approach of choosing expert practitioners as ‘aha leaders. ‘Aha moku leaders throughout Ka Pae ‘Āina gathered often to learn from each other. These religious and educational exchanges allowed them to adopt innovations, make improvements, and progress forward together. The people governed themselves in this manner for seven hundred years from the second century, A.D. until the Tahitian migration and introduction of the hierarchical ali‘i (chiefly) system in the end of the ninth century.[52] Kumu John Ka‘imikaua shared the results of ‘aha governance during this rich period of development:

> After the passing of the first seven generations under the ‘aha councils, peace was established. By the sixteenth generation, there was no more manufacture of weapons and no knowledge of war amongst the people. The leadership of the ‘aha councils was so proficient in providing for the people’s needs. Everyone had enough food, materials for housing, and clothing. There were no rich, no poor. Because of the ‘aha councils, the people were able to progress and expand their farming and fishing abilities and excel spiritually. About three-hundred years after the formation of the ‘aha moku councils, the lands became abundant and the population of the islands increased.[53]

The flourishing of the land and people prompted the ‘aha moku councils to join and discuss the manner in which they should organize themselves further to support the growing population and resource abundance. The ‘aha leadership elected to divide moku into smaller, more manageable units of land called ahupua‘a.[54] ‘Aha ahupua‘a were comprised of resident experts within the ahupua‘a. From here the various ahupua‘a managed themselves under the guidance of their own experts. Ahupua‘a provided the needed structure and organization from which the land could be managed towards abundance and by which the people could prosper further.[55] Governance remained with the ahupua‘a unless an issue affected the entire moku. These councils would convene according to whether decision-making was necessary at the island-wide (mokupuni), regional (moku), or more specifically at the ahupua‘a level. Representative leadership was present at all these levels. Together, they comprised the people’s councils or ‘Aha Kiole o Moloka‘i and made decisions together for the betterment of the island and its respective divisions.[56]

The ‘aha councils remained relevant on Moloka‘i up until the rule of Kamehameha I,[57] Hawai‘i’s first king who united all the islands under one rule. Through the ‘Aha Kiole, Moloka‘i

was traditionally divided into four moku, or districts: Kaluakoʻi (west), Palaʻau (central), Kawela (kona),[58] and Koʻolau (north).[59] This form of governance earned Molokaʻi's renown as ʻāina momona, the "fat land" with its numerous fishponds and bountiful harvests.

4.1.3. ʻĀina Governance under the Aliʻi

Political conquests in latter centuries under aliʻi rule typically consolidated power in a Mōʻī (supreme chief) who acquired authority over an entire mokupuni. Through successful military campaigns they may have also attained power over several islands.[60] When a new mōʻī came into power, the first order of business entailed a complicated and politically delicate process of land distribution amongst the ʻaha aliʻi, a council of chiefs loyal to the mōʻī. This process of land distribution was called a kalaiʻāina.[61] If there were existing moku, ahupuaʻa, ili, and their palena (boundaries) were already well-known and affixed in the minds of the makaʻāinana (common people of the land),[62] then it was advantageous to all to maintain these traditional understandings so as to avoid confusion and conflict, as well as maintain ʻāina momona.[63] Several Mōʻī are renown through oli (chants), mele (song), and moʻolelo (storied accounts) for their wise management and dividing of the lands.[64] They did so in a manner that maximized productivity, kept makaʻāinana happy, and minimized strife among the chiefs who were granted authority over specific moku.[65]

The aliʻi appointed to govern various moku were called aliʻi ʻai moku.[66] They, in turn, selected aliʻi ʻai ahupuaʻa to govern ahupuaʻa.[67] Konohiki, those who possessed special expertise in natural resource management, were designated by the aliʻi ʻai ahupuaʻa to oversee agricultural activities; to fairly allocate water among the makaʻāinana (common people of the land); to monitor fishery health; and enforce kapu. The kapu were strictures and regulations governing human behavior in a manner that preserved resource abundance and allowed for continued renewal.[68]

4.1.4. The Central Role of the ʻOhana in Contributing to Thriving Ahupuaʻa

Despite political wranglings and power dynamics of the aliʻi who sought rule over their island and various moku, the makaʻāinana remained the single constant.[69] The makaʻāinana comprised many ʻohana, the extended families who cultivated the land.[70] If treated fairly by the aliʻi, they remained for many generations in the same area and maintained ʻohana relationships that spread throughout ahupuaʻa and moku.[71] Members of extended ʻohana lived inland (ʻohana ko kula uka) as well as along the shore (ʻohana ko kula kai).[72] Typically, the extended ʻohana lived along ʻili which were ahupuaʻa segments, narrow land strips running mauka to makai.[73] For families, ʻili served a functional purpose to best meet their needs. Families maintained rights to use, cultivate, and mālama their ʻili.[74] Ideally, ʻili comprised a mauka (mountain, inland) piece noted as the ʻumeke ʻai ("that which filled the poi bowl") and a makai (shoreline, nearshore) section called the ipukai ("meat bowl") where a rich source of fish was provided.[75] At times ʻili were not contiguous, but comprised of geographically disconnected segments; these were called ʻili lele ("jumping" or "leaping" ʻili).[76] Again, this was likely to serve a functional role so that the extended ʻohana had access to resources that provided for their subsistence and daily needs. As cartographer and Māhele expert Dr. Kamanamaikalani Beamer writes, "Often ʻili lele included a mountain section, a wetland section, and a fishery."[77] ʻOhana regularly exchanged valued items and foods with each other and came together to prepare lūʻau (feast celebrations),

conduct hukilau (surround fishing), build hale (houses), engage in communal work activities, and prepare makahiki[78] tributes collected by the aliʻi.[79]

The ʻohana also chose haku who functioned as the head of the family; this person was usually a respected kupuna (elder).[80] The haku led the ʻohana councils; equitably distributed fish among the family; welcomed guests and aliʻi; supervised communal work; and led religious and ceremonial activities.[81] Given that Molokaʻi's ʻaha councils remained relevant up until Kamehameha's conquest, it is likely that these haku were given a place of importance at the ahupuaʻa councils; for according to Kumu John Kaʻimikaua, the ʻaha ahupuaʻa were comprised of ʻohana representatives known by their family for their ʻike as expert practitioners.[82] Managing the affairs at the ahupuaʻa level greatly eased the burden on moku councils to the point where they rarely met, unless a matter affected all ahupuaʻa within a moku.[83] According to Kumu John, this bottom-up process was quite effective, "unlike our modern day governing where the heads of the state makes the final decision for the masses beneath."[84] The local leadership of the ʻohana councils and the konohiki (resource managers and agents) with their intimate knowledge of place and palena at the ahupuaʻa level provided efficiencies, maximized productivity, and served to complement and balance the top-down, centralized structure for which the mōʻī and the council of chiefs served to govern the larger issues at the mokupuni (island) and moku (district) level.[85]

Additionally, a trust relationship existed between the aliʻi nui and makaʻāinana which provided a foundation for reciprocity, peace, and prosperity.[86] This trust relationship was founded on genealogical and cosmological beliefs relating to the mating of earth and sky and the birth of both Hāloa-naka, elder sibling whose kino (body) became the taro plant and staple food of the Hawaiian people, and younger sibling Hāloa, the first aliʻi and progenitor of Kānaka Maoli.[87] As the living manifestation of the akua (gods), the aliʻi "mediat[ed] between the divine and human" and held a sacred duty to protect the people:

> "Should an *Aliʻi Nui* neglect proper ritual and pious behavior, surely a famine or calamity would ensue. Should a famine arise, the *Aliʻi Nui* was held at fault and deposed. Alternately, should an *Aliʻi Nui* be stingy and cruel to the commoners, the cultivators of the *ʻĀina*, he or she would cease to be *pono*, lose favor with the *Akua* and be struck down, usually by the people. Thus, the *Aliʻi Nui* had to juggle their responsibilities to keep the cosmos in order. To protect themselves, and to maintain *pono* for their people ..."[88]

These understandings of reciprocal kuleana and mālama engendered a system of "checks and balances" between aliʻi and makaʻāinana in service of each other and in their collective reverence for nā akua and ʻāina. Further, if the aliʻi mistreated makaʻāinana or dishonored the trust relationship between them, makaʻāinana were free to leave and find a more favorable place to live. This freedom of movement of the makaʻāinana provided an incentive for the aliʻi to treat them well, as the ʻāina was made momona (productive, abundant) by the people's hands.[89]

4.1.5. The Nature of Ahupuaʻa, Some General Characteristics, and Kamaʻāina Knowledge of Ahupuaʻa Health in Manaʻe

The Hawaiʻi Association of Watershed Partnerships' website describe ahupuaʻa as the "Hawaiian equivalent of a watershed … a land division with the streams and valleys serving as

boundaries … includ[ing] the land from the mountains to the coast."[90] Ahupuaʻa have also been described as "wedge"[91] or "pie" shaped divisions of land "radiat[ing] from the interior uplands, claim[ing] a deep valley, and extend[ing] seaward past the shoreline."[92] According to Dr. Beamer, generalized characterizations of ahupuaʻa as "watersheds" constituting "pie" or "wedge-shaped" areas of land running from mountain to sea negate the complexity with which the early Hawaiians divided the land[93] and serve to "deculturize[ ] ahupuaʻa and remove[ ] the Hawaiian-ness from the equation."[94]

Dr. Beamer provides empirical evidence that only 5.4% of Hawaiʻi's nearly 2,000 ahupuaʻa qualify as true watersheds.[95] Few ahupuaʻa boundaries actually follow watershed boundaries; rather the boundaries may run along ridgelines or transect watersheds.[96] On Molokai alone, 8 of a total of 85 ahupuaʻa (9.4%) meet the definition of a watershed.[97] In reality, ahupuaʻa divisions are quite varied throughout the Hawaiian archipelago. Some ahupuaʻa are landlocked and did not have the capability alone to provide for all the daily needs of the people.[98] Other ahupuaʻa span mid-mountain to sea rather than from mountain peak; include coastal resources only; span both leeward and windward coasts and mountain ranges; or are split into lele. Specifically as to Lanaʻi and some areas on Molokaʻi such as Pālāʻau, ahupuaʻa span the length from the fishery on one side of the island, up the mountain, and down to the other side of the island to the opposite shore.[99] On Molokaʻi there are also ahupuaʻa split into lele.[100]

For Manaʻe families this may be significant in that several expressed in their interviews a practice of traveling to the remote, northeast side of the island to gather hihiwai and ʻoʻopu as well as engage in fishing and hunting activities. The northeast-southeast connection has become reinforced especially for hunters who attest to certain migrational patterns of deer, pig, and goat that they hunt for subsistence. Traditional trails both on land (e.g., Wailau-Mapulehu trail) and underground via lava tube passages (e.g., Pelekunu-Kamalo underground passage); oral history of fishpond stones on the south shore originating from north shore valleys; the flow of spring water on the southeast shore (e.g., Puaʻahala and Kaʻamola) originating from the north shore (e.g., Pelekunu) and carried via lava tubes into loʻi and fishponds; attestations relating to the source of all tributaries on the northeast and southeast sides of the island originating from a single source, Waiakeakua (water of the gods); and long-held geneaological ties of several Manaʻe families to the north shore valleys prompted an expanded view of the scope of traditional practices and associated native rights. Rather than create a false dichotomy between north and south Molokai and attempt to confine our understanding merely to where the fence locations are proposed; it became evident early on that this report needed to accurately reflect manaʻo on the north shore connections of hoaʻāina who accessed both sides of the island to hunt, fish, and gather. Thus, this chapter on Native Hawaiian rights law; the rationale behind our interview methods and mapping exercises; the assessment of research findings and proposed recommendations are all based on this broader picture.

Recent scholars have introduced more accurate working definitions of ahupuaʻa to mean "culturally appropriate, ecologically aligned, and place specific unit[s] [of land] with access to diverse resources,"[101] or "a community-level land-division component that has been implemented in various ways, as part of a larger social-ecological system, with the aim of maximizing resource availability and abundance."[102]

Keeping in mind that not all ahupuaʻa fit the generic definition, identification of wao, which modernly can be seen as bio-cultural zones,[103] is a helpful framework for understanding where Manaʻe hoaʻāina traditional and customary practices are concentrated and what types of management actions are most appropriate within each zone. The zones include the following: Wao Akua, Wao Kele, Wao Nahele,Wao Lāʻau, and Wao Kānaka.

The Wao Akua has been described by Handy, Handy, and Pukuʻi in *Native Planters* as "the forest of the gods, remote, awesome, seldom penetrated, source of supernatural influences both evil and beneficient."[104] Dr. Kawika Winter, ethnobotanist and director of Limahuli Garden and Preserve on the island of Kauaʻi, describes the Wao Akua as having these types of ecological, spiritual, and social elements: "sacred, montane cloud forest, core watershed, native plant community, non-augmented" and an area that was "traditionally kapu" (forbidden, prohibited).[105]

Just below Wao Akua is Wao Kele or Wao Maʻu Kele described in *Native Planters* as the "rain forest" where "giant trees and tree ferns *(ʻamaʻu)*" grow "under almost perpetual cloud and rain."[106] Dr. Winter describes this zone as a "saturated forest just below the clouds, the upland rainforest where human access is difficult and rare, and an area that is minimally augmented."[107] The next zone is the Wao Nahele described by Dr. Winter as a "remote forest, highly inconvenient for human access; a primarily native plant community; minimally augmented; and [utilized by early Hawaiians as a] bird-catching zone."[108]

These descriptions of Wao Akua and Wao Nahele largely correspond to experiences shared by Manaʻe kamaʻāina, especially in parts where the native, pristine forests are still intact. These are areas that kamaʻāina, including hunters tend not to access. In areas that have been penetrated and overly grazed by ungulates, where forests have turned to grass land, and/or where many invasive, non-native stands of vegetation now occur, more hunters have been able to access these areas. However, the length of time to make these journeys high up into the mountain often deter human access except for those most fit and dedicated to make the trek by foot. There are also certain traditional trails, for example, the Mapulehu-Wailau trail, that straddle northeast and southeast face of the island, allowing for access to both sides. Along the trail, some kamaʻāina travel from the south shore along the Wao Kānaka, Wao Lāʻau and into the Wao Nahele, and boggy Wao Akua where perpetual rain clouds blanket the mountain top, and make their way down steep pali (sea cliffs) to the north face into Wailau Valley.

The two remaining bio-cultural zones, where most human interaction occur is the Wao Lāʻau and the Wao Kānaka. The Wao Lāʻau is described in *Native Planters* as "the inland forested region, often a veritable jungle, which surmounts the upland *kula* slopes on every major island of the chain, reaching up to very high elevations."[109] Dr. Winter describes the Wao Lāʻau as a zone of "maximized biodiversity," comprised of "a highly augmented lowland forest due to integrated agroforestry of food and fuel trees, hardwood trees, construction supplies, medicine and dyes, and lei-making materials."[110]

The Wao Kānaka is where the early Hawaiians chiefly settled. These were the kula lands, "the sloping terrain between the forest and the shore"[111] that were highly valued and most accessible to the people.[112] These were the areas where families constructed their hale, cultivated the land, conducted aquaculture, and engaged in recreation.[113] Pukuʻi describes the extended ʻohana ko kula uka and ʻohana ko kula kai living "inland or upland, and some near or on the shore."[114]

Families living inland cultivated kalo (taro), maia (banana), kō (sugar cane), olonā (native shrub whose bark is used to make cordage), ʻawa root for drinking, medicine, and ceremonial uses, wauke (paper mulberry) to make clothing from pounded kapa.[115] They would share these items with the ʻohana ko kula kai, who contributed by exchanging ipu (gourds), niu (coconut), iʻa (fish), lobster, heʻe (octopus), ʻopihi, and limu (seaweed) that they had harvested.[116] According to Handy and Pukuʻi, collectively, the Wao Kānaka and the Wao Lāʻau provided "the hard wood of the koa for spears, utensils, and logs for boat hulls; pandanus leaves *(lau hala)* for thatch and mats; bark of the *mamaki* tree for making *tapa* cloth; candlenuts *(kukui)* for oil and lights; wild yams and roots for famine time; sandalwood, prized when shaved or ground as a sweet scent for bedding and stored garments."[117]

The presence and access to water was vital to healthy ahupuaʻa and ʻāina momona. In optimal conditions, arable lands were terraced with loʻi kalo (taro patches) fed by ʻauwai (irrigated ditches) from the kahawai (streams and rivers). This system provided ideal conditions for hihiwai (endemic water snails) and the native ʻoʻopu (goby fish) to thrive. Punawai (freshwater springs) formed below as the makaʻāinana created loko iʻa (fish ponds) along the shoreline. Access to sources of water meant wealth, aptly termed as "waiwai" (literally, "water-water")[118] for the abundance water brings to the land.

Wao Kānaka did not terminate at the shore but extended into the sea. Just as the kūpuna identified palena and named various parts of the ʻāina, they also had varied names for the sea:

- *Puʻeone* for the sandy seashore, sand dunes, and sandbar.
- *Kai pualena,* where rivers and streams transporting minerals from the land collide with the sea, mix and churn the water with a golden hue.
- *Kai koholai* for the shallow lagoons located close to shore within the reef's protection.
- *Poʻina nalu* and *kai poʻi* where the waves break along the reef.
- *Kai ele,* the deep, dark blue ocean
- *Kai-popolohua-mea-a-Kāne*, the sea associated with the god Kāne with its vibrant purple-blue and red-brown tones.[119]

Manaʻe kamaʻāina noted rich limu beds, crab and fishing grounds. They identified important types of fish ponds both inland and along the shoreline: the loko puʻeone located inland within the former sand bar; the walled fishponds (loko kuapā and loko ʻume iki) that hug the shoreline and surround areas rich in muliwai, where fresh and saltwater mix. Loko kuapā feature sluice gates called makahā by which fish enter. The kūpuna actively engaged in mariculture within the loko kuapā and several families and entities have restored these ponds in Manaʻe. Loko ʻume iki (fish traps) feature multiple open lanes extending inward and outward to make best use of tidal fluctuations and current flows carrying phytoplankton that attract feeding fish. Fishers utilized these lanes to lay their nets across to capture fish.

Kamaʻāina noted important springs within the ocean. They identified the traditional names of reefs and special fishing grounds that lined up with koʻa (fishing shrines) placed on land. Knowledge of these fishing spots are guarded and kept secret within kamaʻāina fishing families and passed down orally from one generation to the next. Manaʻe kamaʻāina also noted certain reef patches tended to as though they were ocean gardens. These reef patches hold the names of

women fishers of old who possessed the kuleana of mālama (responsibility to care for) these reef patches. Some of them are noted on the old ahupuaʻa maps of the Hawaiian Kingdom and ʻohana can trace their genealogy to these kupuna wahine and, thus their right to these reef patches. Another kamaʻāina attested to his grandmother's practice of building "manini hale" or stone houses in the ocean to attract manini fish. It was also a shelter for the manini when hiding from predators. The manini hale were carefully constructed with stacked stones that provided narrow entry points for the manini, that could withstand the ocean surge, and which could allow for hand harvest at low tide after lifting stones from the top of these structures.

Manaʻe kamaʻāina report that the most adverse impacts to ahupuaʻa health have occurred along the Wao Lāʻau and the Wao Kānaka. Post-contact introduction of ungulates (cattle, goat, and deer) and invasive plant species have altered the landscape, destroyed lowland native forests and impacted rainfall patterns in Manaʻe. Weather patterns have also changed, likely a result of global climate change, with each successive season occurring a month or several months later than usual. Kamaʻāina attest to prolonged drought conditions that were first evident in the 1980s and have progressively worsened over each subsequent decade to the present day. One kamaʻāina mentioned that his crops were affected by the prolonged drought and he is less able to predict whether there will be enough rainfall to water his crops.

The 30-40 year drought has left streams bone-dry or trickling. Historically these streams often ran perennially or filled every time after a moderate to heavy rain. Now they are dry for most parts of the year, except during the rainy, winter months. Stream levels have markedly decreased throughout the Koʻolau/Manaʻe moku: Kamalo, ʻOhia, ʻUalapuʻe, Kainalu, Waialua, Moanui, Honouliwai, Honoulimaloʻo, Halawa, and Wailau.

Denuding of the lower forest from ungulates, poor land management practices, and extreme drought conditions have left the soil brittle and unable to retain moisture. These conditions have directly impacted populations of the native ʻoʻopu (goby fish), a traditional subsistence resource. The ʻoʻopu utilize heavy rains as a reproductive strategy to facilitate mass congregation into the estuary for spawning. In Honouliwai, kamaʻāina have witnessed soil, branches, and natural debris carried down the mountain into the stream and bay from flash flooding events. These events are happening more often than in previous years, and are causing massive die-offs of ʻoʻopu. The presence of large java plum trees along the stream banks also over-shade and absorb tremendous amounts of stream water that degrade the natural habitat for ʻoʻopu and hihiwai. Kamaʻāina are witnessing significantly lowered populations of these two species in streams both in Manaʻe and north shore valleys like Wailau. This has prompted kamaʻāina to take the initiative to clear back java plum trees in Honouliwai and reintroduce native species back into the stream as an affirmative act of mālama. It has also prompted kamaʻāina to exercise self-restraint and encourage others to do so in harvesting some of these sensitive species that are experiencing population decline from habitat degradation.

Without the lowland native forest, there are less trees to trap water and bring moisture through condensation. Kamaʻāina have noticed the disappearance of pepeiao in the Wao Lāʻau, a type of tree fungus and native delicacy because of a lack of moisture in the air. Adaptive strategies of invasive trees and plants that shade out native plants, emit natural phyto-toxins, and over-compete for space have virtually removed precious ground cover and eliminated native

vegetation and biodiversity. A secondary impact is the reduction of water moisture and soakage in the ground. This in turn has affected the viability of spring lines below. Limu gatherers are noticing that prime seaweed grounds that rely on the muliwai from springs entering the shoreline areas are thinning out or have disappeared altogether. Former loʻi kalo (wetland taro patches) have also been overtaken by introduced vegetation. These terraced areas are barely visible today and their ability to ameliorate water soakage and allow suspended sediment from heavy rains to settle into the patches rather than wash into the ocean have been compromised. Nutrient exchange from former wetland taro cultivation into fishponds below are no longer possible. This is due to the dilapidated state of ancient loʻi terraces.

Heavy siltation is also occurring in fishponds and along reefs from land erosion. Areas most affected like Honouliwai and Kaʻamola ahupuaʻa and Keawanui fishpond coincide with unsustainable cattle ranching operations above. Cultural sites such as heiau (ancient Hawaiian temples) have also been trampled in certain areas particularly by cattle. Fishing koʻa that provide a line of sight to secret fishing spots in the ocean have also been compromised by cattle trampling and overgrowth of non-native trees such as kiawe (mesquite). This has had a direct impact on traditional fishing practices.

Similarly, certain land clearing activity has destroyed an important stand of kukui (candlenut) trees in ʻOhia. These trees emitted a purple dye from the bark and was utilized by one of the kamaʻāina families to dye their fishing nets. The ʻohana preferred this variety of kukui to dye their nets over the more common variety of kukui that produces red dye extracts. The purple dye was seen as more advantageous for sustainable fishing practices. The family traditionally surrounded fish with a "bull-pen" technique, selectively harvested desired fish, and safely released undersized and undesired fish because the purple dye was visible enough to the fish to avoid entanglement and gilling.

In ʻAhaʻino, extensive grading and grubbing activities in the mauka region have caused numerous land slides and punctured a major water vein. This has caused springs below to dry out, including a spring that fed a loko puʻuone. Certain vegetation have also dried out below such as lauhala. The area is an important mating and nesting ground for endangered Hawaiian green sea turtles. Kamaʻāina witnessed the death of turtle hatchlings struggling to emerge from their nests where mud from the landslides had covered beach sand.

These kamaʻāina observations underscore the need for a more coordinated management approach from mauka to makai. They also reflect the wealth of knowledge from kamaʻāina families living in Manaʻe, their resilience, and their reliance on natural resources and traditional foods that sustain them. From understanding the language and narrative of the ʻāina, they have expressed the need for comprehensive management along all the Wao and have commented on what actions are most appropriate for each area along the different elevations and gradients.

The following sections in this chapter describe the Native Hawaiian rights that are associated with specific traditional and customary practices in Manaʻe. The sources of Native Hawaiian law derive their origin in kamaʻāina expert knowledge and their traditions.

4.1.6. ‘Ohana Values – The Essence Behind Native Traditional and Customary Practices

As reported, the overwhelming majority of kamaʻāina informants emphasized the need to recognize and respect Native Hawaiian mālama ʻāina values, and agreed that any and all conservation efforts must include access that would allow for Native Hawaiian traditional and customary hunting and gathering rights, as well as any and all cultural practices. When we look at whether something has evolved into a cultural practice, a litmus test is to look at the ʻohana, or the family unit, while understanding that traditionally and in modern times, the ʻohana is central to the life of the land.

Dr. Davianna Pōmaikaʻi McGregor, who has interviewed a large number of kamaʻāina informants residing in “cultural kipuka” (rural areas that have maintained cultural understandings and practices),[120] identified common ʻohana cultural values and customs for subsistence and mālama. It is the essence of these understandings that should be the standard by which to measure whether something is a customary practice or not. It has to maintain the essence of these values. Many of the values and customs included in Professor McGregor’s list were also identified by the cultural informants for this plan.

According to Dr. McGregor, what distinguishes Hawaiian custom and practice is the honor and respect for traditional ʻohana cultural values and customs to guide subsistence harvesting of natural resources. Such ʻohana values and customs include but are not limited to the following:

1) Only take what is needed.
2) Don’t waste natural resources.
3) Gather according to the life cycle of the resources. Allow the native resources to reproduce. Don’t fish during their spawning seasons.
4) Alternate areas to gather, fish and hunt. Don’t keep going back to the same place. Allow the resource to replenish itself.
5) If an area has a declining resource, observe a kapu on harvesting until it comes back. Weed, replant and water if appropriate.
6) Resources are always abundant and accessible to those who possess the knowledge about their location and have the skill to obtain them. There is no need to overuse a more accessible area.
7) Respect and protect the knowledge which has been passed down inter-generationally, from one generation to the next. Do not carelessly give it away to outsiders.
8) Respect each other’s areas. Families usually fish, hunt, and gather in the areas traditionally used by their ancestors. If they go into an area outside their own for some specific purpose, they usually go with people from that area.
9) Throughout the expedition keep focused on the purpose and goal for which you set out to fish, hunt, or gather.
10) Be aware of the natural elements and stay alert to natural signs, e.g. falling boulders as a sign of flash flooding.
11) Share what is gathered with family and neighbors.
12) Take care of the kūpuna who passed on the knowledge and experience of what to do and are now too old to go out on their own.
13) Don’t talk openly about plans for going out to subsistence hunt, gather, or fish.

14) Respect the resources. Respect the spirits of the land, forest, ocean. Don't get loud and boisterous.
15) Respect family ʻaumakua. Don't gather the resources sacred to them.[121]

Native Hawaiian law has often been understood as providing access to resources and places important to traditional and customary subsistence and religious practices. The sections above, however, reflect a more multi-dimensional picture of where these rights are properly emplaced:

- In Kānaka Maoli genealogical and cosmological understandings based on reciprocal ʻohana relationships with ʻāina that call for a greater kuleana to mālama and that the rights of use and access cannot be severed from the responsibility to mālama.

- In the mind-set of mālama ʻāina which involves a way of making decisions that are good for all, rather than sacrificing one interest over the other. This is found in (a) the eight resource realms for which the ʻaha councils made decisions; (b) the ʻaha kiole decision-making matrix that honors the ancestral past, cares for the needs of the present generation, and provides an abundant future for generations yet unborn; and (c) putting into practice the ʻohana values identified above.

- In the expectation that the aliʻi nui, those who were in power and who were living manifestations of nā akua (the gods), were obligated to serve as intermediaries between the gods and the people. They were charged as trustees on behalf of the makaʻāinana. The makaʻāinana in turn worked the ʻāina to make it momona (abundant) through the wise leadership of the aliʻi and their konohiki.

- And in the enduring belief that despite the influences of colonization, the privatization of lands and modern practices of excluding and alienating people from accessing the land, the trust relationship still exists and large landowners and government are still expected to make responsible decisions that respect the rights of kamaʻāina and hoaʻāina to continue their traditional practices.[122]

4.1.7. The ʻAha Kiole Serving as a Vehicle for Free, Prior, and Informed Consent (FPIC) Pursuant to the United Nations' Declaration on the Rights of Indigenous Peoples (UNDRIP)

The United Nations, with 143 nations as signatories, adopted the Declaration on the Rights of Indigenous Peoples (UNDRIP) in September 2007.[123] In 2010, U.S. President Barack Obama signed the Declaration and issued an official statement qualifying the United State's position on UNDRIP as non-binding. However, the U.S. position statement provides that America is continuing to meet the spirit of the UN Resolution through its ongoing work on protecting the rights of America's indigenous peoples and strengthening government to government relations with recognized American Indian tribes.[124] Additionally, with its "near universal acceptance" by a majority of countries, this "endorsement gives it strong moral suasion in the international arena."[125]

Some relevant provisions of UNDRIP include:

> Article 26. Indigenous peoples have the **right to the lands, territories and resources which they have traditionally owned, occupied or otherwise used or acquired**…[and] have the right to own, use, develop and control the lands, territories and resources that they possess by reason of traditional ownership or other traditional occupation or use, as well as those which they have otherwise acquired.
>
> Article 11. indigenous peoples have the **right to…maintain, protect and develop the past, present and future manifestations of their cultures, such as archaeological and historical sites** …
>
> Article 19. States shall consult and cooperate in good faith with the indigenous peoples concerned…in order to obtain their **free, prior and informed consent** before adopting and implementing legislative or administrative measures that may affect them.
>
> Article 29. Indigenous peoples have the **right to the conservation and protection of the environment and the productive capacity of their lands or territories and resources**…
>
> Article 32. States shall consult and cooperate in good faith with the indigenous peoples concerned…in order to obtain their **free, prior and informed consent** prior to the approval of any project affecting their land or territories and other resources …[126]
>
> (Emphases added).

Informed consent lays out the framework for indigenous peoples to make fully informed decisions in accordance with their own "customary systems of decision-making."[127] It requires governmental entities, corporations, developers, and other public and private entities to negotiate with indigenous peoples with the intent of reaching consensus **prior** to implementation of a proposed action. Indigenous peoples also have the **free**dom to consent to or reject a proposal which may affect their ancestral lands that they own, occupy, access, and/or use.[128] (Emphases added).

As the next sections in this chapter will make clear, there are certain vested rights of native Hawaiian ahupuaʻa tenants (hoaʻāina) that have their origins in the ancient land tenure system. This customary law was codified by the Hawaiian Kingdom and later adopted by the State of Hawaiʻi. The State has reaffirmed these rights in its Constitution and statutes. A unique body of jurisprudence has developed around these laws which reflect a heightened obligation by the State and its political subdivisions to reasonably protect traditional and customary Native Hawaiian rights on both public and private lands. The recent passage of Act 288 in 2012 formally created a Statewide ʻAha Moku Advisory Committee within the Department of Land and Natural Resources to "integrat[e] indigenous resource management practices with western management practices[; to] identify[ ] a comprehensive set of indigenous practices for natural resource management; [and to] foster[ ] the understanding and practical use of native Hawaiian resource knowledge, methodology, and expertise."[129] Collectively, these laws and mechanisms reflect a significant step closer to the foundational language found in the UN Declaration on the Rights of

Indigenous Peoples. While not wholly meeting the standards set forth for free, prior, and informed consent, Hawai‘i’s constitutional laws, statutes, and jurisprudence are certainly more expansive than other jurisdictions within the United States.

The ‘Aha Kiole O Moloka‘i and its respective councils on the moku level are self-empowered and self-determined. The Molokai ‘aha councils engage government and private actors from a position that gives them greater parity in making affirmative decisions about the natural and cultural resources that sustain the people. One of the major objectives of this report is to not only accurately document kama‘āina traditional knowledge, mālama practices, and recommended strategies for ahupua‘a-scale restoration and management; but to also appropriately place native community at center stage in the decision-making process and implementation of its own resource management strategy.

4.2. SOURCES OF NATIVE HAWAIIAN RIGHTS LAW

It is within this historical context, that the sources of Native Hawaiian rights law are best understood. As explained in Section 2.4, this Traditional and Customary Practices Report was requested by the ‘Aha Kiole o Moloka‘i - Mana‘e Moku. The ‘Aha Kiole requested the report integrate an ahupua‘a management approach that reflects kūpuna (Hawaiian ancestral) practice and decision-making. The report covers the sources of Native Hawaiian rights law and their relevance to specific cultural, religious, and subsistence practices of Mana‘e kama‘āina. While the ‘aha system today is a modernized version of the ancient framework of natural resource governance practiced on Moloka‘i, the ‘Aha Kiole o Moloka‘i remains true to the essence of the eight realms of decision-making employed by the kūpuna of old: (1) Moana-Nui-Ākea, (2) Kahakai Pepeiao, (3) Ma Uka, (4) Nā Muliwai, (5) Ka Lewalani, (6) Kanaka Hōnua (7) Papahelōlona, and (8) Ke ‘Ihi‘ihi. The recommendations that complement, supplement, and help to inform the East Slope Watershed Management Plan are based on mana‘o shared by Mana‘e kama‘āina informants. Their mana‘o, in may ways, echo the sentiments of ka po‘e kahiko (the people of old) who led with lōkahi and pono in mind.

There are three main sources of law that support Native Hawaiian traditional and customary rights and practices. These sources of law include: Hawai‘i Revised Statutes (“H.R.S.”) Section 7-1, H.R.S. Section 1-1, and Article XII, Section 7 of the State Constitution. In order to understand their meaning and the breadth of what these statutory and constitutional provisions protect, it is necessary to provide the proper historical context for which these laws find their genesis.

4.2.1. The Codification of Customary Law under the Hawaiian Kingdom and Its Modern Adoption and Application under State Law

Through war and conquest waged by Kamehameha, the unification of all the Hawaiian islands was achieved by 1795.[130] Kamehameha established himself as sovereign, and his heirs continued in succession to rule over the Hawaiian Kingdom as a constitutional monarchy up until the 1893 illegal overthrow of Queen Lili‘uokalani and occupation of the islands by the U.S. government. Laws promulgated under the Kingdom of Hawai‘i largely reflect the codification of

Hawaiian customary beliefs and understandings and underscore the trust relationship between the aliʻi nui towards the makaʻāinana.

Early Constitutional Provisions of the Hawaiian Kingdom, the Māhele, and the Reserved Rights of Hoaʻāina

In 1839 Kamehameha III (Kauikeaouli) promulgated the Declaration of Rights, the first document that described the rights of both aliʻi and makaʻāinana and secured their equal protection under the law. If the chiefs, governors, officers of the Kingdom, or land agents violated these equal rights, the Declaration provided that they would lose their honored status.[131] The following year, the 1840 Constitution set forth the nature of ʻāina; the trustee relationship that the King had over the chiefs and people in managing the land; and acknowledged the vested rights among the king, chiefs, and makaʻāinana in the land[132]:

> Kamehameha I, was the founder of the kingdom, and to him belonged all the land from one end of the Islands to the other, though it was not his own private property. It belonged to the chiefs and people in common, of whom Kamehameha I was the head, and had the management of the landed property.[133]

These constitutional provisions laid the groundwork for the events that occurred during the Māhele, the privatization and division of the lands among the king, chiefs, and makaʻāinana. The Māhele introduced a hybridized system fashioned along certain western concepts of private property while retaining certain inherent rights to the makaʻāinana that were grounded in the ancient land tenure system.[134] During the time of the Māhele which began in 1848, Hawaiʻi was transformed from a traditional and communal land tenure system to one based on private property constructs. As the Kingdom was evolving towards a private property regime, it did not wholly adopt a western framework.[135] In 1845, a Board of Land Commissioners to Quiet Land Titles ("Land Commission") was formed to preside over claims made by private individuals holding oral land deeds that were not part of the traditional land tenure system.[136] Once a payment of commutation was made, then the right holder would be issued title in the form of a royal patent.[137] The Land Commission based its decisions "in accordance with the principles established by the civil code" of the Hawaiian Kingdom and "native usages in regard to landed tenures[.]" [138] These principles read in part:

> The same rights which the King possessed over the superior landlords and all under them the several grades of landlords possessed over their inferiors, so that there was a joint ownership of the land; **the King really owning the allodium, and the person in whose hands he placed the land, holding it in trust** …
>
> It seems natural then, and obviously just, that the King, in disposing of the allodium, should offer it first to the superior lord, that is to the person who originally received the land in trust from the King; since by doing so, no injury is inflicted on any of the inferior lords or tenants, they being protected by law in their rights as before; and most obviously the King could not dispose of the allodium to any other person without infringing on the rights of the superior lord. But **even when such lord shall have received an allodial title from the King by purchase or otherwise, the rights of the tenants and sub-**

> **tenants must still remain unaffected, for no purchase even from the sovereign himself, can vitiate the rights of third parties. The lord, therefore, who purchases the allodium, can no more seize upon the rights of tenants and dispossess them …** It being therefore fully established, that **there are but three classes of persons sharing vested rights in the land, -- 1st, the government, 2nd the landlord, and 3rd, the tenant** …[139]
>
> (emphases added)

These principles underscore the trust relationship of the king and chiefs on behalf of the hoaʻāina, the native tenants of the land, those long-time ʻohana who possessed the most intimate relationship to the land. That these rights are "vested" speaks to what is described in Black's Law Dictionary as

> Rights which have so completely and definitely accrued to or settled in a person that they are not subject to be defeated or canceled by the act of any other private person, and which it is right and equitable that the government should recognize and protect, as being lawful in themselves, and settled according to the then current rules of law, and of which the individual could not be deprived arbitrarily without injustice, or of which he could not justly be deprived otherwise than by the established methods of procedure and for the public welfare. Such interests as cannot be interfered with by retrospective laws; interests which it is properly for a state to recognize and protect and of which individuals cannot be deprived arbitrarily without injustice.[140] … Immediate or fixed right to present or future enjoyment and one that does not depend on an event that is uncertain. A right complete and consummated, and of such character that it cannot be divested without the consent of the person to whom it belongs, and fixed or established, and no longer open to controversy.[141]

According to McGregor, when the Land Commission principles are understood alongside the 1840 Constitution it is clear that "any one section of land in the Hawaiian Islands is vested with multiple layers of responsibilities and rights."[142]

The Māhele of 1848 was the Kingdom's adoption of a private property system that divided out the multiple interests in land. The first stages of the Māhele of 1848 involved the King and 252 chiefs quit-claiming their interests between each other. The lands, now considered freehold, were converted into allodial titles. The chiefs were then awarded royal patents once they paid a commutation fee for these allodial titles.[143] The King dedicated the bulk of his landholdings to the government, while keeping the remainder as crown lands[144] for himself and his heirs. There are 1,124 ahupuaʻa and 429 ʻili names listed in the *Buke Kakau Paa no ka Mahele aina I Hooholoia iwaena o Kamehameha III a me Na Lii a me Na Konohiki ana* (Māhele Book). Most of these ahupuaʻa and some ʻili were subsequently delineated as konohiki, crown, or government lands.[145]

A Boundary Commission was established in 1862 to resolve boundaries of ahupuaʻa and ʻili which were typically granted in name only. These claims were resolved through reviewing testimony of kamaʻāina who possessed a comprehensive knowledge of palena in their area.[146]

As one of the early Supreme Court of the Hawaiian Kingdom cases indicates, land surveys and plots alone would not suffice without supporting evidence of kamaʻāina authentication.[147]

All of the Crown, government, and chiefs' lands remained subject to the rights of native tenants. The clause "koe nae na kuleana o na kanaka" is affixed to all LCAs, Royal Patents issued to konohiki, private citizens, Crown and government lands. This clause reaffirms that all lands throughout Hawaiʻi to the present-day are encumbered by "reserved rights of native tenants."[148] The courts to this present day recognize a kuleana reservation attaches to private property holdings in Hawaiʻi.[149]

Hoaʻāina were able to acquire small land-holdings, or kuleana, for themselves through the 1850 Kuleana Act as well as acquire government lands through purchase.[150] The Kuleana Act and the kuleana reservations attached to landholdings reflect traditional and customary understandings that pre-date Statehood and even the time of Kamehameha and his monarchy. These legal provisions represent hoaʻāina relationships to their ahupuaʻa and recognize their rights to access lands from mauka to makai to gather materials for their basic needs (e.g., thatch and aho cordage for making rope and building hale, firewood for imu, ti leaf for wrapping food items, lei-making, and to serve spiritual and ceremonial purposes). Manaʻe families, in large part, maintain a kuaʻāina (country, rural) lifestyle as much of the land remains undeveloped and most have retained traditional, subsistence practices. The exercise of these kuleana rights remain a vital part of the culture.

The Kuleana Act - Hawaiʻi Revised Statutes, Section 7-1

The Kuleana Act of 1850 protects the rights of hoaʻāina (native ahupuaʻa tenants) to gather specific enumerated items such as firewood, house timber, aho cord, thatch or ti leaf for home consumption and non-commercial use.[151] This provision conveyed the King's concern that "a little bit of land even with allodial title, if they were cut off from all other privileges, would be of very little value [.]"[152]

The act was amended the following year to remove a provision that had required hoaʻāina seek permission before accessing private lands to gather these articles. As the reciprocal relationships between hoaʻāina and the konohiki/chiefs gave sway to western understandings, the people of the land began to suffer and were denied access to areas critical to meeting their basic, daily needs.[153] The amended Kuleana Act (1851)[154] was carried over from the period of the Hawaiian Kingdom into Statehood as Hawaiʻi Revised Statutes, Section 7-1. It reads as follows:

> Where the landlords have obtained, or may hereafter obtain, allodial titles to their lands, the people on each of their lands shall not be deprived of the right to take firewood, house-timber, aho cord, thatch, or ki leaf, from the land on which they live, for their own private use, but they shall not have a right to take such articles to sell for profit. The people shall also have a right to drinking water, and running water, and the right of way. The springs of water, running water, and roads shall be free to all, on all lands granted in fee simple; provided that this shall not be applicable to wells and watercourses, which individuals have made for their own use.[155]

Hawaii Revised Statutes, Section 1-1 on Hawaiian Usage and the Importance of Kamaʻāina Expert Testimony

Hawaiʻi Revised Statutes, Section 1-1 is another source of law that was enacted in 1892 as part of the civil code[156] of the Hawaiian Kingdom and has survived into Statehood.[157] H.R.S. § 1-1 instructs Hawaiʻi's courts to look to English and American common law decisions for guidance, except where they conflict with "Hawaiian judicial precedent, or … Hawaiian [custom and] usage" pre-dating 1892.[158] The origins of this law can be traced even further back to the early period of the Hawaiian Kingdom prior to 1838, when it was acknowledged that the islands were "governed … without other system than [Hawaiian custom and] usage, and with a few trifling exceptions, without legal enactments."[159] Under Kamehameha III, the constitutional monarchy took shape with the establishment of an Executive Department comprised of a Privy Council and Ministers to the King. This was followed by the creation of a Judiciary in 1847 authorized to "cite and adopt '[t]he reasonings and analysis of the common law, and of the civil law [of other countries] … so far as they are deemed to be founded in justice, and *not in conflict with the laws and usages of this kingdom.*'"[160]

This law also encompasses the entire spectrum of Hawaiian traditional and customary practices beyond the specific items listed in H.R.S. § 7-1.

Courts look to kamaʻāina expert testimony as the foundation for authenticating Hawaiian custom and usage. This was first discussed in *Application of Ashford*[161] which relied on "reputation evidence" of a kamaʻāina (native person who was most familiar with the land) over a shoreline boundary dispute rather than accept the conclusions of a certified land surveyor. The court stated:

> Kamaʻāina witnesses may testify to the location of seashore boundaries dividing private land and public beaches according to reputation and ancient Hawaiian tradition, custom and usage. The method of locating the seaward boundaries was by reputation evidence from kamaʻāinas and by the custom and practice of the government's survey office. It is not solely a question for a modern-day surveyor to determine the boundaries in a manner completely oblivious to the knowledge and the intention of the king and old-time kamaʻāinas who knew the history and names of various lands and the monuments thereof.[162]

The premise for this case was based upon the requirements of H.R.S. § 1-1 to look to Hawaiian custom and usage to inform the law.

In many ways the origins and the evolution of Hawaiian rights law are representative of this ʻōlelo noʻeau, "i ka wa ma mua, ka wa ma hope" — our future can be found in the wisdom of the past.

Article XII, § 7 of the Hawai‘i State Constitution -- A Reaffirmation of Native Hawaiian Rights

Article XII, Section 7 of the Hawai‘i State Constitution (1978) reads as follows:

> The State reaffirms and *shall protect all rights, customarily and traditionally exercised for subsistence, cultural and religious purposes* and possessed by ahupua‘a tenants who are descendants of native Hawaiians who inhabited the Hawaiian Islands prior to 1778, *subject to the right of the State to regulate such rights*.[163]

This provision solidifies and enhances H.R.S., §§ 1-1 and 7-1, by making it a constitutional mandate for the State and its political subdivisions to "protect the reasonable exercise of customar[y] and traditional[] rights of Hawaiians to the extent feasible."[164]

4.2.2. Relevant Jurisprudence in Native Hawaiian Law

It was from Mana‘e, Moloka‘i that the first landmark Native Hawaiian rights case emerged in 1982 with William "Billy" Kalipi, Sr. asserting his kuleana rights.[165] The Hawai‘i Supreme Court strictly interpreted H.R.S., § 7-1 in *Kalipi v. Hawaiian Trust Co.* ("*Kalipi*") as protective only of access and gathering rights of native tenants actually residing within the ahupua‘a and that these practices may occur only on undeveloped lands.[166] However, as more cases have been litigated since *Kalipi*, the Hawai‘i Supreme Court has revisited the notion of whether traditional and customary practices are viable only on undeveloped lands. The court's decision in *Public Access Shoreline Hawaii v. Hawai‘i County Planning Commission* ("*PASH*") acknowledged that these traditions exercised on "less than fully developed" lands may also warrant protection.[167]

Most, if not all, of the ahupua‘a, particularly the lowland forests and upper reaches of the mountain areas in Mana‘e are undeveloped or less than fully developed. Kama‘āina families attest to the importance of these lands for traditional subsistence activities and for access to important cultural sites.

In *Pele Defense Fund v. Paty* ("*Pele I*"), the Hawai‘i Supreme Court expanded its ruling in *Kalipi* and acknowledged that gathering rights may extend to other ahupua‘a without benefit of tenancy if it can be demonstrated that this was the accepted custom and long-standing practice.[168] The court gave great weight to kama‘āina evidence and acknowledged that "traditional and customary rights associated with tenancy in an ahupua‘a [may] extend[ ] beyond the boundaries of the ahupua‘a."[169]

Similar to the testimony and affidavits submitted in *Pele I*, several kama‘āina in Mana‘e identified the utilization of multiple ahupua‘a for hunting and gathering. As stated earlier, some Mana‘e kama‘āina travel to the remote, northeast side of the island to gather hihiwai and ‘o‘opu and engage in fishing and hunting activities. Some hunters described ungulate migrational patterns between northeast and southeast valleys that coincide with food availability during different seasons. Traditional trails that transect north and south Molokai such as the Wailau-Mapulehu trail and the underground lava tube passage between Pelekunu and Kamalo also reflect movement to different ahupua‘a to access resources that may not be available. For

example, oral history reflects that in order to construct fishponds on the more protected south shore, ancient Molokai kūpuna formed human chains to hand carry basalt stones from the north. These practices confirm that several Manaʻe ʻohana may enjoy expanded traditional and customary rights beyond their ahupuaʻa of residence.

Another significant case is *Ka Paʻakai O Ka ʻAina v. Land Use Commission* ("*Ka Paʻakai*")[170] wherein the court deemed that state agencies, in this case the Land Use Commission, have "statutory and constitutional obligations" to Native Hawaiians.[171] The court stated that one of those obligations is "to protect the reasonable exercise of customarily and traditionally exercised rights of Native Hawaiians to the extent feasible".[172] In addition to ruling that the Land Use Commission had failed to meet its obligation to protect the reasonable exercise of these rights, the court also mandated that state agencies make an independent assessment regarding the impact of proposed actions on Native Hawaiian traditional and customary practices. The three factors that agencies must consider when making these assessments are:

> "(A) the identity and scope of 'valued cultural, historical, or natural resources' in the petition area, including the extent to which traditional and customary native Hawaiian rights are exercised in the petition area;
> (B) the extent to which those resources—including traditional and customary native Hawaiian rights—will be affected or impaired by the proposed action; and
> (C) the feasible action, if any, to be taken … by the [State and/or its political subdivisions] to reasonably protect native Hawaiian rights if they are found to exist."[173]

These factors under the *Ka Paʻakai* framework are still applicable to any State action affecting Native Hawaiian traditional and customary practices, including those exercised in Manaʻe. The State Department of Land and Natural Resources (DLNR) is the governmental entity administering the overall Hawaiʻi Association of Watershed Partnerships. As such, DLNR must ensure it affirmatively protects Hawaiian cultural practices and rights exercised in Manaʻe.

4.3. TRAILS AND TRADITIONAL ACCESS

Section 4.2 explained the sources of Native Hawaiian rights law and the legal foundation that further protects rights to trails and access. This section provides a focused discussion on how this legal foundation and other laws are applied in the context of trails and access.

Traditionally, trails in Hawaiʻi serve very important purposes and are an integral part of the traditional Hawaiian lifestyle. There were two main types of trails used for distinct purposes, the first being trails that ran perpendicular to the coastline, from makai to mauka. These trails chiefly served the purpose of providing access to the forest, agricultural lands, and ocean resources along the wao nahele, wao lāʻau, and wao kānaka. The second type of trail is better known as alahele (pathway) or alaloa (long road), which typically run along the shoreline and transect multiple ahupuaʻa and/or encircle the entire island. These trails were useful for long huakaʻi, visits between extended ʻohana living in several ahupuaʻa. They were also utilized during the makahiki period when aliʻi accepted their share of the lands' bounty and offerings and tributes were placed on the ahu for Lono, the god of peace.

Under Kamehameha's rule and unification of all the islands, these customary observations were honored. The trails remained open to all classes of people to move freely and safely in accordance with the Kānāwai Mamalahoe or "Law of the Splintered Paddle," the first edict declared by King Kamehameha I in 1797.[174] This law was also adopted by the State of Hawai'i during the 1978 Constitutional Convention to reflect concern for public safety and welfare.[175] Under Kamehameha III's rule the Kuleana Act was promulgated, reaffirming the importance of keeping traditional trails open for hoa'āina to exercise customary access and gathering rights. This provision, later adopted by the State of Hawaii under Hawai'i Revised Statutes, Section 7-1, declared that the "roads shall be free to all, on all lands granted in fee simple."[176] Kuleana reservations attached to landholdings issued at the time of the Māhele and surviving to this day also reflect the supremacy of hoa'āina rights of access along ahupua'a.

Access to landlocked kuleana is protected under Hawai'i statutory and case law. An easement (i.e., the right to cross another's land for access to and from a public road) for access to a kuleana may be created either expressly, or impliedly based on prior existing use, or by necessity.[177] In the instance where an express grant of an easement contains the language of a kuleana reservation, "ua koe ke kuleana o na kanaka," or "reserving the rights of native tenants," this grants an owner of a landlocked kuleana unrestricted right of access through the private land. Even if an original land award does not expressly include a kuleana reservation, a landlocked kuleana owner has a right to access his or her parcel over the surrounding land by way of an easement based on necessity or prior use. An easement may be created by strict necessity where the only access to landlocked kuleana is over the grantor's land or by reasonable necessity where an alternative route is possible, but infeasible.[178]

As the Kingdom entered the world stage, engaged in mass agricultural enterprises and trade with foreigners, greater infrastructure was needed to facilitate transportation and commerce. The passage of the Highways Act of 1892 followed. This law recognized that, "All roads, … trails … whether now or hereafter opened, laid out or built by the Government … are hereby declared to be public highways." With appropriate historical documentation and surveys, the State may exercise its authority under the Highways Act to claim trails that were in place before 1892. Trails may become public right-of-ways through dedication or surrender,[179] or by deed granted by a private landowner.[180] Access along Hawaiian trails may also be protected through an implied dedication of a public right-of-way across private land. An implied dedication of a public-right-of-way is established when there is intention and an act of dedication by the property owner, and an acceptance by the public.[181]

The State legislature created the Nā Ala Hele Statewide Trail and Access System in 1988, a program now housed within the State Department of Land and Natural Resources (DLNR).[182] Under this program DLNR is authorized to conduct an inventory of trails throughout the islands; assess accessibility to these trails; acquire additional trails and access areas for public enjoyment; and promulgate rules for access and use of trails.

Hawai'i's laws are very robust in protecting public trust values; particularly in the field of water law.[183] The developing jurisprudence in this area also recognize the rights of Native Hawaiians and the natural resources associated with the perpetuation of cultural practices as constitutionally protected public trust purposes.[184] The public trust doctrine in Hawai'i derives its origins within

the nature of the trust relationship of aliʻi as mediators of the divine on behalf of the makaʻāinana. This trust relationship seeded the laws of the Kingdom, adhered to lands granted at the time of the Māhele, and survived into Statehood through constitutional and statutory provisions. It is likely then that traditional trails fall within the public trust today.[185]

4.3.1. Application of Trails and Access Protections with the Manaʻe Fencing Project

Kamaʻāina informants identified additional mauka-a-makai traditional trails in Manaʻe such as Kaluaʻaha trail, the Mapulehu-Wailau trail transecting south to north shore, Papalaua trail on the northeast shore, the trail to Moʻoula Falls in Hālawa, and a trail beneath the mountain via lava tube connecting Kamalō in the south to Pelekunu in the north. There are also other unnamed hunting trails throughout Manaʻe. These trails run along both public and private lands. Continued access along these trails should be maintained. As each phased fence line project begins, access along these traditional trails must not be obstructed. Discussions with the EMoWP regarding its proposed fencing project indicated that step-overs would be provided to allow for access. This should be the minimum requirement. A more protective solution would be to ensure that the fence lines do not encroach upon these traditional trails, but run alongside them or be redirected away from these traditional trails.

According to the State's website, the only Nā Ala Hele trail listed for Molokaʻi is the Maunahui Road, more commonly known as the Molokai Forest Reserve Road, that leads to the Kamakou Rainforest in central Molokaʻi.[186] The Manaʻe community may also elect to engage the Nā Ala Hele program to formally register important traditional trails into the Statewide Trails system.

4.4. NATIVE BURIALS AND HISTORIC SITES PRESERVATION

In 1966, the United States Congress passed the National Historic Preservation Act (NHPA) in order to preserve, restore, and maintain the historic and cultural environment of the nation with a view towards "stewardship and trusteeship for future generations."[187] Through this legislation a National Register of Historic Places has been established. The States throughout America also maintain State Historic Registers in concert with the federally administered program. In order to be considered for inclusion into both the national and state historic registers, properties must be a certain "age" (at least fifty years old) and maintain an "integrity" that closely reflects its original state.[188] These properties must also be "significant" in terms of history behind the landscape, architecture, or engineering or their association with specific events, activities, people, or developments that were important in the past.[189] The Hawaiʻi Register also includes sites that are important to Kānaka Maoli and other ethnic groups as part of their history and cultural identity.[190]

The Hawaiʻi State Historic Preservation Division ("SHPD") is housed within DLNR and charged with the obligation to "administer a comprehensive historic preservation program."[191] SHPD is responsible for developing a statewide survey and inventory of historic properties and burial sites,[192] as well as regulating "archaeological activities throughout the State."[193]

As the Manaʻe fencing project moves forward, several State and County permit approvals will be required. Given the presence of many cultural sites and native burials in Manaʻe that are either registered or eligible for inclusion onto the historic register, an archaeological inventory survey[194] must be completed prior to project commencement with SHPD review and concurrence.[195] In addition to conducting an archaeological inventory survey, if native burials are also present, a burial treatment plan[196] subject to approval by the Molokaʻi Island Burial Council is required.[197]

If federal funding is received for the fencing project, this may also trigger NHPA Section 106 review as a "federal undertaking" likely to affect listed and/or eligible historic properties.[198] Section 106 is a consultation process between relevant federal agencies, SHPD, Native Hawaiian Organizations (NHOs), the general public, other stakeholders and interested persons.[199] The federal Advisory Council on Historic Preservation (ACHP) has encouraged participants in the Section 106 process to incorporate the precepts found in the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) which was signed by President Obama in 2010.[200] The ACHP underscores Article 18 of UNDRIP which reads as follows:

> "Indigenous peoples have the right to participate in decision-making in matters which would affect their rights, through representatives chosen by themselves in accordance with their own procedures, as well as to maintain and develop their own indigenous decision-making institutions."[201]

The ACHP interprets this provision as consultation that allows for NHOs to "have the opportunity not only to identify those places of religious and cultural importance to them … but also to influence federal decision making in order to protect those places."[202] The ACHP states that the consultation, in order "to be meaningful and effective," should begin as early as possible with an "opportunity to identify and resolve issues, including potential adverse effects to historic properties, while there are still a broad range of alternatives available."[203]

4.4.1. Recommendation to Protect Manaʻe's Historic Sites and Burials in Perpetuity

As mentioned earlier in Section 4.1.7. the ʻAha Kiole may serve as a decision-making body that upholds the traditional and customary rights and practices of Manaʻe kamaʻāina. The ʻAha Kiole o Molokaʻi – Manaʻe Moku may serve as an NHO and consulting party within the Section 106 process. Individual kamaʻāina families in Manaʻe may also request to become a consulting party in this process as well.

A recommended long-term and proactive strategy for protection of culturally significant sites throughout Manaʻe would entail a concerted effort of the ʻAha Kiole o Molokaʻi – Manaʻe Moku to begin identifying sites that are not yet in the federal and state registers of historic places and to formally request their listing.[204] The Society for Molokai Archaeology (SFMA) and the Molokai Enterprise Community Plan have already identified a whole-scale inventory and listing of all cultural sites on the island as a top priority. Some of this work has been undertaken in the Kamalō ahupuaʻa and in Wailau through past partnerships between SFMA, Kamehameha Schools, the University of Hawaii at Mānoa Anthropology Department, the University of Hawaiʻi Maui College – Molokaʻi Education Center, and the Molokaʻi Rural Development

Project. This collaboration resulted in the training of a cadre of community members to serve as Molokaʻi-based archaeological field technicians. The archaeological inventory surveys from those efforts could serve as a starting point for inclusion of cultural sites into the federal and State register. This work is vitally important, particularly since it is a proactive step towards protecting unlisted sites that may otherwise be subject for "data recovery" in the face of approved development proposals. Data recovery sites are subjectively assessed by contract archaeologists who are hired by developers. These sites are considered low value, and low significance and are ultimately destroyed after the archaeologist completes a drawing or visual rendering of the site. Because of prior abuses in other locales throughout the State, it is important to ensure that the archaeologist contracted to do an Archaeological Impact Survey (AIS) is qualified and ethical.[205]

It is important for Manaʻe kamaʻāina to determine for themselves which sites are important to them, so that they may be preserved in perpetuity. The current "data recovery" process in developing and altering landscapes neglects a growing body of knowledge that recognizes the importance of "cultural landscapes." Cultural landscapes are areas indicating interactions between humans and nature that aren't necessarily about environmental subjugation and degradation; rather they reflect "a closely woven net of relationships, the essence of culture and identity."[206] Cultural landscapes are hiding in plain sight throughout undeveloped lands in Hawaiʻi, and are prevalent in Manaʻe's intact ahupuaʻa. The rich heritage of Manaʻe's multiple ahupuaʻa qualify as important cultural landscapes that did not only harbor important heiau (temples), puʻu honua (places of refuge), ahu (stone heaps), and other cultural features. Rather, there is evidence of rich cultivated areas along the wao lāʻau and wao kanaka that are important to the perpetuation of Hawaiian traditional practices. This report attempts to capture their significance to a living and thriving Hawaiian culture in Manaʻe, Molokai that is as equally deserving of protection and restoration as an ancient heiau would be.

In lieu of a comprehensive community-led archaeological inventory prior to the fencing project; a short-term strategy would entail negotiating for non-destructive and non-invasive treatment of all cultural sites, whether listed or unlisted on the register. The ʻAha Kiole o Molokaʻi – Koʻolau/Manaʻe Moku may serve as a representative body in discussions with the EMoWP and SHPD.

Individual families who are lineal or cultural descendants[207] of iwi kūpuna whose resting places are within the proposed project area should also take the time to formally register family burial sites known to them.[208] Families can request that this information remain confidential to the general public as a means to protect native graves from being unearthed or looted for moepū (funerary objects) and artifacts. The benefit of registering known burial sites is that they will be afforded the highest protection under the law. If the East Slope Watershed project proposes to erect fenceline in the vicinity of known burials, SHPD will be able to alert EMoWP to conduct an AIS and develop a burial treatment plan in cooperation with the Molokaʻi Island Burial Council and acknowledged lineal and cultural descendants. In this way, protective and mitigative measures, such as established buffer zones around previously identified burials, and their preservation in place may be included in the burial treatment plan.

4.5. WATER RIGHTS AND THE PUBLIC TRUST DOCTRINE

4.5.1. Legal Framework for Water Law in Hawai‘i

Water law in Hawai‘i is made up of many parts - the Hawai‘i Constitution, the state water code, the Water Commission’s administrative rules, and court decisions.[209] In 1978, Hawai‘i elevated resource preservation to a constitutional mandate when it created constitutional provisions that protect natural resources, such as water.[210] These protections are grounded in the public trust doctrine.[211] Article XI, § 1 and § 7 adopt the public trust doctrine as a “fundamental principle of constitutional law in Hawai‘i.”[212] Article XI, § 1 of Hawai‘i’s Constitution states that “all public natural resources are held in trust by the State for the benefit of the people.”[213] Article XI, § 7 of the constitution lays out more specific directives for how the State should manage its water resources.[214] Article XI, § 7 finds that “[t]he State has an obligation to protect, control and regulate the use of Hawaii's water resources for the benefit of its people.”[215] Furthermore, Article XI, § 7 states:

> [t]he legislature shall provide for a water resources agency which, as provided by law, shall set overall water conservation, quality and use policies; define beneficial and reasonable uses; protect ground and surface water resources, watersheds and natural stream environments; establish criteria for water use priorities while assuring appurtenant rights and existing correlative and riparian uses and establish procedures for regulating all uses of Hawaii’s water resources.[216]

In response to Hawai‘i’s new constitutional mandate, the state legislature enacted Hawai‘i Revised Statutes chapter 174C, known as Hawai‘i’s Water Code, and created the state Water Commission to oversee water management.[217] The Water Code details the responsibilities of the State Water Commission and lays out specific directives for managing and protecting ground and surface water in Hawai‘i.[218]

Hawai‘i’s Supreme Court has also given specific instructions on how the constitutional mandates are to be executed.[219] In 2000, the Hawai‘i Supreme Court had the opportunity to use article XI, section 1 and 7 to protect Hawai‘i’s water resources.[220] In *Waiāhole I*, the court reaffirmed the notion that “the public trust doctrine applies to all water resources without exception or distinction.”[221] The court in *Waiāhole I* held that article XI, section 1 establishes the permissible “outer limits” of regulatory codes and thus informs how a court interprets any state or agency regulation.[222]

Moreover, the court in *Waiāhole I* held that the state has the responsibility to conserve and protect all of Hawai‘i’s natural water resources.[223] Summarizing the objectives of the public trust doctrine in terms of water, the court ruled that “in short, the object is not maximum consumptive use, but rather the most equitable, reasonable, and beneficial allocation of state water resources, with full recognition that resource protection also constitutes ‘use.’”[224] The state’s responsibility does not mean that natural resources cannot be impacted or developed. Instead, the public trust doctrine demands controlled development.[225]

4.5.2. Obligation to Weigh in Favor of Protected Public Trust Uses

The public trust doctrine also includes a presumption in favor of protecting public use of public trust resources.[226] Under the common law, protected trust uses included navigation, commerce, and fishing.[227] *Waiāhole I* established that the protection of public trust resources[228] and Native Hawaiian traditional and customary rights are also protected public trust uses in Hawaii.[229] The court in *Waiāhole I* did not list all other possible protected uses of the public trust resources, but the court did hold that "private commercial use" is not a protected public trust use.[230] This means that even though private, commercial uses of water resources may offer benefits to the public, they do not constitute public trust uses under article XI, section 1 of the State constitution.[231]

Additionally, the State also has a duty to weigh competing interests in public resources, always with a presumption in favor of a protected public use.[232] The court in *Waiāhole I* recognized that public and private interests in natural resources often conflict with each other.[233] To remedy this conflict, the court held that the state is constitutionally obligated to balance the public and private use of public trust resources on a case-by-case basis.[234] The court clarified, however, by holding that the State must start with a presumption in favor of "public use, access, and enjoyment."[235] As a result, public trust uses of natural resources are the "norm or default condition" while private commercial uses of natural resources undergo a "higher level of scrutiny."[236]

Overall, "[t]he burden ultimately lies with those seeking or approving such [private] uses to justify them in light of the purposes protected by the trust."[237] This means that the party seeking to use the public trust resource for private, commercial uses bears the burden of demonstrating that the use is "not injurious to the rights of others."[238] Also, "once adverse impact to the constitutional public trust is raised, the applicant's burden is intensified, and the agency and reviewing court must be satisfied that the relevant constitutional test is met."[239]

4.5.3. Obligation to Plan

In *Waiāhole I,* the Hawai'i Supreme Court clarified the State's public trust obligations as trustee of Hawai'i's natural resources.[240] *Waiāhole I* held that "if the public trust is to retain any meaning and effect, it must recognize enduring public rights to trust resources separate from, and superior to, the prevailing private interests in the resources at any given time."[241]

The State, therefore, has an "affirmative duty to take the public trust into account in the planning and allocation of resources, and to protect public trust uses whenever feasible."[242] Overall, "the [S]tate may compromise public rights in the resource pursuant only to a decision made with a level of openness, diligence, and foresight commensurate with the high priority these rights command under the laws of our state."[243] "[T]he trust duty is not limited to analyzing actions or proposals as they arise."[244] Instead, the public trust doctrine must be considered at "every stage of the planning and decision making."[245]

In 2006, *Kelly v. Oceanside* offered an example as to how the public trust doctrine should be applied to agency decisions.[246] *Kelly* held that the State has a duty to ensure that the conditions set by agency regulations are met.[247] Moreover, *Kelly* ruled that the agency's "discretionary

authority is circumscribed by the public trust doctrine."[248] This means that in instances where a state agency is granted discretionary authority to exercise its power through a state statute, the agency cannot ignore its public trust duties, and decisions to exercise that authority must be informed by public trust principles.[249]

4.5.4. Duty to Conserve Public Trust Resources for Future Generations

The court in *Waiāhole I* recognized that there is a constitutional requirement to protect and conserve Hawai‘i's natural resources and that this requirement is based on a historical understanding that the trust is a public right.[250] The constitutional framers felt that it was important to expressly state that protection of natural resources is for the benefit of present and future generations "because it affirms the ethical obligations of this generation toward the next and is entirely consistent with the concept that the Constitution should provide for the future."[251] Ultimately, the public trust doctrine advocates for "a controlled development of resources rather than no development."[252] Thus, the State is not obligated to never develop or use trust resources for private, commercial gain, but rather, the public trust requires that the State develop the resources in a manner that ensures long-term protection and beneficial use of the resources.[253]

In *In re Wai‘ola,* the Supreme Court of Hawai‘i also clarified that the State assumes the role of trustee over trust resources, and is not just a "good business manager."[254] The legislative and executive branches of state government are "judicially accountable for the dispositions of the public trust," "just as private trustees are judicially accountable to their beneficiaries for dispositions of the res."[255] As an added measure, judicial review protects against thoughtless use of the public trust.[256]

4.5.5. Water Law as it Applies to the Mana‘e Streams and the Proposed East Slope Watershed Management Project

Many of the streams on the South East slope of Moloka‘i are culturally, spiritually, and environmentally significant sources of water and streamlife. The Mana‘e community still relies on the streams for freshwater fish and other resources. Based on the interviews, Pelekunu Stream is a source of Tahitian prawn, hīhīwai, ‘o‘opu and ‘opae. Hālawa Stream is a big stream that carries big fish, such as ‘ulua, that feed on the ‘opae. Hālawa stream also has ‘o‘opu that rely on the mauka to makai stream flow for survival and reproduction. ‘O‘opu are also found in the Haka‘ano Stream. Honouliwai Stream carries hīhīwai, small mullet, and ‘aholehole as well. Several interviewees mentioned that the number of hīhīwai in the streams is depleting. Kama‘āina informants noted that in Pipio Stream there is no hīhīwai because there is not enough water. One informant mentioned that within the last 12 years, the spring water died at Honoulimalo‘o Stream so the interviewee needed to run a pipe further up the stream to get water. In addition, another interviewee mentioned that Moanui Stream does not run anymore because there is a diversion by Pu‘u o Hoku Ranch. Many community members also rely on the freshwater for lo‘i. Waialua and Pipio were specifically mentioned as having lo‘i along their banks. Several Mana‘e communty members also recognize the cultural importance of the streams in the area. Waialua, for example, is alluded to in many oli and mele.

Under the public trust doctrine, the community's right to gather fish and other natural resources

that depend on the freshwater is protected as a public trust purpose. As articulated in *Waiāhole I, In re Waiʻola,* and *In re Kukui,* the exercise of Native Hawaiian traditional and customary rights, including the right to gather natural resources that depend on freshwater, is a protected public trust use of the water.[257] As a result, any alternative use that may impact Native Hawaiian's use is reviewed with heightened scrutiny.[258] In other words, the law protects Native Hawaiians' traditional practice of collecting ʻoʻopu and hīhīwai from the streams. If any entity pumps more ground water for a non-public trust use, like a private, commercial business enterprise, it must show that the non-public trust use will not damage the protected public trust uses.

4.5.6. Molokaʻi's Designation as a Ground Water Management Area and Heightened Protections if Also Designated as a Surface Water Management Area

Molokaʻi is currently designated as a Ground Water Management Area ("GWMA"), which means that the Water Commission more heavily scrutinizes proposed uses of Molokaʻi's ground water.[259] However, Molokaʻi has not been designated as a Surface Water Management Area (SWMA).[260] The Water Code also regulates the use of surface water. The Water Code requires that all stream diversions are registered.[261] The Code defines a stream diversion as "the act of removing water from a stream into a channel, pipeline, or other conduit."[262] The owner or operator of a stream diversion must monitor his/her water use and submit monthly reports to the Water Commission.[263] These reporting requirements for stream diversions are in place even if a diversion is not located in a surface water management area.[264] As a result, even though Molokaʻi is not a surface water management area, all pre-existing stream diversions in Molokaʻi should have been registered with the Water Commission by 1988 and all newly created diversions should be subsequently registered as well.[265]

Some informants expressed concerns about alleged diversions by Puʻu o Hoku that takes water from Moanui Stream and diversions along Kahawaiʻiki, Puniohua, and Puʻu Elelu Streams. If there are diversions, these diversions must be registered with the Water Commission and the water use must be reported as well. Because Molokaʻi is not a SWMA, owners or operators of diversions do not have to obtain a water use permit to divert water from the streams as long as he/she reports the use to the Water Commission.[266]

Designating Molokaʻi as a SWMA would give the Manaʻe community the same type of heightened protection for its surface water that it currently enjoys for its ground water. The public trust doctrine only applies to the State of Hawaiʻi and it's political subdivisions, not to private actors.[267] As a result, without state involvement in the surface water management, the community may not be able to utilize the public trust doctrine to protect its surface water.

Surface water management area designation will give the community the necessary legal protections to ensure that the Water Commission, a state agency, is fulfilling its public trust obligations in all decisions that it makes. Without surface water management area designation, however, private owners and operators of diversions are not constitutionally and legally obligated to consider the public trust when diverting water.

4.6. SUBSISTENCE HUNTING - AN EMERGENT CULTURAL PRACTICE AND RIGHT

4.6.1. Revisiting the First Watershed Partnership in East Molokaʻi: Kamalō/Kapualei

In 1998, The Nature Conservancy introduced the concept of forming an East Molokai Watershed Partnership (EMoWP) between the state government, private landowners, and community members in Kamalō and Kapualei ahupuaʻa. Former cattle ranching and heavy grazing from deer and goat had destroyed the native lowland forest. Each year goats were further encroaching into the higher reaches of the native, pristine forest, the most important feature of the watershed. Unchecked erosion on the mountain jeopardized reefs and fishing grounds below with every heavy rain. TNC requested community buy-in to erect a 5.5 mile long lateral fence to straddle and protect the 30,000 acres of remnant native forest. TNC secured a trained, local workforce to erect the fenceline. The two large landowners acquiesced to having their lands fenced and provided permission to community hunters to thin out animals below the fenceline as well as participate in aerial hunts.

Today, over a decade and a half later, TNC and the community have a greater grasp of the advantages and drawbacks of fencing. The upper rainforest above the fenceline has recovered. Everything below the fenceline is denuded. Animals have migrated further east into neighboring ahupuaʻa to access food. These areas are now overgrazed and prone to erosion and landslides. A local shrimp farm and the loko kuapā at Keawanui were inundated with mud several years ago during a heavy rain event. This was caused by erosion contributed by cattle ranching mauka of the shrimp farm and fishpond, as well as an increasing number of feral deer and goat that had migrated to the ahupuaʻa after the Kamalō-Kapualei fenceline was erected.

While residents in neighboring ahupuaʻa observe a degrading landscape, Kamalō residents notice marked improvements, particularly to shoreline resources. Even though below the fence line Kamalō residents see that the land is overgrazed, the fact that the upper native forest has been able to recover due to the protective fenceline has been enough to reduce some of the siltation into Kamalō streams and along the shoreline. This has resulted in noticeable recovery of Kamalō crab, fishing, and limu grounds.

Building on the overall successes at Kamalō-Kapualei, the EMoWP began to circulate a draft proposal in 2013 for an expansion of the EMoWP to potentially run along the entire length of Manaʻe. Ideally, the fenceline would intersect approximately seventeen (17) miles of mountain range and thirty-six (36) ahupuaʻa.

In forming the most effective plan for simultaneously protecting the watershed and preserving native Hawaiian rights in Manaʻe, it would be beneficial to summarize the varied viewpoints of kamaʻāina and their initial thoughts on how the proposed fenceline affects their rights and cultural practices, both positively and negatively. The following is a summary of the varied perspectives of Manaʻe kamaʻāina, as well as some feedback we received from large landowners. All kamaʻāina agreed that something had to be done, especially given the island's prolonged

drought situation that has caused some visible changes even in Manaʻe, a place that has been traditionally greener than other parts of Molokaʻi.

4.6.2. Kamaʻāina Offer Differing Viewpoints on Fencing and Hunting

Kamaʻāina shared mixed feelings about the expanded fenceline proposal. The thought of laying a fenceline across the entire length of Manaʻe made some hunters leery because a high percentage of mountain areas in Manaʻe are privately owned and it has already been a hardship for hunters to maintain their subsistence practices without being criminalized for trespassing. For them, the fence represented a direct threat to and lack of regard for their subsistence livelihood. One hunter expressed the following sentiment, "All my life I been jumping over fences to hunt and feed my family. I no like see any more fences!"

This sentiment echoes aloha ʻāina activist and president of Pele Defense Fund Palikapu Dedman's concerns about increased State-sponsored conservation fencing on the Big Island, "Before you know it, everywhere is a pristine area and it's more and it's more and it's more. And our culture is slowly getting pushed away and out." Animal eradication efforts there have angered hunters like Palikapu, "They go in and kill all the pigs and everything else. Then you eliminate the hunter. I think that the hunter has been ignored and it's the state's responsibility to look out for them, too."[268]

To avoid a backlash from Manaʻe hunters, EMoWP made sure to consult with both the ʻAha Kiole as well as form a working group of Manaʻe hunters to craft an acceptable proposal for the East Slope Watershed Management Plan. Several kamaʻāina also took part in an aerial survey of the Manaʻe mountain range to discern for themselves the condition of the upper rainforests and ahupuaʻa health overall. The Office of Hawaiian Affairs also stepped in on behalf of the ʻAha Kiole to gather additional manaʻo from Manaʻe kamaʻāina as part of this Traditional and Customary Practices (TCP) report.

One kamaʻāina who is an avid canoe paddler and original crew member of the Hokuleʻa expresses a great reverence for the native forest. She also makes beautiful lei and haku from native plants she gathers from the forest. She is frustrated about hunters asserting rights that include keeping animals on the mountain as a food source while she witnesses the forest diminish in resources and in spiritual mana as Wao Akua. She asserts that it is inappropriate for hunters to claim that hunting is a traditional and customary Hawaiian right, especially because goat, deer, and pig are introduced species. Thus, she fully supports a fenceline and believes that any concession to hunters equates to an infringement on her traditional practices and rights. She contends, "We all talk about the ʻāina being our ice box because we rely on the ʻāina to feed us and provide for all our needs. It's time we all admit that the ice box is broken and we have to fix it."

Other gatherers who access the lower mountain forests expressed the decline in resources that they attributed to overgrazing and change in habitat brought on by goat, deer, and pig. Ocean gatherers and fishermen also felt the same in that limu (seaweed) grounds, crab grounds, fishponds, and the reef are choked with silt and mud carried down the eroded mountain during heavy rains.

Another kamaʻāina, a subsistence fisherman, hunter, and gatherer who understands the different sentiments of various cultural practitioners, spoke from a unifying standpoint and deep love for Molokaʻi Nui A Hina (Molokaʻi Great Child of Hina), "What is our purpose? To take care Hina or protect hunting? Some things we no can compromise. If we take care the ʻāina, the momona going come back." This kamaʻāina recommended that the proposed fence line be lowered to protect not only the upper remnant forest, but also the damaged area where the lowland forest used to exist. He supports aggressive strategies to remove invasive species and replant natives to restore the lowland forest in addition to protecting the upper remnant forest. He cited precedent during the Hawaiian Kingdom period for constructing stone walls to protect the forest. He pointed specifically to the long stone wall at mid-elevation that traverses several ahupuaʻa on Molokaʻi from Kamalō to Makakupaia which was used to keep cattle from trampling vegetation.

A kamaʻāina hunter and kiaʻi loko (Hawaiian fishpond caretaker) also likened the stone wall enclosure of the loko kuapā to the proposed fenceline on the mountain. He felt building walls is a culturally appropriate practice. Where a loko kuapā is a walled fishpond made of stones to protect and cultivate fish; the metal fenceline is a modern-day kuapā on land that is used to protect the precious native forest within.

Some large landowners are wary of having hunters on their land because of liability issues from any injuries sustained on their property. Other landowners are open to providing access, but wish that hunters would have the courtesy of asking permission first. These landowners want to make sure that hunters are utilizing safety measures. They also wish to have open communication with hunters to let them know which areas to hunt and which to avoid in order to safely conduct land management activities. The practice of cutting fences angers large landowners and interferes with their land management, especially if they are raising livestock. Distrust has been fueled on both sides. Some large landowners want a win-win situation where hunters can feel free to hunt, but also give back to the landowners that allow them to hunt on their property. For them, this could be in the form of hunters helping to fix fences and equipment, or doing some kind of conservation work on the land.

Other hunters were okay with EMoWP's compromise measure of having step-overs installed along the fenceline to allow for access into the protected forest. They were willing to make sacrifices in order to restore and protect the native forest so that they could leave the resources in better condition for their children and grandchildren.

Some elder hunters expressed disappointment in the younger generation of hunters who lack respect for the forest by using ATVs that tear up sensitive habitat; waste meat by only taking choice cuts and leaving the rest of the carcass to rot in the open; collect racks for prestige and post pictures of trophy racks on social media sites like Facebook and Instagram. The older hunters felt that the young people were losing the Hawaiian cultural values of mālama. They described pono approaches to hunting: to mindfully walk the land to assess the health of ahupuaʻa resources; select animals carefully, not just trophy bucks but with a mind for conservation and that preserves the health of the herd; harvest according to need and for subsistence; bury the entrails and bring the rest of the animal home to feed the family.

Some hunters expressed concern about the long fence line impeding the seasonal migration of animals moving back and forth from the north shore to the south shore. Hunters explained that pigs follow the appearance of guava, mountain apple and other foods that are in season at different times of the year and in different places. One hunter also explained the stages of development in deer and how their food requirements change over time. He noted that deer in their senescence seek higher ground to fulfill their food and mineral requirements.

The EMoWP sought to respond to these hunter concerns by including as an alternate plan an open corridor that would span the length from Waialua ahupuaʻa to the Pakaikai/Puʻu O Hoku region. The initial thought was that this corridor would allow for the animals to migrate between the north and south shore as well as leave Pakaikai open as an important hunting area. Much of the land is owned by Puʻu O Hoku Ranch. The EMoWP has had difficulty in securing a commitment from Puʻu O Hoku Ranch to join the watershed partnership. For these reasons, the EMoWP thought this proposed open corridor might be a win-win for all. However, several ahupuaʻa with important streams (Waialua, Honouliwai, and Honoulimaloʻo) are located within the proposed corridor area. Some reside on kuleana lands within these ahupuaʻa and rely on streamwater for both traditional agriculture (e.g., loʻi kalo cultivation) and domestic purposes. Some of these families who are tucked back along dirt roads that lead deeper into these valleys do not have hook-up to county water and must rely exclusively on the quality and purity of streamwater. Their very real concern is that if every part of Manaʻe is fenced except for their area, an inordinate amount of hooved animals will be forced to migrate there and foul the precious water resources in that region as well as damage important cultural sites such as the King's Bath in Waialua and the ʻawa cups (ʻapu) carved into stone at Pakaikai. For these kamaʻāina, they advocate for an all-or-nothing solution. It is either "all-fence" to run the entire length of Manaʻe and protect all resources, or "no-fence" at all, so that some ahupuaʻa are not sacrificed for others.

Some kamaʻāina felt that a fenceline was not the answer at all; that it only would serve to keep Native Hawaiians out. The answer instead would be the return of konohiki practices of those who possess the knowledge to manage whole-scale ahupuaʻa. Some of these kamaʻāina were very skeptical about partnering with certain large private landowners; especially those who have a bad track record in caring for the resources and who routinely have Hawaiian cultural practitioners arrested for trespassing their land while in the act of hunting, gathering, holoholo, visiting wahi pana (sacred, cultural sites), and enjoying the streams and waterfalls. They were also distrustful of the ʻAha Kiole as proper representatives of their concerns. They were more focused on caring for their own ahupuaʻa resources rather than formally submit to the ʻAha Kiole process on an island level and a Manaʻe moku level. They only agreed to be interviewed to ensure that their manaʻo be respected by other Manaʻe kamaʻāina, the ʻAha Kiole, the State, TNC, and the private landowners participating in the watershed partnership.

Others felt that fencing is a good tool in conservation, but it is not the only tool. They felt more comfortable in supporting a holistic plan that integrates Native Hawaiians and locals in all aspects of ahupuaʻa management. This would entail having locals and Native Hawaiians hired to conduct fencing and monitoring work. It would also mean securing funds to hire a local and native workforce to restore lowland forests below the fenceline that have been completely destroyed and altered by ungulates; develop native plant nurseries at the cottage-industry level

for Manaʻe families; re-open loʻi terraces and other agriculture features; restore wahi pana and other cultural sites, including koʻa (fishing shrines); restore fishpond walls and remove mangrove; and clean the shoreline and reefs of invasive limu (seaweed).

A few kamaʻāina advocated for a simple and small-scale approach that would entail building the fence line incrementally, a few ahupuaʻa at a time, so that there is opportunity to study and monitor the effect on the watershed, forest, overall ahupuaʻa health, hunting, and Hawaiian cultural practices. One kamaʻāina suggested that EMoWP can explore adding more fence line, ahupuaʻa by ahupuaʻa, after they've studied the effects in each place and have made improvements and adjustments with each project.

Another kamaʻāina who is a pig hunter, fisherman, and also commutes to Oʻahu to do conservation fencing work there explained that small, fence sub-units that are manageable and capable of being maintained is ideal. Fence lines fall into disrepair. Animals can infiltrate these areas and graze on vulnerable native forest land if monitoring and maintenance is not a regular part of management. This individual who also has strong ancestral ties to kuleana lands on the north side of the island also cautioned against erecting a long fence across the entire length of Manaʻe (southeast) and trapping animals on the north shore. In time, they could cause greater harm to the more pristine and water-rich valleys on the north shore and defeat the intent of a watershed partnership.

This report attempts to discern whether a middle ground is available for all stakeholders. This report seeks to address concerns raised by kamaʻāina hunters and the need to protect and repair Manaʻe's upland, native forests; to accommodate all traditional and customary Hawaiian practices that may potentially overlap and conflict; and to suggest ways of achieving an amicable watershed partnership between the State, private landowners, TNC, and the local and native community of Manaʻe. The very process of interviewing Manaʻe kamaʻāina; working with the ʻAha Kiole o Molokaʻi – Manaʻe Moku; receiving guidance from the Office of Hawaiian Affairs; collaborating with TNC's experienced leaders and conservation workers on the ground; and sharing manaʻo from EMoWP partners and their hunters' working group has been a rewarding and invaluable experience that is already paving a hopeful path forward.

The following sub-section will cover impacts of introduced ungulates on Molokaʻi's native ecosystem, overall ahupuaʻa health and associated Native Hawaiian Traditional and Customary Practices. This is to address whether the presence of large game is in fact infringing on certain traditional and customary Native Hawaiian practices.

Next will be an exploration into whether hunting itself is a traditional and customary Hawaiian practice and right as some kamaʻāina assert. This will entail a review of relevant constitutional and statutory provisions and court decisions, particularly a new legal opinion issued by the Hawaiʻi Intermediate Court of Appeals in December 2015 that addresses whether pig hunting is a traditional and customary Hawaiian right.

The next sub-section will cover whether potentially conflicting Native Hawaiian rights and practices can coexist and whether they can be reconciled, especially within the context of the proposed East-Slope Watershed Management plan.

Finally, the last sub-section will determine whether a middle ground can be achieved among stakeholders. This entails looking also to the role the State Department of Land and Natural Resources (DLNR) plays as the lead government agency that administers the watershed partnership program. This section explores the State's duty to affirmatively protect Native Hawaiian rights to the extent feasible, balanced with its authority to reasonably regulate these rights.

4.6.3. Impacts of Large Grazers on Molokaʻi's Native Ecosystems, Ahupuaʻa Health, and Native Hawaiian Traditional and Customary Practices

A Brief Overview of Studies on Ungulate Impacts to Hawaiian Ecosystems Generally and Molokaʻi Specifically

The geographical isolation of the Hawaiian Islands created a unique and fragile ecosystem preceding the first human migrations from Polynesia between 300 and 600 A.D.[269] Birds, insects, and plant seeds arrived through sea and wind dispersal.[270] Plants lost their natural defenses that once protected them from grazers.[271] Over millenia, new species evolved and developed that exist nowhere else on the planet.

The puaʻa or Polynesian pig was the first hooved animal brought to Hawaiʻi during the Polynesian migrations.[272] Descendant of the wild Asiatic swine (*Sus* scrofa subsp. *vittatus*), it was smaller than the wild pig known today in the Islands.[273] The puaʻa was a domesticated animal and food source for the ʻohana.[274] Polynesian pigs were usually housed in pā puaʻa (pig pens), remained within the kauhale (ʻohana compound) and foraged in the lowland forest.[275] At post-contact, European pigs first brought over by Captain Cook in 1778 and from other foreign vessels over the years, interbred with the puaʻa to create the larger feral pig known in Hawaiʻi today.[276] As this new pig variety grew in numbers, they spread further up into the mountains.[277]

Wild pigs eat a variety of food, depending on whatever is available; they will eat hapuʻu tree ferns, waiawī (strawberry guava), and poka maiʻa (banana).[278] They alter native forests by carrying seeds of invasive plants in their gut and on their coats. They also trample on native plants. Through their rooting behavior and fecal waste they create soil conditions that are ideal for invasive plants to grow and outcompete native vegetation that are more adapted to nutrient-poor soils.

Domestic goats were also introduced first to Niʻihau upon Captain Cook's arrival in 1778, then on Kauaʻi in 1792 on Captain Vancouver's journey.[279] An 1850 record of 26,519 goat skins exported to the continental U.S. provides an indication of how huge the goat population expanded over the islands within just seventy-five years from their introduction.

Goats eat both native and non-native plants. A former study of stomach contents of feral goats located at Volcanoes National Park revealed a preference for native vegetation when it is in abundant supply and when there is a low density of other goats to compete with.[280] Through seeds propagated from their feces and also carried on their fur, goats also facilitate the recruitment of invasive plant species that outcompete native vegetation.[281] It has been

documented on the Big Island that goats have destroyed the native mamane forest and caused habitat loss to the endangered palila, the native finch-billed honeycreeper.[282] Today, feral goat populations dominate a wide habitat range from low to high altitudes and wet to dry habitats.[283] They have been described to be "the single most destructive herbivore," especially on island ecosystems worldwide.[284]

Eight axis deer were brought to Hawaiʻi in December 1867 and released on the island of Molokaʻi in January 1868.[285] Deer herds established themselves on other islands in the latter part of the 19th century (around 1898 at Diamond Head and around 1910 in Moanalua Valley on the island of Oʻahu) up until mid-way into the 20th century (1920 on Lānaʻi, 1959 on Maui).[286] The deer population on Molokaʻi increased rapidly from eight deer to one-thousand within two decades. By 1900, the deer population had grown to an estimated 7,500 before animal control measures were put in place to thin the population down to half the original size.[287] The deer's primary habitat is among the grasslands. They are rarely found above an altitude of 3,500 feet.[288]

Overall, ungulates in Hawaiʻi degrade and replace entire native ecosystems, often leaving behind grasslands dominated by introduced species.[289] The destruction of Molokaʻi's endemic forests coupled with cattle ranching, sugar cane and pineapple agriculture caused major land erosion and siltation of the island's fishponds and reefs.[290]

Molokaʻi's east-west, elongate shape and the natural protection afforded its south-facing shore by the islands of Maui, Kahoʻolawe, and Lānaʻi have provided the optimal conditions for the natural development of an extensive fringing reef [291] as well as an ideal location for high-density fishpond construction. However, the very nature of the protected coastline, "the relatively weak wave stresses and the coast-parallel transport" also hampers flushing of sediments that settle on the reef.[292] Sediment is 5-15 cm. thick on the inner reef flat.[293] These sediments resuspend in the water column, causing turbidity and blocking out sunlight for photosynthesis of microalgae present within coral tissues. The sediment then re-settles back onto the reef during calm conditions.

The fishponds also act as silt traps.[294] In 1902, the American Sugar Company introduced the Florida red mangrove (*Rhizopora mangle*) to stabilize the shoreline and capture silt carried by heavy rains down the mountain.[295] Mangroves today dominate Molokaʻi's fishponds and plug up coastal springs. The natural sediment flushing mechanism of the kūpuna-engineered mākāhā (sluice gates) no longer function properly due to the presence of mangrove that accrete and hold sediments,[296] as well as alter the water flow and currents entering these ponds.

Kamaʻāina Observations of Degrading Health of Manaʻe Ahupuaʻa Resources and their Impact on Hawaiian Traditional and Customary Practices

As explained above, traditional gathering for lei-making is one of the cultural practices that are threatened by the presence of ungulates who have altered the landscape and made it difficult for kamaʻāina to gather. There are some plants that only exist in the Wao Nahele and Wao Akua such as maile and certain types of native ferns. For lei makers as well as hula practitioners, preserving the last vestiges of native forest is critically important.

As mentioned earlier in Section 4.1.5. of this chapter, Manaʻe kamaʻāina have noticed many changes in ahupuaʻa health that they attribute to the presence of large grazers such as cattle, goat, and deer. Much of the lowland native forest has been destroyed and invasive plant species have gained a strong foothold in areas that makua and kupuna-aged informants once knew to be dominated by native plants. Kamaʻāina are also noticing severe drought conditions that have lasted for decades and worsened over time. They are unsure whether the drought is the result of global climate change; but they know that the dying native forest is not as effective in catching rain as it used to be.

Kamaʻāina are noticing that there is less moisture along the lower mountain slopes and the lowland forest has been replaced with invasive kiawe, java plum trees, thorny plants, and grasses. It is more difficult to find pepeiao, a native fungus and delicacy that grows on trees.

Mahiʻai (farmers) are also suffering. One kamaʻāina from Honouliwai who relies completely on rainwater because there is no county infrastructure, mentioned that his crops are suffering and he is less able to gauge whether there will be enough rainfall to sustain his crops.

A common saying and observation made by kamaʻāina is that "what happens mauka impacts makai." Streams that used to flow perennially or flowed quite often are now dry or low. Springs are drying up. It is more difficult to find seaweed like huluhuluwaena and ʻeleʻele that need an infusion of clean, uncontaminated freshwater seeps along the shoreline.

The taro terraces are overgrown with invasive plants and trees. There is no longer nutrient exchange and water moving efficiently through the ahupuaʻa to feed spring lines below, promote limu growth, and create the muliwai (brackish water) that supports fishponds and estuarine environments.

A kamaʻāina from Honouliwai ahupuaʻa has restocked the stream there with ʻoʻopu and hihiwai that he gathered from pristine streams on the north shore of Molokaʻi. These native, diadromous species live a portion of their life cycle in the stream and a portion in the ocean. The kamaʻāina informant actively engages in mālama through cleaning the stream and cutting back java plum trees that shade out stream habitat and absorb too much water. During heavy rains, massive amounts of topsoil, branches, and other forms of natural debris are washed down into the stream because of poor land management practices and the presence of deer that have altered and eroded the landscape above. This has caused massive die-offs of ʻoʻopu and hihiwai in the stream which are also a food source for Native Hawaiians.

Ahupuaʻa have been generally described as running "from the mountain to the sea" and providing for the chief and his people "a fishery residence at the warm seaside, together with the products of the highlands, such as fuel, canoe timber, mountain birds, and the right of way to the same, and all the varied products of the intermediate land. ... [B]oth inland and shore fishponds were considered to be part of the ahupuaʻa and within its boundaries."[297] Dr. Carlos Andrade describes ahupuaʻa fisheries as being well "cared for as if they were extensions of [ ] gardens" tended just as carefully and intentionally as the "gardens filling coastal plains, stream-lined valleys, and forest clearings in the uplands."[298]

Evidence of mālama i ke kai (ocean stewardship) is strongly prevalent in several kamaʻāina interviews. These practices are mentioned here for two purposes. Firstly, the full import of the effects that "upstream" uses have on "downstream" activities isn't always obvious. And secondly, understanding the impacts ungulates have on Hawaiian cultural practices is important to the question of what role the State must play to ensure that these practices can continue. Unchecked sediment deposits from eroded landscapes into the ocean impact marine ecosystems and have a ripple effect on traditional subsistence and other customary practices.

Cattle ranching on the mountain slopes of Kaʻamola and eastern migration of goat and deer from the Kamalō-Kapualei area have caused landslides and siltation into Keawanui fishpond. Hui o Kuapā and the Hawaiian Learning Center have been actively restoring the ecology at Keawanui fishpond by repairing the kuapā (wall), reopening springs that feed the pond, and raising fish, limu, "live-rocks" for the aquarium industry, and Hawaiian oysters in a natural environment. The fishpond workers have had to build berms to protect springflow and prevent the fishpond from becoming a silt-trap. They have had to adapt to these less-than-ideal conditions by utilizing the dead branches of invasive mangrove as vertical substrate placed in the water column for seaweed recruitment (e.g., limu ʻeleʻele) that would otherwise be smothered by mud that has accumulated in the pond from deforestation above.

Several Manaʻe kamaʻāina informants identified key fishing koʻa across multiple ahupuaʻa. Koʻa are secret fishing spots in the ocean that are known by Hawaiian families and passed down from generation to generation. These fishing koʻa correspond with koʻa on land, fishing shrines that serve as markers or lines of sight to fishing grounds in the sea. A portion of fishermen's catch are also left at the shrine as offerings to the fishing god Kūʻula. ʻOpihi (limpet) shells are left upturned so that sunlight will reflect off of the shiny inside of the shells and serve as a beacon and line of sight for fishermen attempting to locate their special fishing grounds.

The introduction of ungulates such as goat, deer and cattle have caused severe damage to fishing koʻa. Many of the fishing shrines have been trampled, resulting in either a complete loss of traditional knowledge of special fishing locations or, at minimum, severely hampering successful fishing ventures. Cattle ranching in former lowland native forest areas has been particularly destructive of these fishing shrines. The growth of invasive kiawe that have overtaken former native and endemic vegetation has also hindered lawaiʻa (fishermen) from finding their ocean koʻa. This has prompted some kamaʻāina to recommend that the footprint for the proposed fenceline be relocated lower down the mountain to not only protect the native, pristine upper remnant forest, but also allow for the restoration and protection of the original native, lowland forest.

One kamaʻāina informant explained the practice of his grandmother and the women before her in building "manini houses" that are constructed of stones piled in a heap under water which attracts the manini fish (convict tang, *Acanthurus sandvicensis*). Top stones are lifted at low tide to reveal the manini inside the fish house. Women gather the manini by hand.

There are certain named reef patches in the ʻAhaʻino area known to kamaʻāina living on ancestral lands in that ahupuaʻa. The names of the individual reef patches in ʻAhaʻino

correspond with the names of women who lived during the time of the Māhele or even pre-contact times. People who claim ʻAhaʻino as part of their ancestral lands are able to trace their genealogy to these individual reef patches that served as personal ocean gardens.

It is unclear whether ʻohana from ancient times planted coral patches like those found in ʻAhaʻino. However, as mentioned above, the observation made by coral reef scientist Dr. Jim Maragos of the lane of coral connected to the mākāhā of a fishpond in ʻAhaʻino and extending outward (seaward) from the kuapā, likely indicates intentional coral plantings by ancient Hawaiians. Practices on other islands may also support this premise. For example, it is known that in Kahaluʻu Bay on Hawaiʻi Island, fishermen "pruned" reef for two purposes: to lessen breakage of nets on the reef and to create more niches for fish and other marine life to assemble and multiply.[299]

The ecology of the reef is changing drastically as corals are continuously choked by re-suspended sediment and new silt deposits from heavy rains carrying exposed topsoil down the mountain. Like the adaptations that the kiaʻi loko (fishpond caretakers) have employed at Keawanui fishpond, these Hawaiian practices of constructing fish houses and taking kuleana to mālama specific reef patches may be the best way to protect and restore abundance in Manaʻe fisheries.

According to one kamaʻāina, the strategic placement of fishponds around coastal springs was not only for the purpose of creating a micro-ecosystem for choice herbivorous fish that feed on limu and thrive in brackishwater. The kūpuna erected kuapā (rock wall) around these coastal springs to form a protective buffer between the natural surf, storm surge, and currents that could otherwise plug these springs with sand particles and rocks.

There is merit in his words, as there is an oral history account of the late kupuna, Aunty Zelie Sherwood of Manaʻe who spoke about the legendary spring Loʻipūnāwai located within ʻUalapuʻe fishpond. It was a critical source of water for the hoaʻāina there who were under the oppressive rule of an Oʻahu chief. The hoaʻāina survived by secretly gathering water from the coastal spring hidden in the center of ʻUalapuʻe fishpond, while they caused their oppressors to perish by poisoning all the visible waters.[300]

A less than common understanding is that what is cared for makai also impacts mauka. We learned this concept from Russell Kallstrom with The Nature Conservancy when he described the ongoing studies of native seabirds nesting at Moʻomomi on Molokaʻi's northwest coastline.[301] Moʻomomi is a community-based subsistence fishery managed for over twenty years by Uncle Mac Poepoe, a Hawaiian homesteader and konohiki of that area. Through the use of the Hawaiian moon calendar and mental models, Uncle Mac tracks feeding patterns, reproduction and life cycles, regeneration, multi-species interactions, and habitat requirements of Moʻomomi's marine life. According to Kallstrom, indigenous fisheries management has not only increased the health of the fishery, but has yielded corresponding positive results "upstream" as seen in the significant increase in fecundity, biomass, and survival rates of native seabirds and their offspring that nest along the coastal sand dunes of Moʻomomi. Bird feces in turn provide valuable nutrients to the land and marine algal beds.[302]

Manaʻe kamaʻāina have made similar observations of a positive feedback loop mauka-a-makai (mountain-to-sea) and makai-a-mauka (sea-to-mountain). Some examples include:

- Making hoʻokupu (offerings) of ʻopihi, fish, and shellfish at koʻa (fishing shrines). These hoʻokupu add nutrients from the sea to the soil while at the same time assist lawaiʻa (fishers) in finding family fishing grounds at sea. These practices also acknowledge the spiritual and genealogical connections between land and sea species as described in the Kumulipo.
- Erecting loko kuapā (walled fishponds) around important springs preserves water sources that feed fish, crab, and limu beds as well as provides an important emergency water source for people.

4.6.4. Is Subsistence Hunting a Traditional and Customary Hawaiian Practice and Right?

The manaʻo shared by Manaʻe kamaʻāina provide a compelling view of enduring Hawaiian customary practices exercised throughout the ahupuaʻa, both on land and in the ocean. They also demonstrate a richness in mālama ʻāina traditions that persist today. Scientific studies also corroborate what kamaʻāina are witnessing on the ground in terms of impacts to native forests, streams, fishponds, and reefs with the advent of hooved animals. Kamaʻāina interviews show that the degraded conditions of Manaʻe ahupuaʻa also impact traditional subsistence, gathering, fishing, and religious and ceremonial practices.

However grim the accounts are of the decline in resources and ahupuaʻa health, many of the same kamaʻāina attest to the importance of subsistence hunting to meet their family needs. Many of these kamaʻāina are hunters, fishers, gatherers, and farmers. It is more rare to find that one kamaʻāina is skilled in only one of these subsistence activities. If that is the case, then more often than not, other family members are filling the gaps with their own specialized skills (e.g., grandparents pick limu and do lāʻau lapaʻau (Hawaiian medicinal healing); father and son are hunters and fishermen; mother and daughter prepare Hawaiian foods like ʻinamona, raw crab, and gather articles in the forest for lei making).

The 1993 Molokaʻi Subsistence Study indicates from a random phone survey that twenty-five percent of the respondents hunted and on average they hunted seventeen days within a one-year period from July 1992 to June 1993.[303] These figures underscore the importance of wild game in the diets of Molokai families.

Thus this sub-section will provide a legal analysis of whether hunting of introduced animals constitutes a traditional and customary Hawaiian right. If hunting is indeed a Hawaiian custom protected under the law, then the next question will be whether there is room for all traditional and customary practices identified by Manaʻe kamaʻāina. Are these practices mutually exclusive or can they co-exist as equally important? If these rights and practices can be reconciled, then what is an achievable middle-ground that will restore the ahupuaʻa and maintain ungulate populations for subsistence hunting?

The State agency lead for the East Molokai Slope Watershed Management Plan is the Department of Land and Natural Resources (DLNR). As such, DLNR is obligated under Article XII, Section 7 of the Hawaiʻi State Constitution to "protect all [Native Hawaiian hoaʻāina] rights,

customarily and traditionally exercised for subsistence, cultural and religious purposes."[304] It also has the authority to regulate these rights to the extent feasible.[305]

The sources of Native Hawaiian rights law are described above in Section 4.2. H.R.S., § 7-1, an adoption of the Hawaiian Kingdom's Kuleana Act (1851), ensures that hoaʻāina (native ahupuaʻa tenants) have access and gathering rights to meet their basic daily needs. The law recognizes hoaʻāina "right[s] to take firewood, house-timber, aho cord, thatch, or ki leaf ... [and] a right to drinking water, and running water, and the right of way. ..."[306]

Hawaiʻi Revised Statutes, Section 1-1 instructs Hawaiʻi's courts to look to English and American common law decisions for guidance, except where they conflict with "Hawaiian judicial precedent, or … Hawaiian [custom and] usage."[307] H.R.S. § 1-1 recognizes certain customary practices that go beyond the rights specifically enumerated in H.R.S. § 7-1.[308]

The threshold question is whether hunting is a traditional and customary right. The *PASH* case is instructive for determining whether a particular practice qualifies as a Hawaiian custom. The criteria for proof of custom is that it be *consistent*, *certain*, and *reasonable*. The Hawaiʻi Supreme Court defines these terms as follows:

> (1) "consistency" is properly measured against other customs, not the spirit of the present laws; (2) a particular custom is "certain" if it is objectively defined and applied; certainty is not subjectively determined; and (3) "reasonableness" concerns the manner in which an otherwise valid customary right is exercised—in other words, even if an acceptable rationale cannot be assigned, the custom is still recognized as long as there is no "good legal reason" against it.[309]

Additionally, a custom need not be exercised since "time immemorial," but merely predate November 25, 1892 when the original Kingdom law was passed to guide judicial decisions.[310]

How can we determine whether hunting is *consistent*, *certain*, and *reasonable*? As explained in Section 4.2. above, courts look to kamaʻāina testimony as the standard for authenticating Hawaiian custom and usage.[311]

Kamaʻāina began with references to the Kamapuaʻa traditions. As was mentioned above, the Polynesian voyagers brought the puaʻa (pig) with them when they settled in Hawaiʻi. The puaʻa remains a strong part of the Hawaiian culture today. The deification of Kamapuaʻa as the pig-god reflects the strong cultural connection Hawaiians have to puaʻa. The puaʻa is not just a food source but has been elevated in moʻolelo (stories) as the adventurous and kolohe (mischievous) demigod Kamapuaʻa.[312]

Dr. Davianna Pōmaikaʻi McGregor offered some unique perspectives on Kamapuaʻa and whether hunting is a customary practice in the Kamakou Preserve Cultural Assessment she authored. Dr. McGregor shares the opinion of C.M. Kaliko Baker, a Hawaiian language instructor well-versed in the moʻolelo of Kamapuaʻa:

> Kamapuaʻa was free to roam, he was not domesticated. When he did damage and violated his neighbor's property and possessions they retaliated by trying to hunt and kill him. In his antagonistic relationship with the family of Pele deities his role was to break up the lava domain of Pele and convert it into forest. In the final resolution of their hostilities, Pele and Kamapuaʻa divided the island of Hawaiʻi into their respective domains, the forested areas being the domain of Kamapuaʻa. Hawaiian hunters have interpreted this as evidence that the pig has a natural role in the forest. In the end of the Kamapuaʻa saga, he ventures to Kahiki where his father-in-law castrates him in order to force him to settle into domestic life with a wife and child. According to Baker, this is an indication that the natural state of the pig was to roam free in the forest and that domestication was an imposition of civilization. Moreover the domestication of Kamapuaʻa occurred outside of Hawaiʻi. Baker also notes that pigs were hunted, using spears and/or prayers to be offered as hoʻokupu.[313]

When the Kamapuaʻa lore was discussed among Manaʻe kamaʻāina, there were some interesting viewpoints. One kamaʻāina who is a hunter but most vehemently expressed his disappointment with the disrespectful hunting behavior of youth who tend to hunt for trophies and are wasteful with animal meat stated, "There is no Kamapuaʻa tradition on Molokaʻi! When Kamapuaʻa arrived on Molokaʻi he was confronted by two moʻo wahine (lizard protectors) and they chased him off the island!"

Another kamaʻāina who expressed a reverence for Wao Nahele and Wao Akua and gathers in the upland forests for lei-making countered Baker's opinion by reflecting on Kamapuaʻa's latter years when he was less spry and mischievous. He admonished the people to mālama the forest. For this reason, she does not agree that the Kamapuaʻa tradition suggests that hunting is a customary right that should dilute the more important kuleana and custom of mālama. For her, feral pigs and other ungulates do not belong in the forest and so a co-existence of hooved animals and native forest is untenable. For her, mālama can and should entail fencing at least the remaining upper native forest. She feels that if any hunters who might be opposed to erecting a fence at all and who might claim that their rights are superior to other traditional and customary Hawaiian practices are selfish and should not be afforded any protections or concessions.

Dr. McGregor points out that the Polynesian puaʻa introduced to Hawaiʻi was domesticated and rarely wandered beyond the Wao Kanaka.[314]

> The uppermost levels of the rainforest were sacred to the gods and acknowledged as the Wao Akua. Humans rarely ventured into this realm. The harvesting of plants or even trees from this realm required hoʻokupu or the offering of sacrifices to the deities. The pigs rarely roamed into this sector of the forest.[315]

This would suggest that in protecting the Wao Akua, as is proposed in the East Slope Watershed Plan, the EMoWP would not need to make accommodations (e.g., via step-overs) for hunters to enter through the fenceline to hunt.

However, Dr. McGregor observes that development over the last two centuries has pushed the pigs and other ungulates higher up the mountain into Wao Akua.[316] She cites also the abolition

of the kapu system, the conversion of Native Hawaiians to Christianity, and other foreign influences that corroded Hawaiian precepts on the sacredness of Wao Akua and opened the way for humans and feral animals to infiltrate this region[317]:

> Since agriculture and residential development has destroyed the lowland forest areas where the pigs used to be plentiful and easily reached on foot trails Hawaiians must go deeper into the same forests or higher up the same mountain hunted by their ancestors.[318]

This suggests that Hawaiian customs have had to adapt to changing times. The *PASH* court made clear that customs need not have originated from "time immemorial" and practiced continuously onward to present day. Rather, the custom must have been adopted prior to 1892.[319]

It is well-established that the pua‘a arrived with the first Polynesian migration to Hawai‘i in the 4th century A.D. It is also well known that Europeans brought a larger variety of pig in the 18th century with the arrival of Captain Cook. The interbreeding of these two species produced the feral pig known to roam Hawai‘i's forests today. Pig hunting methods today have been directly influenced by European practices that have been passed down through the generations over the last 150 years. This involves the use of "dogs [to] locate, chase, grab, or bay the game, which is then typically dispatched by the hunter with a gun or knife."[320]

Similarly, axis deer and goat introductions pre-date 1892. Like pig, they have become important food sources for Moloka‘i kama‘āina. These animals are typically hunted with use of rifles. Some also use bow and arrow, but that appears to be a recent and rare method of hunting on Moloka‘i.

The use of guns, knives, bow and arrow, etc. in hunting should not detract from whether or not a particular practice like hunting is customary or not. As McGregor points out with the Hawaiian ‘ohana values, it is the essence of the practice itself that relates to subsistence, culture, and religious ceremony that matter most.[321] The pono hunting approach shared by several of the elder kama‘āina hunters reflect this mindset of mālama: being mindful when hunting to respect the resources and gauge their health; to only take what is needed to feed the family; to not waste meat and to bury the entrails respectfully. This approach reflects the essence of Hawaiian practice.

In the recent *State v. Palama* opinion issued by the Hawai‘i Intermediate Court of Appeals, the court affirmed the trial court's dismissal of criminal charges against a Native Hawaiian defendant who was arrested for pig hunting on private property in Kaua‘i.[322] Palama is a hoa‘āina of Hanapepe and cares for his kuleana land and taro patch there. He often traverses the ahupua‘a and across privately owned lands in Hanapepe to inspect the river flow and water quality for his kalo, as well as hunt for pig to feed his family. One day, Palama went pig hunting with a mule and his dogs. He successfully killed a wild pig with his knife and was subsequently arrested for trespass and for hunting on private lands.

The court applied the *Hanapi* three-part test that a criminal defendant must meet to assert a constitutionally protected native Hawaiian right. Namely, the defendant must prove that he is a descendant of "native Hawaiians who inhabited the islands prior to 1778";[323] second, that his

"claimed right is constitutionally protected as a customary or traditional native Hawaiian practice";[324] and third, "that the exercise of the right occurred on undeveloped or 'less than fully developed property.'"[325]

Palama easily met the first part of the test: proof of native Hawaiian descent. The land on which he hunted also fit the definition of undeveloped or less than fully developed property.

With respect to the second-part of the test, the court sought to determine under *Hanapi* whether there was "an adequate foundation in the record connecting the claimed right to a firmly rooted traditional or customary native Hawaiian practice."[326] The court referenced the Hawaiian custom and usage statute, H.R.S., § 1-1, to determine under the circumstances of this case, whether Palama's pig hunting on the subject property constituted a traditional and customary right.

Palama testified that he had been hunting pig since he was a child and that this knowledge was passed down to him by his family. The court received expert testimony from Dr. Jon Osorio, a Professor of Hawaiian Studies. He explained that pigs were an important part of the subsistence diet of ancient Hawaiians prior to 1892; that pigs were hunted as a method to keep the feral pig population down and deter pigs from destroying 'uala (sweet potato) and lo'i kalo (taro patches). Dr. Osorio believed that Palama was continuing this tradition of "hunting to supplement the diet of his family, and that he was doing it the same way that his father before him and ancestors before him had done."[327] It was also noted that Palama was pig hunting in the area surrounding his taro patch. Another native pig hunter from the same area offered kama'āina expert testimony. He testified that native Hawaiian hunters, including Palama's 'ohana, have been hunting on the subject private property for successive generations.

Based on the evidence offered, the appeals court agreed with the trial court that pig hunting constitutes a traditional and customary Hawaiian right. The court also agreed that the Defendant's constitutionally protected hunting privilege was reasonably exercised. The court found substantial evidence in the record that Palama hunted in a reasonable manner, in alignment with cultural subsistence values and with a mindset for traditional conservation in that he protected his taro patch by hunting pig in the surrounding area.

Given the *Palama* opinion, it is more than likely that the State would uphold pig hunting by Mana'e kama'āina as a valid and constitutionally protectable traditional and customary Hawaiian right, so long as they hunt in a reasonable manner that does not infringe on the rights of others. The same legal framework could also apply to subsistence hunting of deer and goat.

4.6.5. Can Potentially Conflicting Native Hawaiian Practices Coexist? Can these Rights be Reconciled?

With hunting as a traditional and customary Hawaiian right, how can it be reconciled with other traditional and customary rights and practices that may be adversely affected by hunting?

It might all be a matter of perspective. One kama'āina informant shared that when asked what his purpose is, the appropriate response would be to take care of Hina. For him, that means the

use of conservation fencing. To the kamaʻāina who looks at any fence as a "Keep Out, No Trespass" sign and an infringement on his hunting rights, perhaps he might look at the conservation fence in a different way. The incremental step-overs for access are both an assurance that he may continue to hunt and that private landowners will no longer stop him from doing so. At the same time, the natural resources protected within the fence will remain vibrant and abundant so that the other cultural practices he exercises can be maintained today and for succeeding generations of his family.

Reconciling potential conflicts requires finding some kind of common ground. Prevalent in every kamaʻāina interview we conducted was a profound love for ʻāina, and more specifically for Molokaʻi as "one hānau" (birth place). This deep-seated aloha for island and place evoked many passionate statements from kamaʻāina on how to mālama ʻāina and how to mālama each other when there is disagreement. Not a single interviewee reflected a one-sided approach based on rights and privileges, absent responsibility to mālama ʻāina. All could readily agree with the sentiment that the ʻāina, while it is our ice box, still needs fixing.

Earlier Hawaiians had to grapple with potentially conflicting uses. Konohiki were put in charge to carefully regulate uses, so resources would not be over-used or depleted. This is why the kapu system was established – to monitor the people's activities and their use of the resources. Similarly, we must balance the need for an intact forest, the need for hunters to access certain areas to procure game, and the need for lāʻau lapaʻau practitioners, lei makers, fishers, and limu gatherers to enjoy thriving resources.

Ka poʻe kahiko, the people of ancient times, were subject to a stringent kapu system. The kapu system regulated what types of foods men and women could consume.[328] It provided the protocols of engagement between makaʻāinana and esteemed aliʻi.[329] Kapu were also placed on certain activities, such as when to make war and when to honor peace.[330] Finally, the kapu system served as a set of conservation measures.

For example, water use was regulated through a complex set of kānāwai (laws). This entailed the fair allocation of water and honoring time slots among mahiaʻi (farmers) for opening and closing ʻauwai (irrigation ditches) leading from the main stream to a vast network of loʻi kalo (taro patches). Konohiki or lunawai (water managers) enforced the kānāwai and exacted capital punishment on those who disobeyed the law.[331]

Similarly, kapu were also integrated into fisheries management and conservation. Konohiki oversaw the fishing activities within each ahupuaʻa. They ordered the people to alternate fishing areas to avoid depletion and allow for replenishment. They also issued species-specific kapu to correspond with fish spawning periods.[332] According to respected Hawaiian historian, Mary Kawena Pukui, the kapu system in the Kāʻū district of Hawaiʻi Island was practiced in the following manner:

> When inshore fishing was tabu (kapu), deep sea fishing (lawaiʻa-o-kai-uli) was permitted, and vice versa. Summer was the time when the fish were most abundant and therefore the permitted time for inshore fishing. Salt was gathered at this time, also, and large quantities of fish were dried … In winter, deep sea fishing was permitted. A tabu for the

> inshore fishing covered also all the growths in that area, the seaweeds, and shellfish, as well as the fish. When the kahuna had examined the inshore area, and noted the condition of the animal and plant growths, and decided that they were ready for use, that is, that the new growth had had a chance to mature and become established, he so reported to the chief of the area, and the chief ended the tabu. For several days it remained the right of the chief to have all the sea foods that were gathered, according to his orders, reserved for his use, and that of his household and retinue. After this, a lesser number of days were the privilege of the konohiki (overseers of lands under the aliʻi). Following this period the area was declared open (noa) to the use of all.[333]

At the end of a fishing expedition, the lawaiʻa would make an offering of the first catch before the altar of Kūʻula; prized catch were set aside for the aliʻi and his household; then apportionment to the kahuna and konohiki; and finally among the fishermen and those who were in need.[334] As Titcomb describes,

> Division was made according to need, rather than as reward or payment for share in the work of fishing. Thus all were cared for. Anyone assisting in any way had a right to a share. Anyone who came up to the pile of fish and took some, if it were only a child, was not deprived of what he took, even if he had no right to it. It was thought displeasing to the gods to demand the return of fish taken without the right.[335]

The practice of sharing catch is still prevalent among the people of Molokaʻi and is practiced by many Manaʻe kamaʻāina. It is very common especially for fishermen to share catch; hunters to share venison, smoked pig, and goat jerky; farmers and gardeners to share fruits and vegetables with extended ʻohana, neighbors, and especially kupuna who are no longer able to holoholo and easily provide for themselves.

Aliʻi were not immune from societal expectations related to sharing. For instance, while the catch belonged to the aliʻi when fishing was done by or for him, the aliʻi was obligated to share generously with the people.[336]

Dr. Lilikalā Kameʻeleihiwa explains that the source of reciprocity and interdependence between aliʻi and makaʻāinana is embedded within the obligation to mālama ʻāina. Aliʻi were charged with providing the leadership and organization to make the land bountiful and, in turn, capable of sustaining a growing population. The makaʻāinana through their labor fed and clothed the aliʻi. If a commoner failed in his kuleana to mālama the portion of ʻāina allotted to him, he was dismissed. If a konohiki failed in his leadership and management of the resources, he was also discharged of his duties. If the land suffered and the people starved, it was perceived as the fault of the aliʻi for displeasing the gods and not following religious protocols. Negligence in mālama ʻāina signaled also a breakdown in the relationship between aliʻi and makaʻāinana.[337]

Chapter 5 covers the kamaʻāina recommendations to the tough questions we asked:

- If you were konohiki, what would you do?
- Even if you support the fencing initiative in your ahupuaʻa, how would you mālama neighboring ahupuaʻa who are presently not included in the watershed partnership?

- How would you prevent ungulates from migrating to Waialua, Honouliwai, and Honoulimaloʻo and fouling the streams there if everywhere else was fenced?
- If it is not feasible to lower the fenceline to the former lowland forest, how can we repair the damage done by ungulates? How can we re-plant?
- How would you organize community hunts?
- How would you respond to private landowner concerns regarding liability? How would you mend soured relationships between hunters and large landowners?
- How do you address eroding cultural understandings and diverging values between elder hunters and young hunters? How can you give young hunters an ethic of conservation, mālama and aloha ʻāina?

The answers are quite innovative and inspiring.

4.6.6. Finding a Middle Ground: Revisiting Article XII, Section 7 in Balancing the State's Constitutional Mandate to Affirmatively Protect Native Hawaiian Rights to the Extent Feasible with its Authority to Reasonably Regulate these Rights

Under Article XII, Section 7 of the Hawaiʻi State Constitution, government must protect Native Hawaiian rights, but may reasonably regulate them to the extent feasible.[338] However, this provision does not give the State "the unfettered discretion to regulate the rights of ahupuaʻa tenants out of existence."[339] Additionally Article XII, Section 7 of the Constitution "places an affirmative duty on the State and its agencies to preserve and protect traditional and customary native Hawaiian rights, and confers upon the State and its agencies 'the power to protect these rights and to prevent any interference with the exercise of these rights.'"[340]

In criminal cases where the constitutional privilege of exercising a valid Native Hawaiian right succeeds under the three-prong *Hanapi* test, an additional requirement is a "balancing test" that requires the court to "look to the totality of the circumstances and balance the State's interest in regulating the activity against the defendant's interests in conducting the traditional or customary practice."[341]

In *Palama,* the State successfully requested judicial notice be taken of the DLNR Game Mammal Hunting Regulations, Hawaii Administrative Rules (HAR), Title 13, Chapter 123 specifically for the island of Kauaʻi which informs hunters of public hunting grounds where pig hunting is allowed. In doing so, it challenged the trial court's finding that this regulation served as a "blanket prohibition or extinguishment of [Palama's] protected [Hawaiian] practice."[342] The State reasoned that Palama could easily have acquired permission from the landowner or obtained a hunting license to hunt on public lands as provided for by State regulations.

Palama argued that the State's implementation of H.R.S., § 183D-26 would impermissibly delegate to private landowners "the absolute power to grant or deny Native Hawaiians their constitutional privileges."[343] The trial court also found the State's rationale to be flawed. Focusing specifically on whether the State's enforcement of the regulation infringed on Palama's

right to hunt on the subject private property in Hanapepe ahupuaʻa (where he is a hoaʻāina), the appeals court ruled that this action would "operate[ ] as a summary extinguishment of Palama's constitutionally protected right to hunt pig on the subject property."[344]

The ICA reiterated the Hawaiʻi Supreme Court's position in *PASH* that western understandings of property law are not synonymous with Hawaiʻi's system; namely, "the western concept of exclusivity is not universally applicable" here.[345] Further, the appeals court looked to the legislative record to determine the consititutional framers' intentions in adopting Article XII, § 7:

> Aware and concerned about past and present actions by private landowners ... which preclude native Hawaiians from following subsistence practices traditionally used by their ancestors, your Committee proposed this new section to provide the State with the power to protect these rights and to prevent any interference with the exercise of these rights. Moreover, your Committee decided to provide language which gives the State the power to regulate these rights. ...[346]

Delegates of the 1978 convention communicated the importance of this constitutional amendment, given that "large landowners, who basically are 10 to 12 corporations and estates and who own almost 90 percent of all private lands, have intruded upon, interfered with and refused to recognized [sic] such rights."[347] The court factored these committee findings into its analysis in *Palama* and concluded that requiring Palama to gain landowner permission to utilize lands that he traditionally and customarily accesses for hunting or in the alternative hunting on public land "frustrates the protections afforded by HRS § 1-1 and 7-1 and article XII, section 7."[348]

The *Palama* case was decided within a criminal trespass context and places the burden on the Native Hawaiian defendant to prove s/he was practicing a constitutionally protected traditional and customary Hawaiian right. The more appropriate standard of review for this watershed partnership is to look especially at the State's constitutionally mandated public trust obligations – to care for natural ecosystems, as well as to preserve Native Hawaiian rights and practices that rely on healthy resources and ecosystems.

Reviewing the *Palama* case is still instructive, however, in determining the delicate balance the State must exercise to affirmatively protect Native Hawaiian rights, while at the same time reasonably exercise its regulatory powers. *Palama* is also instructive regarding the State's role in facilitating and fostering productive and respectful relationships between Native Hawaiian cultural practitioners, large private landowners, and conservation groups.

In a civil context where certain proposed actions may impact Native Hawaiian rights, the burden sits squarely with the applicant to prove there is no infringement on those rights. Here, the EMoWP involves the State as a lead and partner. Per the *Ka Paʻakai* standard, the State must make an independent assessment of what cultural practices exist in the subject area, determine the potential cultural impacts, and adopt a plan that mitigates those impacts. It is also necessary that the State affirmatively protect Native Hawaiian rights, which are also considered public trust purposes under the State constitution.

The EMoWP proposal and this Manaʻe Traditional and Customary Practices Report are a combined exercise in collaborative governance between State government, private, and native Hawaiian stakeholders. This collaboration is also a positive step toward meeting constitutional obligations to protect traditional and customary Hawaiian rights and the public trust.

The EMoWP has a complex challenge as well as an incredible opportunity to achieve synergy – whole-scale solutions that are greater than the sum of the individual parts. It can attain this through collaborating with the Native Hawaiian community; melding conventional conservation strategies with indigenous, ecological knowledge; and considering the deeper and very positive implications of what Hawaiians mean by laulima (working together), mālama (stewardship), and pono (doing things the right way, even when it is more difficult at the outset).

4.7. THE VALUE OF INTEGRATING TRADITIONAL ECOLOGICAL KNOWLEDGE IN NATURAL RESOURCE MANAGEMENT

By studying clues in the landscape, scientists have begun to realize that what they believed to be pristine ecosystems, were in fact sophisticated and biodiverse environments that were sustainably designed by indigenous peoples over hundreds of years. There is a new appreciation for indigenous resource management strategies based on traditional ecological knowledge (TEK)[349] because of the solutions that they may offer in these modern times.[350] According to a report titled, "Our Common Future" from the World Commission on the Environment and Development (WCED), "Tribal and indigenous peoples' … lifestyles can offer modern societies many lessons in the management of resources …[they] are repositories of vast accumulations of traditional knowledge and experience that link humanity with its ancient origins. Their disappearance is a loss for the larger society, which could learn a great deal from their traditional skills in sustainably managing very complex ecological systems."[351]

The waiwai (richness) found in the Manaʻe kamaʻāina interviews underscore the importance of traditional knowledge in paving a sustainable path forward.

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[43] *A Mau A Mau*, *supra* note 1.
[44] Report to the Twenty-Fifth Legislature 2009 Regular Session: Final Report Aha Kiole Advisory Comm. at 7 (2008), *available at http://www.ahamoku.org/wp-content/uploads/2011/09/Final-Report-12-18-081.pdf* [hereinafter Aha Kiole Legislative Report 2009] (quoting Act 212, 2007 Leg., 24th Sess. (Haw. 2007)).
[45] HAW. REV. STAT. §171-4.5(d) (2013) (emphasis added).
[46] *A Mau A Mau*, *supra* note 1.
[47] *Id.*
[48] Interview with Dr. Kawika Winter, Director, Limahuli Garden and Pres., Hāʻena Makai Watch Coordinator, and former member of the late Kumu John Kaʻimikaua's Halau Hula o Kukunaokalā in Honolulu, Haw. (Dec. 10, 2014) [hereinafter Dr. Kawika Winter Interview].
[49] *Id.*
[50] Dr. Kawika Winter, *Applying Traditional Resource Mgmt. Philosophies to Contemporary Conservation Efforts on Kauaʻi*, Presentation to the Native Hawaiian Rights Clinic, Univ. of Haw. William S. Richardson Sch. of Law (Nov. 9, 2015) [hereinafter Dr. Kawika Winter Presentation].
[51] *A Mau A Mau*, *supra* note 1.
[52] *Id.*

[53] *Id.*
[54] *Ahupuaʻa*, MARY KAWENA PUKUI & SAMUEL H. ELBERT, HAWAIIAN DICTIONARY 9 (rev. & enlarged ed. 1986) ("[L]and division usually extending from the uplands to the sea, so called because the boundary was marked by a heap (ahu) of stones surmounted by an image of a pig (puaʻa), or because a pig or other tribute was laid on the alter a tax to the chief.").
[55] CARLOS ANDRADE, HĀʻENA THROUGH THE EYES OF THE ANCESTORS, 27 (2008) (describing Kauaʻi Island's "Golden Age" when its reigning aliʻi Manokalanipo "initiat[ed] a system of classifying and organizing lands into different categories in order to better manage resources and people" and through this system, "peace and prosperity" resulted). *See also* KAMANAMAIKALANI BEAMER, NO MĀKOU KA MANA: LIBERATING THE NATION, 32-33 (2014) (describing land identified and bound by palena allowed for resource governance and management that ensured greater productivity).
[56] *A Mau A Mau*, *supra* note 1.
[57] Aha Kiole Legislative Report 2009, *supra* note 44 at 38.
[58] ANDRADE, *supra* note 55 (the term "kona" typically refers to lands along that are south or southwest facing on each of the Hawaiian islands.).
[59] *Id.* (The term "koʻolau" refers to lands that are typically situated on the windward side of each island, the lands buffeted by the pre-dominant northeasterly winds of Hawaiʻi.).
[60] BEAMER, *supra* note 55, at 31.
[61] *Id.* at 45-47.
[62] Lorenz Gonschor & Kamanamaikalani Beamer, *Toward an Inventory of Ahupuaʻa in the Hawaiian Kingdom: A Survey of Nineteenth- and Early Twentieth-Century Cartographic and Archival Records of the Island of Hawaiʻi.* 48 HAW'N J. HIST. 53, 56 (2014) (land boundaries were known by makaʻāinana mentally and their knowledge was passed down orally. The concept of physically drawing maps came post-European contact. While certain famous mōʻī from various islands are credited for demarcating moku and ahupuaʻa, it is noted that some ahupuaʻa pre-dating the "centraliz[ed] aliʻi" system are more likely that similar "kin-based land units" of older "non-feudally organized Polynesian islands."). *See also* BEAMER, *supra* note 55, at 32-33 (the palena created "spaces of attachment and access . . . [they] delineated the resource access of makaʻāinana and aliʻi on the ground, literally connecting people to the material and spiritual resources of these places." The knowledge of these palena known "visually and cognitively" by hoaʻāina was shared orally from one generation to the next).
[63] BEAMER, *supra* note 55, at 47.
[64] Gonschor & Beamer, *supra* note 62, at 55 ("[T]he system of ahupuaʻa divisions was created by rulers who unified or centralized governance of their respective islands, such as Māʻilikukahi on Oʻahu and 'Umi on Hawaiʻi Island."). *See also* ANDRADE, *supra* note 55, at 27 (explaining that Manokalanipo was part of Kauaʻi Island's "Golden Age" of agricultural productivity, also creating a framework of land classification along moku and ahupuaʻa).
[65] BEAMER, *supra* note 55, at 34-35 (Māʻilikūkahi is the famed mōʻī of Oʻahu who is known as the first to establish palena (boundaries and divisions) of moku and ahupuaʻa in a manner that made the land productive. These palena are noted to this day in land titles and maps).
[66] E.S. CRAIGHILL HANDY & MARY KAWENA PUKUI, THE POLYNESIAN FAMILY SYSTEM IN KAʻU, HAWAIʻI 5 (1998).
[67] *Id.*
[68] ANDRADE, *supra* note 55, at 30, 74.
[69] BEAMER, *supra* note 55, at 45 (noting that while "all lands were redistributed [by the new, reigning, successive mōʻī to his loyal chiefs], the rights over those lands would change to a lesser extent for makaʻāinana families who continued to live on their lands with similar rights throughout multiple kālaiʻāina, while the rights of individual chiefs and mōʻī could change with each kālaiʻāina.").
[70] HANDY & PUKUI, *supra* note 66 (describing ʻohana in her native homeland district of Kāʻū on Hawaiʻi Island, "[t]he fundamental unit in the social organization of the Hawaiians of Ka-u was the dispersed community of ʻohana, or relatives by blood, marriage and adoption, living some inland and some near the sea but concentrated geographically in and tied by ancestry, birth and sentiment to a particular locality which was termed the ʻāina [sic].").
[71] HANDY & PUKUI, *supra* note 66 (describing that over time, through inter-marriage among families, the presence of extended ʻohana became established throughout the ahupuaʻa and nearby moku).
[72] *Id.* at 4.
[73] *Id.*
[74] BEAMER, *supra* note 55, at 43.

[75] HANDY & PUKUI, *supra* note 66, at 4.
[76] *Id.*
[77] BEAMER, *supra* note 55, at 44.
[78] Gonschor & Beamer, *supra* note 62, at 55 (describing makahiki as a time of peace, celebrated annually during the period of the god Lono-i-ka-makahiki. At each ahupuaʻa boundary, ahu (altars) were erected with a puaʻa (pig) and other tributes for the ruling aliʻi placed atop it. Hoʻokupu (offerings) were also given to ensure ʻāina momona (abundance) and blessings upon the land).
[79] HANDY & PUKUI, *supra* note 66, at 5-6 (describing the important role extended ʻohana played in making the land productive, establishing sharing networks, and providing local leadership in every day ahupuaʻa affairs).
[80] *Id.* at 6.
[81] *Id.*
[82] *A Mau A Mau*, *supra* note 1.
[83] *Id.*
[84] *Id.*
[85] Dr. Kamanamaikalani Beamer, presentation to HWST 458 Nat. Resource Issues & Ethics in Haw. class, Univ. of Haw. at Mānoa Lecture (Feb. 5, 2015) [*hereinafter* Dr. Kamana Beamer Presentation] (explaining that under one rule, the mōʻī and ʻaha aliʻi represented top-down governance that was necessary to govern the larger affairs of an island. The kupaʻāina, the common people familiar with their land, maintained the palena, their place-based knowledge of the uses and boundaries of their ahupuaʻa).
[86] LILIKALĀ KAMEʻELEIHIWA, NATIVE LANDS & FOREIGN DESIRES: PEHEA LĀ E PONO AI?, 26 (1992) ("the *Aliʻi Nui* kept the *ʻĀina* fertile and the *Akua* appeased; the *makaʻainana* fed and clothed the *Aliʻi Nu*i. The *Aliʻi Nu*i determined the correct uses of the *ʻĀina*. The *pono,* or righteous *Aliʻi Nui*, was one who established order upon the *ʻĀina* so that it might be more productive.").
[87] *Id.* at 24.
[88] *Id.* at 26.
[89] Marion Kelly, Changes in Land Tenure in Hawaii, 1778-1850 (June 1956) (unpublished thesis, University of Hawaiʻi at Mānoa) (on file with author).
[90] HAWAIʻI ASSOCIATION OF WATERSHED PARTNERSHIPS, http://hawp.org/what-is-a-watershed (last visited Jan. 29, 2015).
[91] E.S. CRAIGHILL HANDY & ELIZABETH GREEN HANDY WITH THE COLLABORATION OF MARY KAWENA PUKUI, NATIVE PLANTERS IN OLD HAWAII: THEIR LIFE, LORE, AND ENVIRONMENT 48 (rev. ed. 1991) [hereinafter HANDY, HANDY & PUKUI].
[92] Gonschor & Beamer, *supra* note 62, at 69 (citing Marion Kelly, Changes in Land Tenure in Hawaii, 1778-1850 (June 1956) (unpublished M.A. thesis, University of Hawaʻi)).
[93] Gonschor & Beamer, *supra* note 62, at 79. *See* also BEAMER, *supra* note 55, at 40-42.
[94] BEAMER, *supra* note 55, at 51.
[95] Gonschor & Beamer, *supra* note 62, at 70.
[96] *Id.* at 73.
[97] *Id.* at 70.
[98] *Id.* at 69-79.
[99] *Id.* at 69. *See* also BEAMER, supra note 55, at 52 ("On Lānaʻi and Molokaʻi, some ahupuaʻa extend across the island from a fishery up into the mountains and down to the adjacent fishery.").
[100] Gonschor & Beamer, *supra* note 62, at 69.
[101] *Id.* at 71.
[102] Dr. Kawika Winter Presentation, *supra* note 50.
[103] *Id.*
[104] HANDY, HANDY & PUKUI, *supra* note 91, at 56.
[105] Dr. Kawika Winter Presentation, *supra* note 50.
[106] HANDY, HANDY & PUKUI, *supra* note 91, at 56.
[107] Dr. Kawika Winter Presentation, *supra* note 50.
[108] *Id.*
[109] HANDY, HANDY & PUKUI, *supra* note 91, at 56.
[110] Dr. Kawika Winter Presentation, *supra* note 50.
[111] HANDY & PUKUI, *supra* note 66, at 4.

[112] HANDY, HANDY & PUKUI, *supra* note 91, at 56.
[113] Dr. Kawika Winter Presentation, *supra* note 50.
[114] HANDY & PUKUI, *supra* note 66, at 4.
[115] *Id.* at 6.
[116] *Id.*
[117] HANDY, HANDY & PUKUI, *supra* note 91, at 56.
[118] *Id.* at 57.
[119] *Id.* at 56-57.
[120] MCGREGOR, NĀ KUAʻĀINA, *supra* note 21.
[121] MCGREGOR, CULTURAL ASSESSMENT FOR THE KAMAKOU PRESERVE, *supra* note 29, at 16-17.
[122] MCGREGOR, NĀ KUAʻĀINA, *supra* note 21, at 28–29 (noting that "[a]lthough the chiefs and the konohiki had full appropriation rights over the land and the people, in the main this was a system of mutual obligation and benefit between the chiefs and the people. The chiefs controlled the land and distributed it among the makaʻāinana. The chief was required to manage and oversee the production on the land. He regulated the use of scarce resources and apportioned these resources among the people according to principles of fair use … He conserved the resources of the land through restriction and replacement policies. Although Hawaiian tradition records cases of arbitrary, irresponsible, and self-serving chiefs who abused the people, they were clearly exceptional cases and were quickly replaced with responsible chiefs who cared for the well-being of the people. The Hawaiian proverb ʻI aliʻi no aliʻi no nā kanakaʼ (a chief is a chief because of the people) reflects the Hawaiian attitude that the greatness of a chief was judged according to the welfare of the people under him. According to the Hawaiian historian David Malo, ʻIn former times, before Kamehameha, the chiefs who took great care of their people. That was their appropriate business, to seek the comfort and welfare of the people, for a chief was called great in proportion to the number of his people.'").
[123] *United Nations Declaration on the Rights of Indigenous Peoples*, G.A. Res. 61/295, U.N. Doc. A/RES/61/295 (Sept. 13, 2007), 46 I.L.M. 1013 (2007) [*hereinafter* UNDRIP].
[124] *Announcement of U.S. Support for the United Nations Declaration on the Rights of Indigenous Peoples: Initiatives to Promote the Government-to-Government Relationship & Improve Lives of Indigenous Peoples* (available at http://www.state.gov/documents/organization/184099.pdf).
[125] Frank Seier, *'Free, Prior and Informed Consent' under UNDRIP: What Does it Really Mean?*, (Jun. 2011), http://www.right2respect.com/2011/06/'free-prior-and-informed-consent'-under-the-un-declaration-on-the-rights-of-indigenous-peoples-what-does-it-really-mean/ (last visited Jan. 28, 2015).
[126] UNDRIP, *supra* note 123.
[127] FOREST PEOPLES PROGRAMME, *Free, prior and informed consent (FPIC)*, http://www.forestpeoples.org/guiding-principles/free-prior-and-informed-consent-fpic (last visited Jan. 28, 2015).
[128] *Id.*
[129] HAW. REV. STAT. §171-4.5(d) (2013).
[130] MCGREGOR, NĀ KUAʻĀINA, *supra* note 21, at 30 (noting that Kamehameha I conquered the islands of Oʻahu, Molokaʻi, Maui, and Lānaʻi in 1795 after having his warriors train with Western military weapons).
[131] *Nā Kumukānāwai O Ka Makahiki 1839 A Me Ka 1840*, 1.1 KA HOʻOILINA: JOURNAL OF HAWAIIAN LANGUAGE SOURCES, Luna Hoʻoponopono et al., eds., Jason Kāpena Achiu trans., Mar. 2002 [hereinafter L.1840], at 30-59, *available at* http://hooilina.org/collect/journal/index/assoc/HASH0166.dir/1.pdf (last visited Feb. 17, 2015).
[132] MCGREGOR, NĀ KUAʻĀINA, *supra* note 21, at 32.
[133] L.1840, *supra* note 131; McBryde Sugar Co. v. Robinson, 54 Haw. 174, 185-87, 504 P.2d 1330, 1338-39 (1973)); *See also* Kekiekie v. Dennis, 1 Haw. 42, 43 (1851) (validating that the rights of hoaʻāina, native ahupuaʻa tenants, were guaranteed through the 1840 Constitution of the Hawaiian Kingdom).
[134] BEAMER, *supra* note 55, at 144.
[135] Pub. Access Shoreline Haw. v. Haw. Cnty. Planning Comm'n (*PASH*), 79 Hawaiʻi 425, 447, 903 P.2d 1246, 1268 (1995) (concluding that the "western concept of exclusivity [in private property law] is not universally applicable in Hawaiʻi" and that "the issuance of [ ] Hawaiian land patent[s]" at the time of the Māhele conveyed "a limited property interest.").
[136] Gonschor & Beamer, *supra* note 62, at 58.
[137] *PASH*, 79 Hawaiʻi at 445 (citing *Law Creating the Bd. to Quiet Land Titles,* in Fundamental Laws of Hawaii 137 (1904)).

[138] *Id.* (citing Act of April 27, 1846, pt. I, ch. VII, art. IV, § 7; L. 1845–46, at 109, *reprinted in* 2 *Revised Laws of Hawaii* 2123 (1925)).
[139] MCGREGOR, NĀ KUAʻĀINA, *supra* note 21, at 34 (citing OFFICE OF THE COMM'R OF PUB. LANDS, INDICES OF AWARDS MADE BY THE BD. OF COMM'R TO QUIET LAND TITLES IN THE HAWAIIAN ISLANDS, at 2 (1929)).
[140] BLACK'S LAW DICTIONARY, 1564 (6th ed. 1990) (citing American States Water Serv. Co. of Cal. v. Johnson, 31 Cal.App.2d 606, 88 P.2d 770, 774).
[141] *Id.* (citing St. ex rel. Milligan v. Ritter's Estate, Ind. App., 46 N.E.2d 736, 743 (1943)).
[142] MCGREGOR, NĀ KUAʻĀINA, *supra* note 21, at 35.
[143] Gonschor & Beamer, *supra* note 62, at 59.
[144] *Id.* at 58.
[145] *Id.*
[146] *Id.* at 60-61.
[147] *In re* Boundaries of Pulehunui, 4 Haw. 239, 251 (1879).
[148] Gonschor & Beamer, *supra* note 62, at 61.
[149] DAVID M. FORMAN & SUSAN K. SERRANO, HOʻOHANA AKU, A HOʻOLA AKU: A LEGAL PRIMER FOR TRADITIONAL AND CUSTOMARY RIGHTS IN HAWAIʻI 9 (2012) [hereinafter FORMAN & SERRANO, HOʻOHANA AKU, A HOʻOLA AKU].
[150] Gonschor & Beamer, *supra* note 62, at 61.
[151] Act of August 6, 1850, § 7, *reprinted in Laws of His Majesty Kamehameha III, King of the Hawaiian Islands* 202, 203–04 (1850) [hereafter L. 1850].
[152] Pub. Access Shoreline Haw. v. Haw. Cnty. Planning Comm'n (*PASH*), 79 Hawaiʻi 425, 446, 903 P.2d 1246, 1267 (1995) (citing 3B *Privy Council Records* 681, 713 (1850)).
[153] *Id.* (citing L. 1851, § 7, at 98 regarding the "many difficulties and complaints have arisen from the bad feeling existing on account of the Konohiki's [sic] forbidding the tenants on the lands enjoying the benefits that have been by law given them.").
[154] Act of July 11, 1851, *reprinted in Laws of His Majesty Kamehameha III, King of the Hawaiian Islands* 98–99 (1851) [hereafter L. 1851].
[155] Haw. Rev. Stat. § 7-1 (1994).
[156] L.1892, c. 57, s 5, approved on November 25, 1892 which states, "Section 5. The common law of England, as ascertained by English and American decisions, is hereby declared to be the common law of the Hawaiian Islands in all cases, except as otherwise expressly provided by the Hawaiian Constitution or laws, or fixed by Hawaiian judicial precedent, or established by Hawaiian national usage, provided however, that no person shall be subject to criminal proceedings except as provided by the Hawaiian laws."
[157] Haw. Rev. Stat. § 1-1 (2013); *See* FORMAN & SUSAN K. SERRANO, HOʻOHANA AKU, A HOʻOLA AKU, *supra* note 149, at 9-10.
[158] State v. Zimring, 52 Haw. 472, 475 (1970) (citing De Freitas v. Trustees of Campbell Estate, 46 Haw. 425, 380 P.2d 762 (1963)).
[159] Pub. Access Shoreline Haw. v. Haw. Cnty. Planning Comm'n (*PASH*), 79 Hawaiʻi 425, 437, 903 P.2d 1246, 1258 (1995) (note 21, citing 1 *Statute Laws of His Majesty Kamehameha III, King of the Hawaiian Islands* 3 (1845-46)).
[160] *Id.* (note 21, citing Act of September 7, 1847, ch. I, § IV; 2 *Statute Laws of His Majesty Kamehameha III, King of the Hawaiian Islands* (1847) (emphasis added)).
[161] *In re* Ashford, 50 Haw. 314, 440 P.2d 76 (1968).
[162] *Id.* at 316.
[163] HAW. CONST. art. XII, § 7 (1978) (emphasis added).
[164] Pub. Access Shoreline Haw. v. Haw. Cnty. Planning Comm'n (*PASH*), 79 Hawaiʻi 425, 437, 903 P.2d 1246, 1258, note 43 (1995).
[165] Kalipi v. Hawaiian Trust Co., 66 Haw. 1, 656 P.2d 745 (1982).
[166] FORMAN & SUSAN K. SERRANO, HOʻOHANA AKU, A HOʻOLA AKU, *supra* note 149, at 9 (citing Kalipi, 66 Haw. at 9, 656 P.2d at 750).
[167] *See PASH*, 79 Hawaiʻi at 451.
[168] Pele Def. Fund v. Paty (*Pele I*), 73 Haw. 578, 620, 837 P.2d 1247, 1272 (1992). *See* FORMAN & SUSAN K. SERRANO, HOʻOHANA AKU, A HOʻOLA AKU, *supra* note 149, at 13 (citing *Pele I*, 73 Haw. at 620, 837 P.2d at 1272). In *Pele I*, the plaintiffs, the Pele Defense Fund ("PDF") challenged the state's decision to exchange specific ceded lands for privately owned land on Hawaiʻi Island. PDF claimed that after the land swap, its Native Hawaiian

members seeking to exercise traditional subsistence, cultural, and religious practices were denied access to the undeveloped and now privately owned land. PDF provided testimony and affidavits attesting to the actual practices of Native Hawaiians living in in the Puna region as traditionally gathering outside of their ahupuaʻa of residence onto the lands subject in this litigation. This evidence formed the basis for the court's decision to affirm these practices as rights protected by law.

[169] FORMAN & SUSAN K. SERRANO, HOʻOHANA AKU, A HOʻOLA AKU, *supra* note 149, at 13-14 (citing *Pele I*, 73 Haw. at 620-21, 837 P.2d at 1272; citing also Pele Def. Fund v. Estate of James Campbell, Civ. No. 89-089, 2002 WL 34205861 (Haw. 3d Cir. Aug. 26, 2002)).

[170] Ka Paʻakai O Ka ʻAina v. Land Use Comm'n, 94 Hawaiʻi 31, 7 P.3d 1068 (2000).

[171] *Id.* at 1083 (2000).

[172] *Id.*

[173] FORMAN & SUSAN K. SERRANO, HOʻOHANA AKU, A HOʻOLA AKU, *supra* note 149, at 17 (citing *Ka Paʻakai*).

[174] HAWAIʻI LEGAL AUXILLARY, THE LAW OF THE SPLINTERED PADDLE: KĀNĀWAI MĀMALAHOE, *available at* https://www.hawaii.edu/uhelp/files/LawOfTheSplinteredPaddle.pdf. King Kamehameha I declared this law after having attempted to attack with his spear an innocent group of people fishing along the shoreline. Kamehameha I accidentally slipped into a lava rock crevice. Not knowing Kamehameha's identity, two fishermen stayed behind while the others ran away in fright. In their defense, they struck Kamehameha with a paddle which splintered over his head and left Kamehameha unconscious. When Kamehameha awakened, he realized the error he committed as an aliʻi charged with the responsibility to care for the common people and to treat them fairly. For this he instituted the Kānāwai Māmalahoe or Law of the Splintered Paddle which gave all people the right to travel along the roads and trails unmolested. The passage reads as follows:

THE LAW OF THE SPLINTERED PADDLE	**KĀNĀWAI MĀMALAHOE**
O my people,	E nā kānaka,
Honor thy gods;	E mālama ʻoukou i ke akua
Respect alike (the rights of)	A e mālama hoʻi i kānaka nui
Men great and humble;	a me kānaka iki;
See to it that our aged,	E hele ka ʻelemakule,
Our women, and our children	ka luahine, a me ke kama
Lie down to sleep by the roadside	A moe i ke ala
Without fear or harm.	ʻaʻohe mea nana e hoʻopilikia.
Disobey, and die.	Hewa nō, make.

[175] HAW. CONST. art. IX, § 10 (1978). ("The law of the splintered paddle, *mamala-hoe* kanawai, decreed by Kamehameha I – Let every elderly person, woman and child lie by the roadside in safety – shall be a unique and living symbol of the State's concern for public safety."); *See also* HAWAIʻI LEGAL AUXILLARY, *supra* note 174, at 16.

[176] L. 1851; Haw. Rev. Stat. § 7-1 (1994).

[177] Palama v. Sheehan, 50 Haw. 298, 301, 440 P.2d 95, 97-98 (1968) (holding that the defendants established access rights under H.R.S. section 7-1 because the previous owners of their property historically used a trail running through plaintiffs' property. The trails provided access between the defendants' taro patches, which were located mauka (inland) of the plaintiffs' property, and their kuleana parcels at the seashore. The court held that defendants were entitled to a right-of-way across plaintiffs' land by reason of necessity, because flooding when it rained prevented access by a more indirect route. The court also allowed for vehicular access along the trail which was widened in 1890.); Rogers v. Pedro, 3 Haw. App. 136, 642 P.2d 549, cert. denied, 64 Haw. 689 (1982).

[178] Kalaukoa v. Keawe, 9 Haw. 191, 194 (1893).

[179] Haw. Rev. Stat. § 264-1(c).

[180] Haw. Rev. Stat. § 264-1(c)(1).

[181] The King v. Cornwell, 3 Haw. 154, 161 (1869).

[182] Haw. Rev. Stat. § 198D.

[183] *In re* Waiāhole Combined Contested Case Hearing, 94 Hawaiʻi 97, 128-146, 9 P.3d 409, 441-458 (2000).

[184] *Id.* at 137 (citations omitted).

[185] FORMAN & SUSAN K. SERRANO, HOʻOHANA AKU, A HOʻOLA AKU, *supra* note 149, at 29 (describing King Kamehameha's "sovereign prerogatives" attaching to all private property conveyed at the Māhele which "includ[ed]

the power '[t]o encourage and even to enforce the usufruct [right of enjoyment] of lands' and '[t]o provide public thoroughfares and easements, by means of roads, bridges, streets, etc.'" Principles Adopted by the Board of Commissioners to Quiet Land Titles in Their Adjudication of Claims Presented to Them (Aug. 20, 1846), 2 Statute Laws of His Majesty Kamehameha III, King of the Hawaiian Islands 81, 85, *reprinted in* 2 REVISED LAWS OF HAW. 21242128 (1925)).

[186] NĀ ALA HELE TRAIL & ACCESS SYSTEM, *Moloka'i*, https://hawaiitrails.ehawaii.gov/island.php?island=Molokai (last visited Jul. 5, 2015).

[187] 16 U.S.C. § 470aa (1966), *amended by* Act of Dec. 19, 2014.

[188] 30 C.F.R. § 60.4 (2016)

[189] *Id.*

[190] HAW. ADMIN. R. § 13-284-6(b) (2015).

[191] HAW. REV. STAT. § 6E-3 (2015).

[192] *Id.* § 6E-3(1), (3)-(5) (2015.

[193] *Id.* § 6E-3(13) (2015)

[194] HAW. ADMIN. R. § 13-276-2 (2015) (explaining an archaeological inventory survey is a written report submitted to SHPD that identifies and documents the presence of archaeological and historic sites, including burial sites in a project area, and evaluates their significance).

[195] HAW. REV. STAT. § 6E-8 (2015).

[196] HAW. ADMIN. R. § 13-300-2 (2015).

[197] *Id.* § 13-300-3(b) (2015).

[198] 43 C.F.R. § 10.1(b)(1)(ii) (2014).

[199] 36 C.F.R. § 800.2(c) (2016).

[200] ADVISORY COUNCIL ON HISTORIC PRESERVATION, *Sec. 106 & the U.N. Declaration on the Rights of Indigenous Peoples: Intersections & Common Issues: Article 18 & Sec. 106* (2013), *available at* http://www.achp.gov/docs/UNDeclaration106.pdf.

[201] *Id.*

[202] *Id.*

[203] *Id.*

[204] *See* Haw. Rev. Stat. § 6E-5.5(b)(1) (2013).

[205] *See generally*, Rod Thompson, *Court Orders Trail, Bones Returned: The Hawaiian relics were moved during construction of a Big Isle residential area*, HONOLULU STAR BULLETIN (Aug. 3, 2001), http://archives.starbulletin.com/2001/08/03/news/story14.html; *see also* NATASHA BALDAUF & MALIA AKUTAGAWA, HO'I HOU I KA IWIKUAMO'O: A LEGAL PRIMER FOR THE PROTECTION OF IWI KŪPUNA IN HAWAI'I NEI 9-13 (2013).

[206] Harold Schaich, Claudia Bieling & Tobias Plieninger, *Linking Ecosystem Services with Cultural Landscape Research,* 19 GAIA 269, 270-71 (2010).

[207] HAW. ADMIN. R. § 13-300-2 defines a "lineal descendant" as a person who has "direct or collateral genealogical connections to certain Native Hawaiian skeletal remains." In contrast, a "cultural descendant" is a claimant who has demonstrated "genealogical connections to Native Hawaiian ancestors who once resided or are buried or both, in the same ahupua'a or district in which certain Native Hawaiian skeletal remains are located or originated from."

[208] *See* BALDAUF & AKUTAGAWA, *supra* note 205, at 76 (providing the step-by-step procedures for burial sites registration).

[209] D. KAPUA'ALA SPROAT, OLA I KA WAI: A LEGAL PRIMER FOR WATER USE AND MANAGEMENT IN HAWAI'I 7 (2009).

[210] *Id.*

[211] *Id.*

[212] *In re* Waiāhole Combined Contested Case Hearing, 94 Hawai'i 97, 132, 9 P.3d 409, 444 (2000).

[213] HAW. CONST. art. XI, § 1 (1978).

[214] *Id.* art. XI, § 7 (1978).

[215] *Id.*

[216] *Id.*

[217] SPROAT, *supra* note 209, at 9.

[218] *Id.*

[219] *See In re* Waiāhole Combined Contested Case Hearing (*Waiāhole I*), 94 Hawai'i 97, 9 P.3d 409 (2000).

[220] *See id*.

[221] *Id.*
[222] *Id.* at 133.
[223] *Id*.
[224] *See id.* at 140.
[225] *Id.* at 141.
[226] *Id.* at 142..
[227] Joseph L. Sax, *The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention,* 68 MICH. L. REV. 471, 476 (1970).
[228] *In re* Waiāhole Combined Contested Case Hearing (*Waiāhole I*), 94 Hawai‘i 97, 136, 9 P.3d 409, 448 (stating that "we thus hold that the maintenance of waters in their natural state constitutes a distinct 'use' under the water resources trust. This disposes of any portrayal of retention of waters in their natural state as 'waste'"); *see also* Nat'l Audubon Soc'y v. Superior Court of Alpine Cty., 33 Cal. 3d 419, 434, 658 P.2d 709, 719 (1983) (stating that a natural resource's ecological use and recreational use are public trust uses).
[229] *Waiāhole I*, *supra* note 228 at 137.
[230] *Id.* at 138 (holding "that the public trust may allow grants to private interests in trust resources under certain circumstance" but that in no way does private commercial use a protected pubic purpose that is protected by the trust).
[231] *Id.*
[232] *Id*. at 142.
[233] *Id.*
[234] *Id.* at 141.
[235] *Id*. at 142.
[236] *Id.*
[237] *Id.*
[238] *Id.* (quoting Robinson v. Ariyoshi, 65 Haw. 641, 649 n. 8, 658 P.2d 287, 295 n. 8 (1982)).
[239] *Id.* (citing Commonwealth Dep't of Envt'l. Resources v. Commonwealth Pub. Util. Comm'n, 18 Pa.Cmwlth. 558, 335 A.2d 850, 865 (1975)).
[240] *Id.*
[241] *Id*. at 132.
[242] *Id.* at 141.
[243] *Id.*
[244] D. Kapua‘ala Sproat & Issac H. Moriwake, *Ke Kalo Pa‘a o Waiāhole: A Case Study of the Use of the Public Trust as a Tool for Environmental Advocacy,* COMMON LAW REMEDIES FOR PROTECTING THE ENV'T 269 (Denise Antolini & Cliff Rechtschaffen eds., 2007).
[245] *Id.*
[246] Kelly v. 1250 Oceanside, 111 Haw. 205, 140 P.3d 985 (2006).
[247] *Id.* at 227 (stating that the County had "an affirmative duty" to ensure that a land developer complied with environmental protection conditions).
[248] *Id.* at 230 (stating that "although in some respect, exercise of DOH's authority is discretionary in nature, such discretionary authority is circumscribed by the public trust doctrine").
[249] *Id.* at 230-31, 140 P.3d at 1010-11.
[250] *In re* Waiāhole Combined Contested Case Hearing (*Waiāhole I*), 94 Hawai‘i 97, 142, 9 P.3d 409, 453.
[251] STANDING COMM. REP. NO. 77, *reprinted in* 1 PROCEEDINGS OF THE CONST. CONVENTION OF HAW. OF 1978 686 (State of Hawaii 1980).
[252] *Waiāhole I*, *supra* note 250 at 142.
[253] *Id.*
[254] *In re* Wai‘ola O Moloka‘i, Inc. (*In re Wai‘ola*), 103 Haw. 401, 422, 83 P.3d 664, 685 (2004) (quoting Ariz. Cent. for Law in Pub. Interest v. Hassell, 837 P.2d 158, 168–69 (Ariz.Ct.App. 1991).
[255] *Id.* at 422-23 (clarifying that beneficiaries include future generations, not just present generations).
[256] *Id.*
[257] *In re* Waiāhole Combined Contested Case Hearing (*Waiāhole I*), 94 Hawai‘i 97, 9 P.3d 409, 449; *In re Wai‘ola*, 103 Haw. at 442; *In re* Kukui (Moloka‘i) Inc., 116 Haw. 148, 507-08, 174 P.3d 320, 346-47.
[258] *Waiāhole I,* 94 Haw. at 142.

[259] ST. OF HAW., DEPT. OF LAND AND NAT. RES., COMMISSION ON WATER RESOURCE MANAGEMENT, *Water Management Areas*, http://dlnr.hawaii.gov/cwrm/groundwater/gwma/ (last visited Apr. 23, 2014); *See* HAW. REV. STAT. § 174C-41 (2015).
[260] SPROAT, *supra* note 209, at 28. Nā Wai ʻEhā on Maui is currently the only surface water management are in Hawaiʻi; *Water Management Areas*, *supra* note 259. Like ground water designation, surface water management area designation adds heightened scrutiny and requirements for the use of surface water.; *See* HAW. REV. STAT. § 174C-41 (2015).
[261] HAW. REV. STAT. § 174C-92 (2015).
[262] *Id.* § 174C-3 (2015).
[263] HAW. ADMIN. R. § 13-168-7(a) (2015); *See* SPROAT, *supra* note 209, at 26 (detailing the requirements for surface water reporting).
[264] *See* HAW. REV. STAT. § 174C-92 (2015).
[265] HAW. ADMIN. R. § 13-168-31 (2015); *See* SPROAT, *supra* note 209, at 26.
[266] *See* HAW. REV. STAT. § 174C-48 (2015).
[267] HAW. CONST. art XI, § 1 (1978).
[268] *Deer growth mystery in Hawaii pits hunters against government,* FOX NEWS (May 23, 2012), http://www.foxnews.com/us/2012/05/23/deer-growth-mystery-in-hawaii-pits-hunters-against-government.html.
[269] Mark Chynoweth, Christopher A. Lepczyk, Creighton M. Litton, and Susan Cordell, *Feral Goats in the Hawaiian Islands: Understanding the Behavioral Ecology of Nonnative Ungulates with GPS and Remote Sensing Technology*, 41-42 (2010) (Poster Presentation, Proc. 24th Vertebr. Pest Conf.) *available at* http://www.markchynoweth.info/uploads/2/8/9/7/2897583/chynoweth_et_al._vpc_2010_41-45_feral_goats_in_hawaiian_islands.pdf
[270] *Id.* at 42.
[271] *Id.*
[272] Kepā Maly, Benton Kealiʻi Pang, & Charles Peʻapeʻa Makawalu Burrows, *Pigs in Hawaiʻi, from Traditional to Modern, available at* http://www.eastmauiwatershed.org/wp-content/uploads/2013/01/Puaa-cultural-fact-sheet-04.03.pdf.
[273] *Id.*
[274] *Id.*
[275] *Id.*
[276] *Id.*
[277] *Id.*
[278] Sérgio L. G. Nogueira-Filho, Selene S. C. Nogueira, & José M. V. Fragoso, *Ecological impacts of feral pigs in the Hawaiian Islands*, BIODIVERS CONSERV DOI 10.1007/s10531-009-9697-0 (2009), http://web.stanford.edu/group/fragoso/docs/Nougeiro%20Fragoso%202009%20Ecological%20impact%20Pigs.pdf.
[279] Chynoweth, Lepczyk, Litton, & Cordell, *supra* note 269, at 42.
[280] *Id.* (citing D. K. Morris, *Summer food habits of feral goats in Hawaii Volcanoes National Park*, unpublished National Park Service Report 17 (1969)). Study revealed that 98% native plant species were found in goat stomach contents in areas where native vegetation was abundant and there was a low population density of goats. In areas where goat density was high and native vegetation was scarce, the stomach contents of goats were 99% non-native plants.
[281] *Id.*
[282] *Id.* at 43.
[283] *Id.* at 42.
[284] *Id.* at 41.
[285] George H. Waring, *Preliminary Study of the Behavior and Ecology of Axis Deer on Maui, Hawaii.* Hawaii Ecosystems at Risk (HEAR) Project, *available at:* http://www.hear.org/AlienSpeciesInHawaii/waringreports/axisdeer.htm
[286] George H. Waring, *Preliminary Study of the Behavior and Ecology of Axis Deer on Maui, Hawaii*, HAWAII ECOSYSTEMS AT RISK (HEAR) PROJECT (2007), http://www.hear.org/AlienSpeciesInHawaii/waringreports/axisdeer.htm.
[287] *Id.*
[288] *Id.*
[289] Chynoweth, Lepczyk, Litton, & Cordell, *supra* note 269, at 43.

[290] THE CORAL REEF OF SOUTH MOLOKAʻI, HAWAIʻI: PORTRAIT OF A SEDIMENT-THREATENED FRINGING REEF iv (Michael E. Field et al. eds., 2008), *available at* http://pubs.usgs.gov/sir/2007/5101/sir2007-5101.pdf.
[291] *Id.* at 7.
[292] *Id.* at 144.
[293] *Id.*
[294] *Id.* at 7.
[295] *Id.* at 129.
[296] *Id.* at 7.
[297] *In re* Kamakana, 58 Haw. 632, 638-39, 574 P.2d 1346, 1350 (1978) (citing *In re* Boundaries of Pulehunui, 4 Haw. 239, 241 (1879) and *Harris v. Carter*, 6 Haw. 195, 197 (1877)).
[298] ANDRADE, *supra* note 55, at 30.
[299] Interview with Dr. Kaipo Perez, Recreation Specialist I, City & Cty. of Honolulu, in Honolulu, Haw. (Jul. 1, 2015).
[300] CAROL ARAKI WYBAN, TIDE AND CURRENT: FISHPONDS OF HAWAIʻI 32 (1992).
[301] Russell Kallstrom, remarks at community meeting regarding Proposed Moʻomomi Community-Based Subsistence Fishing Area (CBSFA) Administrative Rules, in Hoʻolehua, Hawaiʻi (Nov. 8, 2014) (on file with author).
[302] *Id.*
[303] DAVIANNA MCGREGOR, THE NATURE CONSERVANCY, CULTURAL ASSESSMENT FOR THE KAMAKOU PRESERVE, MAKAKUPAʻIA AND KAWELA, ISLAND OF MOLOKAʻI 22 (2006) [hereinafter MCGREGOR, CULTURAL ASSESSMENT FOR THE KAMAKOU PRESERVE].
[304] HAW. CONST. art. XII, § 7 (1978).
[305] Pub. Access Shoreline Haw. v. Haw. Cnty. Planning Comm'n (*PASH*), 79 Hawaiʻi 425, 451, 903 P.2d 1246, 1272 (1995).
[306] HAW. REV. STAT. § 7-1 (1994).
[307] State v. Zimring, 52 Haw. 472, 475 (1970) (citing De Freitas v. Trustees of Campbell Estate, 46 Haw. 425, 380 P.2d 762 (1963)).
[308] *PASH*, *supra* note 305, at 441.
[309] *Id.* at 447, note 39.
[310] *Id.* (citing State v. Zimring, 52 Haw. 472, 475 (1970) as "implicitly disapprov[ing] the 'time immemorial' standard when it indicated that 'the Hawaiian usage mentioned in HRS § 1-1 usage which predated November 25, 1892.'").
[311] *In re* Ashford, 50 Haw. 314, 440 P.2d 76 (1968) (relying on expert "reputation evidence" of kamaʻāina).
[312] Maly, Pang, & Burrows, *supra* note 272.
[313] McGregor, Cultural Assessment for the Kamakou Preserve, *supra* note 29, at 17.
[314] *Id.* at 18.
[315] *Id.*
[316] *Id.*
[317] *Id.*
[318] *Id.* at 16.
[319] Pub. Access Shoreline Haw. v. Haw. Cnty. Planning Comm'n (*PASH*), 79 Hawaiʻi 425, 451, 903 P.2d 1246, 1272 (1995) (citing State v. Zimring, 52 Haw. 472, 475, 479 P.2d, 204 (1970) as "implicitly disapprov[ing] the 'time immemorial' standard when it indicated that 'the Hawaiian usage mentioned in HRS § 1-1 usage which predated November 25, 1892.'").
[320] Maly, Pang, & Burrows, *supra* note 272.
[321] MCGREGOR, CULTURAL ASSESSMENT FOR THE KAMAKOU PRESERVE, *supra* note 29, at 15
[322] State v. Palama, No. CAAP—12—0000434, 2015 WL 8566696 (Haw. Ct. App. Dec. 11, 2015).
[323] *Id.* at 4 (citing State v. Hanapi*,* 89 Hawaiʻi 177, 186, 970 P.2d 845, 894 (1998) (quoting *PASH,* 79 Hawaiʻi at 449, 903 P.2d at 1270).
[324] *Id.* (citing *Hanapi,* 89 Hawaiʻi at 186, 970 P.2d at 494).
[325] *Id.* (citing *Hanapi,* 89 Hawaiʻi at 186, 970 P.2d at 494).
[326] *Id.* (citing *Hanapi,* 89 Hawaiʻi at 187, 970 P.2d at 495).
[327] *Id.* at 6.

[328] KAME'ELEIHIWA, *supra* note 86, at 33-36 (describing certain food restrictions placed on women, particularly foods considered kinolau (major physical forms) of male Akua (gods). These foods included banana, certain types of red fish, pig, and coconut. Female consumption of these foods constituted an act of defilement, not in the sense that women were inferior to men, but with the understanding that women were inherently powerful through their procreative abilities to birth land, gods, and chiefs. To consume these foods would lessen the mana of men. The separation of the sexes allowed both men and women to maintain their mana over certain roles. For the men, their mana was expressed in their sexual prowess, their skills in agriculture, as masterful warriors, deep-sea fishermen, navigators and ocean voyagers).
[329] *Id.* at 36-39 (describing the ali'i as intermediaries between the gods and the common people. As the gods had power over life and death, the ali'i through the 'Aikapu also had this power over the people. Maka'āinana who violated certain kapu, such as allowing their shadow to fall upon the ali'i or failing to prostrate before the ali'i, were put to death. This physical separation between ali'i and maka'āinana and the understanding that ali'i were representatives of nā Akua mirrored the manner in which Hawaiians perceived their gods, as entities to both fear and love. Conversely, ali'i were expected to be devout and in their religious protocols. A failure to do so provided grounds for maka'āinana to abandon their ali'i as poor leaders and conduits of the gods' favor)
[330] *Id.* at 44-45 (describing the worship of the war god Kū during eight months of the year. During this period, warfare was permitted and human sacrifices were made to Kū. Four months of the year were dedicated to the god Lono who represented peace and fertility. During these months hard labor was kapu and warfare forbidden. The people enjoyed a period of peace, feasted, engaged in hula and games. Ho'okupu offered to Lono in the months that ushered the new year (makahiki) were representations of the abundance of the land and accumulation of material wealth in the form of pigs and produce, kapa, and feathers)
[331] HANDY, HANDY & PUKUI, *supra* note 91, at 57-59.
[332] MARGARET TITCOMB, NATIVE USE OF FISH IN HAWAII 13 (2d. ed. 1992).
[333] *Id.* at 14.
[334] *Id.* at 8.
[335] *Id.*
[336] HAWAIIAN FISHING LEGENDS xviii (Dennis Kawaharada, ed., 1992).
[337] KAME'ELEIHIWA, *supra* note 86, at 30-31.
[338] Pub. Access Shoreline Haw. v. Haw. Cnty. Planning Comm'n (*PASH*), 79 Hawai'i 425, 437, 903 P.2d 1246, 1258 (1995)).
[339] *PASH*, 79 Hawai'i at 451, 903 P.2d at 1272.
[340] Ka Pa'akai O Ka 'Aina v. Land Use Commission, 94 Hawai'i 31, 45, P.3d 1068, 1082 (2000) (citing Stand. Comm. Rep. No. 57, *reprinted in* 1 PROCEEDINGS OF THE CONSTITUTIONAL CONVENTION OF 1978, at 639 (1980)).
[341] State v. Palama, No. CAAP—12—0000434, 2015 WL 8566696, 7 (Haw. Ct. App. Dec. 11, 2015) (citing State v. Pratt (*Pratt II*), 127 Haw. 206, 216-18, 277 P.3d 300, 310-312 (2012)).
[342] *Id.* at 8.
[343] *Id.*
[344] *Id.* at 8-9.
[345] *Id.* at 9 (citing Pub. Access Shoreline Haw. v. Haw. Cnty. Planning Comm'n (*PASH*), 79 Hawai'i 425, 447, 903 P.2d 1246, 1268 (1995)).
[346] *Id.* (citing Stand. Comm. Rep. No. 57, at 639).
[347] *Id.* (citing Comm. Whole Rep. No. 12).
[348] *Id.* at 9-10.
[349] FIKRET BERKES, SACRED ECOLOGY 7 (3d. ed. 2012) (defining TEK as "a cumulative body of knowledge, practice, and belief, evolving by adaptive processes and handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment.").
[350] *Id.* at 3.
[351] *Id.*

5. RECOMMENDATIONS

This final chapter addresses the last two objectives of this report:

- **Develop a framework for a community-based Subsistence & Ahupuaʻa Management Plan for the Manaʻe Moku, Mauka to Makai; and**
- **Summarize Community Recommendations for the East Slope Management Plan**.

It aims to be clear in the roles and responsibilities of the various entities involved. The chapter concludes with a brief list of "Next Steps" for implementation.

This section builds on the information provided to meet the first two objectives of this report. The first objective entailed documenting Native Hawaiian traditional and customary practices of Manaʻe kamaʻāina. This information is provided in Chapter 3 on "Findings." The interviews and intake information gathered demonstrate that Native Hawaiian traditional and customary practices are still regularly exercised in Manaʻe, both in the form of subsistence activities, such as hunting, farming, fishing, and gathering, as well as in customary, religious, and ceremonial practices. Details of those practices are described and documented in the sections on cultural sites and trails, nearshore fisheries, and hunting. In addition, Chapter 3 summarizes the manaʻo shared by the community on the proposed East Slope Management Plan (January 2014 draft), and how it may potentially impact the people's ability to carry out their traditional and customary practices. While some informants had concerns that the expanded fence could cause some negative impacts in the short-run, such as having to jump over fences or locate step-overs to access certain areas, most recognized and supported the intended positive effects of repairing the watershed for the long-term ecosystem health.

Chapter 4 "Legal Framework and Analysis" addresses the second objective of assessing specific legal protections of Manaʻe kamaʻāina traditional and customary practices. The legal section is divided into specific areas of the law that correspond to manaʻo shared by Manaʻe kamaʻāina informants. This manaʻo is analyzed within the context of the proposed expansion of the East Molokaʻi Watershed Partnership (EMoWP). It covers traditional subsistence activities in Manaʻe, religious and ceremonial protocols, and efforts to mālama ʻāina. The chapter describes relevant constitutional and statutory provisions, as well as the body of common law developed from Hawaiʻi Supreme court decisions on Native Hawaiian rights.

Building on that information, this chapter takes the manaʻo shared by the kamaʻāina informants about their traditional and customary practices, along with the legal information pertinent to such practices in Manaʻe, and weaves them together to create the framework of the Subsistence and Ahupuaʻa Management Plan for Manaʻe Moku. It then summarizes the Community Recommendations for the East Slope Management Plan from the perspective of it being a key aspect of the overall restoration of the moku of Manaʻe from an indigenous mauka-a-makai standpoint. It should be noted that the authors recognize the stated desire of many community members to have one integrated plan, and advocate that the future Subsistence and Ahupuaʻa Management Plan be such a document. The original intent was for this document to be that plan. However, it was decided that it would instead take the first step of creating the framework and foundation for such a plan. A comprehensive moku-wide plan will require significantly more

resources to be fully adequate, including an in-depth and iterative community process. Furthermore, time constraints require that community recommendations for the East Slope Management Plan be shared while the project is still in its planning phase.

Since the recommendations within this Traditional & Customary Practices Report (TCP) provide for both short and long-term measures, and whereas some of these recommendations can be implemented in the short-term, and are within TNC's scope of work, we encourage the incorporation of those recommendations into the East Slope Management Plan. For those long-term strategies that need more community leadership and management outside of TNC's scope of work, we encourage that this TCP be utilized as a starting point for future discussions regarding comprehensive moku planning. In addition, other restoration projects within Manaʻe should continue to move forward, whether they are undertaken by individuals, families, organizations, or by ahupuaʻa. It is the authors' hope that even though this report it is not a "full plan," it can still be useful in securing funding for projects that are in alignment with what is presented here.

Regarding the input for the East Slope Management Plan, the majority of the community members interviewed, including kamaʻāina informants, do support the proposed fence, as long as it is done with additional management efforts that are rooted in Native Hawaiian mālama ʻāina values and traditional ahupuaʻa land management practices. From manaʻo shared by kamaʻāina informants, the following overarching/foundational principles were identified (for any and all planning processes for Manaʻe):

- **In developing a management strategy, utilize a holistic ahupuaʻa-based approach running from mauka to makai.**
- **Allow each ahupuaʻa to implement their own vision for their place**.
- **Ensure access for Native Hawaiian traditional and customary practices.**
- **Implement management strategies incrementally, observe impacts, and make adjustments accordingly.**
- **Conservation efforts should include the hiring of local residents and the utilization of community members in resource management.**

This report acknowledges that some informants are opposed to the utilization of a fence as any part of the conservation effort. The reasons are detailed herein. Some kamaʻāina informants shared their ideal scenario whereby a fence or some type of barrier would not be needed, and the people of Manaʻe could reclaim their traditional kuleana, both their rights and responsibility, to mālama (care for and manage) their ancestral/traditional lands or ahupuaʻa themselves. However, as many of these same informants have expressed, there are numerous challenges to enacting this proposition.

With this in mind, the recommended approach presented here is to honor all manaʻo shared, and to weave them together into a unified framework for a community-based Manaʻe Subsistence and Ahupuaʻa Management Plan, along with recommendations for the East Slope Management Plan. Additionally, this report incorporates traditional Native Hawaiian land management practices to complement and enhance modern conservation techniques.

The recommendations are presented in the following sections:

- **Framework for a Subsistence & Ahupuaʻa Management Plan for the Manaʻe Moku, Mauka to Makai**
- **Community Recommendations for the East Slope Management Plan**
- **Next Steps**

5.1. FRAMEWORK FOR A SUBSISTENCE AND AHUPUAʻA MANAGEMENT PLAN FOR THE MANAʻE MOKU, MAUKA TO MAKAI

Various members of the Manaʻe community requested the creation of a community-based Subsistence and Ahupuaʻa Management Plan in tandem with the East Slope Management Plan presented by TNC and the EMoWP. These plans are intended to be complementary to each other and are ideally conceived together as an integrated mauka-a-makai management framework. Ultimately, the authors advocate for an in-depth, iterative process with the community that would involve more time and funding, and would result in a detailed action plan with specific goals, timelines, and entities responsible for implementation. As one informant said, "yes, I support a larger plan that is community-based and addresses the entire moku, but it should go ahupuaʻa by ahupuaʻa, not one-size fits all. It's gotta have specific recommendations for each ahupuaʻa. I know that's a lot of work, but that's how it should be."

Thus, what is presented here is a framework and foundation for such a plan. It is hoped that the full plan can be developed in the near future with additional resources, but fewer than would be necessary if starting from ground zero, since it can build on what is provided in this document.

First and foremost, the Subsistence and Ahupuaʻa Management Plan for the Manaʻe Moku should be based on a solid foundation of Native Hawaiian values and principles, which includes: **the 8 Resource Realms and ʻAha Decision-Making Process, the 5 Wao of the Ahupuaʻa, and Mālama ʻĀina and ʻOhana Values.** These three concepts were presented in Chapter 4, and are summarized here in relation to the recommendations.

5.1.1. The 8 Realms of Decision-Making under the ʻAha Councils

As discussed in Chapter 4, historically there were certain ethics and realms of consideration upon which the ʻAha councils of Molokaʻi based their decisions.[352] The eight realms of decision-making included consideration of[353]:

1) ***Moana-Nui-Ākea*** – the farthest out to sea or along the ocean's horizon one could perceive from atop the highest vantage point in one's area.
2) ***Kahakai Pepeiao*** – where the high tide is to where the lepo (soil) starts. This is typically the splash zone where crab, limu, and ʻopihi may be located; sea cliffs; or a gentle shoreline dotted with a coastal strand of vegetation; sands where turtles and seabirds nest; or extensive sand dune environs such as Moʻomomi in northwest Molokaʻi that expand upward all the way to the mountain.
3) ***Ma Uka*** – from the point where the lepo (soil) starts to the top of the mountain.
4) ***Nā Muliwai*** – all the sources of fresh water, ground/artesian water, rivers, streams, springs, including springs along the coastline that mix with seawater.

5) ***Ka Lewalani*** – everything above the land, the air, the sky, the clouds, the birds, the rainbows.
6) ***Kanaka Hōnua*** – the natural resources important to sustain people. However, management is based on providing for the benefit of the resources themselves rather than from the standpoint of how they serve people.
7) ***Papahelōlona*** – knowledge and intellect that is a valuable resource to be respected, maintained, and managed properly. This is the knowledge of the kahuna, the astronomers, the healers, and other carriers of ʻike.
8) ***Ke ʻIhiʻihi*** – elements that maintain the sanctity or sacredness of certain places.

The ʻAha as a collective considered every decision around impact and benefit to the eight resource realms. The ʻAha would first identify and consider a given problem or situation; engage in a critical examination of potential solutions with consideration of their possible effects upon the eight resource realms; and ultimately implement solutions that "honor the ancestral past, address the needs of the present, and set up future generations to have more abundance."[354] Potential solutions were weighed according to how beneficial or detrimental they were to each realm. Kumu John Kaʻimikaua expressed that this wise management resulted in lōkahi, "the balance between the land, the people that lived upon the land and the akua (gods)." In turn, lōkahi manifested "pono, the spiritual balance in all things."[355]

Application to Subsistence and Ahupuaʻa Management Plan: It is recommended that the 3-Part Decision-Making Process adopted by the ancient ʻaha councils and the 8 Resource Realms of Decision-Making be utilized by whatever entity eventually oversees implementation of the Plan.

5.1.2. The 5 Wao of the Ahupuaʻa

Identification of wao, which modernly can be understood as bio-cultural zones,[356] is a helpful framework for understanding where Manaʻe hoaʻāina traditional and customary practices are concentrated and what types of management actions are most appropriate within each zone. The zones include the following: Wao Akua, Wao Kele, Wao Nahele, Wao Lāʻau, and Wao Kānaka. Multiple definitions of the 5 wao were shared in Chapter 4, thus abbreviated definitions are given below for reference:

1) ***Wao Akua*** – sacred, montane cloud forest, core watershed, native plant community, non-augmented and an area that was traditionally kapu (forbidden, prohibited).[357]
2) ***Wao Kele*** – saturated forest just below the clouds, the upland rainforest where human access is difficult and rare, and an area that is minimally augmented.[358]
3) ***Wao Nahele*** – remote forest, highly inconvenient for human access; a primarily native plant community; minimally augmented; and [utilized by early Hawaiians as a] bird-catching zone.[359]
4) ***Wao Lāʻau*** – a zone of maximized biodiversity, comprised of a highly augmented lowland forest due to integrated agroforestry of food and fuel trees, hardwood trees, construction supplies, medicine and dyes, and lei-making materials.[360]
5) ***Wao Kānaka*** – where the early Hawaiians chiefly settled. These were the kula lands, "the sloping terrain between the forest and the shore"[361] that were highly valued and most accessible to the people.[362] These were the areas where families constructed their hale,

cultivated the land, conducted aquaculture, and engaged in recreation.[363] Wao Kānaka did not terminate at the shore but extended into the sea.

Application to Subsistence and Ahupuaʻa Management Plan: It is recommended that the framework for the Plan is based on these 5 Wao.

5.1.3. Mālama ʻĀina and ʻOhana Values

As reported, the overwhelming majority of cultural informants emphasized the need to recognize and respect Native Hawaiian mālama ʻāina values, and agreed that any and all conservation efforts must include access that would allow for Native Hawaiian traditional and customary hunting and gathering rights, as well as any and all cultural practices. When we look at whether something has evolved into a cultural practice, a litmus test is to look at the ʻohana, or the family unit, while understanding that traditionally, the ʻohana is central to the life of the land.

Professor Davianna McGregor, who has interviewed a large number of cultural informants residing in "cultural kipuka" (rural areas that have maintained cultural understandings and practices),[364] identified common ʻohana cultural values and customs for subsistence and mālama. The essence of these understandings should be the standard by which to measure whether something is a cultural practice or not. It has to maintain the essence of these values. Many of the values and customs included in Professor McGregor's list were also identified by the cultural informants for this plan.

According to Professor McGregor, what distinguishes Hawaiian custom and practice is the honor and respect for traditional ʻohana cultural values and customs to guide subsistence harvesting of natural resources. Such ʻohana values and customs include but are not limited to the following:

1) Only take what is needed.
2) Don't waste natural resources.
3) Gather according to the life cycle of the resources. Allow the native resources to reproduce. Don't fish during their spawning seasons.
4) Alternate areas to gather, fish and hunt. Don't keep going back to the same place. Allow the resource to replenish itself.
5) If an area has a declining resource, observe a kapu on harvesting until it comes back. Weed, replant and water if appropriate.
6) Resources are always abundant and accessible to those who possess the knowledge about their location and have the skill to obtain them. There is no need to overuse a more accessible area.
7) Respect and protect the knowledge which has been passed down intergenerationally, from one generation to the next. Do not carelessly give it away to outsiders.
8) Respect each other's areas. Families usually fish, hunt, and gather in the areas traditionally used by their ancestors. If they go into an area outside their own for some specific purpose, they usually go with people from that area.
9) Throughout the expedition keep focused on the purpose and goal for which you set out to fish, hunt, or gather.

10) Be aware of the natural elements and stay alert to natural signs, e.g. falling boulders as a sign of flash flooding.
11) Share what is gathered with family and neighbors.
12) Take care of the kūpuna who passed on the knowledge and experience of what to do and are now too old to go out on their own.
13) Don't talk openly about plans for going out to subsistence hunt, gather, or fish.
14) Respect the resources. Respect the spirits of the land, forest, ocean. Don't get loud and boisterous.
15) Respect family ʻaumakua. Don't gather the resources sacred to them.[365]

In terms of understanding Native Hawaiian traditional and customary rights, it is vital to understand that access and usage privileges are balanced by the responsibility to mālama. There are rights for access and usage, but there is also a kuleana, or responsibility to take care of resources. That understanding was embedded within the kapu system. Namely, strictures were placed on the harvesting of certain fish during their spawning times or kapu were placed on certain areas to allow for replenishment. Kapu were lifted once spawning periods ended and konohiki (resource managers) observed an abundant supply of fish in a given area. Thus, the understanding that access rights of hoaʻāina go hand-in-hand with a kuleana to mālama ʻāina.

Application to Subsistence and Ahupuaʻa Management Plan: It is recommended that over-arching values be agreed upon for the foundation of the Plan. The ʻohana values listed above can provide a solid starting point. In addition, the following values, which are closely related to (or based on) the ʻohana values, were identified through the process of developing this report. They may also serve as examples to be considered for the final Plan.

The "Icebox" Value – Many residents of Manaʻe talked about the ocean and the land as their "icebox." This is an important concept to discuss because people have different interpretations of what it means. The understanding of the icebox is that you grab the items you need to make a meal, then put everything back in – that's how the icebox works. You don't take everything out at once. Today, many feel that if they don't take the last ʻopihi then someone else will, which indicates a lack of understanding of the concept. "Icebox" means you should just take what you need for today, so that species can continue to reproduce and flourish tomorrow and for future generations.

Today, as cultural values erode, resource abuse is widespread. One kamaʻāina informant said, "you cannot take from the icebox if the icebox is broken." Basically, the "icebox" of Manaʻe needs to be fixed; that's where mālama comes in. Another value of Hawaiʻi's kapu system was the careful balance of multiple and potentially competing subsistence usages and ceremonial practices. Kūpuna practiced self-restraint to avoid over-harvesting and to ensure abundance. There was also active mālama taking place, some of which continues today. Numerous kamaʻāina informants expressed the value of exercising self-restraint so that the resources are maintained. Several of them also shared how they practice this ethic, such as one informant who said that he doesn't gather hīhīwai anymore to allow for replenishment and encourages others to do the same. One cultural informant described how he proactively conducted mālama practices through kanu (planting) and re-stocking hīhīwai and ʻoʻopu in streams that had lost or diminished populations of these native and endemic species. He also labored to provide a

healthy environment for these species by cutting back java plum trees that create a thick canopy overhead and shade out stream habitat and whose roots absorb too much water and cause stagnating conditions.

"Hunting Pono" Values – Similar concerns about eroding cultural values were raised by Manaʻe hunters. There is a sense that the younger generation lacks the values of older generations. There have been observations that many young hunters are not hunting for meat, but instead for trophy racks. This is indicated by facebook posts of their racks on the internet and only taking prime venison cuts and leaving the rest of the carcass on land to rot. Older hunters said they were taught to take every part, not to waste, and not to pollute. They would take as much meat as they could, and then bury the remains. Unfortunately, younger hunters are dishonoring these cultural subsistence values.

Some young hunters also access hunting grounds disrespectfully with loud ATVs instead of walking the hunting trails. The use of these vehicles to tear up traditional trails and enter resource abundant grounds is a form of disrespect and a lack of consciousness towards the ʻāina that feeds us. Elder cultural informants identified the value of walking to a place (vs. driving), since walking the trails affords the opportunity to see and monitor the resources, to know or learn where to go for resources, to appreciate what you have, and to approach respectfully. Also, accessing hunting (or fishing) spots by foot is a natural conservation method because people will be less prone to over-harvest when they have to carry everything out on their back.

In response to these observations, several kamaʻāina informants recommended the hunter education program be augmented to include conservation skills/techniques, along with mālama ʻāina values and practices. This was seen as a solid strategy since all individuals are required to attend hunter education classes to earn a hunting license. Young hunters can be taught cultural values and recruited to engage in conservation work so they develop a good ethic early on. Lastly, there was significant discussion on developing a "hunting hui" in order to conduct community hunts, pool resources, and operate under a common liability insurance that would satisfy the concerns of large landowners whose lands are accessed for hunting. Such a hui could also assist in various conservation activities – both on public and private lands – such as fixing fences, installing/repairing irrigation, etc., in order to give back to the landowners in exchange for access.

"Educational Values/The Value of Education" – Besides hunters, numerous other kamaʻāina informants talked about the need for education, both in terms of specific practices, as well as more overarching values. They believe the focus must be placed on re-instating traditional values within the community. One informant stated that there should be widespread education of the customary and traditional practices of taking only what you need, taking one plant and planting two or three in its place, and not hunting the same place repeatedly.

While it was widely agreed that education must be a key component of this Subsistence and Ahupuaʻa Management Plan, the specific components of that educational program still need to be developed. Some suggestions included education for hunting, fishing, fishpond restoration, native plant restoration, and loʻi kalo restoration. All of these courses could include a foundation of mālama ʻāina values and how to incorporate them into such practices.

5.1.4. Ahupuaʻa Management Practices

Traditional ahupuaʻa land management practices are founded on Native Hawaiian values and principles of mālama described above. Kamaʻāina informants were asked, "If you were the konohiki, and you were in charge of taking care of your ahupuaʻa, how would you do it?" There was a wide array of answers, from general values to specific practices. Many informants shared specific recommendations about their ahupuaʻa or others in Manaʻe, where they and/or their ʻohana carry out various cultural practices, such as taking care of heiau, restoring and planting loʻi, gathering lāʻau lapaʻau and/or other native plants, utilizing traditional fishing techniques, restoring fishponds and streams, etc. It is critical that this knowledge is preserved to ensure that such practices will be perpetuated. And although much of their manaʻo is specific to their place, there were common threads, which are compiled below.

In addition, one group that we interviewed, Hui Aloha ʻĀina o Manaʻe ("the Hui"), created an outline for an "Aloha ʻĀina Ahupuaʻa Training Program" (see Appendix C). It should be noted that this group wanted to implement their program without a fence. Still, their program included many of the main components that other informants identified, and is incorporated below.

Thus, what is presented in the following table is a summary of the key components as shared with us by the community members (largely kamaʻāina informants) we interviewed, including the Hui. It summarizes the key recommendations shared, and should be added to as appropriate. The framework is presented in a table for ease of understanding and viewing. Following the table is a longer narrative that provides a more detailed explanation of the table. The narrative is in outline form and contains some of the place-specific recommendations shared.

Table 5.1: Mana‘e Subsistence & Ahupua‘a Management Plan Framework

WAO	NATURAL & CULTURAL RESOURCES	EXISTING CONDITION& THREATS	LEGAL PROTECTIONS	COMMUNITY MANAGEMENT RECOMMENDATIONS
WAO AKUA ● Sacred Forest ● Montane Cloud Forest ● Core Watershed ● Native-Plant Community ● Non-Augmented ● Traditionally Kapu area	○ Native Forest ○ Freshwater source ○ North to South Trails (e.g., Wailau to Mapulehu Trail) ○ Goat (some, both N & S side) ○ Pig (migrate between N & S) ○ Deer (some places like Pākaikai)	*A complete inventory needs to be done. EMoWP will be doing an Environmental Assessment (EA) and Cultural Impact Assessment (CIA) for each unit as they progress, which should cover Wao Akua for those areas.*	▪ Trails – Maintain Native Hawaiian cultural rights & practices to traverse on traditional trails for travel, subsistence, and religious purposes. Consider designation of all traditional trails as public trails under the State Na Ala Hele Trails program. ▪ Hunting – Provide waivers and/or Memoranda of Agreement (MOA) between local/community hunters, EMoWP, & other landowners. Form hunting hui/cooperatives with mandated liability insurance and initiate partnerships or agreements with large landowners for hunting access. Coordinate with hunter education and licensing program supplemental curriculum for traditional management and conservation work in tandem with EMoWP initiatives.[366]	❑ Wao Akua should be respected and largely left alone, which can be accomplished with fencing. ❑ Implement fence (where supported). ❑ Manage ungulates in order to protect the critical water resources located there. ❑ Remove invasive plants and re-plant natives, as feasible. ❑ Ensure access for hoa‘āina hunting, Native Hawaiian traditional and customary gathering and mālama practices, religious and ceremonial activities. ❑ Maintain trails and ensure access.
WAO KELE ● Saturated Forest (below clouds) ● Upland Rainforest (human access difficult and rare) ● Minimally Augmented	○ Native Forest ○ Streams ○ Waterfalls ○ North to South Trails (e.g., Wailau - Mapulehu Trail) ○ Goat (some, both N & S side) ○ Pig (migrate between N & S) ○ Deer (some places like Pākaikai)	*A complete inventory needs to be done. EMoWP will be doing an EA and CIA for each unit as they progress, which should cover Wao Kele for those areas.*	▪ Trails – same as above. ▪ Hunting – same as above. ▪ Streams – consider application to State Water Commission for Surface Water Management Area Designation of important streams. Work with Water Commission to determine In-Stream Flow Standards and include community collaboration (critical to determine how much water is needed for traditional and customary practices and stream health).	❑ Implement fence (where supported). ❑ Manage ungulates; Implement hunting recommendations detailed in narrative below. ❑ Remove invasive plants and re-plant natives, as feasible. ❑ Ensure access for hoa‘āina hunting, Native Hawaiian traditional and customary gathering and mālama practices, religious and ceremonial activities. ❑ Maintain trails and ensure access. ❑ Maintain and restore native stream ecology.

WAO	NATURAL & CULTURAL RESOURCES	EXISTING CONDITION& THREATS	LEGAL PROTECTIONS	COMMUNITY MANAGEMENT RECOMMENDATIONS
WAO NAHELE ● Remote Forest (highly inconvenient for human access) ● Primarily Native Plant Community ● Bird-Catching Zone ● Minimally Augmented	○ Native Forest ○ Streams ○ Waterfalls ○ ʻOʻopu ○ Hīhīwai ○ North to South Trails (e.g., Wailau - Mapulehu Trail) ○ Goat, Pig, Deer ○ Lei plants (e.g., maile)	*A complete inventory needs to be done. EMoWP will be doing an Environmental Assessment (EA) and Cultural Impact Assessment (CIA) for each unit as they progress, which may include Wao Nahele in those areas.*	▪ Trails – same as above. ▪ Hunting – same as above. ▪ Streams – same as above.	❑ Protect Waiakeakua, the waterbowl that feeds all streams. ❑ Implement fence (where supported). ❑ Manage ungulates; Implement hunting recommendations detailed in narrative below. ❑ Remove invasive plants and re-plant natives, as feasible. ❑ Restore Ulu Kukui o Lanikaula at Puʻu o Hoku to catch the rain cloud. ❑ Ensure access for hoaʻāina hunting, Native Hawaiian traditional and customary gathering and mālama practices, religious and ceremonial activities. ❑ Maintain trails and ensure access. ❑ Maintain and restore native stream ecology.
WAO LĀʻAU ● Lowland Forest ● Maximized Biodiversity ● Highly Augmented due to Integrated Agroforestry (food and fuel trees, hardwood trees, construction supplies, medicine and dyes, lei materials)	○ Native Lowland Forest ○ Trails: lateral - between ahupuaʻa; vertical N-S, mauka-makai ○ Goat, Pig, Deer ○ Streams: ʻoʻopu, hīhīwai ○ Springs ○ Brackish water fish species that swim and feed upstream: e.g., ʻaholehole, mullet ○ Cultural sites: heiau, puʻuhonua, etc. ○ Native plants: kukui, wauke, ulu, pepeiao ○ Lei Plants: maile, ginger ○ Construction wood and plant fibers for structures and implements ○ Loʻi kalo	*A complete inventory needs to be done for Wao Lāʻau. Should be done as part of next steps.*	▪ Trails – same as above. ▪ Hunting – same as above. ▪ Streams – same as above. ▪ Appurtenant Water Rights - an inventory should be done to determine appurtenant water rights associated with loʻi kalo (taro lands) (loʻi) and ʻauwai (irrigation ditches) which have reserved water rights from the time of the Māhele. ▪ Wahi pana – Inventory important wahi pana and cultural sites, and petition to include them in National and State Historic Sites Registries.	❑ Implement fence where feasible and supported. This is most likely lower than proposed fenceline, so would require additional landowner agreements. ❑ Manage ungulates; implement hunting recommendations. ❑ Remove invasive plants and re-plant natives, ❑ Restore Ulu Kukui o Lanikaula at Puʻu o Hoku ❑ Ensure access for hoaʻāina hunting, Native Hawaiian traditional and customary gathering and mālama practices, religious and ceremonial activities. ❑ Maintain trails and ensure access. ❑ Maintain and restore native stream ecology. ❑ Restore koʻa for ceremonial offerings and to serve as a line of sight to important traditional fishing grounds in the ocean. ❑ Cultural sites should be cared for and maintained. Mālama should be carried out by hoaʻāina families as feasible.

WAO	NATURAL & CULTURAL RESOURCES	EXISTING CONDITION & THREATS	LEGAL PROTECTIONS	COMMUNITY MANAGEMENT RECOMMENDATIONS
WAO KANAKA ● "Hawaiian Footprint" Zone ● Habitation ● Agriculture ● Aquaculture ● Recreation	○ Cultural sites (e.g., heiau) ○ Burials ○ Trails (lateral - between ahupuaʻa and N-S, mauka-makai) ○ Canoe plants/trees: ʻulu, maiʻa, ʻuala, kalo (wet & dryland) ○ Native plants/trees: kukui, wauke, pepeiao, etc. ○ Lei Plants: maile, ginger, ti leaf, etc. ○ Fishing koʻa ○ Shoreline resources: limu, crab, pipipi, kupeʻe, ʻopihi, ʻopae, etc. ○ Ocean resources: fish, heʻe, honu, etc. ○ Fishponds ○ Estuaries ○ Springs entering shoreline/ocean ○ Stream resources: ʻoʻopu, hīhīwai, prawns ○ Reef patches tended as sea gardens (associated with women) ○ Manini houses (tended by women) ○ Special fishing grounds tended by ʻohana (linked to koʻa on land) ○ Reef ○ Open Ocean	*A complete inventory needs to be done for Wao Kanaka.* *Should be done as part of next steps.*	▪ Streams – same as above. ▪ Wahi pana – same as above. ▪ Protect ancient burial sites through official burial registration with State Historic Preservation Division. ▪ For landowners not in the Watershed partnership and who own property below proposed fenceline, draft right of entry agreements for kamaʻāina families to do restoration, such as native plantings with mobile fencing units to restore lowland forests. ▪ Create hui or cooperative for cottage industry development among kamaʻāina families to operate native plant nurseries for reforestation work. ▪ Create agreements between native plant nursery growers and implementers of restoration work (EMoWP for mauka areas) for purchase of native plants. ▪ Initiate strategy for leasing of State-owned fishponds for restoration work, food production, reopening and protecting springs. ▪ Participate in new statewide streamline permitting process for fishpond restoration and utilization. ▪ Investigate new/additional zoning consistent with this Manaʻe TCP & larger ahupuaʻa plan. ▪ Prevent filling and building on wetlands through strict enforcement of zoning and permitting requirements. ▪ Investigate illegal grading and grubbing activities taking place without a permit to protect ahupuaʻa resources, especially springs, streams and nearshore area from siltation and non-point source pollution. ▪ For overall protection of nearshore fisheries, initiate process and proposed management plan for Community-Based Subsistence Fishing Area (CBSFA) designation. ▪ Institute protections for endangered green sea turtles in critical mating and nesting areas (eg ʻAhaʻino, Honomuni). Minimize negative land-based activities that contribute to deterioration of essential habitat.	❑ Remove invasive plants and re-plant natives, as feasible. ❑ Ensure access for hoaʻāina hunting, Native Hawaiian traditional and customary gathering and mālama practices, religious and ceremonial activities. ❑ Maintain trails and ensure access. ❑ Restore koʻa and line of sight from ocean. ❑ Cultural sites should be cared for and maintained. Mālama should be carried out by hoaʻāina families as feasible. ❑ Maintain and restore native stream ecology. ❑ Establish native nurseries with mauka and makai species. ❑ Loʻi and ʻauwai should be restored, re-opened, and kalo planted for production. Loʻi can also be utilized as silt traps to reduce run-off. ❑ Support sustainable farming for personal and commercial production. ❑ Support fishpond protection and restoration efforts. ❑ Remove invasives, such as gorilla ogo limu, or invasive fish like roi. ❑ Implement shoreline monitoring and offshore monitoring. ❑ Explore options for community-based resource management of marine resources through obtaining Community-Based Subsistence Fishing Area (CBSFA) designation.

*Note: This table reflects a synthesis of the manaʻo of kamaʻāina informants of Manaʻe. The ʻAha Moku o Koʻolau/Manaʻe requested that this Traditional and Customary Practices Report be done with an integrated ahupuaʻa management approach that reflects kūpuna (Hawaiian ancestral) practice and decision-making. In addition to the above table, which summarizes the primary actions proposed, below is a more detailed description of these recommendations.

Narrative to support preceding table with more detailed recommendations:

- **Restore natural resource infrastructure to bring back the regular rains (reported to have been daily) that numerous kamaʻāina informants recalled, and increase soakage in landscape, which includes restoration of native forests in mauka areas, as well as lowland forest.** This includes the following specific recommended actions:
    - Protect **Waiakeʻakua,** identified as "the birthplace of waters," and described as "the most important water source because it feeds every stream on that side of the island." It's critical that this area be protected because it acts like a sponge that soaks up the moisture, like Kamakou Bog; its health is vital to the overall watershed health.
    - Restore and re-forest **Ka Ulu Kukui o Lanikaula**, the sacred kukui grove located on Puʻu o Hoku Ranch lands, which is said to be the key to bringing back the rains to Manaʻe.[367] Develop community agreement with Puʻu o Hoku Ranch to re-plant kukui and have local families provide native plant nurseries for that.
    - Remove invasive plants, such as kiawe and Java Plum, and re-plant natives in forest succession pattern. Re-create the native forests by simultaneously planting all levels (ground-cover, sub-canopy, canopy, etc.). Plant in accordance with the Wao (Wao Lāʻau is the food forest; Wao Kanaka is the human agricultural zone), and use species that also provide materials for building, crafts, clothing, and food (canoe plants). Support the creation of groves and orchards.
    - Start native plant nurseries that provide stock for such plantings.
    - Utilize the orographic effect for strategic native tree plantings at various height intervals; steady trade winds carry moisture from the ocean, causing condensation on trees. Trees are responsible for 40% rainfall by lift. This is orographic or "lift rain" that is capable of recycling over time to produce 100% rain from a cloud forest in the Wao Akua and Wao Nāhele. Tree lines cause the wind to spiral vertically and descend back down to hit succeeding tree lines along higher elevations. If trees are strategically planted at different height intervals, it will cause several of these spirals as it travels up the mountain top. As a result, bands of rainfall will form along the various altitudes and tree lines and travel down ahupuaʻa from mauka to makai.
    - In areas below EMoWP's fenceline, provide mobile fences to protect new saplings until they grow to a certain height and trunk size that make them invulnerable to ungulate grazing.
    - Engage in responsible plant gathering practices that promote continued and healthy growth.
    - Initiate a program similar to efforts undertaken in Niger, Africa in Farmer Managed Natural Regeneration (FMNR) where heavily grazed native tree plants can be restored through strategic trimming and pruning work to assist them to grow straight and tall, rather than bush-like.[368]

- Set-up water catchments to collect rainwater to irrigate plants.
- Create kīpuka (oases) that will allow for regenerative growth of lowland forests in the long-term. Start by strategically growing appropriate water plants near springs that will add to water absorption in the landscape and eventually create more moisture rich habitat for lowland forest restoration.
- Plant utilizing methods that capture rain/moisture and reduce erosion, which will be unique to each location, but could include techniques such as staggered net-and-pan plantings that circulate water from plant to plant and tree to tree. Incorporate earthworks, such as building and restoring terraced areas for loʻi and installing swales for planting trees. Utilize loʻi for the dual purpose of cultivating kalo and serving as silt traps to purify water and avoid siltation in fishponds and on reefs. Identify plants that hold soil in place; don't remove a tree (even if invasive) without re-planting with something else (plant more than one tree).
- Use cabins for not only hunter access, but for restoration work as appropriate.
- Collaborate with people already doing restoration work and build off of their efforts and successes.

- **Preserve and re-open the springs that contribute to muliwai (brackish water), especially where ancient fishponds are located:**
  - Springs are an important part of moʻolelo of the area and contribute to overall food and water security.[369]
  - Restore walls of dilapidated fishponds to prevent sand and rocks that may be brought in by ocean currents from covering the springs that enter into the ocean. As one kamaʻāina informant said, "It is well-known that fishponds were typically constructed around underwater springs. Part of the reason that they were constructed was to protect these springs from stones and sand debris that could potentially cover these springs were it not for the presence of the kuapā (fishpond wall)."
  - Remove mangrove that have established themselves on and around these springs.
  - Consider again the orographic effect, and how muliwai feeds the rain coming off the ocean onto the land, impacting plants mauka.
  - Estuaries are known as some of the most vital and productive areas. The mix of fresh and salt water along with rich stream and spring nutrient inputs result in a multitude of niches for marine flora and fauna. Estuaries also serve as important feeding, spawning, and nursery grounds and are the entry and exit points for diadromous species.

- **Re-open old spring-fed loʻi that were part of the loko iʻa kalo complex (areas where loʻi kalo fed loko iʻa and nutrients were cycled between the two):**
  - Restore loʻi and plant kalo.
  - Remove invasive trees (especially water-intensive species, like Java Plum) located on old loʻi terraces.
  - Clean out ʻauwai connecting streams to loʻi (e.g., Hau trees).
  - Restore loko iʻa.

- **Restore streams:**

- Remove invasive canopy trees that shade streams and suck up water (e.g., Java Plum).
- Plant natives along stream banks to stabilize, such as akakai grass. Native plants along banks also promote build-up of detritus (algal and micro-algal growth) as a food source for fish such as mullet and āholehole, which swim upstream; they need the stream cleared to do so.
- Restore habitat for hīhīwai and ōʻōpu through stream maintenance. Consider re-introduction of such species.
- Conduct stream monitoring.

➢ **Restore loko iʻa (fishponds):**
- Remove mangrove, re-open springs
- Remove invasive limu, re-plant with native and other edible limu for fishfeed and human consumption for subsistence.
- Erosion control efforts in mauka regions also beneficial to the ocean.
- Improve micro-ecosystem (habitat) for fish, especially those that are attracted to muliwai (mullet, awa, āholehole).

➢ **Restore reef and protect fishing grounds:**
- Identify and reduce harvesting of grazing fish that eat limu to reduce algal domination on the reef.
- Recognize Native Hawaiian families that have ancestral and on-going special relationships with certain fishing spots that were deliberately cultivated (e.g., fishing koʻa, certain reef patches, manini houses).
- Restore corresponding fishing koʻa/shrines or markers on land.
- Remove invasive limu, re-plant with native and other edible limu for fishfeed and human consumption for subsistence.
- Identify critical fish nursery areas and feeding grounds, nesting, spawning and reproduction of fish, turtle, and other marine species.
- Seek special legal protections for coastal resources through Marine Life Conservation District (MLCD), Fisheries Management Area (FMA), or Community Based Subsistence Fishing Area (CBSFA) designations. Special estuaries we would likely need to protect include Honouliwai, Honoulimaloʻo, and Hālawa.
- Recognize traditional nearshore fisheries (konohiki fisheries) that include fishing area from the shoreline to the edge of the barrier reef, or where there is no reef, one (1) mile from the shore. This means limiting recreational activities that pose a potential safety hazard to fishermen (skindivers), such as wind-surfing, kite-surfing, jet-skiing, water skiing, knee boarding. Maintain and enforce the law of no jet-skis/thrill-craft, as well as other activities that would disrupt fish schools, feeding, and nursery areas.

➢ **Recommendations for cultural sites and trails:**
- Restore, preserve, and maintain cultural sites, such as heiau, koʻa, etc. Mālama should be carried out by kamaʻāina families as feasible and appropriate.
- Restore, preserve, and maintain mauka-makai trails and trails traversing the Koʻolau and connecting the north and south faces of the island.
- Ensure that the fence does not obstruct these trails.

- There were lateral trails that connected ahupuaʻa. Identify, map, restore, and maintain those trails. Research if there was an alaloa; if so, map and restore it.
- Establish multi-purpose cabins at strategic points along ahupuaʻa clusters for plant maintenance of trails and cultural sites, as well as watershed restoration (removal of invasive and planting of natives) and hunting.

➢ **Improve large-scale land management practices:**

- While some large landowners utilize sustainable land management techniques, others were identified by kamaʻāina informants as having engaged in poor land management practices, such as cattle ranching in steep areas; grading, grubbing, and clearing large land areas which punctured water veins and dried up important spring lines below. These actions resulted in erosion, flash-flooding, ʻoʻopu and hīhīwai die-offs, landslides and mudslides, mud deposits on sensitive turtle nesting grounds, ocean fouling, and reef siltation. There should be a call to action for these landowners to become good neighbors and work with the community to improve their land management practices, and thereby contribute to overall watershed and ahupuaʻa health.
- Review the Molokai Community Plan, map out certain areas that are critical to the overall watershed health, and include these recommendations in the Community Plan.
- Review zoning, including the Special Management Area (SMA) near the shoreline; ensure there is legal development within those zones, as well as enforcement for grading and grubbing permits.
- Work with large landowners to create agreements with community to do the proposed conservation work, such as cleaning streams and springs, re-opening and clearing of trails, removal of invasive species, and re-planting of natives. These agreements could take the form of conservation or cultural easements, an MOA for right-of-entry, etc. Discuss the possibility of exchanging hana (work) for permission to hunt on large landowner property. Also discuss topics of liability, the creation of a hunting hui with common liability insurance, hunter education program with conservation training and work, and creating a Manaʻe specific hunter manual for safety, conservation, and work projects with large landowners.

5.2. COMMUNITY RECOMMENDATIONS FOR THE EAST SLOPE MANAGEMENT PLAN

This section presents a summary of community input and recommendations for the East Slope Management Plan (January 2014 draft). It is composed primarily of recommendations that are related to the proposed fence and those activities directly impacted by it, such as hunting, along with other traditional and customary practices within the proposed fenceline.[370] Overall, the majority of kamaʻāina informants interviewed are in support of the fencing project as proposed. However, other viewpoints were expressed as well, which were documented in more detail in Chapter 3. Thus, what follows is a summary of those perspectives. They are presented in the five (5) primary ways this conservation effort could be pursued, based on what was presented in the East Slope Management Plan and the input received for this process.

Community Manaʻo Regarding Proposed Fencing (summary of details in Chapter 3)

- **Proposed Fencing: Puaʻahala to Hālawa** – *as proposed in the East Slope Management Plan (January 2014 draft).*
    - Overall, the proposed fencing from Puaʻahala to Hālawa has substantial support by the kamaʻāina informants interviewed, as long as access for traditional and customary practices is ensured with the implementation of step-overs (which the East Slope Plan includes). Many also suggested additional management for the areas makai of the fenceline (to be implemented by kamaʻāina and various cultural groups who have already stepped forward, or who will step forward to take on the kuleana of implementing the Subsistence & Ahupuaʻa Management Plan). Several informants also stated that they would like to see mitigation efforts for unfenced areas that may be impacted by changed migration patterns of ungulates. However, not every ahupuaʻa supports the fence (specific ahupuaʻa identified below). Thus, it is recommended that the fence be implemented, first and foremost, in those areas that support it.

- **Alternative #1: Fencing with Pākaikai Corridor** – *a possible alternative presented in the East Slope Management Plan due to it being a preferred deer hunting area and being characterized by relatively degraded native forest.*
    - Alternative #1: Fencing all of Manaʻe with the exception of leaving a corridor at Pākaikai open has very little community support due to the potential negative impacts to the land, cultural sites, and water resources within the proposed corridor from heavy ungulate migration and traffic to this area. This alternative should not be pursued.

- **Alternative #2: No Fencing**
    - Of the kamaʻāina informants interviewed thus far, a few ahupuaʻa (hoaʻāina of the ahupuaʻa) have stated that their over-riding sentiment is "no fence" (specific ahupuaʻa identified below). Thus, it is recommended that the residents/kamaʻāina of those areas begin a dialogue with the implementers of the fence (TNC) about their desire to manage their place themselves. It is possible that as the initial fencing units are implemented west of them, the impacts may be seen as positive and worth implementing within their ahupuaʻa. If not, then alternatives should be pursued (see next alternative).

- **Alternative #3: Mauka-Makai Connector Fencelines** – *an alternative proposed by some kamaʻāina informants that are opposed to the mauka fencing project (East Slope Plan), and concerned about the spillover impacts to their ahupuaʻa where the proposed open corridor exists.*
    - Kamaʻāina proposed the construction of mauka-makai fences as connecting links to TNC/EMoWP's lateral fenceline that would be constructed along the pristine forest-edge. This strategy may serve to mitigate harm to neighboring, unfenced ahupuaʻa and abate concerns of ungulate outmigration and spillover into these unprotected areas.

- It is also in alignment with the sentiment of other kamaʻāina informants that communities in each ahupuaʻa should take care of their own issues without harming neighboring ahupuaʻa. This sentiment was shared by hunters who felt that each ahupuaʻa or ahupuaʻa "cluster" (where several ahupuaʻa are small in size and can combine their efforts) should conduct community hunting activities to control ungulate populations to a sustainable level and distribute meat to the families living in their area.
- The mauka-makai fence would serve to keep ungulates within their ahupuaʻa of origin while community hunters could organize regular campaigns to thin out herds within their own ahupuaʻa. One kamaʻāina hunter proposed a unique method for organizing community hunts along native, traditional fishing principles and strategies like "surround-net" and what could be likened to how loko ʻumeʻiki (fish trap ponds) are constructed and utilized. This hybridized method for hunting ungulates would entail setting up posts spanning the vertical length of ahupuaʻa. These posts would be established at 10 meter increments in the outline of a heʻe (octopus) head with ʻawe (legs) extending or fanning outward. On community hunt days, cargo net could be laid along these posts to form the shape of the heʻe much like surround net is laid in the ocean. Hunters located at lower elevations of the ahupuaʻa could "paipai" (scare) ungulates by coordinating their movements upward until the ungulates are trapped and cinched within the poʻo (head) of the heʻe.
- TNC has expressed some concerns about additional costs associated with mauka-makai connecter fences. The authors urge that this alternative be seriously considered if TNC and the EMoWP wishes to build and maintain a good-faith relationship with communities living in unfenced areas. Further dialogue will need to take place between kamaʻāina, large landowners, TNC, and all other key partners involved, with careful consideration to costs, potential impacts, and alternative management methods. Additional considerations are included in Table 5.3.

- **Alternate #4: Integrating "Release Valves" Between Fenced Sub-Units to Facilitate Ungulate Movement and Aid in Community Hunts** -- *an alternative to mauka-makai connector fences that would also address concerns of ungulate migration and spillover impacts to large unfenced corridors.*
  - If mauka-makai connector fences are too cost-prohibitive, another suggestion was offered that would entail creating incremental "release valves" between fencing sub-units in each ahupuaʻa/ahupuaʻa cluster. These "release-valves" are envisioned as open, vertical mauka-makai, N-S directional pathways that run between and parallel to TNC/EMoWP's fencing sub-units like mākāhā (gate openings) in loko kuapā (fishpond walls). To minimize further degradation of the Wao Akua and Wao Nāhele, these mākāhā-like pathways or release valves could be strategically located in areas that do not have intact native forests. These pathways could also run along the contour of the land to minimize erosion.
  - The function of these land mākāhā or release valves would be to control the flow of ungulates along various ahupuaʻa and mitigate spillover to the large open and unfenced corridor from Waialua to Hālawa. Each ahupuaʻa will have a fair share

of meat and hunters will not have to travel outside of their ahupuaʻa to hunt. This would also ensure that each ahupuaʻa will still have access in their area to animals for subsistence hunting. In this manner, increased hunting pressure and safety threats for homes located in the large open corridor from Waialua to Hālawa will be avoided.
    - Community hunts can also be strategically organized along these mākāhā openings or release valves since animal traffic is more likely to flow along these pathways. As a matter of human safety and to avoid hunting accidents with regular hikers, care must be taken to not site these mākāhā along ancient, traditional foot trails where people usually traverse.

- **Alternative #5: Lowered Fenceline** – *an approach recommended by some kamaʻāina informants whereby the proposed fenceline would be implemented lower than currently proposed in order to allow for the original native lowland forest to recover that was located within the Wao Lāʻau.*
    - Overall, this alternative should be considered in areas where the kamaʻāina and large landowners are interested in doing so. It has the potential to have an even greater impact to the health of the overall ahupuaʻa; however, it would also require additional landowners to join the East Molokai Watershed Partnership.

- **Additional Community Manaʻo Regarding Fencing** – *the recommendations below are elaborated on in Table 5.3.*
    - Smaller and More Manageable Sub-Units
    - Active Engagement and Inclusion of the community, especially hunters
    - Traditional Fishing Methods Adapted to Land in order to Manage Ungulate Populations.

<u>Manaʻo Shared by the Hoaʻāina (native tenants) of each Ahupuaʻa Cluster</u>

It is important to note that "hoaʻāina" legally refers to native tenants currently living in a specific ahupuaʻa, which is why it is used in the heading of this section. Based on the interviews conducted, tenants of each ahupuaʻa had very different perspectives and priorities. This makes sense based on the history of each ahupuaʻa being relatively separate and independent in their land management. Thus, the recommendation is that for those ahupuaʻa who want the fence, where that community is basically united on that approach, and the large landowners are a part of the partnership, then those ahupuaʻa should move ahead and implement their vision for their place.

In contrast, there are hoaʻāina of certain ahupuaʻa who are strongly opposed to the fence. In most of these cases, the hoaʻāina do not have a good relationship with the large landowners (or *some* of the landowners) in their ahupuaʻa. Often it is because they disagree with the way these landowners are currently managing their property – implementing land use practices that are not sustainable, or not within the spirit of mālama, but degrade ahupuaʻa health. Thus, it is these hoaʻāina who feel they should manage their own ahupuaʻa without a fence. In general, those informants who feel this way also believe they have the ʻike (knowledge) to do that. Perhaps in the future these hard feelings that are being experienced between large landowners and

community members can be worked through, but for now we need to look at each ahupuaʻa, or clusters of ahupuaʻa, and ensure that their vision is included in this plan.

In the ʻAha Council system, decisions were made along ʻAha Ahupuaʻa as well. So if a proposed action only affected that one ahupuaʻa, then councils would decide on the ahupuaʻa level, and the ʻAha Moku at the district level was not triggered for decision-making. We are finding as we are interviewing different families within different ahupuaʻa that they're often of one mind, so we can consider this as making decisions along the ahupuaʻa level. This is useful in cases such as this one, where the entire moku does not agree. If that's the case, then we must be sure that decisions made affect only that ahupuaʻa and not the others, which is when other strategies should be explored, such as mauka-makai fences.

The table below is a summary of manaʻo shared by the 44 key (mostly kamaʻāina) informants interviewed and/or surveyed (with an Intake Form) for this process. The authors took care to identify and talk to representatives of as many key long-time kamaʻāina families as possible, as well as to coordinate with TNC on who to talk to. In addition, TNC has talked with many of these same families, and is currently in the process of doing outreach to the residents of each ahupuaʻa as their project progresses, beginning with the Pākuʻi Unit, which consists of the ahupuaʻa of Puaʻahala, Kaʻamola, Keawanui, West ʻŌhiʻa, East ʻŌhiʻa, Manawai, Kahananui, ʻUalapuʻe, and Kaluaʻaha. Thus, as shown below, the informants interviewed for this process who live in the ahupuaʻa within the Pākuʻi Unit are generally in support of the fence as proposed by the most current East Slope Management Plan update (as of October 2014).[371]

Table 5.2: General Sentiment Towards Proposed Expanded Fence by Ahupuaʻa or Ahupuaʻa Cluster, From West to East

Ahupuaʻa	General Sentiment
Puaʻahala, Kaʻamola, Keawanui	Support the fence.
West ʻŌhiʻa, East ʻŌhiʻa, Manawai, Kahananui, ʻUalapuʻe	Support the fence.
Kaluaʻaha	Majority support the fence, some concern about access for subsistence practices.
Mapulehu, Pukoʻo, Kūpeke	Unknown (none interviewed).
ʻAhaʻino	Some against the fence, some support.
Honomuni, Kawaikapu, Kainalu, Pūniuʻōhua	Support the fence.
Waialua, Moanui, Kumimi	Some against fence, especially if there is a corridor created through this area (the Pākaikai Corridor alternative). The main concern is the outmigration and spillover of ungulates into this open corridor that would foul important streams that residents rely on for both agricultural and domestic purposes.
Honouliwai, Honoulimaloʻo	Support the fence. They recommended go slow, see if the first fence works out and adjust management accordingly. Some concern about Pākaikai Corridor also because they are reliant on stream water for both agricultural and domestic use.
Puʻu o Hoku Ranch lands	Undecided.
Hālawa	Support the fence. Emphasized the need for all ahupuaʻa tenants to be informed.[372]

*Note: This table is only based on the 44 informants surveyed for this process.

The following table presents the recommendations for the East Slope Management Plan shared by the kamaʻāina informants interviewed for this report. In December 2014, the authors met with EMoWP/TNC to review these recommendations, thus, their initial feedback is included as well.

Note new abbreviation utilized in table: "SAMP" (Subsistence & Ahupuaʻa Management Plan) to minimize table size.

Table 5.3: Community Suggestions for East Slope Management Plan

Community Suggestion	Additional Community Mana‘o	Initial EMoWP/TNC Molokai Feedback	Implementation
1. Create small, manageable fenced sub-units with priority to absolutely pristine native upland forest.	Build what you can manage and manage what you can build; building bigger and not being able to manage it in the long run reduces the effectiveness of protecting the watershed within the fenceline.	The size of fencing units is an ongoing debate. EMoWP strives to find the right balance between minimizing the amount of fencing used (larger units = less fencing, less disturbance in forest, less cost) and making units small enough to manage.	Size of units should be determined through an open dialogue between EMoWP & community.
2. In lieu of mauka-makai connector fences, create small corridors between fencing units in most appropriate places (i.e., areas that do not have intact native forest, and will not cause intensive erosion) as “release valves” that lessen ungulate migration and pressure on large, unfenced areas.	▪ Consider lesser quality areas (not intact native forest) for these potential “release valves” to allow for North-South migration and to ease pressure on unfenced areas not in the watershed partnership. ▪ This would also make coordinated community hunting more effective (ungulates would travel through corridors like fish do through mākāhā). ▪ These areas should not correspond with traditional trails where hunting may conflict with hiking activity and pose a potential safety hazard. ▪ Site these areas in less erosive terrain (this may entail creating an area that runs along contour with the land to reduce scarring and erosion of the landscape).	▪ If you create a corridor, you create edges, basically open more areas to “infection,” where invasive plants can spread. ▪ Creates safety concerns. Narrow corridors could create potential danger if ungulates (esp. in numbers) “collide” with people. ▪ The need for “release valves” indicates over-population. ▪ Another potential strategy might be to increase animal control on the north shore. ▪ The concept needs more study as to its potential effects; consider pros & cons. ▪ May work better along lower contour fence.	The use or non-use of small corridors as “release valves” that lessen spillover impacts to large unfenced areas should be determined through an open dialogue between EMoWP & community.
3. Plant food for ungulates along these “release valve” areas (corridors discussed above).	So less stress is placed on native plant life in neighboring ahupua‘a that have not yet been fenced.	Brings up idea of creating “animal management areas” that are away from native ecosystems (lower). Would allow access to food source & protect ecosystem.	Need dialogue between EMoWP & community, if use small corridors.

Community Suggestion	Additional Community Mana‘o	Initial EMoWP/TNC Molokai Feedback	Implementation
4. Tie in a mauka-makai fenceline to lateral fences erected by EMoWP pursuant to the East Slope Management Plan.	▪ Need to let each ahupua‘a (or ahupua‘a cluster), who are in agreement, manage their own area. Those ahupua‘a (or clusters) who strongly oppose the fence and for which large landowners have not joined the watershed partnership could manage their own areas. In this way, decisions made in one ahupua‘a (or cluster) do not infringe upon decisions made in another ahupua‘a (or cluster). ▪ Even if this is an added expense, it is necessary in order to prevent harm to neighboring ahupua‘a and is consistent with the ‘Aha Councils’ methodology of caring for the 8 resource realms and utilizing a decision-making matrix that included honoring kūpuna wisdom, addressing the needs of the present, and ensuring abundance for future generations. ▪ As an alternative, we could look at planting a living fence out of acceptable vegetation that would essentially block out-migration to unfenced ahupua‘a.	▪ Agree with concept of allowing each ahupua‘a decide on its management. The difficulty comes in getting funding since it’s not typically done (no proof of effectiveness). ▪ Also, deer go all the way makai, so a mauka-makai fence wouldn’t stop all lateral movement. ▪ Another idea might be to do partial mauka-makai fence and add on a “wing-fence” to draw animals in (would work mostly for goats and on flat areas).	Use of mauka-makai fences should be determined through an open dialogue between EMoWP & community, with all considerations researched and presented.
5. Fencing should correspond with an animal control plan outside the fence that has certain benchmarks based on carrying capacity.	This would bring ungulate population to sustainable numbers that preserve a food resource for subsistence while allowing the land to heal and re-establish preferred vegetation. This could be carried out by or with the help of the community hunting huis/cooperatives discussed in the narrative above.	This again brings up the idea of “animal management areas.” There is no evidence that a native Hawaiian forest can sustain any level of ungulate activity. There is strong evidence that a native forest will heal with zero tolerance (no ungulates), which is the goal for fenced areas.	Such animal control is outside of EMoWP/TNC’s scope of work, but will help with implementation if requested. Need a carrying capacity study first.
6. Coordinate community hunts accordingly to reach planned benchmarks (outside fence).	Need a carrying capacity study for deer (and possibly pigs and goats), along with a survey on how many of these animals are needed for household consumption. This suggestion could also be carried out by or with the help of the community hunting huis/cooperatives.	Agree.	Kuleana of SAMP implementers. Also a carrying capacity study should be conducted for deer, pigs & goats.

Community Suggestion	Additional Community Mana‘o	Initial EMoWP/TNC Molokai Feedback	Implementation
7. A program integrating conservation by hunters should be included as part of the Hawai‘i Hunter Education Course.	Should teach cultural values regarding hunting (e.g., ATVs, trophy rack hunting, wasting meat, discarding remains, etc.). This program could be developed with the members of the hunting huis/cooperatives.	Agree.	Kuleana of SAMP implementers to work with course teachers.
8. For community hunts, implement technique modeled along surround-net fishing or loko ‘umeiki fishtrap.	Place stakes at every 10 meters along the mountain in the outline of a he‘e (octopus) to mimic the fishing practice of surround net. When community hunts are scheduled, erect a cargo net barrier along the stakes. Hunters from below will chase animals into the net, which will be cinched at the top. Note: animal count surveys should be done beforehand to avoid catching too many animals. Animals hunted for subsistence should be harvested sustainably to continue as a food source, but also in manageable numbers to minimize degradation of native vegetation.	▪ Mostly useful for goats, but probably won’t work for deer or pigs. ▪ Again, there is no evidence that a native Hawaiian forest can sustain itself with any ungulates, but good to minimize numbers.	Kuleana of SAMP implementers.
9. Install cabins up mauka along each ahupua‘a or ahupua‘a cluster (e.g., Pua‘ahala - Ka‘amola; ‘Ohia - Ualapu‘e; Kalua‘aha; Mapulehu - Puko‘o; etc.).	These cabins would be multi-purpose: ▪ Hunters can use them to access areas with a high concentration of ungulates they cannot reach within a day’s hike, who need to stay overnight to continue the hunt & bring the animals down the mountain. ▪ The second purpose is to conduct fence monitoring work, invasive species removal (above & below fence), establishing new stands of native plants, and maintenance of trails & cultural sites. Hunters can be utilized to do such activities.	Need to consider placement – it’s ultimately up to the landowner. Also need to decide who’s responsible for maintenance. There has been vandalism to some cabins, so it might be easier to construct something simple, like a platform with a roof.	Kuleana of SAMP implementers.
10. Create meat distribution points along each ahupua‘a or ahupua‘a cluster on community hunt days.	That way the meat is not wasted; all families can have a fair share of game meat for home consumption.	Good idea, but will take some coordination. It’s been tried before and there is often more meat than can eat, so need a plan for extra meat. Need a hunting leader to determine how much to hunt and to coordinate drop-offs.	Kuleana of SAMP implementers; Hunting Hui may act as lead coordinator.

Community Suggestion	Additional Community Manaʻo	Initial EMoWP/TNC Molokai Feedback	Implementation
11. In those ahupuaʻa with fence, a detailed plan and integration of hoaʻāina in ahupuaʻa management below the fenceline is essential.	▪ Animals below the fenceline may have increased impact to lower areas of the ahupuaʻa (Wao Lāʻau, Wao Kanaka) and created more erosion. ▪ To avoid denuding these areas, planting of native and canoe crops must be undertaken while removing some invasive species (e.g., kiawe, java plum) that extract too much water and negatively impact streams, taro terraces, heiau, and fishing koʻa. ▪ Create mobile, detachable fencing units to surround and protect native plants and trees.	Need to be careful to not remove invasives (those not along stream) without replanting with natives that hold soil in place.	Kuleana of SAMP implementers.
12. Establish cottage industries among hoaʻāina families to operate backyard native plant nurseries.	▪ Include plants that are grown-out to specific sizes that will not leave these plants/trees vulnerable to ungulate grazing. ▪ Create mobile, detachable fencing units to surround and protect native plants and trees. ▪ Erect water catchment up mauka and re-open springs to water these plants and trees. ▪ Grow native species for mauka and makai areas in these nurseries.	Good idea, although there is no stage at which most plants are not still vulnerable to ungulate grazing.	Kuleana of SAMP implementers.
13. Address secondary impacts/threats to areas that will not be fenced, especially the north shore ahupuaʻa.	▪ Deer and pig migrate according to seasonal shifts and food availability (e.g., pigs follow the guava and mountain apple; deer and goat when they reach an old age end up moving further mauka and eating different kinds of vegetation to meet nutritional needs). ▪ Fencing causes ungulates to travel around or to the next unfenced ahupuaʻa to find food, this causes more wounds in the land and provides an area for invasives to come into, particularly if these animals end up feeding on native plants *(one kamaʻāina informant identified certain native plants ungulates eat when they run out of their preferred food sources).*	This may be true, but what it means is that: a) this should be monitored (e.g., conduct a study on ungulate populations in north shore ahupuaʻa before and after fence is erected), and b) animal control should be increased for north shore ahupuaʻa.	A study should be done to monitor ungulate populations in the north shore ahupuaʻa – before and after implementation of fence. Needs funding.

5.3. NEXT STEPS

Looking forward, here are the basic actions that need to be taken to implement the recommendations from this report:

1. **TNC should continue gathering input and collaborating with Manaʻe Community to integrate recommendations from this Report.**
   - This can be done as part of their CIS (Cultural Impact Statement) and EA (Environmental Assessment) processes.

2. **Manaʻe Community should work together to develop the Subsistence and Ahupuaʻa Management Plan for Manaʻe Moku.**
   - This may be led by ʻAha Kiola o Molokaʻi – Manaʻe Moku or another appropriate entity.
   - Find funding for planning process.
   - Use a community process to select and hire an appropriate community and environmental planner to oversee process.

3. **Identify Potential Groups/Organizations to Oversee Implementation.**
   - Such a group/organization should become apparent during the process of developing the Subsistence & Ahupuaʻa Management Plan, based on their involvement. One obvious consideration is the ʻAha Moku o Molokaʻi – Manaʻe Moku.
   - That group/organization should then seek funding to implement the Subsistence & Ahupuaʻa Management.

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[352] Interview with Dr. Kawika Winter, *supra* note 48. (Dr. Winter stated that he "express[es] [this manaʻo] with humility and in the hope that it is staying true to Kumu John's teachings. ʻOia ihola me ka haʻahaʻa a me ka ʻoiaʻiʻo.").
[353] *Id.*
[354] Dr. Kawika Winter Presentation, *supra* note 49.
[355] *A Mau A Mau*, *supra* note 1.
[356] Dr. Kawika Winter, *Conservation Past and Present: Applying "traditional ecological knowledge" philosophies to contemporary conservation practices on Kauaʻi*, Presentation at the Univ. of Haw. at Mānoa Imi ʻIke Nat. Resources and Envtl. Mgmt. Research Seminar Series (Dec. 10, 2014) [hereinafter Winter, *Conservation Past and Present*].
[357] *Id.*
[358] *Id.*
[359] *Id.*
[360] *Id.*
[361] HANDY & PUKUI, *supra* note 66, at 4.
[362] HANDY, HANDY & PUKUI, *supra* note 91, at 56.
[363] Winter, *Conservation Past and Present*, *supra* note 356.
[364] MCGREGOR, NĀ KUAʻĀINA, *supra* note 120, at 6–8.
[365] MCGREGOR, CULTURAL ASSESSMENT FOR THE KAMAKOU PRESERVE, *supra* note 29, at 16-17.
[366] It should be noted that each individual landowner has to allow and agree to participation, it is their decision, and not that of the EMoWP.

[367] As described in Chapter 3, Ka Ulu Kukui o Lanikaula is only a small grove today, but it was once a huge forest of kukui trees (some say 600 acres), which were essential for bringing rains to Manaʻe. The rainclouds were said to travel from Hakaʻano, a northeast ahupuaʻa, move through Ulu Kukui o Lanikaula, and further along all the ahupuaʻa of East Molokaʻi, until they reached Kamalō, and moved out to sea towards Lānaʻi.
[368] For more information on Farmer Managed Natural Regeneration, see the following link: http://permaculturenews.org/2008/09/24/the-development-of-farmer-managed-natural-regeneration/.
[369] There may be support for this informant's statements because further interviews and literature search revealed that one of the fishponds in Manaʻe, ʻUalapuʻe fishpond, provided a safety net for the early Hawaiians living in that area. When warriors from Hawaiʻi island attempted to subjugate the people living in Manaʻe it was told in legend that the people knew of an important underwater spring located within ʻUalapuʻe fishpond. The people devised a plot to kill their enemy by poisoning the stream. The enemy perished due to the poisoned waters but the hoaʻāina survived because they secretly gathered the spring water flowing into the fishpond.
[370] Some have argued that hunting is not a traditional and customary practice. However, deer, goat, and pig were introduced prior to 1892, at which time the King placed a kapu on introduced deer which were given as gifts to him; they then became an important part of subsistence for Molokaʻi families. Culture has evolved to include these animals as important food sources for traditional subsistence. Therefore, they are protected by the Hawaiʻi Constitution Article XII, §7 and HRS, § 1-1.
[371] *Summary Update of the East Slop Watershed Project*, *supra* note 38.
[372] One of the authors conducted an informal talk-story with two kamaʻāina informants of the ahupuaʻa of Hālawa (one of them being the oldest living Native Hawaiian born and raised in Hālawa who still lives there), which is what this sentiment is based on. Because it was a short discussion and not a formal interview, the notes were not included in the Meeting Notes.

Traditional & Customary Practices Report for Manaʻe, Molokaʻi

Traditional Subsistence Uses, Mālama Practices and Recommendations, and Native Hawaiian Rights Protections of Kamaʻāina Families of Manaʻe Moku, East Molokaʻi, Hawaiʻi

February 2016

Appendices

A. Intake Form
B. Description of Cultural Sites Identified on Map
C. Hui Aloha ʻĀina o Manaʻe's "Aloha ʻĀina Training Program"

Name				
Mailing Address				
Email				
Phone	Home	Work	Cell	Age
Gender		Relationship Status		
Male	Female	Married	Single	Living w/ partner
Employment Status (please check appropriate box)	Employed	Unemployed	Laid Off	If working, where do you work? Or what type of work do you do?
Household Income (please circle)	$ 0 – 9,999	$10,000 – 19,999	$20,000 – 29,999	$30,000 – 39,999
	$40,000 – 49,999	$50,000 – 59,999	$60,000 +	
Please specify number, including self:	How many people are living in your home?	How many children (17 yrs or younger) are living in your home?	How many adults (18 yrs or older) are living in your home?	How many families are living in your home?
What is the highest level of formal education you have completed? (please circle)	Less that grade school	Grade school (6 years)	Intermediate school	High school (12 years)
	G.E.D.	Trade School	College	Graduate school
Ethnic/Racial Background (please circle)	Caucasian	Chinese	Filipino	Japanese
	Korean	Native Hawaiian (full or part)	Pacific Islander	Portuguese
	Multiple Ethnic (non-Hawaiian)	Other:		

Name:				
District of Residence (please circle)	Maunaloa / Kaluakoʻi	Hoʻolehua	Kualapuʻu / Kalae Kipu	Kalamaʻula / Kaunakakai
	East End (Manaʻe)	Kaunakakai / Kawela	Halawa / North Shore	Kalaupapa
Place of Birth	Where did you spend most of your 18 yrs growing up?	How many years have you lived in the state of Hawaiʻi?	How many years have you lived on Molokai?	What ahupuaʻa do you currently reside in?
As to Manaʻe ahupuaʻa, which ahupuaʻa do you have genealogical connections to? (Circle all that apply)	Kamalo Kapualei Kumueli Wawaia Puaʻahala Kaʻamola Keawanui West ʻOhia East ʻOhia Manawai Kahananui ʻUalapuʻe Kaluaʻaha Mapulehu Punaula Pukoʻo Kupeke Ahaʻino 1 Ahaʻino 2 Kailiula Honomuni Kawaikapu Kainalu Puniuohua Puelelu Puniuhoa 2 Puniohua 1 Waialua Moanui Kumimi Honouliwai Honoulimaloʻo Keahuoku Lupehu Pohakupili Moakea Keopukauuku Keopukaloa Koaliʻi Halawa Wailau Pelekunu			
Definition of Subsistence: The customary and traditional uses by Molokai residents of wild and cultivated renewable resources for direct personal or family consumption as food, shelter, fuel, clothing, tools, transportation, culture, religion, and medicine; for barter, or sharing, for personal or family consumption; and for customary trade.				
Which of the following traditional and subsistence activities have you or family engaged in while living on Molokai? (Please circle all that apply)	Hawaiian traditional and religious ceremonial practices	Hunting	Land gathering	Stream gathering
	Fishing and ocean gathering	Farming, gardening	Fishpond, aquaculture	Raising livestock
If you do not engage in any of these activities, why not?	Too busy	Too old	Disabled	Not interested
	Rely on others	Other: _____		

Name:				
About how many <u>times a month</u> do other people on Molokai give your family food like fish, meat, limu, etc. that they have caught, gathered, or grown themselves?				____ times a month
Overall, how important is subsistence to your family?	1 Very Important	2 Somewhat Important	3 Somewhat unimportant	4 Not at all Important
About what percent of your family's food comes from subsistence activities (fishing, hunting, gathering, raising animals, cultivation)?				_____ %
Do you ever use the resources you get from subsistence for any of the following activities? (Circle all that apply)				
Sharing/Gift-Giving	Exchange/Trade	Sale	Restock	Other: _____
Does subsistence benefit you and your family in any of the following ways? (Please circle all that apply)				
Carry on the culture	Family togetherness	Spiritual well-being/Religion	Exercise/Health/ Diet	Recreation
Medicine	Education	Leis, Decorations, and Crafts	Other: _____	
Do you use subsistence resources for special occasions?			Yes	No
If yes, for what types of special occasions do you collect for? (Circle all that apply)				
Anniversary parties	Birthdays	Funerals	Graduations	Holiday celebrations
Lūʻau	Reunions	Weddings	1-Year Anniversary of Death	Blessing Something Newly Built
Other:				
Do you collect food from the ocean or land for people from other islands?			Yes	No
When you go fishing, hunting, or gathering, how often do you take people from off island with you?	1 Always	2 Often	3 Rarely	4 Never

Name:				
Do you fish?		About how many days in the past year did you fish?	Does this number represent a typical number of days you fish every year?		If no, why?
Yes	No	_____ days	Yes	No	
During which season of the year do you do the most fishing?		Summer (Jun – Aug)	Fall (Sep – Nov)	Winter (Dec - Feb)	Spring (Mar – May)
What types of fish do you generally catch? (please circle all that apply)					
Awa		Akule	Aholehole	Ahi	Aweoweo
Enenui		Hage	Hinalea	Kahala	Kaku
Kawakawa		Kole	Kumu	Kupipi	Lai
Mahimahi		Mamo	Marlin/Kajiki	Menpachi/U'u	Moana
Moi		Mu	Mullet	Nabeta	Oio
Onaga		Ono	Opakapaka	Opelu	Palani
Papio/Ulua		Rainbow Runner	Ta'ape	Toau	Uhu
Weke		Uouoa	Other:		
Do you gather other resources from the ocean?		About how many days in the past year did you gather resources from the ocean?	Does this number represent a typical number of days you gather ocean resources every year?		If no, why?
Yes	No		Yes	No	
During which season of the year do you do the most ocean gathering?		Summer (Jun – Aug)	Fall (Sep – Nov)	Winter (Dec - Feb)	Spring (Mar – May)

Name:				
[redacted]				
Identify the types of resources you gather from the ocean. (circle as many that apply)				
Crab/Papa'i	He'e/Octopus	Kupe'e	Leho	Lobster/Ula
Opihi	Pipipi	Salt	Sea Cucumber/Loli	Shrimp/Opae
Sea Urchin/Wana	Other:			
Do you hunt?	About how many days in the past year did you hunt?	Does this number represent a typical number of days you hunt every year?		If no, why?
Yes / No		Yes	No	
During which season of the year do you hunt the most?	Summer (Jun – Aug)	Fall (Sep – Nov)	Winter (Dec - Feb)	Spring (Mar – May)
Identify the types of animals you hunt. (circle those that apply)				
Axis Deer	Birds	Goats	Pigs	Other: _____
Do you gather from the land?	About how many days in the past year did you gather from the land?	Does this number represent a typical number of days you gather from the land every year?		If no, why?
Yes / No		Yes	No	
During which season of the year do you gather from the land the most?	Summer (Jun – Aug)	Fall (Sep – Nov)	Winter (Dec - Feb)	Spring (Mar – May)
Identify the types of wild plants/fruits you gather from the land. (circle those that apply)				
A'ali'i	Ahinahina	Akala	Ahuhu	Alahe'e
Alae	Awa	Banana/Maia	Guava	Hala
Hapu'u/Ferns	Hau	Ha'uwi	Ho'io	Iliahi/Sandalwood
Ilima	Kaunaoa	Kiawe	Koa	Koali
Ko'oko'olau	Kou	Kukui	Laukahi	Liko/Lehua

Name:				
[redacted]				
Identify the types of wild plants/fruits you gather from the land. (circle those that apply)				
Lilikoi	Loulu	Maile	Mangrove	Maunaloa
Mamake	Milo	Niu	Noni	Oranges
Papaya	Paria	Pepeiao	Plum	Popolo
Ti Leaf/Shoot/Root	Uhaloa Leaf/Root	Ulu	Other:	
Do you gather from streams?	About how many days in the past year did you gather from streams?	Does this number represent a typical number of days you gather from streams every year?		If no, why?
Yes / No		Yes	No	
During which season of the year do you gather the most from streams?	Summer (Jun – Aug)	Fall (Sep – Nov)	Winter (Dec - Feb)	Spring (Mar – May)
Identify the types of things you gather from streams. (circle those that apply)				
Aholehole	Crabs	Frogs	Hihiwai	Mullet
Opae	O'opu	Prawns	Pupu	Uouoa
Other:				
Do you grow vegetables, fruits, and/or medicinal plants for your family?		If yes, please list the types of vegetables, fruits, and/or medicinal plants you grow.		
Yes	No			
Do you raise animals for food for your family?		If yes, what types of animals do you raise?		
Yes	No	Poultry		
		Meat	Eggs	Fighting Cocks
Cattle	Deer	Rabbits	Goats	Pigs
Do you support the proposed East Molokai Watershed Project?		Are you concerned that the proposed East Molokai Watershed Project extending from Kamalo to Halawa will impact your traditional subsistence and religious practices?		
Yes / No / Unsure		Yes	No	Unsure
Why?		If yes, how so?		

Name:

As to Manaʻe, which ahupuaʻa do you access for traditional, religious, ceremonial purposes and/or gather, fish, farm, and/or hunt for subsistence? (Please check all that apply)

Ahupuaʻa Name	Religious & ceremonial practices	Hunting	Land gathering	Stream gathering	Fishing & ocean gathering	Farming, Gardening	Fishpond, aquaculture	Raising livestock
Kamalo								
Kapualei								
Kumueli								
Wawaia								
Puaʻahala								
Kaʻamola								
Keawanui								
West ʻOhia								
East ʻOhia								
Manawai								
Kahananui								
ʻUalapuʻe								
Kaluaʻaha								
Mapulehu								
Punaula								
Pukoʻo								
Kupeke								
Ahaino 1								
Ahaino 2								
Kailiula								
Honomuni								
Kawaikapu								
Kainalu								
Puniuohua 2								
Puniuohua 1								
Waialua								
Moanui								
Kumimi								
Honouliwai								
Honoulimaloʻo								
Keahuoku								
Lupehu								
Pohakupili								
Moakea								
Keopukauuku								
Keopukaloa								
Koaliʻi								
Halawa								
Wailau								
Pelekunu								

Description of Cultural Sites Identified on Map on page 32:

1. Huelo – Located on the northern shore, just east off of Makanalua Peninsula, Huelo is known to be the home to the very last endemic loulu palm (*Pritchardia munroi*). Seedlings from here have been transfered to the Kalaupapa plant nursery, Kamalō, and mauka Kainalu for cultivation and re-propagation of this species.
2. Pelekunu – Much like other surrounding valleys, Pelekunu is known for its plethora of loʻi that were cultivated here. One of its associated islands, Mōkapu, is known for its role in the "Moʻolelo of Haʻihaʻikū." A north-south traditional trail is known to have gone from Pelekunu valley through to Kamalō. In 1960, a diversion of that same trail was documented to lead to Manuahi as well.
3. Kamakou Preserve – The Kamakou rainforest was fenced off by The Nature Conservancy of Hawaiʻi as its distinct natural flora are rare and have yet to be tainted by humans. There are many native species of plants and animals found within this portion of land that are not found with such high integrity elsewhere in Hawaiʻi.
4. Kapuʻokoʻolau/Kapoʻokoʻolau – "There's a place, Waikuʻilani, that goes to Kapoʻokoʻolau. There used to be a waterfall going into the gulch that sank down into the ground (not into the ocean). But along the ocean portion, it formed springs. Each fishpond [on east Molokaʻi] has 2-3 springs."
5. ʻŌhiʻa – "My ʻohana was instructed only to pick kukui from east ʻŌhiʻa, but when the [name removed to protect confidentiality] family built a hale up there, the lepo came down and the stream overflowed. The kukui was used for eating, to make inamona and to dye their fishing nets. Some kukui bark can make a dark maroon dye. Other kukui is more reddish. When trying to surround a pile of fish, the fish will be spooked and run into the dark. If the fish is maroon, it can hide. This allowed the fisherman to be more selective in harvesting." There is also a known koʻa (fishing grounds, usually identified by lining up with marks on shore) off-shore of ʻŌhiʻa that was used by fishermen until kiawe was spread by cattle and grew too thick and tall to utilize the koʻa traditionally.
6. Manawai – Known to have 12-15 documented heiau sites as discussed in a field study done by Kathleen Kawelu, Ph.D.
7. Pākuʻi – Most known for its heiau where a prophecy was made concerning the sovereignty of Hawaiʻi and how "the little fish (makaʻāinana) will rise to eat the big fish (aliʻi)".
8. ʻIliʻiliʻōpae – Located in the Pūkoʻo area, ʻIliʻiliʻōpae is known as the second largest heiau throughout Hawaiʻi. It is told that this particular heiau was used for "sorcery" and human sacrifice was practiced here.
9. Wailau – Much like its neighbor valleys (Pelekunu to the west and Hālawa to the east), Wailau was made up of many loʻi complexes. These were documented and discussed in Dr. Windy McElroy's dissertation. There is a traditional/historic trail that leads out from Wailau and cuts towards Mapulehu as well as the coast that is still used to this day. Wailau is also known for its rocks lying offshore and its relevance to the "Moʻolelo of Kana."

10. Oloku‘i – One of the most pristine areas in Hawai‘i. In fly-overs you can see banana patches. People lived there as evidenced from the banana groves. ‘Oloku‘i has largely escaped impact so far from humans in modern times.
11. Honomuni – It is said that in this area, Kamehameha had his people build a great lo‘i that fed majority of the east coast of Moloka‘i.
12. Pākaikai – Also known as “Queen’s bath”, this area has a great abundance of lo‘i terracing that indicate the cultivation that went on in here in the past. A local of Moloka‘i addressed that this area called Pākaikai was traditionally located closer to Pu‘u ‘Ōhelo rather than where it is now identified to be located.
13. Hālawa – A plethora of cultural sites have been located within this valley as it was heavily inhabited and used for cultivation of kalo and other native plants. A full report of all sites within it can be read through Dr. Patrick Kirch’s Hālawa Study.
14. Moanui & Kumimi – both known for the vast ali‘i burials located here.
15. Ka Ulu Kukui o Lanikaula – The kukui groves of Lanikaula are well known for their significance to the chiefess Lanikaula and demarcated as an area where she would play. Today, Ka Ulu Kukui o Lanikaula can be seen as a paradigm for what is happening to Hawai‘i’s forests.
16. Pōhakupili – There are many springs located in this area that begin their flow from mauka all the way down to the various fishponds makai. If the top sources are clogged or dry, the springs down below also dry-up. This is the epitome of what is happening with the watershed in Mana‘e.

Hui Aloha ‘Āina o Mana‘e

Aloha Āina Training Program

Field Crew	Training Activities	Training Activities
Feral Ungulate Management	Hunting/Slaughter/ Meat distribution	Transect monitoring
Invasive Plant Removal	Hand removal, Chainsaw removal	Mulching/ Timber production
Native Plant Nursery/ Restoration	Seed Collection/Nursery Propogation	Grow out/ Re-planting
Stream/Riparian Zone Restoration	Invasive Species Removal/ Clean Debris	Native Species Monitoring
Shoreline Monitoring	Important Near Shore Resources	Invasive Species Removal
Lo‘i Kalo Restoration/ Production	Lo‘i Restoration	‘Auwai Maintanence
Sustainable farming/ Commercial production	Vegetables	Fruit
Loko I‘a Restoration/Production	Kuapā restoration	Aquaculture
Offshore monitoring	Important Offshore Resources	Subsistence Enforcement
Traditional Navigation, Moon cycles and seasons		
Native art		