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FINAL ENVIRONMENTAL ASSESSMENT

for

CONSTRUCTION and PUBLIC USE

of the

(KAHAKAPAO LOOP TRAIL)

MAKAWAO FOREST RESERVE, MAUI

Division of Forestry & Wildlife
Na Ala Hele Trails & Access Program
Maui District Office

June 2003

INTRODUCTION	1
SUMMARY	1
BACKGROUND	2
GENERAL DESCRIPTION OF THE TECHNICAL ACTIONS AND SOCIO-ECONOMIC CHARACTERISTICS	2
SUMMARY DESCRIPTION OF THE AFFECTED ENVIRONMENT.....	4
IDENTIFICATION AND SUMMARY OF MAJOR IMPACTS AND ALTERNATIVES CONSIDERED.	9
PROPOSED MITIGATION MEASURES	10
DETERMINATION	11
FINDINGS AND REASONS SUPPORTING DETERMINATION	11
LIST OF PERMITS REQUIRED	13
ENVIRONMENTAL ASSESSMENT PREPARATION INFORMATION	13
APPENDIX A: Map of Planned Trail, Road Re-Routing and Surrounding Area	A-1
APPENDIX B: Trail Specifications	B-1
APPENDIX C: Cultural Impact Assessment	C-1
APPENDIX D: Comment letters and responses received on the Draft EA.....	D-1

Introduction

The Na Ala Hele Trails & Access Program was established in 1988 through Chapter 198D of the Hawai'i Revised Statutes. At that time, the State Legislature assigned to the Department of Land and Natural Resources the responsibility of planning, developing, acquiring land or rights for public use of land, constructing, and engaging in coordinating activities to implement a statewide trail and access system. The Division of Forestry and Wildlife was designated as the parent agency responsible for supporting the Program.

The Program is concerned with creating a trail system within private and state-owned lands; it is responsible for the maintenance and development of trail systems within Forest Reserves. On the island of Maui, these Forest Reserve areas include the West Maui, Koolau, Hana, Kipahulu, Makawao, Waihou, and Kula Forest Reserves.

Responding to increased interest and direct inquiries from the public, Na Ala Hele seeks to expand the trail system in the Makawao Forest Reserve to include the new Kahakapao Loop Trail. The trail is intended to provide access opportunities for Forest Reserve management practices, alien species detection and control, nature study, wild land research, fire control, hunting, bicycling, horseback riding, and traditional hiking.

Summary

<i>Project Name</i>	Kahakapao Loop Trail
<i>Proposing Agency</i>	Na Ala Hele, Trails and Access Program Department of Land & Natural Resources State of Hawai'i
<i>Approving Agency</i>	Department of Land and Natural Resources State of Hawai'i
<i>Location</i>	Makawao Forest Reserve TMK 2-2-4-016
<i>Property Owner</i>	State of Hawai'i
<i>Land Use</i>	Conservation District, Resource Subzone
<i>Agencies Consulted</i>	State: Department of Health Office of Environmental Quality Control Department of Land and Natural Resources Historic Preservation Division Aquatic Resources Division Land Management Division Conservation and Resources - Enforcement Division State Parks Division Department of Transportation Department of Agriculture County: Planning Department Department of Parks and Recreation

Federal: National Park Service
U.S. Fish & Wildlife Service

Other: Sierra Club, Maui Chapter
Native Hawaiian Plant Society
Friends of Haleakala National Park
Haleakala Ranch, Ltd.
Na Ala Hele, Maui Advisory Council
Maui Hunters' Association

A list of those commenting on the Draft Environmental Assessment and copies of comment letters and responses is included in Appendix D.

Background

The Makawao Forest Reserve is comprised of 2,093 acres on the west-facing slope of Haleakala Volcano. The Reserve ranges in elevation from about 2,040 to 4,920 feet and contains a network of over 13 miles of bulldozed management roads. The Reserve was established in 1908 to protect the important water shed. Until 1997, when the Kahakapao Road was opened to the Piihoho Water Treatment Facility, there was no legal public access to the Reserve.

Traditional Hawaiian gathering has occurred in the Makawao Forest Reserve area for generations and predates the establishment of the Reserve itself. Hunters have also utilized the area, searching for wild pig. During the 1960's, the State Division of Forestry began a tree-planting program in the Makawao area to replace the declining remnant forest. Planting was done between 1960 and 1971 and consisted largely of eucalyptus, various pines and tropical ash. The ridgelines were scraped with bulldozers creating four-wheel drive roads, many of which still exist. These roads were named after the equipment operators who created them. Today, this forest provides excellent soil and water protection as well as outstanding recreational opportunities.

The goal of the proposed action is to establish a relatively level pathway for use by beginning to intermediate-level recreational users, including hikers, bicyclists and equestrian users, while at the same time increasing security for the County Water Treatment Facility. The trail is intended for day use only and continues Na Ala Hele's commitment to fulfill a trail network construction scheme for the Maui District. Construction of the Kahakapao Loop Trail is not expected to create any significant environmental impacts. Therefore, a Finding of No Significant Impact (FONSI) has been issued.

General Description of the Technical Actions and Socio-Economic Characteristics

Technical Actions

The planned Kahakapao Loop Trail is approximately three miles long, and will be a designated equestrian and bicycle trail, allowing the use of horses and bicycles, as well as pedestrian hikers. Access to the trail is off Kahakapao Road, located approximately 1.5 miles up Piihoho Road from Makawao Avenue. As part of the trail construction, Kahakapao Road will be re-routed from the current blacktopped road just inside the Forest Reserve Boundary and reconnect with the existing ridge roads (Borge Ridge Road and Fong Ridge Road) once they are past the existing water treatment facility. The planned trail starts from the re-routed section linking to Fong Ridge Road. Looping from the bottom of Fong Ridge, the trail will connect to the bottom of Paahao Ridge. The trail will contour through a Eucalyptus plantation, cross an unnamed gulch filled with a mix of native and nonnative plants, and continue through the plantation until reaching the Paahao Ridge Road at approximately the 2880 foot elevation. From there it will continue up Paahao Ridge to the approximately 3680 foot elevation, then will cut through the gulch and contour back to the top of Fong Ridge and Fong Ridge Road. A map illustrating the planned trail and the road re-routing within the

Makawao Forest Reserve is included in Appendix A.

The project will be completed over five stages. The first stage involves an initial biological reconnaissance survey (already performed) of the new road corridors, the trail corridor area, identification of sensitive elements, and flagging of the potential trail course. The flagging will be removed after construction.

The second stage includes the re-routing of the Fong and Borge Ridge Roads. The current roads pass through the existing water treatment facility in relatively close proximity to the reservoirs. In response to the County of Maui, Department of Water Supply letter written January 31, 2002, during the Draft Environmental Assessment comment period, the Department of Land and Natural Resources has proposed to re-route the current roads passing through the facility to address security concerns. Fong Ridge Road would be re-routed to circumvent the Treatment Facility and remain outside of the old fence alignment. With the new route, the facility would remain out of sight and away from public passage. The map contained in Appendix A illustrates the planned re-alignment. A new segment connecting Kahakapao Road with Borge Ridge Road would be constructed, eliminating the need to pass through the Water Treatment Facility to connect to Borge Ridge Road. A new gate will be constructed at the turn off for the Borge Ridge Road. At this time, no gate is planned for the turn off for the Fong Ridge Road. If at a later time this is required, plans will be drawn up to construct a security gate for the area. The current gate at the Makawao Forest Reserve boundary will be redesigned and relocated to facilitate easier access to the water treatment facility. By letter of April 11, 2002, the Maui County Department of Water Supply indicated that it supports the planned re-routing. Prior to actual road construction, a fencing enclosure will be constructed around existing populations of the candidate species *Cyanea asplenifolia* (Haha) found within the roadway corridor, to protect the plant during and after construction.

The third stage includes preliminary removal of vegetation and debris (brushing) from the planned trail course. This action will reveal and define the extent and condition of the trail bed and uncover any existing sensitive plants or historical materials. In the event that any Federally listed threatened or endangered species, archaeological sites or artifacts are encountered, trail work will halt and efforts to re-route the trail course to avoid these elements will be made.

The fourth stage will involve construction of the trail bed and careful removal of fallen trees and hazardous tree-snags from portions of the trail. Trail construction will involve the use of materials taken from the surrounding landscape when possible and complementary materials when surrounding materials are not available. Where possible, the trail will be cut to a grade ranging between 5 and 10 percent in keeping with established NAH specifications outlined in the NAH Program Plan, pages V-7 through V-9. (Appendix B). The width of the trail will vary from approximately three to four feet, and will be constructed with equestrian use in mind. Removal of woody roots and stumps will be done only where necessary and where doing so will not de-stabilize the trail bed.

The final stage will be to place several signs at strategic locations along the trail requiring users to observe certain rules of conduct and warning of possible hazards. Periodic brushing of vegetation, clearing of debris, removal of trash, spot-restoration of trail structures, and maintenance of trail signs will be routinely conducted. Light use of herbicides including Roundup (Isopropylamine salt of Glyphosate) and Garlon 3A (Tricypyr) may be employed at this point and from time to time as part of a regular maintenance plan to prevent the regeneration of non-native vegetation in the trail bed. Because the trail is being constructed with the use of volunteer labor, construction may take as long as one year, depending on volunteer turnout.

Kahakapao Road ends at a locked gate before the Piiholo Water Treatment Plant (the Makawao Forest Reserve Boundary gate). The gate was installed to provide security for the Board of Water Supply water treatment plant. The gate is generally left open during the day to facilitate travel between the Piiholo Plant and the Olinda Reservoir site for water treatment personnel. However, the gate is under the control of the County Board of Water Supply and the gate may be locked at any time, as indicated by existing signs on the gate. Parking for users of the trail is limited to the existing road shoulders outside the existing

Makawao Forest Reserve Boundary gate. At this time there are no plans to build any formal parking areas. However, DLNR plans to monitor the parking situation and will continue to explore options regarding parking in this area, including moving the gate.

Socio-economic Characteristics

No direct economic effects are expected to result from the road re-routing or the establishment of a trail for public use. Although Na Ala Hele allows commercial activities to occur by permit on certain trails, the Kahakapao Loop Trail is not intended for that use. The trail will add approximately three miles to the statewide Na Ala Hele trail system as an additional recreational resource for all ages interested in hiking, nature study, photography, hunting, bicycling and horseback riding. Na Ala Hele's goal is to create a family-oriented wild land recreational experience by building an uncomplicated, easily traversed mountain trail.

Costs relative to completing the project and maintaining the trail will be borne by the State of Hawai'i and its volunteer participants under the Na Ala Hele Trails and Access Program and will not involve the use of private funds. The estimated development costs for labor, materials, planning, necessary documentation, and all phases of the project (not including long-term maintenance) should not exceed \$75,000.00.

The significant aesthetic value inherent in the area's mixed-native and historic forest plantation character includes the quiet forested isolation characteristic of the Makawao Forest Reserve and offers a special outdoor experience for the community.

Na Ala Hele has traditionally relied on the efforts of volunteers for construction, brushing and light maintenance of its trails. The Kahakapao Loop Trail project will also involve engaging individual and group volunteers who will invariably gain a feeling of accomplishment and other benefits derived from multiple service project excursions during the trail building period.

Summary Description of the Affected Environment

The work project site is located entirely within the Makawao Forest Reserve. The area is located on the western slope of Haleakala Volcano, in the District of Makawao, Tax Map Key 2-2-4-16. The weather is usually clear in the morning hours until clouds build up and envelop the lower portions of the Forest Reserve in the afternoon. Mist or light and persistent rain is common although in recent years, drought conditions have prevailed. Storms usually occur during the fall and winter months, with heavy winds and rain contributing 60 to 120 inches of rainfall annually. Nights are generally cold at any time of the year. Winds originate predominately from the East-northeast for most of the year and may occasionally blow from the South-southwest during "Kona" conditions. Winds and cloud conditions are often variable due to an atmospheric vortex that is created by the mountain topography of the area and prevailing trade winds.

Public Utilities

There are no public utilities (electrical, water, sewer, or other) within three miles of any part of the trail. There are no plans to install utilities within the Makawao Forest Reserve. The nearest public utilities are located in Makawao Town. There is, however, electricity provided to the water works pumps at the County facility.

Public Access

The planned trail is accessible year-round by following the Kahakapao Road off of Piihoho Road from Makawao Town. The public will have access at the locked gate located at the Forest Reserve boundary. Unimproved informal parking is located on the side of the road at the reserve boundary. The trail has an entry point off Kahakapao Road, along Fong Ridge Road.

Flora

The planned trail passes through a plantation forest of varied introduced species on the ridge tops and remnant native species in the gulches. No threatened or endangered species were encountered during the botanical survey along the flagged portion of the trail course. However, along the road re-route corridor the botanical survey located 2 individual plants of Haha (*Cyanea asplenifolia*), a candidate species for Federal listing. An enclosure fence will be created to protect these plants. Also occurring within the Forest Reserve, but not along the trail or road corridors is the candidate species Holei (*Ochrosia haleakalae*) and the Federally listed endangered species Mahoe (*Alectryon macrococcus*). Plant species observed and surveyed along the entire trail and road courses are listed below.

Non-native:

Ashes (*Fraxinus spp.*)
Monterey Cypress (*Cupressus macrocarpa*)
Eucalyptus (*Eucalyptus spp.*)
Monterey Pine (*Pinus radiata*)
Black Wattle (*Acacia decurrens*)
Silky Oak (*Grevillea robusta*)
Australian Red Cedar (*Toona ciliata*)
Guava (*Psidium guajava*)
Quinine (*Cinchona pubescens*)
Christmas Berry (*Schinus terebinthifolius*)
Senna (*Senna septemtrionalis*)
Ti (*Cordyline fruticosa*)
Passion Fruit (*Passiflora edulis*)
Love-in-a-mist (*Passiflora foetida*)
Morning Glory (*Ipomoea indica*)
Five-finger Maidenhair (*Adiantum hispidulum*)
Lady Fern (*Athyriopsis japonicum*)
Velvet Grass (*Holcus lanatus*)
Wild Cane (*Saccharum spontaneum*)
Molasses Grass (*Melinis minutiflora*)
Broom sedge (*Andropogon virginicus*)
Hilo Grass (*Paspalum conjugatum*)
Palm grass (*Setaria palmifolia*)
Rattail Grass (*Sporobolus africanus*)
Yellow Foxtail (*Setaria glauca*)
Carpet grass (*Axonopus fissifolius*)
Asiatic Pennywort (*Centella asiatica*)
Hairy Cats-Ear (*Hypochoeris radicata*)
Heal all (*Prunella vulgaris*)
Plantain (*Plantago lanceolata*)
Asiatic Hawks beard (*Youngia japonica*)
Fireweed (*Erechtites valerianifolia*)
Kahili Ginger (*Hedychium gardnerianum*)
Maui Pamakani (*Ageratina adenophora*)
Gorse (*Ulex europaeus*)
Poha (*Physalis peruviana*)
Hairy Horseweed (*Erigeron bonariensis*)
Tar Weed (*Cuphea carthagenensis*)
Pukamole (*Lythrum maritimum*)
Blackberry (*Rubis argutus*)

Native:

Ohia (*Metrosideros polymorpha*)
Koa (*Acacia koa*)
Kolea Lau nui (*Myrsine lessertiana*)
Papala (*Charpentiera obovata*)
Hapuu pulu (*Cibotium glaucum*)
Olopua (*Nestegis sandwicensis*)
Halapepe (*Pleomele auwahiensis*)
Kopiko (*Psychotria hawaiiensis*)
Naupaka kuahiwi (*Scaevola gaudichaudii*)
Pilo (*Coprasma foliosa*)
Pukiawe (*Styphelia tameiameia*)
Kanawao keokeo (*Cyrtandra grayi*)
Hoi Kuahiwi (*Smilax melastomifolia*)
Hue hue (*Coccoloba trilobus*)
Manono (*Hedyotis hillebrandii*)
Manono (*Hedyotis terminalis*)
Maile (*Alyxia oliviformis*)
le le (*Freycinetia arborea*)
Carex (*Carex* spp.)
Uluhe (*Dicranopteris linearis*)
Kupukupu (*Nephrolepis exaltata*)
Moa (*Psilotum nudum*)
Dryopteris wallichiana
Iwa Iwa (*Asplenium adiantum-nigrum*)
Iwa Iwa (*Adiantum cuneatum*)
Peahi (*Microsorium spectrum*)
Okupukupu laui (*Doodia kunthiana*)
Palaa (*Odontosoria chinensis*)
Loulou (*Coniogramme pilosa*)
Palapalai (*Microlepia strigosa*)
Hoio kula (*Pneumatopteris sandwicensis*)
Ala ala wai nui (*Peperomia* spp.)
Bryophyte spp.

Fauna

A variety of avifauna and mammals occur throughout Makawao Forest Reserve. Several native bird species are known to inhabit the project area. They include:

Alauahio (*Paroreomyza montana*)
Amakihi (*Hemignathus virens*)
Apapane (*Himatione sanguinea*)
Iiwi (*Vestiaria coccinea*)
Kolea (*Pulvialis fulva*)

The majority of bird species in the area are represented by exotic or introduced game bird species. They include:

Barred Dove (*Geopelia striata*)
Common Myna (*Acridotheres tristis*)
House Finch (*Carpodacus mexicanus*)

Japanese Bush Warbler (*Cettia diphone*)
Japanese White-eye (*Zosterops japonicus*)
Nutmeg Mannikin (*Lonchura punctulata*)
Northern Cardinal (*Cardinalis cardinalis*)
Northern Mockingbird (*Mimus polyglottus*)
Melodious Laughing Thrush (*Garrulax canorus*)
Spotted Dove (*Streptopelia chinensis*)

Mammals and reptiles observed or otherwise known to inhabit in the project area include:

Feral Cat (*Felis catus*)
Feral Dog (*Canis familiaris*)
Feral Pig (*Sus scrofa*)
House Mouse (*Mus musculus*)
Mongoose (*Herpestes auropunctatus*)
Rat (*Rattus spp.*)
Skink (*Scincidae sp.*)

Lasurus cinereus semotus, the Hawaiian Hoary Bat, is known to occur in the project area. No adverse impacts are expected as a result of the trail and road construction, and in fact, the project may allow for greater surveys of the species.

Historical/Archaeological and Cultural Sites

A cultural impact assessment was conducted for the proposed Kahakapao Loop Trail in the *ahupua'a* of Hamakuapoko and the full report is included as Appendix C. Historic research of the project area was carried out to identify any cultural resources or traditional practices associated with the areas encompassing the proposed trail corridors and surrounding vicinities. An attempt was made to contact present and former residents of Makawao who may have used the areas for cultural practices, as well as various organizations regarding cultural knowledge, land use history, cultural sites and traditional Hawaiian or other cultural practices in the vicinity of the Kahakapao project area.

Formal interviews were conducted with Mr. Sam Ka'ai and an informant long familiar with the Makawao Forest area. Mr. Sam Ka'ai was born in Hana and currently lives in Pukalani. He has extensive cultural knowledge of the general Makawao areas and is considered one of Hawaii's living cultural treasures. The second informant was born and raised in Makawao and was a regular pig hunter in the Makawao Forest area.

Historic background research of the Hamakuapoko area indicated areas *makai* of the project area, near the gulches, would have been rich in resources and well populated in traditional times. However, the project area and surrounding vicinities would have been covered in native forest including *koa* (*Acacia koa*), *'ohi'a lehua* (*Metrosideros polymorpha*), *ti* (*Cordyline fruticosa*), and *kukui* (*Aleurites moluccana*), and unsuitable for long term habitation. Two centuries of deforestation for industrial purposes destroyed majority of the native forest, and by the early to mid 1900s, the project area was open pastoral land. Also introduced in the early 1900s was the competitive gorse weed Scotsman (*Ulex europaeus*) that was used as hedging material. The gorse had spread uncontrollably by the 1950s and destroyed majority of the native plants that remained. In 1953, the Olinda prison facility was opened with the primary purpose of having inmates clear the overgrown gorse areas. In response to the decline in forest areas and the overgrown gorse problem, the State Department of Forestry began a tree-planting program in the 1960s. Today the project area consists primarily of introduced species including eucalyptus, various pine and tropical ash.

The only ongoing cultural practice identified in the vicinity of the project area was pig hunting. Pig hunting

was historically a major cultural activity in the upland areas of Makawao, although discussions with local residents and testimonies by informants indicated pig hunting has declined over the last fifty years as a result of increased residential developments and lack of public access. Several pig hunting trails are located adjacent to the proposed Kahakapao Loop Trail, however informant testimonies have indicated that access to pig hunting trails would not be restricted by the development of the trail corridors.

Gathering for plant resources in traditional times would have been abundant in the project area. Procurement of forest resources such as sandalwood and *koa*, bird feathers, medicinal plants, and possibly alternate food source during times of famine would leave little or no evidence of such activities. In addition, the proposed project area was once a sandalwood and *koa* forest for which Hawaiians would gather *koa* stumps for canoe making [personal communication Sam Ka'ai, January 13, 2003]. Logs were cut and soaked in Maliko Gulch in preparation for transportation downstream to the oceanfront where the shaping would occur. However, over two centuries of mass deforestation has changed the landscape dramatically, and the majority of the native plants resources that were once gathered no longer exist. Limited *maile* (*Alyxia olivaeformis*) and *'ohi'a lehua* (*Metrosideros polymorpha*) picking are known to occur within the Makawao forest reserve, however there was no indication during the assessment of any ongoing plant gathering activities and none of the informants interviewed indicated any knowledge of ongoing plant gathering in the project area.

A field inspection of the area, as well as consultation with Makawao residents, State archaeologists, and a review of historic maps failed to find any archaeological sites or cultural properties in the vicinity of the project area. Based on a field inspection conducted by Dr. Melissa Kirkendall, State Historic Preservation Division Maui/Lanai Island Archaeologist in September 2001, the State Historic Preservation Division determined it unlikely that significant historic properties would be impacted by the trail's construction and concluded that no historic properties would be affected by the planned construction of the Kahakapao Loop Trail.

Adjacent Natural Resources

The planned trail and road corridors lie entirely within the Makawao Forest Reserve; hunters, equestrians, bicyclist and hikers have used the area over the years.

The planned trail contours through a Eucalyptus plantation, crosses an unnamed gulch filled with a mix of native and nonnative plants, and continues through the plantation until reaching the Paahao Ridge Road at approximately the 2880 feet elevation. From there the trail travels up the ridge road to approximately 3680 feet elevation where it contours back to the Fong Ridge Road, crossing through the top of the same gulch. The gulch is not a perennial stream but may experience occasional freshets. The area was planted with exotics for wood production as a goal, and as a consequence large/small scale harvesting and replanting may occur. If so, it may affect recreational opportunities and will require some type of mitigation. Fong Ridge also serves as a popular site for DLNR's minor harvesting activities that includes vehicular access only when the Piiholo Water Treatment Plant has the gate open.

The road re-routes will turn off the blacktopped road below the water treatment facility, pass through the non-native tree plantations circumventing the water treatment facility, and reconnect with the appropriate ridge road. The Borge Ridge Road will be gated at the bottom to restrict access to non-vehicular traffic.

Sensitive Habitats

The native plant species of the area are fairly common to mesic areas on Maui and in the State. A survey of the trail and road re-route areas revealed no specimens classified as threatened or endangered and only one specimen classified as a candidate species (*Cyanea asplenifolia*) along a corridor area of 25 feet wide on either side of the proposed centerlines. As noted earlier, a fenced enclosure will be constructed around

these plants to protect them during and after construction. Though not directly within the planned trail or road corridors, three threatened or endangered species are also located within the Forest Reserve. Their location within the Forest Reserve exposes them to random accidental damage, vandalism, or removal by anyone who may choose to wander off the established trails.

During the summer months, the area is exposed to drought and near-drought conditions where grasses and other bushy shrub species become a highly combustible fuel source. This period can present a significant fire hazard and in 1996 the Reserve experienced a fire occurrence due to a downed utility power line along Fong Ridge Road.

Identification, Summary of Major Impacts and Alternatives Considered

Major Impacts - Positive

The proposed trail development will provide excellent opportunities for expanding the recreational use of the Makawao Forest Reserve, matching a growing demand for family-oriented trail use activities, nature study, and photography. The trail will enhance environmental and ecosystem awareness by the public and also detection of native flora and fauna and incipient alien species. The series of techniques for reconstruction, maintenance and management described in the action's technical characteristics in the final work phase have been quite effective in mitigating a variety of consequences from public use along other Na Ala Hele trails. The proposed re-routing of the roads will increase security to the water treatment facility and increase accessibility to the adjacent areas to a variety of recreational users.

The positive benefits of an aggressive management program incorporating a strong interpretive element should successfully offset the negative impacts expected to be caused by occasional acts of vandalism, littering, unauthorized fires and other degrading uses of the trail. The trail will provide firefighter access across gulches that are otherwise difficult to traverse without an established trail and will act as a firebreak for ground moving grass fires. The gate at the top of Fong Ridge has a history of vandalism. With the increased presence of hikers, vandalism may be discouraged.

An active volunteer program administered by Na Ala Hele will provide for additional maintenance of the trail while providing an interpretive context and an appreciation of the environment for trail users and volunteers alike. Learned trail reconstruction and management techniques by volunteers would be transferable to other locations on Maui and across the State where similar environmental conditions exist.

Major Impacts - Negative

Construction of the trail and the road re-routes will briefly expose roots and other subsurface biomass to feral pigs. Pigs (and possibly deer) continue to represent the most significant source of negative impacts to the landscape. Long term rooting and browsing of the native vegetation by pigs and compaction of soils and spread of nonnative grasses throughout the area has helped establish aggressive non-native weed species. Rooting and grazing have also reduced the capacity for reestablishing less-aggressive native plant species. Plant defoliation caused primarily by grazing of deer may also promote soil erosion through the loss of protective leaf cover.

It is possible that large numbers of trail users would represent an additional source of impacts to the trail corridor area. Hikers, hunters, equestrians and mountain bikers wandering off the trail or traversing switchbacks in large groups could significantly damage vegetation, possibly accelerating soil erosion and helping to de-stabilize the trail bed. Horses may loosen the trail foundation, accelerating erosion and ditching if not controlled or watched closely. Horses may also browse on native plants. Unfortunately, vandalism, fires, and littering, can be expected to occur, though not with significant frequency.

Motorcycles are occasionally observed to be using trails within the Forest Reserve. Forest Reserve Rules

and Regulations ban motorcycles from going off of established roads while using Forest Reserve lands. Na Ala Hele will install appropriate informational signs at the trailhead, and if necessary, construct physical barriers such as trailhead bollards or other motorcycle use deterrents. Signs will identify users and right of ways to reduce conflicts.

Various user impacts will be monitored for their effect on the long-term preservation of the existing native plants and animals in the area. The Maui Na Ala Hele Trails Program has adapted a monitoring (Photo-point Management) system involving the use of photography, trail bed transect measurements, weed inventories, and field counters to compare use with impacts. Na Ala Hele is empowered to restrict access or close trail areas should the impacts prove too severe for continued public use without program intervention.

Based on the historic background research, as well as informant testimonies, the Kahakapao Loop Trail is anticipated to have no adverse impact upon native Hawaiian cultural resources, beliefs and practices. The only ongoing cultural practice identified during the course of the assessment was pig hunting; however, the construction of the Kahakapao Loop Trail will not affect the legal hunting availability of the area. While the combination of hunting and other recreational activities could be cause for serious accidents, the Makawao Forest Reserve is a designated multi-use area. The area will continue to be open to hunting on weekends and holidays, and hunters are welcome to use the trail to access the area and to ease the retrieval of meat.

Alternatives Considered

A no-build scenario was considered as an alternative to the proposed project. If the Kahakapao Loop Trail project is deferred, a significant opportunity to provide recreation for the largest portion of the recreational community will be deferred. Also, an important link to forming a significant firebreak within the plantation forest will not be built. Deprivation of public enjoyment of the various experiences offered by trail use for novice users and families would not be realized and a significant public recreational resource would be wasted.

Proposed Mitigation Measures

Impacts to the trail area will result from regular public use over time. Effective management strategies for regulating use will be a primary strategy for trail management. Existing monitoring and management efforts are proving to be effective.

The Program will strive to convey important information to the public regarding trail use etiquette. Recently established Na Ala Hele Trail System Rules and Regulations providing clear definitions of appropriate use activities will be combined with a trailhead information program. Na Ala Hele will place information about the new trail in existing public information packets containing trail maps, user etiquette, information on spread of non-native plants and interpretive descriptions that are available free of charge.

No strategies or techniques for reducing impacts to the trail area can be considered totally effective. However, constructing the trail to avoid sensitive native elements, remaining within trail grade specifications, constructing adequate trail slope and drainage structures will satisfactorily protect against impacts. The sensitive nature of the local natural environment is explained to all users through the series of brochures described above. Trail management techniques require routine monitoring to determine their effectiveness as will the use of informational and educational signs.

In order to mitigate impacts to endangered species, DLNR intends to provide fencing around any endangered species found within 50 feet of the trail corridor. At this time, the only known rare species within that range are two individual *Cyanea asplenifolia* plants, candidate species for Federal listing. These plants occur together beside the section of road that is to be re-routed around the water treatment facility, and an enclosure fence will be constructed around these plants. Volunteers will be informed of any

threatened or endangered plant species along or in the vicinity of the trail or road corridors. Should any additional endangered plants be found along the trail or road corridors, they will be protected from grazing by horses by enclosure fencing or other appropriate mitigation measures.

In order to mitigate the spread of invasive species, interpretive and educational materials will be made available through the Wailuku DLNR office and Na Ala Hele will maintain the trail corridor to keep it relatively free of noxious weeds.

All State historic preservation laws will be considered and integrated, when appropriate, in the development and management of the trail in accordance with Chapter 6E, Hawai'i Revised Statutes. In the event that any historical sites, artifacts or other structures are encountered within sight of the trail, the State Historic Preservation Division will be notified immediately, trail construction will halt, and the process pertaining to establishing management, mitigation, and if appropriate, interpretive measures will be initiated.

Should they become necessary due to human impact on the surrounding environment, several public use impact mitigation measures could individually or collectively be installed. They include: passive barriers, (e.g., visitor channeling for sensitive site avoidance), interpretive signs, and increased frequency of regular maintenance of the trail corridor by DOFAW staff and trained volunteers. Seasonal closures may be necessary. As mentioned above, motorized vehicles use of the trail will be prohibited.

Finally, to mitigate the potential conflict between recreational users and hunters, signs warning of the presence of hunters will be posted.

Determination

With the implementation of the management strategies recommended in this Final Environmental Assessment, it is not expected that this project will have a significant detriment to the surrounding environment, and a Finding of No Significant Impact (FONSI) is anticipated.

Findings and Reasons Supporting Determination

No Federally listed threatened or endangered plant or animal species have been found to occur within the trail corridor construction area. Two individual plants of the candidate species *Cyanea asplenifolia* were located along the road re-route of Borge Ridge. These plants will be protected within a fenced enclosure. No impacts to historical sites or cultural practices are expected to occur resulting from the construction or use of the trail or re-route of the roads. These elements, combined with implementing a suitable management plan and an active volunteer program should be effective in mitigating the bulk of user-related impacts.

The anticipated Finding of No Significant Impact is based on the evaluation of the project in relation to the following criteria identified in the Hawai'i Administrative Rules § 11-200-12.

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

The proposed trail will not impact the visual character of the area. The trail is compatible with the surrounding land use plans and programs being implemented for the region. The trail is located within the Makawao Forest Reserve, which is public land, and will increase general accessibility to the area for the public.

Some common plants may be damaged during trail construction and road re-routing, but not to any significant degree. No archaeological or historical sites are known to exist within the trail corridor. Should any archaeologically or culturally significant artifacts, bones, or other indicators of previous onsite activity

be uncovered during the construction phases of development, their treatment will be conducted in strict compliance with the requirements of the Department of Land and Natural Resources, State Historic Preservation Division.

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

The trail will expand the range of beneficial uses within the environment by increasing recreational opportunities in the Makawao Forest Reserve. Appropriate public access to and use of the area will be increased. The trail is compatible with the range of uses for a forest reserve.

3. Conflicts with the state's long term environmental policies or goals and guidelines as expressed in Chapter 344, Hawai'i Revised Statutes.

The proposed development is consistent with the Environmental policies established in Chapter 344, HRS, and the National Environmental Policy Act.

4. Substantially affects the economic or social welfare of the community or state.

The proposed project is not expected to affect the economic or social welfare of the community or State. The proposed project is designed to support surrounding land use patterns, will not negatively or significantly alter existing residential areas, and will not stimulate unplanned population growth or distribution. Funds for implementation are coming from normal government operational budgets and volunteer labor. Social impacts are expected to be positive, as the project's development is in response to public requests for increased hiking, equestrian and biking opportunities. Community members will benefit from the creation of additional recreational opportunities.

5. Substantially affects public health.

The proposed project will provide a significant contribution to Maui's future population by providing residents with the opportunity to improve their general health and well-being by exercising and enjoying the natural beauty of the Makawao Forest Reserve. The activities associated with hiking, bicycling, and equestrian trails work to dramatically increase one's health.

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

The proposed project in itself will not generate new population growth, but will provide needed recreational values to the area's present and future population. No public facilities will be impacted.

7. Involves a substantial degradation of environmental quality.

The proposed trail will utilize existing undeveloped forest reserve lands. The overall design of the project will complement the general use of the area. The trail itself and the planned re-routing of the roads will have a small footprint and are not expected to result in a substantial degradation of environmental quality. Endangered species found in the project area will be protected from harm during and after construction.

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

Construction and use of the planned trail is not anticipated to have a cumulative impact on the environment, nor is it a commitment for larger actions. Increasing the number of recreational opportunities and improving the Na Ala Hele trails system is compatible with the long-term goals of the State.

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

There are no rare, threatened or endangered species within the trail corridor. There is a cluster of two individual *Cyanea asplenifolia* plants, a candidate species for Federal listing, near the proposed re-routing of the existing access road. An enclosure fence will be constructed surrounding these two individuals to protect them during construction. With the planned mitigation, the project is not anticipated to substantially affect rare, threatened or endangered species or their habitat.

10. *Detrimentially affects air or water quality or ambient noise levels.*

Due the location of the proposed trail in the Makawao Forest Reserve, there is not anticipated to be any impact to near-shore ecosystems resulting from surface runoff. Some noise will be generated during trail construction and road re-routing; however, this activity will take place only during daylight hours, far from any residential area, and is anticipated to be minimal. Impacts will be significantly positive in terms of public health and enjoyment as compared to the "no action" alternative.

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.*

Development of the trail is compatible with the above criteria since the project area is not in a flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, fresh water or coastal waters. Moreover, development of the trail is not likely to harm environmentally sensitive areas, because much of the forest reserve was previously disturbed by planting of the tree plantations, and no longer reflects a "natural environment."

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

Due to the topographical characteristics of the forest reserve, views along the trail are generally not significant. The majority of the trail will not be visible, except from higher elevations along the trail by persons traveling along the trail. Finally, no views will be obstructed or be visually incompatible with the surrounding area

13. *Requires substantial energy consumption.*

Construction of the proposed trail will not require substantial energy construction. Na Ala Hele is a volunteer program, and the general public is anticipated to provide the manual labor. After completion of construction, there will be minimal demand for energy use, limited to periodic maintenance efforts.

List of Permits Required

Construction of the project requires approval by the Board of Land and Natural Resources. No other permits are anticipated.

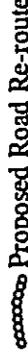
Environmental Assessment Preparation

This Environmental Assessment was prepared by staff of the Na Ala Hele Trails & Access Program, Maui District, Division of Forestry & Wildlife, Department of Land & Natural Resources, State of Hawai'i.

Appendix A

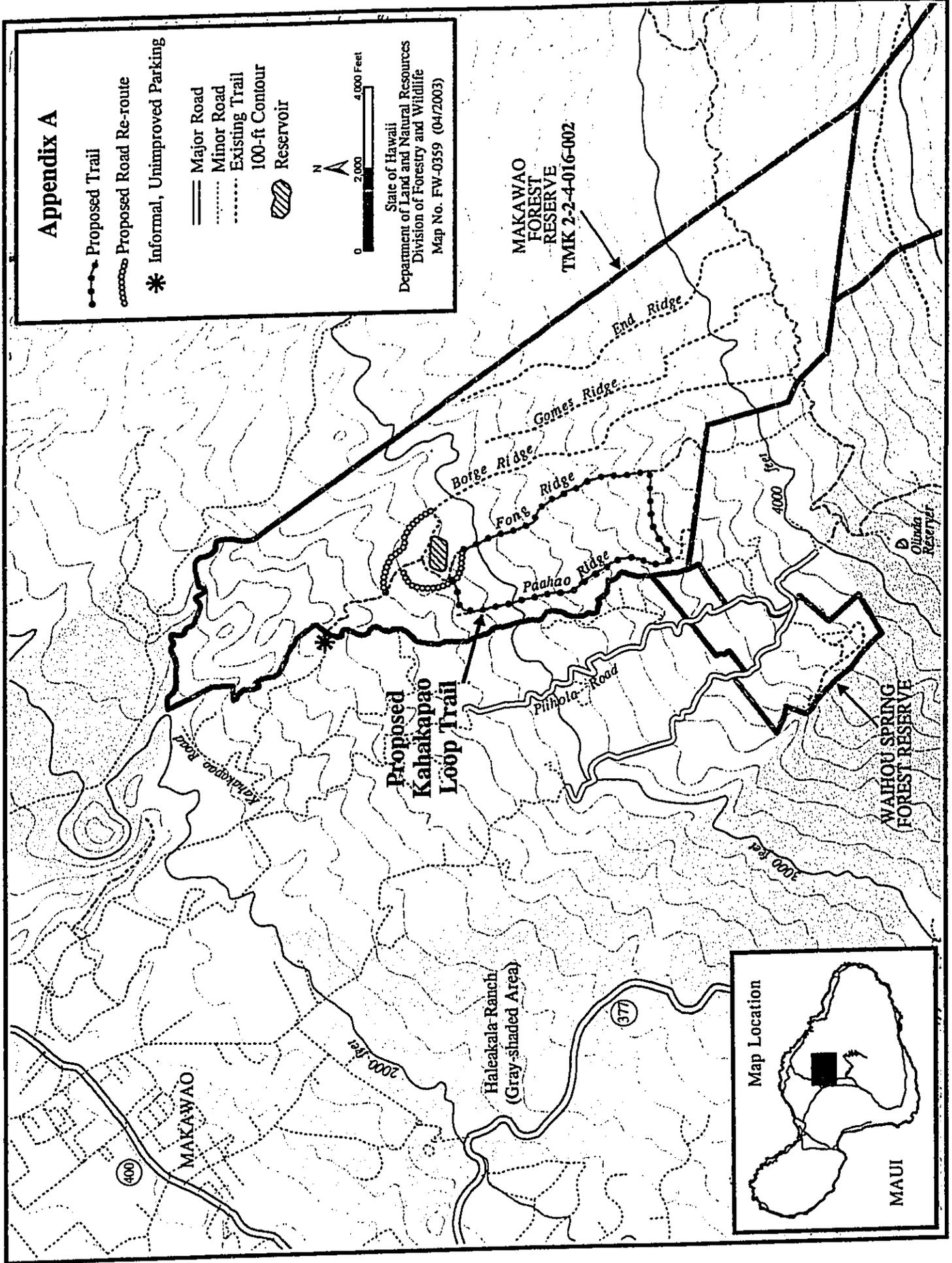
MAP OF PLANNED TRAIL, ROAD RE-ROUTING AND SURROUNDING AREA

Appendix A

-  Proposed Trail
-  Proposed Road Re-route
-  Informal, Unimproved Parking
-  Major Road
-  Minor Road
-  Existing Trail
-  100-ft Contour
-  Reservoir



State of Hawaii
 Department of Land and Natural Resources
 Division of Forestry and Wildlife
 Map No. FW-0359 (04/2003)



Appendix B

TRAIL SPECIFICATIONS

Management actions are also more likely to be accepted if the public is consulted and informed when various actions are being considered. Trail and access users have a stake in many management decisions. Involving the public (via the Na Ala Hele advisory councils) is recommended whenever feasible. The councils can help managers by outlining their preferences with respect to management actions and by facilitating communication between user groups and managers. The advisory councils user groups can also be instrumental in public information or education programs which constitute an indispensable aspect of ongoing management.

D. TRAIL AND ACCESS DEVELOPMENT, DESIGN, AND MAINTENANCE

1. GENERAL TRAIL AND ACCESS DEVELOPMENT GUIDELINES

Na Ala Hele's trail and access development guidelines apply differently depending on the trail type. Existing or historic trails, roads, and other access ways will often not conform to recommended guidelines. Na Ala Hele does not intend to redesign or reconstruct these trails unless absolutely necessary. Na Ala Hele consults with the Historic Preservation Division in historic trail restoration and maintenance concerns which are discussed later in this section.



"High quality trail design is primarily a balance between beauty and function. Natural features and scenery exist ideally in creative juxtaposition with the continuity, efficiency, and durability of a proposed route." (From Trail Building and Maintenance, 2nd ed. Proudman and Rajala, 1981)

The following information is applicable to the construction of new Na Ala Hele trails and accesses or to existing, non-historic trails/accesses in need of reconstruction. Specific design guidelines for various trail types and modes of transport are presented in Figures V-4. through V-6.

- Initial Construction and Ongoing Maintenance - Routes should be designed to require minimal future maintenance. The need for vegetation removal, grading, and other modifications should be minimized. Trails should be located where the soil is stable and well-drained.
- Erosion - Routes should conform to the natural terrain. Long, straight sections, sudden, abrupt changes in direction, and steep grades should be avoided. Switchbacks, waterbars, and steps should be used to promote erosion control.
- Safety - Stream and road crossings should be planned to minimize the potential for accidents. Bridges may be necessary. Warning signs may be needed.
- Trail Experience - The trail experience can be more interesting with the incorporation of a diversity of biological, climatic, scenic, and topographic features along the route. Trails should include areas where the public can safely access scenic views.

Additional general information on trail development, including design, layout, and construction, is contained in the many source materials in the Na Ala Hele library. Especially valuable materials are listed in Figure V-3.

Figure V-3. Recommended Sources on Trail Building and Maintenance

Proudman, Robert, and Rajala, Reuben, Trail Building and Maintenance, 2nd Edition. Appalachian Mountain Club in association with the National Park Service, National Trails Program, Boston: 1981. This is easily the best single volume source on trail construction and repair and is strongly recommended as a handbook for groups actively involved in trail work. Each DOFAW District Office has a copy. Handbooks can be purchased by writing to:

Appalachian Mountain Club Books
5 Joy Street
Boston, MA 02108

Hooper, Lennon. NPS Trails Management Handbook. United States Department of the Interior, National Park Service. 1983.

State of Indiana, Department of Natural Resources. Indiana Trails Construction and Maintenance Manual.

State of New Mexico, Natural Resources Department. Adopt-a-Trail Handbook. Volunteers for the Outdoors. 1984.

Ashbaugh, Byron. Trail Planning and Layout. National Audubon Society. New York: 1965.

2. SPECIFIC TRAIL AND ACCESS DEVELOPMENT GUIDELINES

Refer to Figures V-4. through V-6. for details on trail and access design, layout, and construction.

3. ACCESSIBILITY FOR PERSONS WITH DISABILITIES

a. What the Law Requires

Chapters 502 and 504 of the Rehabilitation Act of 1973 require that programs, services, buildings, and facilities that are supported by Federal monies be accessible to persons with disabilities. Section 103-50, HRS, requires that all public buildings and facilities constructed by the State and Counties conform to the "American Standards Specifications for Making Buildings and Facilities Accessible to and Usable by the Physically Handicapped."

The "Uniform Federal Accessibility Standards" are used by the Federal Departments of Interior, General Services Administration, Defense, Housing, and Urban Development, and the U.S. Postal Service.

Even though the Na Ala Hele program has not applied for or received Federal funding, the program must comply with Federal accessibility requirements because Na Ala Hele is part of DOFAW and DLNR, both of which receive Federal monies for a variety of programs.

b. Accessibility

The previously mentioned "American and Uniform Standards" work to prevent architectural barriers so that disabled persons can enjoy access to governmental services that should be equally accessible to all people. Accessibility is not limited to structures and facilities. Federal law also requires programs to be equally accessible. This includes making information available to visually and hearing impaired persons on the availability and location of services, programs, and facilities.

There are no established standards for trails, camping grounds, and picnic shelters. The State of Hawaii's Commission on Persons with Disabilities (Department of Health) is available to review program and structural plans and advise on ways to provide equal access to the maximum extent feasible. In the absence of established standards, it is important to voluntarily determine what can be done to facilitate access to outdoor areas. A balance needs to be maintained between accessibility needs, safety, and environmental and historic preservation concerns.

A wheelchair accessible path requires sufficient width, gentle slopes, and a firm, slip-resistant surface. To construct and maintain to safety standards, such a trail in historic, wildland, or sensitive trail environments may result in unacceptable levels of impacts on the trails and their surroundings. Wherever accessible trails/accesses are located, parking, restrooms, water, and other facilities must be built to standards that enable use by disabled persons, particularly if such facilities are present for the non-disabled.

Kanaha Pond, a major wetland habitat for waterbirds on Maui, has wheelchair accessible trails and viewpoints. Keanae Arboretum, a DOFAW project on Maui, is in the process of developing trails that will be wheelchair accessible. However, at this time neither area has any restroom facilities.

APPENDIX C

CULTURAL IMPACT ASSESSMENT

CULTURAL IMPACT ASSESSMENT
FOR THE PROPOSED
KAHAKAPAO LOOP
AND WAIHOU SPRINGS TRAILS
HĀMĀKUAPOKO AHUPUA`A,
MAKAWAO DISTRICT,
MAUI ISLAND, HAWAI`I
(TMK: 2-4-16: 2, 2-4-15: 2, 3, 4, 6, 12)

Melanie M. Mann, B.A.,
Douglas Borthwick, B.A.
And
Hallett H. Hammatt, Ph.D.

Prepared for
Na Ala Hele Trails and Access Program

Cultural Surveys Hawai`i, Inc.
February 2003

ACKNOWLEDGMENTS

Cultural Surveys Hawai'i, Inc. would like to thank all the informants who participated in this cultural impact assessment. We are most grateful for their time and kind words of wisdom. We also wish to acknowledge Bob Hobby of the Department of Land and Natural Resources and Sam Ka'ai for their *mana'o*.

ABSTRACT

At the request of Na Ala Hele, Cultural Surveys Hawai'i, Inc. conducted a cultural impact assessment for the proposed Kahakapao Loop Trail (TMK: 2-4-16: 2) and the Waihou Springs Trails (2-4-15: 2, 3, 4, 6, 12) in the *ahupua'a* of Hāmākuapoko, District of Makawao, Maui.

An attempt was made to contact present and former residents of Makawao, as well as various organizations regarding cultural knowledge, land use history, cultural sites and traditional Hawaiian or other cultural practices in the vicinity of the Kahakapao Loop and Waihou Springs trail project areas. Two knowledgeable informants were identified and interviewed.

Historic background research indicated that in ancient times, the project areas would have been covered in native forest including *koa*, *'ohi'a lehua*, *ti*, and *kukui*. Areas *makai* would have been well populated and suitable for successful cultivation of a variety of resources. However, areas *mauka* (including the project areas) would have been unsuitable for long periods of habitation. Mass deforestation and cattle grazing in the mid 1800s through the early 1900s had eliminated majority of what had existed of the native forest, and in response to the declining remnant forest, the State Division of Forestry began a tree-planting program in the 1960s.

This study failed to find any archeological sites within the trail corridors or immediate vicinities. Two archaeological studies have been conducted south of the Waihou Springs trails project area, however both studies reported no significant archaeological findings.

The only ongoing cultural practice identified during the course of the cultural impact assessment was pig hunting within the Makawao Forest Reserve. Pig hunting was historically a major cultural activity in the upland areas of Makawao, although pig hunting has declined over the last fifty years as a result of increased residential developments and lack of public access. Several pig hunting trails are located adjacent to the proposed Kahakapao Loop trail, however informant testimonies have indicated that access to pig hunting trails would not be restricted by the development of the trail corridors.

Although no specific cultural concerns were identified during the course of the cultural impact assessment, Cultural Surveys Hawai'i, Inc. recommends the following in the event that inadvertent historic properties, including human burials, are encountered during construction for the Kahakapao Loop and Waihou Springs trail corridors. State law (Chapter 6E, Hawai'i Revised Statutes) requires the following:

1. Stop all disturbing activity in the immediate area.
2. Leave all remains in place.
3. Immediately notify the State Department of Land and Natural Resources-Historic Preservation Division (DLNR/SHPD) and the county police department.

TABLE OF CONTENTS

ACKNOWLEDGMENTS	i
ABSTRACT	ii
LIST OF FIGURES	v
LIST OF TABLES	v
I. INTRODUCTION	1
A. Project Area Background	1
B. Scope of Work	5
C. Methodology	5
1. Historic Research	5
2. Identification of Knowledgeable Informants	9
3. The Interview Process	10
4. Biographical Sketch of the Informant	10
<i>Sam Ka'ai</i>	10
II. PROJECT AREA DESCRIPTION AND NATURAL SETTING	11
A. Project Area Description	11
B. Natural Setting	11
III. CULTURAL SETTING	13
A. Makawao District	13
B. General Overview of Hāmākuapoko Ahupua`a	15
C. Legends Associated with Hāmākuapoko	16
D. Early Historic Period	18
The Māhele	18
Traditional Land Use Patters	19
E. Hāmākuapoko 1900s to Present	21
IV. PREVIOUS ARCHAEOLOGICAL RESEARCH	29
V. CULTURAL RESOURCES/TRADITIONAL PRACTICES	32
A. Native Gathering Practices for Plant Resources	32
B. Native Hunting Practices	32
C. Trails	33
D. Burials	33
E. Cultural Properties	34
VI. SUMMARY AND RECOMMENDATIONS	35
A. Summary	35
B. Recommendations	36

VII. REFERENCES	37
Appendix: Interviews	40

LIST OF FIGURES

Figure 1	Portion of USGS 7.5 Minute Series Topographic Map, Kilohana and Haiku Quadrangles, Showing Kahakapao and Waihou Springs Trail project areas.	2
Figure 2	Tax Map Key 2-4-16 Showing Kahakapao Loop Trail.	3
Figure 3	Tax Map Key 2-4-15 Showing Waihou Springs Trails.	4
Figure 4	General Picture of the Proposed Kahakapao Trail area.	12
Figure 5	General Picture of the Proposed Waihou Springs Trails area.	12
Figure 6	1872 map of Makawao, W.D. Alexander, Surveyor-General, Showing Approximate Location of Kahakapao Loop Trail and Forested Areas.	22
Figure 7	1872 Map of Makawao, W.D. Alexander, Surveyor-General, Showing Approximate Location of Waihou Springs trails area, Haleakalā Trail, and areas impacted by deforestation.	23
Figure 8	1907 Map of Makawao, Walter E. Wall, Surveyor, Showing Approximate Location of Kahakapao and Waihou Springs project areas.	26
Figure 9	1957 USGS Topo Map, showing locations of Olinda Prison Camp and Haleakalā Trail.	27

LIST OF TABLES

Table 1:	Results of Community Consultations	6
Table 2.	Previous Archaeological Studies Conducted in the Vicinity of the Kahakapao Loop and Waihou Springs trails project areas	30

I. INTRODUCTION

A. Project Area Background

At the request of the Department of Land and Natural Resources Division of Forestry and Wildlife, Na Ala Hele Trail and Access Program, Cultural Surveys Hawai'i, Inc. conducted a cultural impact assessment for the proposed Kahakapao Loop (TMK 2-4-16: 2) and Waihou Springs trails (TMK 2-4-15: 2, 3, 4, 6, 12), Hāmākuapoko *Ahupua`a*, Makawao District, Island of Maui (Figures 1). The proposed Kahakapao Loop trail will be located within the Makawao Forest Reserve (Figure 2), and the Waihou Springs trails will be situated within the Waihou Springs Forest Reserve in Olinda (Figure 3).

The purpose of the cultural impact assessment is to consider the effects that the proposed trails may have on native Hawaiians as it pertains to their culture and right to practice traditional customs. The Hawai'i State Constitution, Article XII, Section 7 protects "all rights" of native Hawaiians that are "customarily and traditionally exercised for subsistence, cultural and religious purposes." Act 50 (SLH 2000) was passed as an attempt to balance the scale between traditional lifestyles and development and economic growth. Act 50 provides that environmental impact statements: (1) Include the disclosure of the effects of a proposed action on the cultural practices of the community and State; and (2) Amends the definition of "significant effect" to include adverse effects on cultural practices.

The Scope of Work (SOW) was designed to meet the Guidelines For Assessing Cultural Impacts as adopted by the Office of Environmental and Quality Control (OEQC) (1997), as well as, the requirement of any other State and County agencies involved in the review process for the proposed project. The "Guidelines for Assessing Cultural Impacts" issued by the Office of Environmental and Quality Control (OEQC) discuss the types of cultural resources, practices and beliefs that might be assessed. The Guidelines state:

The type of cultural practices and beliefs subject to assessment may include subsistence, commercial, residential, agricultural, access-related, recreational, and religious and spiritual customs. The types of cultural resources subject to assessment may include traditional cultural properties or other types of historic sites, both man-made and natural, including submerged cultural resources, which support such cultural practices and beliefs.

Preliminary archaeological and botanical surveys were conducted in December of 2001. The archaeological assessment resulted in a finding that "no historic properties will be affected by this undertaking" (SHPD/DLNR LOG. 28907 DOC. 0112CD32). Additionally, the botanical assessment indicated that no threatened or endangered native or endemic species were within the trail corridor itself, although a few exist within the Forest Reserve. The current cultural impact assessment is a complimentary component to the archaeological and botanical studies, and provides critical information regarding those traditional and cultural practices that may be affected by the development of the Kahakapao Loop and Waihou Springs Trails.

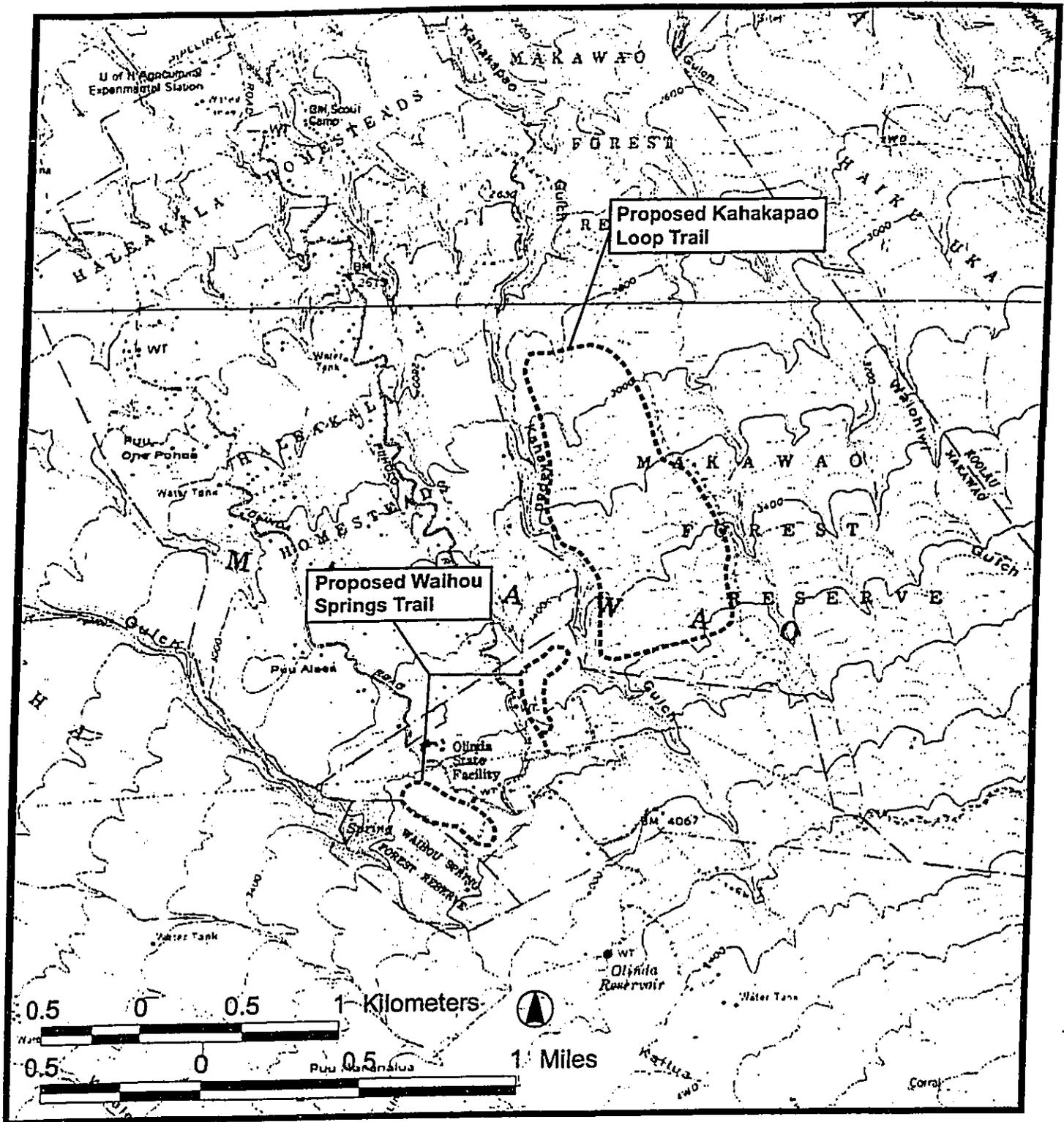


Figure 1 Portion of USGS 7.5 Minute Series Topographic Map, Kilohana and Haiku Quadrangles, Showing Kahakapao and Waihou Springs Trail project areas.

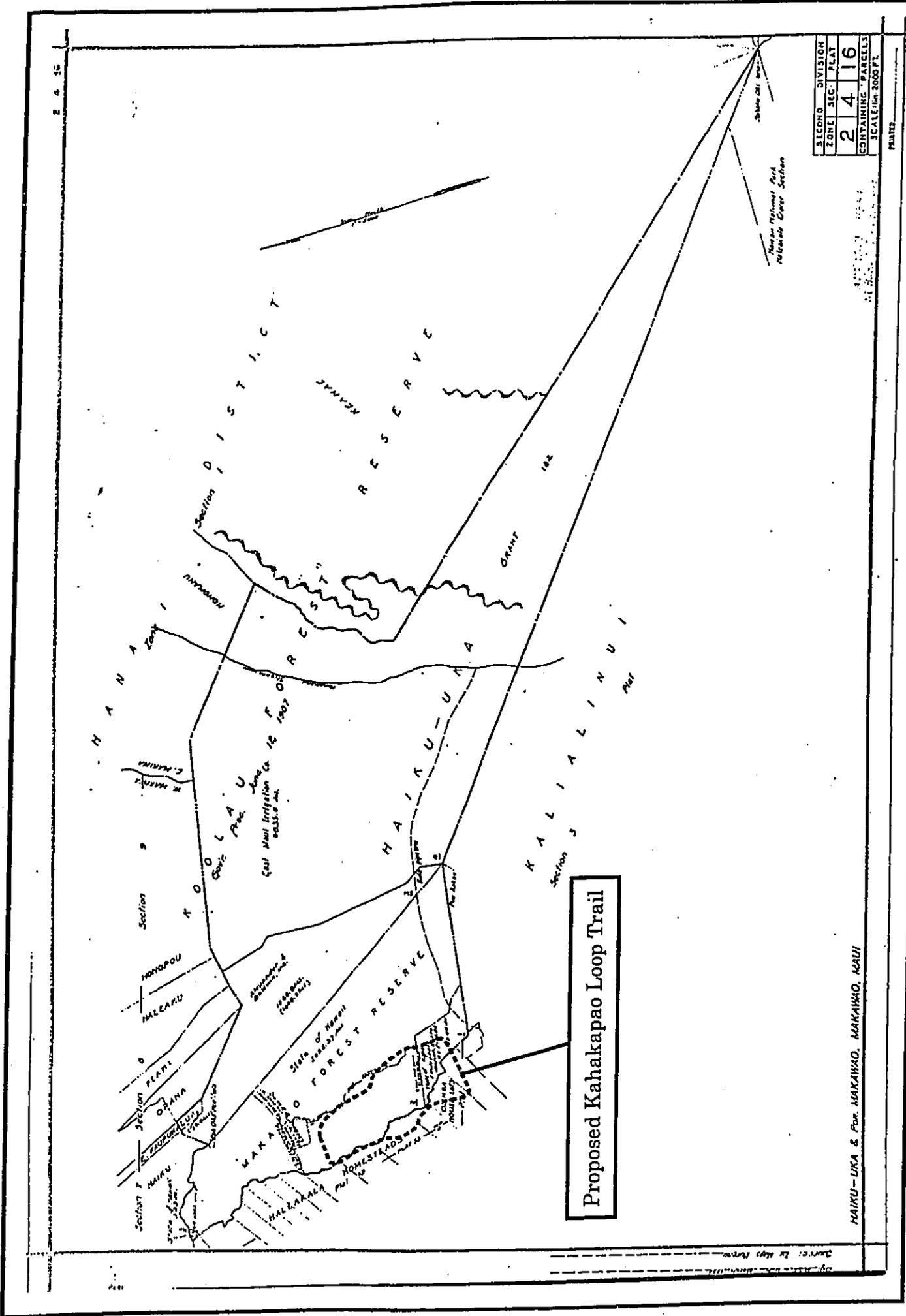


Figure 2 Tax Map Key 2-4-16 Showing Kahakapao Loop Trail.

B. Scope of Work

In compliance with the Office of Environmental and Quality Control (OEQC) and Act 50, the following Scope of Work (SOW) was designed to satisfy the requirements of a cultural impact assessment as it relates to the identification of traditional Hawaiian customs and rights within the project areas.

- 1) Examine historic documents, Land Commission Awards, and historic maps, with the specific purpose of identifying traditional Hawaiian activities. Such activities would include the gathering of plant, animal and other resources, in addition to agricultural pursuits, as may be indicated in the historic record.
- 2) Review existing archaeological information pertaining to site distribution, as this may enable us to reconstruct traditional land use activities, as well as identify and describe past and/or present cultural resources, practices, and beliefs associated with the trail.
- 3) Conduct limited oral interviews with persons knowledgeable about the historic and traditional practices in the project area(s).
- 4) Preparation of a report on the above items summarizing gathered information as related to traditional practices and land use. The report will assess the impact of the proposed action on the cultural practices and any features identified.

C. Methodology

1. Historic Research

Historic documents, maps and photographs were researched at: the Hawai'i State Archives; Hawai'i State Survey Office; Bernice Pauahi Bishop Museum archives and library; the State Historic Preservation Division (SHPD) Library; and the Cultural Surveys Hawai'i Library.

2. Identification of Knowledgeable Informants

Hawaiian organizations, government agencies, community members and cultural and lineal descendants with ties to the Makawao area were contacted to (1) identify potential knowledgeable individuals with cultural expertise and knowledge of the Kahakapao and Waihou Springs project areas and surrounding vicinities, and (2) to identify cultural concerns and potential impacts relative to the Kahakapao and Waihou Springs project areas. An effort was made to locate informants who either grew up in Makawao or who, in the past, used the Kahakapao and/or Waihou Springs project areas for traditional and cultural purposes. In addition, informal talk-story with community members familiar with the project areas was ongoing throughout the consultation period. The organizations and agencies consulted

included: the State Historic Preservation Division; West Maui Cultural Council; Maui/Lana'i Island Burial Council; Office of Hawaiian Affairs; Alu Like, Inc.; Maui Hawaiian Civic Club; Department of Hawaiian Homelands; Maui Community College; Sierra Club; Nature Conservancy; Native Hawaiian Plant Society; and individual departments of the County office.

The following table shows the results of the community consultations which were conducted.

Table 1: Results of Community Consultations

Key:

Y=Yes

N=No

A=Attempted (at least 3 attempts were made to contact individual, with no response)

S=Some knowledge of project area

D=Declined to comment

U=Unable to contact, i.e., no phone or forwarding address, phone number unknown

Name	Affiliation	Contacted	Personal Knowledge (Y/N/S)	Comments
Aiu, Pua	Office of Hawaiian Affairs	Y	N	No comment. Made referrals.
Allen, Janet	West Maui Cultural Council	A		
Armstrong, Thomas	Makawao Resident	Y	Y	Resident of Makawao. Comment that proposed Kahakapao Trail will not affect hunting access.
Craddick, David R.	Department of Water Supply-Maui County	A		
Chun, Philip		A		
Derego, Jeffery C.	Kahakapao resident	Y	Y	Resident of Makawao. Hunts pig and deer in the area. Expressed concern about conflicts between hikers and hunters.

Name	Affiliation	Contacted	Personal Knowledge (Y/N/S)	Comments
Dukelo, Kahele	Maui Community College, Po'okela Program	Y	N	No comment and no referrals given.
Duey, Rose Maire	Alu Like, Inc.	Y	Y	Made referrals.
Evenson, Mary		Y	S	No comment.
Fujishiro, Paul	La'au lapa'au expert	A		
Hall, Dana N.	Maui/Lanai Island Burial Council	Y	Y	Made referrals.
Haan, Bram Den	Valley Isle Road Runners Association	U		
Hau, Skippy	DLNR Division of Aquatic - Resources Maui	Y	Y	Gave comment regarding trail management and potential forest fires. Made referral.
Hobdy, Bob	Department of Forestry and Wildlife	Y	Y	Gave extensive historic background about Olinda and the Makawao Forest Reserve. First hand knowledge about the trail area-completed botanical survey for the environmental assessment.
Hokoana, Lui	Maui Community College, Hui Lei Ola	Y	N	No comment.
Ino, James J.	Natural Resources Conservation Service	A		
Ka'ai, Sam	Resident of Pukalani	Y	Y	Has extensive knowledge of the culture and history of the general Makawao area. Interviewed on January 14, 2003.
Kafka, Peter R.	Sierra Club	U		

Name	Affiliation	Contacted	Personal Knowledge (Y/N/S)	Comments
Kapeliela, Kana'i	DLNR, State Historic Preservation Division	A		
Kirkendall, Dr. Melisa	DLNR, State Historic Preservation Division	Y	Y	No known archaeological sites in either areas. Commented on springs in Olinda that were once tapped into for supplying water to Kula residents.
Ke'au, Charles		A		No known telephone number.
Koga, Jason	DLNR, Land Division	Y	N	Made no comment.
Lindsey, Ed		Y	N	Made referrals.
Matsui, Patrick	Department of Parks and Recreation	Y	N	Made referrals.
Maui Historical Society		Y	N	Made referrals.
Mauri, Carla	Makawao Public Library	Y	N	Made no comment. Made referrals.
Maxwell, Charles K.	Maui/Lanai Island Burial Council	Y	D	Declined to comment.
McEldowney, Dr. Holly	DLNR, State Historic Preservation Division	Y		Commented that both the Kahakapao and Waihou Springs area appear to be already substantially developed.
Medeiros, Anthony	Former resident of Olinda.	Y	Y	Grandparents and Parents lived in Olinda in the '30s, '40s and '50s. Used to pick blackberry to make jam and hunt pig as youngsters.
Medeiros, Vanessa	Department of Hawaiian Homelands	Y	N	Made referrals.

Name	Affiliation	Contacted	Personal Knowledge (Y/N/S)	Comments
Merle, Jeff	Olinda resident.	Y	Y	Commented on <i>maile</i> picking within the Makawao Forest Reserve and Olinda areas. Also mentioned the abundance of pig hunting within both areas.
Naeole, Iokepa	The Nature Conservancy	Y	N	Made referrals.
Nelson, Linda	Native Hawaiian Plant Society.	U		
Pelekikena, Clara DeStefano	Central Maui Hawaiian Civic Club	U		
Pu, Eddie		U		
Shattenberg-Raymond, Lisa	Maui Nui Botanical Gardens	Y	S	Made referrals.
Shimaoka, Thelma	Office of Hawaiian Affairs	Y	S	Made several referrals.
Wendt, Ed		A		

3. The Interview Process

A substantial effort was made to locate 3-4 knowledgeable informants for the cultural impact assessment for the Kahakapao Loop Trail and Waihou Springs Trail. Two individuals with extensive knowledge of the Makawao area were identified and formally interviewed. The first interview was conducted on January 14, 2003 with Mr. Sam Ka'ai, and the second interview was carried out on January 16, 2003 with an informant long familiar with Makawao Forest area. The second interviewee wishes to remain anonymous, and will be referred to as the Informant throughout this report. Each interview lasted an hour to two hours, and both interviews were taped and transcribed. Both participants were then given the opportunity to review the transcriptions and provide any necessary corrections and/or editing remarks to approve the final transcription. An "Authorization for Release" form giving permission for the interviews to be used as part of this assessment was then signed by each informant. Excerpts from the interviews were used throughout the report, wherever applicable. The full transcription for both interviews is appended to this report.

4. Biographical Sketch of the Informant

Sam Ka'ai

Mr. Sam Ka'ai was born to Edward and Kathryn Marciel on April 17, 1938 in Hāna, Maui. At birth, Mr. Ka'ai was *hanai* by his father's eldest sister, Maile Marciel and her husband, Sam Kaha'i Ka'ai, who raised him. His father was a craftsman and canoe maker, who passed his knowledge of the material Hawaiian culture on to Mr. Ka'ai at a very young age. During the war of the 1940s, Mr. Ka'ai's family moved from Hāna to Kaupō, and then to Moloka'i and Waihe'e. Mr. Ka'ai is one of six siblings and holds the title of *hiapo* (first born). Today, Mr. Ka'ai resides in Pukalani where he continues to perpetuate the Hawaiian culture through a variety of cultural activities. Mr. Ka'ai is considered one of Hawai'i's living cultural treasures, who is often called upon to conduct cultural ceremonies, lectures and blessings.

II. PROJECT AREA DESCRIPTION AND NATURAL SETTING

A. Project Area Description

The proposed Kahakapao Loop Trail is planned to be located within the Makawao Forest Reserve (Figure 4). The proposed trail corridor will be located on the western slope of Haleakalā Volcano within the Makawao Forest Reserve. Looping from the bottom of Fong Ridge the trail connects to the bottom of Pa`ahao Ridge. From there, it continues up Pa`ahao Ridge then cuts through the gulch and reconnects to the top of Fong Ridge. The trail is approximately three miles long. The elevation of the proposed trail ranges from 2800 feet above sea level in the gulches to 3600 feet above sea level on the ridge. The Makawao Forest Reserve was established in 1908 for watershed protection, and includes an area of approximately 2,093 acres. In the 1960s, a state forestry program of tree-planting was undertaken, with ridges and level areas bulldozed and a road system established for planting and harvesting.

The Waihou Springs Trail is proposed for the Waihou Springs Forest Reserve in Olinda (Figure 5). The proposed trail will be in two sections—one to the west of the Olinda Bird Sanctuary and one to the east. The western loop ranges in elevations from 3600 to 3800 ft above sea level and the eastern loop at 3400 to 3700 feet above sea level. The name "Olinda" refers to the name of Samuel T. Alexanders' home, which was later sold to Harry Baldwin (Pukui *et al.* 1974: 169). Olinda was also the location of a territorial and state prison camp from 1956 to 1973. The former prison camp facility was then converted into the Olinda Bird Sanctuary in 1986.

B. Natural Setting

Weather conditions within the project areas are usually clear during the morning hours, with a few afternoon clouds, which envelope the lower portions of the Forest Reserve. Mist and/or light and persistent rain is common, however, in recent years drought conditions have prevailed. Storms usually occur during the Fall and Winter months with heavy winds and rain contributing 60 to 120 inches of rainfall annually. Nights are usually cold all year round. Winds originate mainly from the east-northeast for most of the year, but may occasionally blow from the south-southwest during "Kona" conditions. Winds and cloud conditions usually vary due to the mountain topography and the prevailing trade winds. The topography is extremely varied due to the trails transition from the bottom of the gulches to the top of the ridges. The areas within the gulches consist of well-drained soils developed in volcanic ash (Olinda loam, 12 to 20 percent slopes) and rock land encompassing the trail areas up on the ridges (Foote *et al.* 1972).



Figure 4 General Picture of the Proposed Kahakapao Trail area,



Figure 5 General Picture of the Proposed Waihou Springs Trails area.

III. CULTURAL SETTING

A. Makawao District

The proposed Waihou Springs and Kahakapao Loop trails reside in the modern judicial district of Makawao in the *ahupua`a* of Hāmākuapoko. In ancient times, the *ahupua`a* of Hāmākuapoko would have been considered an independent *moku* or district, with a number of *ahupua`a* within.

Under the reign of Kaka`alaneo, Maui was divided into twelve *moku* or districts (Coulter 1935: 216-217). These *moku* included Kā`anapali, Lāhainā, Hāmākuapoko, Hāmākualoa, Ko`olau, Hāna, Kīpahulu, Kaupō, Kahikinui, Honua`ula, Wailuku, and Kula. The twelve ancient districts of Maui were later reduced to four under the Civil Code of 1985, which consolidated all East Maui districts into one. Later the Session Laws of 1909 regained two districts, which established a total of six districts. Under the Session Laws of 1909, Hāmākualoa and Hāmākuapoko were joined to make the modern district of Makawao.

The Makawao District, as presently defined, consists of four traditional Hawaiian political districts. These include Honua`ula to the south, along the leeward slopes of Haleakalā; Kula, which overlooks the Wailuku District and the Isthmus lands; and Hāmākuapoko and Hāmākualoa along the windward slopes of Haleakalā (In Sterling 1998: 4).

The literal translation of Makawao is "forest beginning" (Pukui *et al.* 1984: 142), although several interpretations have transpired. Makawao may also translate to mean the "eye of the inland forest"—*maka*, meaning 'eye' (Pukui 1986: 224) and *wao* meaning 'inland region or forest' (Pukui 1986: 382).

The two rains associated with Makawao are the *`ualena* and *`uki`ukiau* rains. The *`uki`ukiu* rain is also referred to as *`ukiu* rain and is described as "a fine rain with wind that blows down from the mountains" (In Sterling 1998: 9). Although very little literature has been written about the *`ualena* and *`uki`ukiu* rains, Mr. Sam Ka`ai suggested the following:

SK: *`Ualena*, *`Ula* mans reddish-yellow, and *`Ualena* is the yellow rains—which I have a feeling, I cannot confirm, but I have a feeling it was used for [inaudible]. But let's say it was called *`Ualena* rains, the reddish-yellow rains, which is, the rain is falling and the light comes through from the dawn, and that is the water spirit, and would be one of the lower manifestations of the *kūohu*, the cloud of Kāne's involvement when the rains fall—you see it's Kāne, it's the rains of Kāne falling on the forest of Haumea, now *hau* means to serve up and *mea* means serving up all things, so Haumea makes the forest grow. So it's also the mist that comes out of the ground, so we associated Haumea, okay—and the earth is called *papahonua*, *wāhine papahonua*, but the child spirit, the forest spirit is *wāhine haumea*, she receives the rain and for that she offers all these things up. Now *`Ualena* rains have this kind of

mist-*kuakuokalena* is the mist that comes across the area and has that certain quality of dawn, *`ula`ulalena*—it's the equivalent to the thing you see in the ocean called *`ehu`ehukai*—when the waves come in and the wind blows the sea back and makes that spray and you see the rainbows inside that, that is *`ehu`ehukai*. So some people are named *`Ehu* from *`ehu`ehukai*, the blowing back of the wave, sometimes it's called the red-headed surfer and other times it's called the rooster of the wave, get all kind different kind names—it depends on whose interpreting. So this *`Ulalena* get that golden reddish rain, which comes in that mist, that's because the cloud banks are rising and the rains that fall from that—if the light pictures through, get that color—now that's the physical description. For the Hawaiian, it's coming the enriched breadth of this woman, breathing on the forest—and the other name is very supportive, it's a name of a fern. What's the name overthere?

CSH: *`Ukiukiu*.

SK: Get *`uki`uki* grass—know *`uki`uki* grass, now try remember Hāmākua coast get *`uki`uki*. *`Uki`uki* is one dryland grass? Where you find that kind grass? Mostly in Kona, yeah? So I think *`Ukiukiau* is more, that's just the rain that comes over, because in the old days also had *`uki`uki* fern—it's one prickly fern. Or it's a fern that we call by a different name, but when come dry the thing all shock, and that's what they call *`uki`uki*. Here in Hawai'i we call the fish *ulua*, you go down to the Tuamutu's, the full size fish is called the *ulua*, we call *pāpi`o* the younger one, yeah—down there get five different names and *ulua* is only [inaudible]. It's all according to the sizes—*purau* for how, because *pukahau* is the flower only. Then they have *purau* is the wood, we call it *lā`au*, then they get—you look at the tree it's one name, you look at the stem it's another name, you look at the fruit it's another name—they don't have that so called catch—in other words, with our culture we pick one name, we say *pukahau*, the flower of the *hau*, then we say *lā`auhau* for the wood—get multiplicities, so it's hard, they say what kind of wood is it, they say *hau*, it's —so same thing up there, it's *`uki`uki* might be the poky-poky grass, but when ferns in summer, when getting to that dry stage, one of the descriptions is poky-poky grass—you know that tangled, you know the one we eat, it's the home for pigs. That fern, when it's in its dry state—so it might be, and try remember dry fern has that yellowish color, if you talking about the yellowish rain, you know where the formal is coming out—I don't know if you want to use that kind of stuff, because you're not going to find literature, you're going to say Sam Ka`ai said—

Several legends mention the *`ukiu* and *`ulalena* rains, including the legend about Kihapi`ilani and his sweet potato patch. After escaping from his brother Lono, Kihapi`ilani came to reside among the commoners of Hāmākuapoko. There, he planted a large sweet potato patch. As Kihapi`ilani worked, the rain and wind of Makawao penetrated his body. "The sunshine beat down on this back, the *`uki`ukiu* breeze blew in front of him, the *`Ulalena* rain added its share, and intense heat reflected from the *`ulei* vines" (Kamakau 1961: 24). It was the double rainbow that followed the *`Ulalena* rain that eventually

revealed Kihapi'ilani's royal identity, as Kamakau explains:

One old man remarked to the other, "there must be a chief near by for this is the first time that a rainbow is spread before the trees." As they were speaking a man came from below with a huge load on his back, and they called to him to come into the house. He shifted his load, saw the old men, Kau-lani and his companion, let down his burden, and entered...They asked him, "Where are you going?" He answered, "I am returning to the boundary of Kula and Makawao." "Are you a native of the place?" they inquired? "Yes," he replied. They said, "There is not a native from Kula to Hamakua with whom we are not acquainted. You are a stranger." "Yes, I am a stranger." They said, "The gods have revealed your identity. You are a chief, Kiha-a-Pi'ilani." He answered, "I am he. Conceal your knowledge of me and tell no one." (Kamakau 1961: 24)

Clearing of the forest trees for sugarcane by Europeans in the mid to late 1800s had altered the environment. The negative effects included in less rainfall in the Makawao area as Mr. Sam Ka'ai had suggested:

SK: So today we affirm the Pā'ia Bypass, the this that. Just like Ho'okipa. Had forest going all the way from the top of Hāli'imaile, where the *maile* lied down like carpets—big forest over there. From there down to Ho'okipa had *'ohia* trees all the way to the shore. And the minute they saw had rain there, Europeans said let's cut all those trees down and plant sugar. So they moved the wet line by. In fact they made it the town zone. The mist rains of *'ulalena* came that far down. Now all that push away. Because you scrape the ground, you take the trees—you know how it when it rains, it steams, it causes clouds, it holds the mist—all of that was taken away. They burned all that wood off for sugar. They brought in Portuguese with ox—that's how most Portuguese came here, to pull the stumps of the *koa* trees out. And the *haole* who didn't want to pay money said okay you clean my land I will give you an acre there. And finally you attract work for cleaning of land. And then the gulch, I can't think of the name, that's where the old dump was, they burned for fifteen years. When you throw logs over that still dirt in the roots they continue to smoke for fifteen years. The Hawaiians say the *puoho* is coming back—the ancient mist.

B. General Overview of Hāmākuapoko Ahupua`a

The *ahupua`a* Hāmākuapoko is located on the north side of east Maui, abutting Kula and Wailuku on the west and Hāmākualoa to the east. One translation of Hāmākuapoko is 'short Hāmākua' (Pukui *et al.* 1974: 39). A review of the literature indicated no interpretation of the name, however geographically, it is the same north/northeastern position as the Hāmākua Coast on the island of Hawai'i. This may suggest a correlation between the name and its geographic position on an island (Bushnell *et al.* 2001: 13).

Few historic documentation associate upcountry Maui with residential areas of ruling chiefs, sacrificial *heiau* or places of refuge. Instead, the upland areas have been noted as a productive area renowned for the growing of dry taro, sweet potatoes and raising of pigs (Watanabe 1996:53). Historical documentation by E.F. Craighill Handy and Elizabeth Handy (1972) outline likely general patters in the number of traditional *ahupua`a* of Hāmākuapoko:

Hāmākua Poko (Short Hāmākua) and Hāmākua Loa (Long Hāmākua) are two coastal regions where gently sloping *kula* lands intersected by small gulches come down to the sea along the northern coast line of East Maui...Stream taro was probably planted along the watercourse well up into the higher *kula* land and forest taro throughout the lower forest zone. The number of narrow *ahupua`a* thus utilized along the whole of the Hāmākua coast indicates that there must have been a very considerable population. This would be despite the fact that it is an area of only moderate precipitation because of being too low to draw rain out of trade winds flowing down the coast from the rugged and wet northeast Ko`olau area that lies beyond. It was probably a favorable region for breadfruit, banana, sugar cane, arrowroot; and for yams and `awa in the interior. The slopes between the gulches were covered with good soil, excellent for sweet-potato planting (Handy and Handy 1972: 498).

More specifically, Handy (1986) describes the cultivation of Hāmākuapoko at Maliko Stream as follows:

The deep gulch of Maliko Stream widens at its seaward end into a flat-bottom valley which, in pre-sugar days when the stream had constant flow, harbored a number of terraces. The gradually rising land of Hamakuapoko in earlier times would have been suitable for dry taro not for wet. It was probably well populated and cultivated, for the *kula* land east of Maliko was a small patchwork of *ahupua`a*. (Handy 1986:109)

According to Handy's descriptions, Hāmākuapoko would have been well populated by Hawaiians along the *makai* sections of the gulches and streams, which provided adequate soil conditions for cultivation of a variety of plant resources. Successful cultivation and the continued flow of the water resources would have sustained a substantial population. However, the landscape *mauka* would have been covered in native forest vegetation and unsuitable for long periods of habitation.

C. Legends Associated with Hāmākuapoko

Only a few legends were found with direct link to Hāmākuapoko. The first legend is of Kihapi`ilani and his sweet potato patch. The legend of Kihapi`ilani and his sweet potato patch has been written at extent by both Fornander (1917) and Kamakau (1961), although there are noted differences in the stories location.

Kihapi`ilani came to rule Maui by killing his older brother who was first born successor. Kihapi`ilani is often remembered on Maui for his stupendous leap from great heights into a pool of water (*lelekawa*), and for building a paved road around the island of Maui (Beckwith, 1970). Because Kihapi`ilani was an actual figure, much of the legend is said to be based on historic events. Fleeing from the ill treatment of his older brother, Pi`ilani, Kihapi`ilani runs to Makawao where he takes up residence with a woman and her family, all the while keeping his identity secret. He lives peacefully for a time in a place called Kalaniwai. When his wife's family begins to complain of his laziness, Kihapi`ilani travels to the lowlands of Ha`ikū, he learns how he can take revenge on his older brother. He takes the sweet potato stalks back to Kalaniwai and plants his famous sweet potato patch, after which he continues on to Wailuku to pursue his brother (Forrader 1917: 236-242).

In Kamakau's version, Kihapi`ilani is represented more as a supernatural figure with legendary strength who runs to a place on the boundary of Kula and Makawao. It is here where he plants his great patch of sweet potatoes:

There was a famine in Kula and Makawao, and the people subsisted on *lulele*, *pualele*, *popolo*, and other weeds. One night Kiha-a-Pi`ilani went to clear a patch of ferns to plant sweet potatoes, and on the same night he made a large one that would naturally require the labor of eight men to clear. When morning came, the hedge patch was noticed, an immense one indeed. The people said skeptically of this great undertaking, 'Where will he find enough sweet potato slips to cover the patch?' Next day Kiha-a-Pi`ilani went to Hāmākuapoko and Hali`imaile to ask for potato slips. The natives gave him whole patches of them wherever he went; [they said]. He went to clean a number of morning glory-veins and returned. Two owners who gave him the contents of their patches had gone home. He pulled up the vines and whatever potatoes adhered to them, and allowed them to wilt in the sun. After they had wilted he laid vines on the, and tied them. He went on doing this until he had enough load for ten men to carry. Then he made a carrier (*awe`awe*) of morning-glory vines, placed the bundles of slips in it, and lifted it with great strength onto his back. The sunshine beat down on his back, and the *uki`ukiu* breeze blew in front of him, the *Ulalena* rain added its share, and intense heat reflected from the *ulei* vines (Kamakau 1961:24).

Kamakau places Kihapi`ilani's sweet potato patch and the events of the story within Hāmākuapoko, although Forrader's account places the figures more within the boundaries between Makawao and Ha`ikū, on the border of the two Hāmākua districts. The legend is significant in that it illustrates the importance of sweet potato in Makawao, which continued to play a critical role in Makawao throughout the historic period (Sterling 1998: 99).

The two Hāmākua districts are further mentioned in a chant written by Ke-a-ula-moku. Ke-a-ula-moku, son of Ka-ua-kahi-akua-niu and Naohaku, was an acclaimed composer of chants and a celebrated man of Kalani`opu`u's day. While traveling back to Hawai`i island with Kalani`opu`u, Kā-a-ula-moku was homesick for the two Hāmākua

districts of Maui, where he had lived with Kamehameha-nui and Kahekili. His love for Hāmākuapoko and Hāmākualoa was further expressed in lines from the following chant:

<i>Alo—ha, alo—ha— Aloha wale o`u maka—a la—e o`u</i>	Affectionate longing, affectionate longing, Affection for my (foster) parents, my parents,
<i>Aloha wale o`u makua Mai na `aina Hamakua, He mau `aina Hamakua elua, No`u mua kaikua`ana i noho ai, He ala pali na`u he mau ali`i ia, O ka hanai ana komo kā aloha, Lele hewa au i he mau kaikua`ana—e `A`ole—he mau mea `e wale no o laua.</i>	Affection for my parent̄s Who belongs to Hamakua, The two districts of Hamakua, Where my elder brothers live. My hillside trails are theirs to rule, They nurtured me until I loved them; I find myself with other elder brothers Who are not the same to me.

...(Kamakau 1961: 112).

Kamakau (1961) also referenced Hāmākuapoko as one place where chiefs would send their men to gather people for shark bait:

Some of the chiefs under Kamehameha, such as Alapa`i-malo-iki and Ka-uhi-wawae-ono, were murdering chiefs who did not keep the law against killing men, but went out with their men to catch people for shark bait. If they found a man or even a woman out at night they would kill him and keep the body until it decayed and used it for shark bait...At Keala and Kalahiki in South Kona, at Hāmākuapoko on Maui, and at Pu`uloa on O`ahu, people were killed by them for shark bait (Kamakau 1961: 232).

It is also in Hāmākuapoko that residents were most aware of possible shark attacks. As such, Kamakau (1964) also indicated the tremendous respect for sharks, given by Maui residents. As he explains:

This is the main reason why the people of Maui worshiped sharks—in order to be saved from being eaten by a shark when they went fishing. At Kaupo, Kipahulu, Hana, Ko`olau, Hāmākuapoko, Ka`anapali, Lahaina, and Honua`ula a fisherman was in danger of being devoured by a shark when he was out fishing with a dip net (*upena `aki`iki`i*), or setting out fishnets (*lawai`a `upena ho`auau*), or whichever kind of fishing a man would be doing alone. (Kamakau 1964: 78)

It is further mentioned that Maui residents would not eat shark meat out of respect. Those who would indulge in a taste for shark meat were considered, *malahini* or foreigners (Kamakau 1964: 78).

D. Early Historic Period

The Māhele

The *Māhele* records of the 1840s and 1850s indicate that Kekauonohi (great granddaughter of Kekaulike, former King of Maui) received the *ahupua`a* of Hali`imaile (LCA 11216), which included some 4,260 acres at "Hāmākuapoko" (Indices 1929). At the

same time the east half of Hāmākuapoko became government lands with the western half awarded to W.P. Leileiohoku (Indices 1929). Leileiohoku's portion of Hāmākuapoko was later "surrendered in lieu of commutation" (Indices 1929) for other lands, which made virtually the entire Hāmākuapoko District/ahupua`a government lands. Thus, no Land Commission claims are recorded because it was all government-claimed land (Masterson *et al.* 1997: 5). Majority of the *kuleana* LCA were awarded north of the proposed trail areas, within the present Makawao Town. Settlement in the areas of the proposed project areas would have been difficult as a result of the high forest density [personal communication with Bob Hobdy, December 18, 2002].

Traditional Land Use Patterns

The project areas were undoubtedly native Hawaiian forest. During traditional Hawaiian times, the area was probably sparingly utilized for forest resources. Typical trees and vegetation in the area included *koa*, sandalwood, *ohi`a lehua*, *kukui* and *ti*. Procurement of forest resources such as sandalwood and *koa*, bird feathers, medicinal plants, and possibly alternate food source during times of famine would leave little or no evidence of such activities. However, clearing of the forest for pasture or other uses is quite evident. The proposed trail corridor was once a sandalwood and *koa* forest [personal communication Sam Ka`ai, January 13, 2003] for which Hawaiians would gather *koa* stumps for canoe making. Logs were cut and soaked in Maliko Gulch in preparation for transportation downstream to the oceanfront where the shaping would occur. During Mr. Sam Ka`ai's translation of Makawao, he mentioned the culture of canoe making in the Makawao forest:

SK: There are many *wao*—when you look up land names, like Owaomulimuli, usually get one high mountain like this and then get a break, like a break in the wood, that is called the muddy place. *Mulimuli* is mud—*owao*—Hawaiians talk about that, usually no can plant—place where you can plant stuff is where get mud, above that the soil is too one kind, too mineralized rather than—top soil is mixed right, with organic material, not organic material, but the basics. So Makawao usually means to perceive the inner forest. Place where you can see in the inlands. Okay the area above where the school is had *koa* trees and they were cut by the Hawaiians and pulled to where we call Makawao, and thrown in the river, or rather thrown into the mud banks of the river, so that it [the stumps] wouldn't dry.

CSH: So they were throwing the—

SK: You adze the tree, you drag—from up there, you drag down here, and then you rest it in a cool place, no wind blowing on top, cover `em with mud or in the trench, and you fill `em up with water, for one year.

CSH: To retain the moisture?

SK: So that thing no crack. And then that became a major station for roughing and shaping. You did more roughing and shaping, to bring down, there and that's where you rested. In case you were rained out—Makawao can be rainy—instead of going all the way down to the lowlands, for drying out, you would cross the mountain—you know the gulches—and come towards once a place called Pukalani. It had a hole in the heavens so the rains did not fall as

much—and here you could dry up. So here *mauka* is a place where they gathered the *māmane*, *ulupua* and *kauwila*—those hardwoods. But cattle came in so quick that all these trees were gathered up as firewood for the plantation, and finally those trees take so long for grow, they disappeared from the scene. Now above a certain line, above four thousand feet, all of those trees—there were no trees, it was just grassland, so it was called Kula—it is usually found in the arid, leeward side of an island.

By 1873, the *koa* of the lower forest of Haleakalā was severely depleted. Deforestation would have created an environment suitable for cattle ranching, where cattle were not quite so sensitive to temperature, rainfall or soil conditions. Native plants were quickly overtaken by introduced species or suffocated out of existence. Mr. Sam Ka'ai elaborated on the subject of the deforestation of native plants and indicated that many of the trees that replaced the *koa* and *'ohi'a lehua* were resources that could provide for industries:

CSH: You were talking earlier about the *koa* trees in Makawao forest and it being there for canoe makings.

SK: Most of it was *'ohia*. I know on the back part of the road—Omaopio used to be another reason for call *melemele* is because you had pua melemele, the yellow *'ohia* used to grow up there. Now it's all guava and *waiawī* and—remember the cattlemen brought in ninety different kinds of grass. You see this man who died here, he brought in some of the best grasses—[*kukuiū?*], which is from Africa and Buffalo Grass, which held the soil together. He came and saw a solution—some of the grasses they made and was killing off the Hawaiian grasses, like *'uki'uki* that goes straight up. *Pili* grass, go straight up. The cattle knock 'em over—easy for knock over and then they become furrows of dirt. So these grasses took over to save the flooding off, because the cattle, the weight was smashing the ground and making it all loose. Von Tempsky moved up here and ran cattle, and then he brought in the Wattle tree because of the bark—it was good for tanning leather. To create a local industry. But then they didn't use it and it became a weed up here. Hāna, Hāna Plantation—you know they took out all the trees and so all the trees come back up, now African Tulips. It was brought in because it was the [inaudible] that made up life jackets. When Hawai'i was more marine orientated, when the Sandelwood mountains they grew that, and then the second row they developed Kepa from India—the cotton tree they call that, to make up life jackets. Now that is a weed growing all over Hāna. It is reforesting the areas. The forest that is growing in Hāna is not the native forest. It is not the *'ohia* that was there and the *lauhala* that was solid along the coast like Nāhiku.

CSH: Did they eventually clear all those *koa* trees or—

SK: *Koa* was a sellable wood, so you cut every sellable wood to make money. Then they tried to replant and it didn't come back fast enough. Hawaiian roots take too long. So then they did research and in the 1880s they—by 1900s it's heavy already—it's *kalipa* or Eucalyptus. Fast growing hardwood. Of course, it's very combustible. Very burnable. But we don't have that problem because they plant 'em in very wet areas. But upper Kula no trees grew—no trees at all. So then they put in the black forest. The Scotch came in and then they put in

Gorse.

The decline in native forest in the vicinity of the Waihou Springs area is further demonstrated on a 1872 map of Makawao (Figure 6). By the 1870s, the Waihou Springs project area was probably cleared pasture land, with little to no native vegetation. The only tree indicated in the vicinity of Waihou is a 'lone *koa* tree', located *makai*. The area in the vicinity of the proposed Kahakapao trail, however, still appears to be planted in *koa* and *ohia* (Figure 7). Also indicated on the 1873 survey map is the old Haleakalā trail, which was historically the primary route from Makawao to Haleakalā.

E. Hāmākuapoko 1900s to Present

Ranching was to eventually dominate all land use within the project area and the upland slopes of Haleakalā. Clear cutting and burning of sandalwood continued well into the mid 1800s, which greatly impacted the landscaping of the area. Numerous Portuguese worked as woodcutters in the area, cutting wood for Pā'ia Mill:

Informant: My grandfather was a woodsmen. He cut wood for the plantation because the mill used to run with wood—with steam. So had plenty Portuguese in those days was all wood cutters. My grandfather used to own all this over here. He was a farmer. But my other grandfather, on my father's side, he was a wood cutter for the mill.

CSH: What mill was that?

Informant: Pā'ia Mill.

The continued clearing of the forest trees over a century had taken its toll, and in response to remedy the situation, the Makawao Forest Reserve was established in 1908. The forest reserve was sanctioned off for watershed protection and included approximately 2,093 acres.

Also during the early 1900s, gorse was introduced in the upland forest of Hāmākuapoko. Gorse (*Ulex europaeus*) is a spiny, evergreen exotic shrub which can grow up to 15-feet tall and 30-feet in diameter. In a single gorse plant, there can be hundreds of pods which eventually burst and expel thousands of gorse seeds. The roots are very extensive and can live underground for over thirty years. Gorse branches end in a spine and are covered with green, scale-like prickly leaves (King County 2003). It is here say that the individual who introduced the gorse was identified during a confrontation at a local bar, as Mr. Sam Ka'ai had indicated in the following transcription:

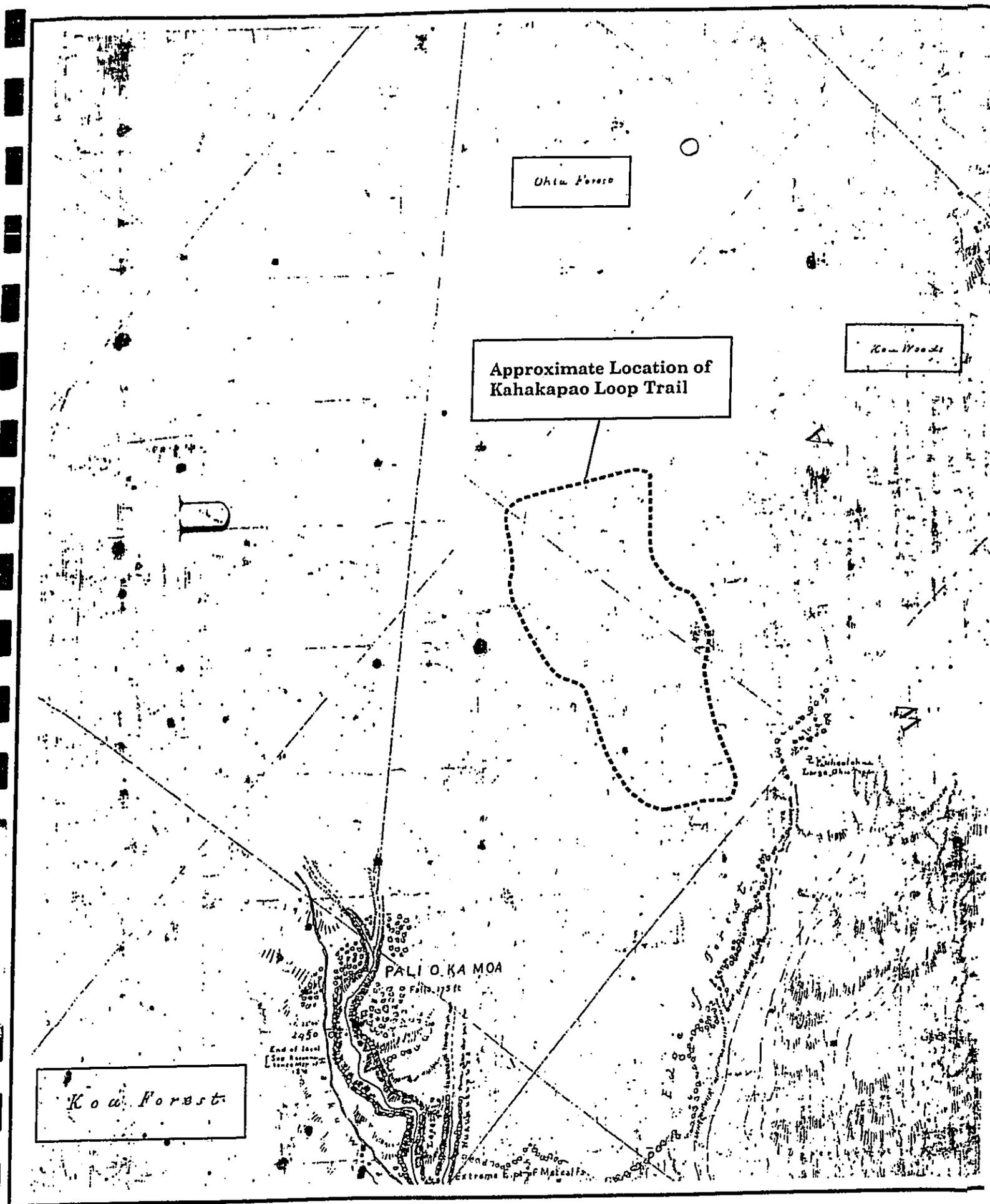


Figure 7 1872 Map of Makawao, W.D. Alexander, Surveyor-General, Showing Approximate Location of Waihou Springs trails area, Haleakalā Trail, and areas impacted by deforestation.

CSH: What was that Gorse for?

SK: Well, I have tried to find, somebody had one—it was kind of in Hawaiian and then there is supposed to be an English copy about a fist fight between two Scotchman in the Wailuku Hotel. There were two old men. One went after the other with a stick and the other one [inaudible] him for it. And they were senior gentlemen in their sixties and seventies when it happened. There is a Hawaiian person who got a hold of the records—I don't want to mention his name because I don't want to pick on the family. And the fight was, the guy said he had brought in the Gorse.

CSH: Who brought in the Gorse?

SK: One of the Scotchman. And the other one said, "you damn fool who brought the scourge of Scotland here." And then they just went after each other—the two old guys. The two old guys, who were senior gentlemen. But the description about who brought the Gorse—.

Gorse is native to western and central Europe, where it is has been cultivated for centuries as hedgerows and livestock forage. Mr. Sam Ka'ai suggested that gorse was also introduced to Maui for similar reasons:

SK: The Gorse in Scotland was a wide bush—you trim it and you make hedges out of it. And they are the original *pānini*, the pen of prickles. It's all over New Zealand. It takes over all kind of pasture. You cannot clear it, the Scotch brought it! You cannot clear it with a bulldozer. The shoots will stay in the ground fifteen to twenty years. So now in the areas around Lake Kaupō that thing was really really bad. And in the re-cleaning, they brought in spruce. California Spruce. And they grow those trees, and today New Zealand is the largest artificial forest in the world. Now why? Because Gorse took over and by growing spruce the tree grows faster, cuts the light off and the gorse dies. So up here they grow Japanese Blackpine to cut off the gorse. But gorse was a hedge rows in Scotland and you trim it and the sheep couldn't go through. That's how the paddocks were measured, by gorse fencing. And when you get free labor to go out and cut the gorse—it's all needles, terrible job, the minute you abandon the land, the gorse grows outward. You see, it's one of these clever things.

CSH: They brought the gorse here for the same reason?

SK: Deliberate! That man said, "I brought the gorse here." And the other Scotsman got up and told him he was a damn fool. For the same reason, to make hedges in the upland. This is the cleverness of the European mind introducing the change of industry!

By the 1930s, the gorse had spread uncontrollably. The second informant interviewed also commented on the nuisance nature of the weed:

CSH: Oh so they used to grow the gorse to make bushes.

Informant: Yeah, but this thing get seeds and the seeds—and on a hot day the seeds can fly twenty to thirty feet away, and that things just keeps spreading and spreading. So when Tam got real old and he felt it was his last days on earth, then he hired somebody and started cleaning this all up and raising cattle. So you hardly see the gorse now.

Majority of the forest area was set aside as homestead programs in the 1950s, including the Haleakalā Homesteads and the Olinda Houselots. A 1907 map by Walter E. Wall shows the homestead area of Haleakalā and Olinda. Also indicated on the historic map is the old Haleakalā horse trail, located southeast of the proposed Waihou Springs Trails (Figure 8).

In an effort to eliminate the gorse, a state territorial prison camp was also established in 1953 [personal communication with Bob Hobdy December 18, 2003] located near the present Olinda Homesteads, and adjacent to the proposed Waihou Springs Trails. Low-security prisoners were brought to Maui from overcrowded O`ahu prisons, with the primary purpose of clearing the overgrown gorse areas. The Olinda prison facility was located on 114 acres of Haleakalā land (Figure 9) and initially housed approximately 30 prisoners. A portion of the western segment, where the existing trail is accessed from Olinda Road, was the location of a large recreational ball field for the prison camp, which is now covered by the existing pine forest. In addition to clearing the gorse, prisoners grew vegetables for shipment to Honolulu (Maui News 1942: 1). In the early 1950s, Olinda prisoners had also undertaken the job of linking the road to Kahakuloa with the highway that extends beyond Lahaina, making it possible to circle clear around the West Maui block of mountains (The Honolulu Advertiser 1955: A4). By the mid 1950s, majority of the gorse had been eliminated. Issues pertaining to the sanitation of the facility, the increase number of escaping convicts, and the lack of budget for maintaining buildings eventually forced Olinda prison camp to close in 1973.

In response to the declining remnant forest, the State Division of Forestry began a tree-planting program in the Makawao area in the 1960s. Tree planting consisted primarily of eucalyptus, various pine and tropical ash. As a secondary measure, the tree planting also served to keep the gorse weed down by shading it out of existence. The second informant interviewed had participated in the reforestation in the early 1960s and mentioned the following:

Informant: And then inside here, I going show you, had one big garden, the State had, I work for them little while. They raise trees. Ninety-percent of the trees they raise was—Taeda pine, Sugi pine, and some other kind. This is one ancient tree right here—[laughing].

CSH: One telephone pole [laughing]!

Informant: And eh—we used to raise them there, in the building, as seedlings, and then when they come about one foot tall we take them outside—and then from there, when come about two three feet high, we take `em in the trucks and we go Waipoli, above Kula.

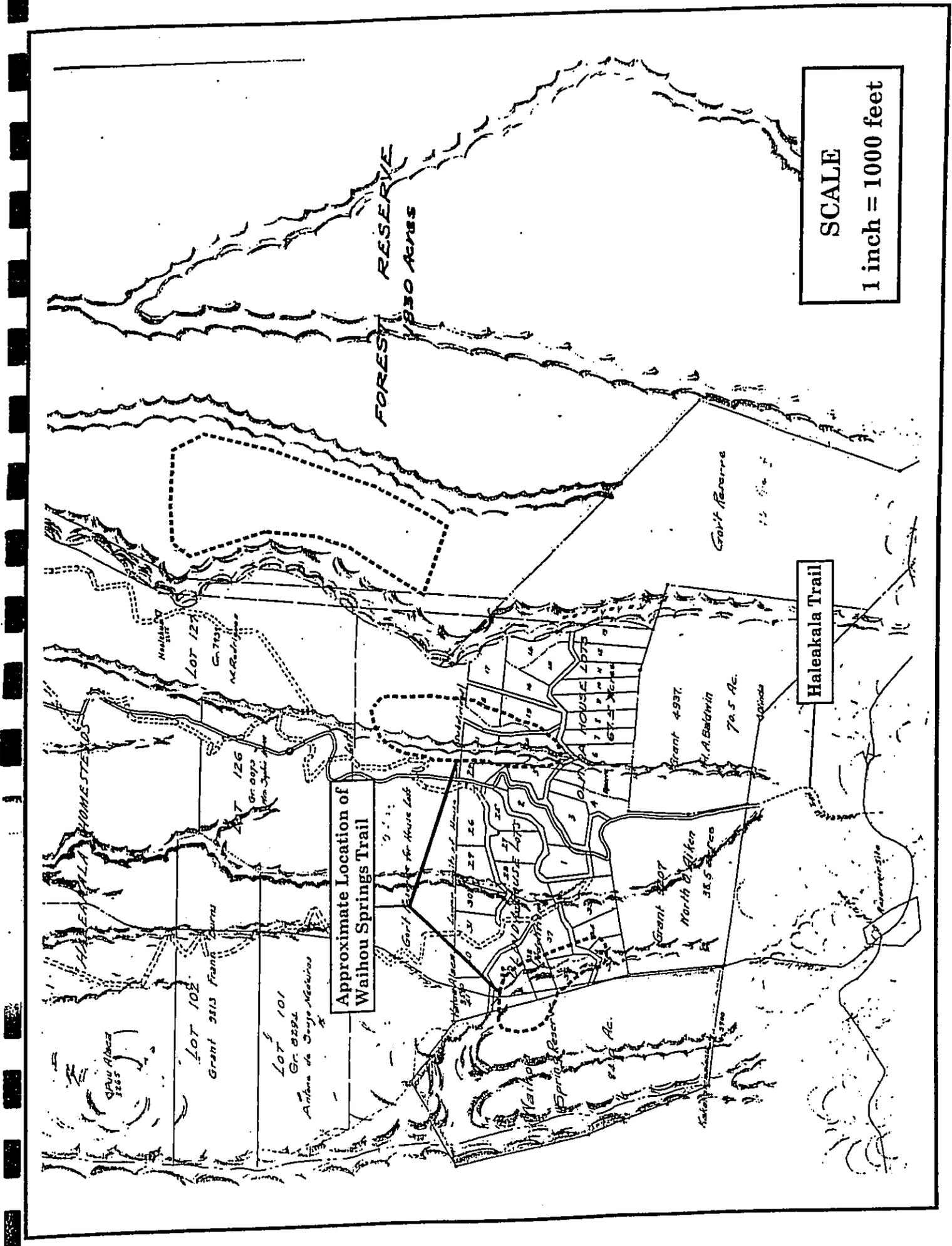


Figure 8 1907 Map of Makawao, Walter E. Wall, Surveyor, Showing Approximate Location of Kahakapao and Waihou Springs project areas.

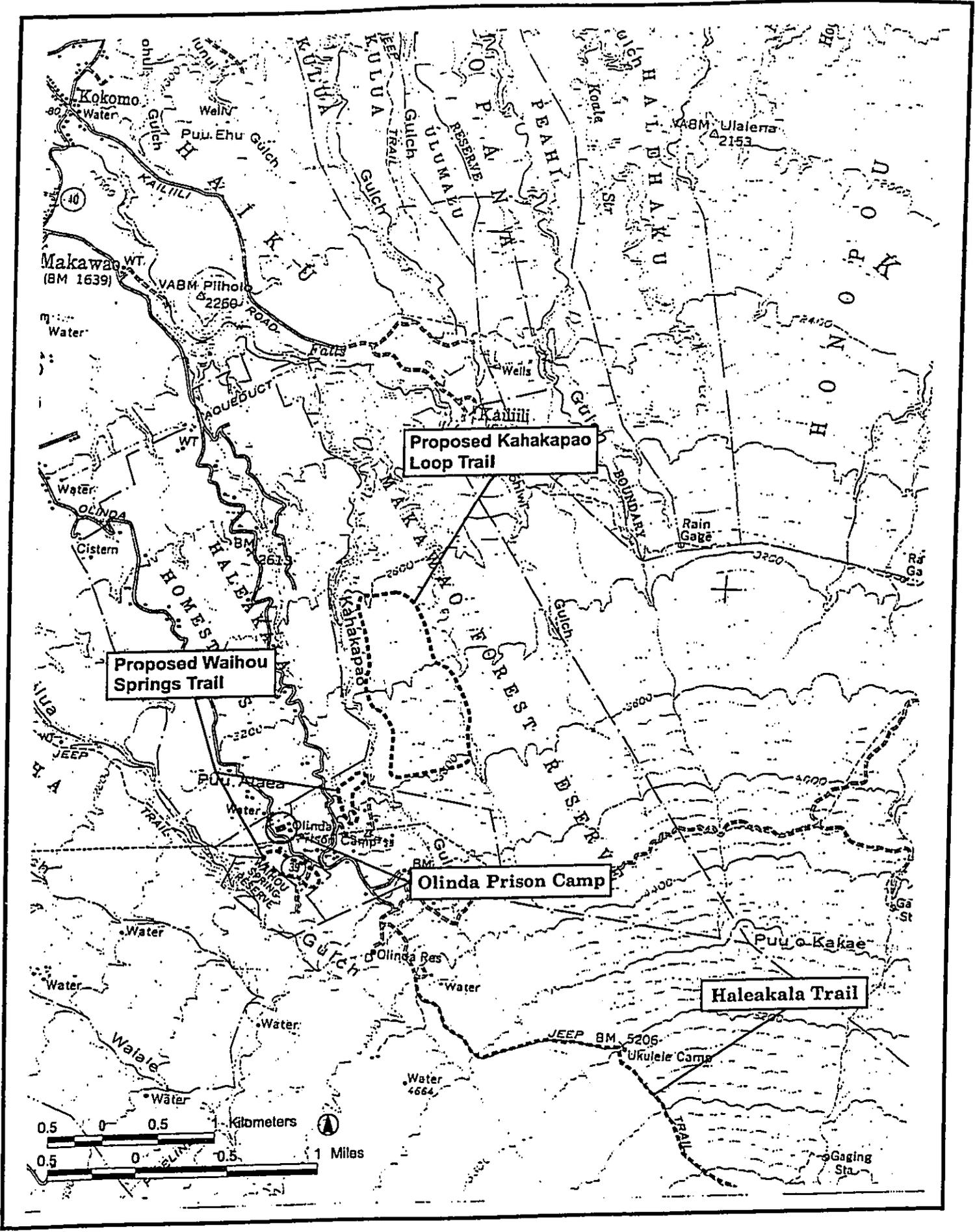


Figure 9 1957 USGS Topo Map, showing locations of Olinda Prison Camp and Haleakalā Trail.

We take `em up there we plant, no more even trees up there, that place was all open and dry area. So, they figure they going plant trees there and going attract the clouds, they going hold the clouds for rain, for moist.

CSH: Oh for the moisture.

Informant: Yeah—only thing, they went plant the wrong kind trees [laughing]. Pine trees—pine trees no attract the moist. Like they did in the Makawao Forest Reserve—they destroyed everything that was natural and go plant eucalyptus. You can tell this was planted because the kind of in rows, yeah. And then when you go up Polipoli, by the cabin, by what they call hunters cabin, from there you walk down the trail, you going come to one redwood forest—we used to go there every six months for trim the trees, for trim the branches. This is *poha*, you know what is *poha*?

The house in which they raised the seedlings would have been adjacent to the existing Waihou Springs Trail. The house is no longer in use, but remnants of its existence still remain. In addition to planting pine, the State had also attempted to raise insects in the same garden house in hopes that it too could help eliminate the gorse:

Informant: Not yet. This road was made, when they decided to make this a nursery—this land was given by—I forget who went give this land to the State, and then they decided to make one nursery and then they made this road, they made the nursery in there. And then one guy, one caretaker, he used to live up there, get one house up there—then caretaker and the warden from the prison afterwards, they used to live over there. After that, when I was working for the State, we used that to raise bugs, you know. They wanted something to kill the gorse, so they raised one kind of moth that they said would kill the gorse, that they would put a web all around the gorse—never work out!

CSH: Oh the moth—?

Informant: Never work out. They let the moth go and you never see `em no more. And then couple other bugs were raised up there—just like we no more enough bugs around here. Okay, from here on that was the nursery. Used to be one gate here. Right inside there is where we used to plant all the trees, after came out of the seeding room. This is part of the trail you are talking about.

In 1986, the Olinda prison facility was converted into a state-of-the-art captive bird propagation facility. The Olinda Bird Sanctuary is home to a flock of endangered `alala and nene, as well as other bird species in danger of becoming extinct.

Today the major agricultural activities in upcountry Maui and areas in the vicinity of the project area are livestock grazing, truck farming, flower production, and orchard crops. The forest reserve has been used in recent time for recreation and hunting. Pig hunting is still popular within the forest reserve, although the number of pigs have declined in recent years as a result of residential developments. Additionally, changes in weather conditions over the last fifty years have affected the flow of water in the area and majority of the gulches and natural springs are dry.

IV. PREVIOUS ARCHAEOLOGICAL RESEARCH

The earliest documented archaeological study in the Hāmākuapoko was conducted by Winslow M. Walker (1930) in the early 1930s during his Maui island archaeological inventory survey. Walker identified and described over 200 *heiau* on the island of Maui, many of which were previously destroyed. In Hāmākuapoko, Walker recorded one *heiau* located "near Kailua Gulch half a mile west of the Paia Road" (Walker 1931: 152). Walker identified the *heiau* as Site 58 and described it as "a platform 50-80 feet and probably destroyed in cane" (Walker 1931: 152).

Recent archaeological investigation in upcountry Hāmākuapoko are rare, however two archaeological studies most relevant to the present project areas were identified. In 1988, an archaeological inventory survey was carried out for the proposed 36-inch waterline starting at the Olinda Water Treatment Plant, northeast to the Waikamoi Reservoirs. The water main is located one half of a mile south of the proposed Waihou Springs trail and two miles south of the proposed Kahakapao Loop trail. The archaeological investigation indicated no evidence of historic sites (Estioko-Griffin 1998). A second study was carried out for the proposed Kahakapao Reservoirs located approximately one and one-half mile west of the proposed Waihou Springs trails and two and a half miles south of the proposed Kahakapao Loop trail. The reconnaissance survey identified no archaeological sites within the project area (Borthwick 1990).

The remainder of the archaeological studies conducted in Hāmākuapoko are situated *makai* or north of the present Kahakapao Loop and Waihou Springs trails project areas. Two documented burial sites located well to the northeast of the current project areas were identified during the archaeological background research. The closest documented burial site is located more than 15-miles northeast of the current project areas. State Site 50-50-06-2922 is a cluster of grave monuments and an isolated grave (Donham 1992). Additionally, a burial pit (State Site 50-50-05-4502) was also documented during monitoring for the Ku'au Beach Subdivision, located over 25 miles northeast of the current project areas (Masterson 1997).

No archaeological studies have been conducted directly within the Kahakapao Loop and Waihou Springs trails project areas, or immediate vicinity. Table 2, however, provides an account of previous archaeological studies in the vicinity, and indicates the source, the State Site Numbers (if applicable), the location of the study, the type of study conducted, and a brief summary of the author's findings.

Table 2. Previous Archaeological Studies Conducted in the Vicinity of the Kahakapao Loop and Waihou Springs trails project areas

Source	State Site #	Location	Nature of Study	Results
Walker 1930	Site 58	Near Kailua Gulch half a mile west of the Pā'ia Road	Inventory Survey	Said to have been a platform 50-80 feet. Probably destroyed in cane.
Asdic-Griffin 1988		Waikamoi Reservoir to Olinda Water Treatment Plant	Inventory Survey	No evidence of historic sites were found.
Borthwick 1990		Kahakapao Reservoirs	Reconnaissance Survey	No evidence of historic sites were identified.
Donham 1990a	50-50-10-1709 through 1711 and 50-50-10-2512 through 2524	Pi'ilani Residential Community	Inventory Survey	Sixteen sites with 30 component features were identified at the end of the survey. Three of the sites had been previously identified. Findings included nine terraces, seven enclosures, four C-shapes, four rock piles, two platforms, two midden scatters, an alignment, and a modified outcrop. Limited subsurface testing was conducted at five sites.
Donham 1990b	50-50-10-2475	Pi'ilani Residential Community	Data Recovery Program	Initial inventory survey conducted in May of 1989 indicated two possible human burials. Data recovery conducted a year later found no human remains present. A revised interpretation of the site was made and the authors indicated a possible terrace complex associated with dryland agriculture.
Donham 1990c		Upcountry Maui High School Sites	Inventory Survey	Five potential Upcountry Maui High School sites were investigated. No archaeological sites were identified.
Donham 1992	50-50-06-2922	Upland ridge separating Honopou and Ho'olawa drainage system	Burial Documentation	A cluster of grave monuments and an isolated grave was identified and described.

Source	State Site #	Location	Nature of Study	Results
Masterson <i>et al.</i> 1997	50-50-05-4502	Ku'au Beach Subdivision	Monitoring Report	One burial pit (50-50-05-4502) was identified and recorded. No burial was exposed and the new road embankment was constructed as a raised berm of imported soil to secure the area from erosion and further disturbances.
Kawachi 1997		Northwest slopes of Haleakalā	Archaeological Site Recording	Initial investigations identified three post-contact Chinese agricultural sites (Watanabe 1996). The current study reports on the recordation and limited excavation of the three sites. Four previously unidentified sites (three terraces and a modern road) were also documented.
Fredericksen 2000		Hanawana Valley	Inventory Survey	A previously identified agricultural complex with possible habitation features were investigated. One charcoal sample was extracted from a large terraced area. Radiometric analysis yielded a date range of AD 1425 to 1665. Additional archaeological study was recommended.
Shideler <i>et al.</i> 2000		Ulumalu-Peahi Water System	Inventory Survey	No evidence of significant cultural resources identified.
Bushnell <i>et al.</i> 2001		Kahui Pono L.L.C. Roadway Access Easement	Traditional Practices Assessment	No ongoing cultural activities or historic sites were identified.

V. CULTURAL RESOURCES/TRADITIONAL PRACTICES

A. Native Gathering Practices for Plant Resources

In traditional times, the project areas would have been covered in native forest including *koa* (*Acacia koa*), *ʻohiʻa lehua* (*Metrosideros polymorpha*), *ti* (*Cordyline fruticosa*), and *kukui* (*Aleurites moluccana*). Over the last two century, however, deforestation for industrial purposes had dramatically altered the appearance of the forest. Logging in the mid to late 1800s resulted in the elimination of majority of the forest trees, which was later followed by cattle grazing in the early to mid 1900s. The introduction of gorse (*Ulex europaeus*) as hedging material in the early 1900s further added to the rapidly declining native forest. By the mid 1950s, the gorse had spread uncontrollably, killing majority of the remaining native plants. In response to the problems of deforestation, the State began a tree-planting program in the early 1960s, at which time eucalyptus, various pines and tropical ash were planted. As a result of the continued abuse of the forest area, many of the native plant species that may have occupied the project areas no longer exist.

No threatened or endangered species were encountered in the trail corridor areas during the environmental assessment. However, *mahoe* (*Alectryon macrococcus*) is a Federally listed endangered species and is known to exist within the Makawao Forest Reserve area. Mr. Bob Hobdy of the Department of Forestry and Wildlife mentioned that *maile* (*Alyxia olivaeformis*) and *ʻohiʻa lehua* (*Metrosideros polymorpha*) also exist within the forest reserve areas, and further indicated that limited flower picking are known to occur in areas *mauka* of the proposed Kahakapao Loop trail [personal communication with Bob Hobdy December 18, 2002]. None of the informants interviewed indicated any knowledge of ongoing plant gathering in the project areas.

Based on the botanical survey, as well as informant testimonies, it is believed that there is no ongoing gathering of plant resources within the proposed trail corridor or immediate vicinity.

B. Native Hunting Practices

In historic times, hunting would have been an essential component of everyday life for residents of Makawao. The second informant interviewed was born and raised in Makawao, and is a third generation pig hunter in the Makawao forest area. He had indicated that his father made very little wages and hunting was a necessity to his families survival. He further mentioned that pig hunting continued to be an important activity for him, even when he was raising his own family. However, the convenience of local supermarkets quickly replaced hunting, and today his children know very little about hunting practices. Below, he discusses his recent retirement from pig hunting:

Informant: No—I getting too old already. You know like my doctor says, "someday they going find you dead in the woods." I said, "so what? I gotta die someplace." And no more as much pigs as used to get. I tried many times to quit hunting—because my kids all grow up, and they marry other kind people. Two of my daughters married *haole*—you bring one pig home they say, "eh what is that dad?" They rather go to the supermarket go buy—so, I catch a pig, I bring `em home, I clean `em, I make smoke meat. I tell them, "You guys, get some

meat come get!" They tell me, "Eh--no need, we get from the last time, yet!" I bring `em home I make *laulau*, "you guys like *laulau*?" "Yeah okay we like." "Okay, how much you like?" "Give me three `nough." I made eighty, what the heck am I going to do with eighty? So afterwards, I catch one pig, I come through Makawao town, I look for one Filipino, I tell `em, "you like this pig?" "Oh yeah." I go give `em to him. Afterwards I think--what am I doing this for? Shoot--it's not a must anymore. Like I raised my family almost the way my father did--although I became an ocean man afterwards--fish, pig, goat--that's how I helped raise my family.

CSH: Times have really changed, now, yeah?

In addition to pigs, the informant also mentioned the abundance of pheasants in the Makawao forest area:

CSH: And had pheasants up here you said?

Informant: Oh, choke with pheasants. In fact till today some guys shoot in the fields around here. I get one guy, he one pheasant hunter right now, one of my friends, he brought me about twenty birds already. About twenty five--but I no can eat `em all. I take bout five or ten and then the rest I go give to my Filipino neighbors--they eat `em all, just like chicken.

Pig hunting in the Makawao forest area would have been abundant in historic times, however discussions with local residents and testimonies by informants indicated that pig hunting has declined in recent years due to restrictions in public access and the decline of wild pigs that roam the areas, due to the increasing number of residential developments. Based on informant testimonies and talk-talk story sessions with local pig hunters, it appears that there will be no adverse affects to pig hunting by the development of the Kahakapao and Waihou Springs trail corridors.

C. Trails

The old Haleakalā trail is the only historic trail identified in the vicinity of the project areas. The Haleakalā trail is indicated on a series of historic survey map (see Figure 6 through 8), as early as 1873. The trail is located immediately south of the Waihou Springs trails project area and extends from Olinda, south-southeast to Haleakalā Crater. Prior to the construction of paved roads in the mid 1950s, the Haleakalā trail would have been one of the primary access route between Makawao and Haleakalā. Portions of the Haleakalā trail now traverses through private properties and the trail itself is no longer regularly utilized.

In addition to the historic Haleakalā trail, several pig hunting trails were noted in areas adjacent to the Kahakapao Loop trail project area. However, no pig hunting trails are known to traverse either the Kahakapao Loop or Waihou Springs trail corridors.

D. Burials

There is no direct evidence or documentation of burials in the trail corridors or immediate vicinity. Background archaeological research did indicated two burial grounds approximately 15-miles northeast (*makai*) of the proposed project areas (Donham 1992 and Masterson 1997).

E. Cultural Properties

No cultural properties have been noted in the vicinity of either the Kahakapao or Waihou Springs trails project areas. A field inspection of the area, as well as consultation with Makawao residents, State archaeologists, and a review of historic maps indicated no archaeological sites or cultural properties in the vicinity of the project areas. However, two structures associated with the Olinda prison facility are known to exist adjacent to the proposed Waihou Springs trails project area. The baseball field and garden house are known to have been associated with the Olinda prison facility, which opened in the 1950s and closed in the mid 1970s. Neither the baseball field nor the garden house will be affected by the development of the Waihou Springs trail corridor.

VI. SUMMARY AND RECOMMENDATIONS

A. Summary

A cultural impact assessment was conducted for the proposed Kahakapao and Waihou Springs trails in the *ahupua`a* of Hāmākuapoko. Historic research of the project area was carried out to identify any cultural resources or traditional practices associated with the areas encompassing the proposed trail corridors and surrounding vicinities. An attempt was made to contact present and former residents of Makawao who may have used the areas for cultural practices, as well as various organizations regarding cultural knowledge, land use history, cultural sites and traditional Hawaiian or other cultural practices in the vicinity of the Kahakapao and Waihou Springs project areas.

Formal interviews were conducted with Mr. Sam Ka`ai and an informant long familiar with the Makawao Forest area. Mr. Sam Ka`ai was born in Hāna and currently lives in Pukalani. He has extensive cultural knowledge of the general Makawao areas and is considered one of Hawai`i's living cultural treasures. The second informant was born and raised in Makawao and was a regular pig hunter in the Makawao Forest area.

Historic background research of the Hāmākuapoko area indicated areas *makai* of the project areas, near the gulches, would have been rich in resources and well populated in traditional times. However, the project area and surrounding vicinities would have been covered in native forest including *koa*, *`ohi`a lehua*, *ti*, and *kukui*, and unsuitable for long term habitation. Two centuries of deforestation for industrial purposes destroyed majority of the native forest, and by the early to mid 1900s, the project areas was open pastoral land. Also introduced in the early 1900s was the competitive gorse weed Scotsman that was used as hedging material. The gorse had spread uncontrollably by the 1950s, destroyed majority of the native plants that remained. In 1953, the Olinda prison facility was opened with the primary purpose of having inmates clear the overgrown gorse areas. In response to the decline in forest areas and the overgrown gorse problem, the State Department of Forestry began a tree-planting program in the 1960s. Today the project areas consists primarily of introduced species including eucalyptus, various pine and tropical ash.

This study failed to find any archaeological sites within the trail corridors or immediate vicinities. Two archaeological studies have been conducted south of the Waihou Springs project area, however both studies reported no significant archaeological findings.

The only ongoing cultural practice identified in the vicinity of the project area was pig hunting. Pig hunters still access nearby trails to hunt wild pig within the Makawao forest reserve areas, however none of the hunting trails are known to traverse the proposed trail corridors. Mr. Bob Hobdy [personal communication December 18, 2003] further mentioned that pig hunting has declined in recent years due to the lack of public access and the decline of wild pigs that roam the area due to residential developments over the last thirty years.

Gathering for plant resources in traditional times would have been abundant in the project area. However, over two centuries of mass deforestation had changed the landscape dramatically, and majority of the native plants resources that were once gathered no longer exist. *Maile* and *`ohi`a* picking are known to occur within the Makawao forest reserve, however there was no indication during the assessment of any ongoing plant gathering activities.

Based on the historic background research, as well as informant testimonies, the Kahakapao and Waihou Springs trails will have no adverse impact upon native Hawaiian cultural resources, beliefs and practices. The only ongoing cultural practice identified during the course of the assessment was pig hunting, however public access for hunting activities will not be affected by the development of the trail corridors.

B. Recommendations

Although no specific cultural concerns were identified during the course of the cultural impact assessment, the following recommendation is made in the event that inadvertent historic properties, including burials, are encountered during construction of the Kahakapao Loop and Waihou Springs trail corridors. State law (Chapter 6E, Hawai'i Revised Statutes) requires the following:

- A. Stop all disturbing activity in the immediate area.
- B. Leave all remains in place.
- C. Immediately notify the State Department of Land and Natural Resources-Historic Preservation Division (DLNR/SHPD) and the county police department.

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Appendix: Interviews

Interview with Sam Ka`ai (SK)
January 14, 2003
Conducted in Pukalani
Interviewed by Melanie Mann (CSH)

SK: Okay, let me get orientated--Haleakalā Homestead, which is, extended by where? Makawao. I'm trying to find out where the mountain is. Olinda--.

CSH: You know where the old State prison was?

SK: Where the State what used to be?

CSH: --Ah the State Prison.

SK: Yeah I know where that--so this is above that?

CSH: Yes, above that.

SK: Okay now I am orientated. Olinda Reserve. Water Tank. Kailua--that's the stream. Makawao Forest Reserve. Okay, this all up on top Haleakalā. Ha`ikū `uka.

CSH: I think they two fall in two different *ahupua`a*. The Olinda one falls in--

SK: No, no but the thing about it is that I am trying to find some prominent things around it. Girls School and campus. Where is that?

CSH: I think I have a better map.

SK: That no make sense. I don't know what this is. What is Pu`u `alaea? Unless I have this upside down. I'm looking for some prominent orientation--where the sea, where the mountain, where the north, where the south. Does this mean north?

CSH: Yes, this is north.

SK: Okay, this is the way I'm supposed to be looking at it. So Haleakalā is up here. So this is the *mauka* part behind--. This the place where they get for go look the birds?

CSH: Yes. The bird sanctuary.

SK: Where is that over here?

CSH: It's right over here.

SK: Okay now I know where I'm talking about. This is where the Baldwins are--so this Pi`iholo Ranch area is just below. Okay, perhaps I am not the best person for this area because I am still trying to figure out the name of this road over here.

CSH: Waiohiwi Gulch--that's one of them.

SK: So this is lands above EMI [East Maui Irrigation] ditch?

- CSH: Yes.
- SK: So this is inside the Forest Reserve?
- CSH: Yes!
- SK: And what are you trying to know about those things?
- CSH: I just want to gain some insight into past cultural activities that were going on in the area and if there still are cultural activities that continue today in the area.
- SK: Peter Baldwin and his son run those activities up there, but he owns Kumupio Ranch and that would give him access to knowledge, and he rides through there, and because he takes a ride up there he has bothered himself by talking to all the cowboys, people who knew—all the Portugese who used to go up there. They used to take *koa* trees from the area, and guys hunt into this area. There are some penetrations, which I think it's what you talking about here. Hawaiian homesteads—and there are some people who have bought lands up there. Do you know if these houses still exist?
- CSH: I believe so.
- SK: Because it looks like there are a lot of houses in there, and I can't even recognize those things.
- CSH: When I talked to you earlier, you had mentioned--
- SK: I'm still trying to figure out where this road is—you know people along the road over there, but you don't know the—. Where the heck is that Girls School. Okay, I grew up in Kaupō and on the leeward side of Hāna, and I am familiar with the Lahaina and Waihe'e area where I grew up. This needs that special orientations by the horsemen who go up into the trails. Now what are these—are these being preserved?
- CSH: No, they want to develop pedestrian trails—not really develop, but they want to clear areas for pedestrian trails.
- SK: Okay, access for nature trails. So this is part of developing—so the Makawao Forest Reserve belongs to Haleakalā?
- CSH: I'm not sure.
- SK: So in other words, the Nature Conservancy has bought this?
- CSH: No Nā Ala Hele, who is part of the Department of Land and Natural Resources has received money to make nature trails.
- SK: I think there is some pressure to make public access. I believe the older cowboys (like Ikua Purdy)—you know the old *kāmaka*, we grew up with them, see, and because of his family he is like a historical person—I know people don't go to him because he is not Hawaiian, but Haleakalā has been there longer, and the people who have worked for them have been around there longer than—they would have more information about

hunting—my brother hunted up there. But to say that they know the names specifically—. What do you have for the meaning of Makawao?

CSH: You tell me, uncle.

SK: There are many *owao*—when you look up land names, like Owaomulimuli, usually get one high mountain like this and then get a break, like a break in the wood, that is called the muddy place. *Mulimuli* is mud—*owao*—Hawaiians talk about that, usually no can plant—place where you can plant stuff is where get mud, above that the soil is too one kine, too mineralized rather than—top soil is mixed right, with organic material, not organic material, but the basics. So Makawao usually means to perceive the inner forest. Place where you can see in the inlands. Okay, the area above where the school is had *koa* trees, and they were cut by the Hawaiians and pulled to where we call Makawao, and thrown in the river, or rather thrown into the mud banks of the river, so that it [the stumps] wouldn't dry.

CSH: So they were throwing the—

SK: You adze the tree, you drag—from up there, you drag down here, and then you rest it in a cool place, no wind blowing on top, cover 'em with mud or in the trench, and you fill 'em up with water, for one year.

CSH: To retain the moisture?

SK: So that thing no crack. And then that became a major station for roughing and shaping. You did more roughing and shaping, to bring down, there and that's where you rested. In case you were rained out—Makawao can be rainy—instead of going all the way down to the lowlands, for drying out, you would cross the mountain—you know the gulches—and come towards once a place called Pukalani. It had a hole in the heavens so the rains did not fall as much—and here you could dry up. So here *mauka* is a place where they gathered the *māmane*, *ulupua* and *kauwila*—those hardwoods. But cattle came in so quick that all these trees were gathered up as firewood for the plantation, and finally those trees take so long for grow, they disappeared from the scene. Now above a certain line, above four thousand feet, all of those trees—there were no trees, it was just grassland, so it was called Kula—it is usually found in the arid, leeward side of an island. So Kula is named after the gold grasslands of the uplands and sweeps down and then does a lateral in the area called Kīhei is called Kula Makai, and over here is Kula Mauka. That is the place you find *keawe* trees today—that arid dry area is also called Kula. So get Kula Makai and Kula Mauka. And right next to Kula Mauka comes—on the Big Island would be like North Kona and—you know towards the overpass road—that's the kind of dryland forest of the hardwoods—the Hawaiians would use to make weapons. There was the *kauwila*, *māmane*, *ulupua*—and the place in Makawao, or next to Makawao in the land of Hāmākua Poko, *mauka* part of Hāmākua Poko is called 'Awalau. See and I think your area is even—

CSH: Hāmākua Poko I think mine.

SK: Hāmākua Poko and then Hāmākua Loa. So it's called H-Poko—when you say H-Poko they understand, but nobody use the name Hāmākua. Hāmākua Poko is where you are talking about, and 'Awalau is a part of it—today they call that area Haiku, but

Haiku is a line—Haiku consists of Haiku Hill, Giggle Hill, Slaughter House Hill and then cut mountain along O`opio Road. That is the dividing line of the *moku* and Māliko Gulch, that was the dividing line—everything on the southern side and west (below Hāli`imaile) belongs to Wailuku Moku and above Hāli`imaile belongs to Kula Mauka. East and north of that line is called Hāmākua Poko—so only the hill area and the village is called, but because they had a plantation there, called Haiku Plantation, all its land became known as Haiku—it's specific name, but they calling the whole area Ka Haiku, and Haiku is only the village—in fact it's only the hill, south of the village. When you come around the coast here, through what is Ho`okipa, which is in the Wailuku District, and you make that turn you see a hill they building houses, this side all pineapple, Haiku is supposed to be there—that hill is Haiku. Ka Haiku means to stand and to speak loudly or proudly—or is the bumps on your back—you know the nobs on your back, that's what those hills are.

SK: Let me show you this paper over here—now this was done by Kepā Maly. Polynesian Editation Corporation, August 1, 1846 to July 26, 1846, then November 14, 1865—now these are about trips taken around this place, describing different Plantation and the views, and back here are all the goddesses, the streams—“[reading]...developed with [inaudible] and associated with the falling rains, M*A*L*I*K*O and ascending falling rains were re-met by Mr. Castle, the chief mill operator at Haiku. Haiku, we saw the mill, the people, they were packing up to come and visit us. We saw—” The name of the rain is U*K*I*U*K*I*U—Ūkiuku is the rain, “ [reading] proudly moving across the top of Pi`iholo...and it is found in an ancient *mele*, spoken here...it says traveling in the presence of Haiku here is Awa`awapuhi Gulch forth in the visiting approach...” Anyway this paper will give you, this paper was given to Peter Baldwin, and it's my only copy. Now let's see here, Pi`iholo Sugar Plantation, it describes that and its elevation and area, how much acres. What we are trying to do is get to the Hawaiian material here—Hawaiian Traveling—1840. Back here you see inside this paper is the name I've been trying to get—it's the two water princesses of this area, you know the *kiha*. In fact, what I should do is let you read this now, turn off your tape.

[Pause]

SK: `Ulalena, `Ula means reddish-yellow, and `Ualena is the yellow rains—which I have a feeling, I cannot confirm, but I have a feeling it was used for [inaudible]. But let's say it was called `Ulalena rains, the reddish-yellow rains, which is, the rain is falling and the light comes through from the dawn, and that is the water spirit, and would be one of the lower manifestations of the *kūohu*, the cloud of Kāne's involvement— when the rains fall—you see it's Kāne, it's the rains of Kāne falling on the forest of Haumea. Now *hau* means to serve up and *mea* means serving up all things, so Haumea makes the forest grow. So it's also the mist that comes out of the ground, so we associated Haumea, okay—and the earth is called *papahonua*, *wāhine papahonua*, but the child spirit, the forest spirit is *wāhine haumea*, she receives the rain and for that she offers all these things up. Now `Ualena rains have this kind of mist—*kuakuokalena* is the mist that comes across the area and has that certain quality of dawn, `ula`ulalena—it's the equivalent to the thing you see in the ocean called `ehu`ehukai—when the waves come in and the wind blows the sea back and makes that spray, and you see the rainbows inside that, that is `ehu`ehukai. So some people are named `Ehu from `ehu`ehukai, the blowing back of the wave, sometimes it's called the red-headed surfer and other times it's called the rooster on the wave, get all kind different kind names—it depends on whose interpreting. So this `Ulalena

get that golden reddish rain, which comes in that mist, that's because the cloud banks are rising, and the rains that fall from that—if the light pictures through, get that color—now that's the physical description. For the Hawaiian, it's coming the enriched breadth of this woman, breathing on the forest—and the other name is very supportive, it's a name of a fern. What's the name over there?

CSH: `Ukiukiau.

SK: Get `uki`uki grass—know `uki`uki grass, now try remember Hāmākua coast get `uki`uki. `Uki`uki is one dryland grass? Where you find that kind grass? Mostly in Kona, yeah? So I think `Ukiukiau is more, that's just the rain that comes over, because in the old days also had `uki`uki fern—it's one prickly fern. Or it's a fern that we call by a different name, but when come dry the thing all shock, and that's what they call `uki`uki. Here in Hawai'i we call the fish *ulua*, you go down to the Tuamutu's, the full size fish is called the *ulua*, we call *pāpi`o* the younger one, yeah—down there get five different names and *ulua* is only [inaudible]. It's all according to the sizes—*purau* for how, because *puahau* is the flower only. Then they have *purau* is the wood, we call it *lā`au*, then they get—you look at the tree it's one name, you look at the stem it's another name, you look at the fruit it's another name—they don't have that so called catch—in other words, with our culture we pick one name, we say *puahau*, the flower of the *hau*, then we say *la`auhau* for the wood—get multiplicities, so it's hard, they say what kind of wood is it, they say *hau*, it's —so same thing up there, it's `uki`uki might be the poky-poky grass, but when ferns in summer, when getting to that dry stage, one of the descriptions is poky-poky grass—you know that tangled, you know the one we eat the stems for, it's the home for pigs. That fern, when it's in its dry state—so it might be, and try remember dry fern has that yellowish color, if you talking about the yellowish rain, you know where the formal is coming out—I don't know if you want to use that kind of stuff, because you're not going to find literature, you're going to say Sam Ka`ai said—.

CSH: Do you know Bob Hobdy? I talked to him earlier, too and he talked about—

SK: And how was it?

CSH: Well, he's retiring.

SK: Try ask him about that fern.

CSH: Okay.

SK: Because it is the grass, but try ask him about the fern.

CSH: He's going to New Zealand for one whole month for his retirement.

SK: That's one good man you know!

CSH: Yeah that's what I heard. So he gave me some insight into the area.

SK: Did he ever show you the place names that he did of Maui? Did he publish that ever? He lectured, but I'm not sure if he ever published.

CSH: Now that he is retired, he said he will spend his time trying to do the place names and work on his maps.

SK: That is very important. He is the one who revealed Nāhiku—as being a sub-province or sub-*moku*. There is always a debate about whether Nāhiku belongs to the *moku* of Hāmōa or Hāna or Koʻolau. Koʻolau is what we call Keʻanae. The *moku* of Keʻanae is not a *moku*—the place is called Koʻolau. It goes from Hāmākua ʻIke, Hāmākualoa, Koʻolau, and in between Koʻolau and what is known as Hāna today, would be Hāmōa, is this place called Nāhiku. Which means 'the seven'. It's a sub-province or something, like a sub-district. Everyone says, "how come Keʻanae got it's name?" On the right hand side is Okalaupapa, which is the lower peninsula—get big argument about that—get one place called the Manoa, other people call it Niumoʻo. Get one fish hole, and ʻōpae may have come out of that, but we don't know—but that's the place of ʻanae, all the baby fish. That's the same side the interisland ferry boats that used to come in and land out there on the rock. So that place is called Keʻanae. The mail came off at that place. So the area then became known as Keʻanae Mail bank. So that area became prominent. The Papali something, which is where the YMCA camp is, that is a fortress—that cliffs up there. A very famous fortress, but there is not enough literature about it. No prominent chief at the time of—connected it. The roads bring in, and make this place as prominent again. So you call that place Keʻanae, and ʻanae is the small fish. The mullet or whatever—when it is in its' infant stage, swarming. Right off that area. That was what could be seen by the landing boats, so it's called Keʻanae. So they called it—well it's the mail going to Keʻanae. But the mail is going to all of the province called Koʻolau. Because they already had a Koʻolau, Oʻahu they didn't want a Koʻolau, Maui. Like they have Hāmākua on the Big Island, Hāmākua on Kauaʻi—they didn't want one more Hāmākua for the mail, so they started calling it Sam's place. That's where Kamuela came out. That is a modern Bible name. The mail master was one Chinese guy named Sam—or one Scotsman named Sam, I don't know. But the name Sam, was given to Sam's bag. Kawaihae Mauka, Kamuela—same name. So the same thing here, Keʻanae changed it's name ʻanae because of the mail bags being delivered, cargo being delivered—that's a landing. But that province or *moku* is called Koʻolau. And then, the prominent places of ancient Hawaiʻi in that is Wailua Ike and Wailua Nui. Now the roads rides the ridge in between to the place called Kawaikāne. That is the big population areas. And then there was the population above that peninsula. So we have modified the names. Just like, we have now, Mākena. Mākena is one spring, not a district. But the area is called Honoula. And a most prominent place now down there is the bay, called Keoneʻōʻio—bone fish bay. Wai Lea is Honoula. And then the area we call Kīhei. Kīhei is a phenomena seen from that land, not that land. That land is called Kula Makai—*ka moku* Kula Makai. And when you are standing on Kula Makai you can see the phenomena called Kīhei. Kīhei is Haleakalā with the clouds, you know the pink up here, with the clouds going out towards Kahoʻolawe, that is called Kīhei. That is the shawl of Haleakalā. You can see it. It really is over Honoula, but we call it Kīhei. But everyone says—but I tell them, "if you think you so right, then how come you can have Kamaʻoliʻi one, Kamaʻoliʻi two and Kamaʻoliʻi three?" *Kama* means child. *Kamaʻāina*, child from here. Home team, *kamaʻāina*. The ones, the children who ate here first. *Malahini*, the guy from up the shore. In protocol, when you set up, the home team is the *kamaʻāina*, because the bones are behind them in the mountains. The *malahini* stand at the shoreline. That is one of the basic protocol. Kamaʻoliʻi one is happy child number one, and happy child two and happy child three—that's ʻōlelo *haole* in Hawaiian, backwards. Pāʻia for instance. Pāʻia is in your district. Pāʻia is

not a district. When you go and take your drivers' test for license, they tell you it's rooster town. That's the meaning of Pā`ia. But it doesn't mean that at all. Pā`ia means intrusive sound. What the rooster does in the morning. Because how you know that is, when they talk about Pā`ia Mauka—*ka hale pule a ka nui elua*. Get two churches towards the mountain from Pā`ia, is the two churches of God. And the town is called Pā`ia Makai—towards the sea from Pā`ia. Pā`ia is the mill, meaning noisy. Towards the sea from noisy is the village. From the mountain from noisy is the two churches. So when you close the mill down, and there's no sound then. what? No more Pā`ia. But the government calls it Pā`ia District. These are the misnomers of the place. So we should go back to the *ahupua`a* and find what the name of that place. Interesting, yeah.

CSH: It's amazing how over a span of fifty years how much is lost and how things change.

SK: You go to a chief informant, which is usually a casual talk, talking to some plantation manager, who wanted to just call the field something. And so, all things change according to the convenience of who is the *luna* elevated at that time. Pu`unēnē is now a hole. Pu`ulepo is a mound of dirt that used to be where this cut-off to Lahaina is from Kahului, and the road to Kīhei—in between there is a hole in the ground. That was a large mound called Pu`ulepo. Or Lelelepo, meaning the mound of the flying earth. And they shoveled all that away with two-ton wagons and eight mules to make all Wailuku roads. And then when the steam shovels came—it was such good soil—Pu`unēnē is the same thing. It's not the mill, it's over here where the old road—you know where dump goes up, goes up to Kula—there was a mound, I believe it's where the stone cracker is. It was the mound of the geese. But now it's gone. They used that raw material. And I am told by some old timers that there were seven of these mounds, and they are all gone. They were in that little area, and they made up—they were used for the roads, at the time when you hand shoveled. So that started in the 1840s, already, when the dirt started to disappear. So you have this not much recording, and then later on we know a trucking firm—you see, when there is a company, the company keeps records, and then everything starts to shadow, and that's what Pā`ia—. When I was young, I asked an old Hawaiian man, who was my elder, and I knew the meaning, but I told him Pā`ia. And he told me, like *haūpia*, Pā`ia—it meant the first stage of pounding of the tapioca, which is what *pia* is. Like *pa`i`ai*. And I asked around for years if that was a possibility. *ʻIa ʻi`a* the way you scratch on the board, or you hit some rattling sound, that is *ʻi`a ʻi`a*. That's what the rooster does. When you are sleeping, that first sound is intrusive. You have to know how Hawaiians got people up. If your elder man walk inside, and wake you up he ways, "oe`oe-ala!" Meaning, you, you, up! The elders would say, [singing] *ʻa`ala paha o`i`a anuanu mai e ka wela ke`ala paha*—would you like to get up? The cold is going, and the heat is coming, would you like to get up? Then they would add the rains of so and so are singing—that's how you get up elders. So Pā`ia is the most intrusive way to *ho`o`ala*. And plantation, blow the whistle, get up, go to work! And that's what they say—wow the noisy! And then the Hawaiians start dying off, you start bringing in Chinese, Japanese—everyone speaking different languages, and everyone adjusts to the needs of the day. So the things Hawaiian were negligible—all set aside. So today we affirm the Pā`ia Bypass, the this that. Just like Ho`okipa. What is the meaning for that? Had forest going all the way from the top of Hāli`imaile, where the *maile* laid down like carpets—big forest over there. From there down to Ho`okipa had *ohia* trees all the way to the shore. And the minute they saw had rain there, Europeans said let's cut all those trees down and plant sugar. So they

moved the wet line by. In fact they made it the town zone. The mist rains of *`ulalena* came that far down. Now all that is push away. Because you scrape the ground, you take the trees—you know how it when it rains, it steams, it causes clouds, it holds the mist—all of that was taken away. They burned all that wood off for sugar. They brought in Portuguese with oxen—that's how most Portuguese came here, to pull the stumps of the *koa* trees out. And the *haole* who didn't want to pay money said okay you clean my land I will give you an acre there. And finally you attract work for cleaning of land. They used these block detectors [attackers?]. Had twelve thick of two inch housers going nine to ten times around one block, tied to many, many oxen that would pull the tree stumps up. And then the gulch, I can't think of the name, that's where the old dump was, they burned for fifteen years. When you throw logs over that still have dirt in the roots, they continue to smoke for fifteen years. The Hawaiians say the *puoho* is coming back—the ancient mist. But it really was the smoke. So that was how that land was changed. That is what all those rock piles are. And Lahaina of course had more rock piles. They just literally changed the agronomy and pushed the wet line back, miles. It was good top soil, versus places where after you take the trees away the top soil was shallow. There was good soil. More *heiau* are destroyed along this coast, you know along Hāmākuapoko. The reason was that all the operators were non-Hawaiians—some of them were Norwegians and Germans. Germans came with the machines. So they bust all that stone up. Some of the stones were pushed into the ocean, some were pushed into making road beds along those areas, and bridge abutments.

CSH: You were talking earlier about the *koa* trees in Makawao forest, and it being there for canoe makings.

SK: Most of it was *`ohia*. I know on the back part of the road—Omaopio used to be another reason for call *melemele* is because you had pua melemele, the yellow *`ohia* used to grow up there. Now it's all guava and *waiawi* and—remember the cattlemen brought in ninety different kinds of grass. You see this man who died here, he brought in some of the best grasses—[kukuiū?], which is from Africa and Buffalo Grass, which held the soil together. He came and saw a solution—some of the grasses they made and was killing off the Hawaiian grasses, like *`uki`uki* that goes straight up. *Pili* grass, go straight up. The cattle knock `em over—easy for knock over, and then they become furrows of dirt. So these grasses took over to save the flooding off, because the cattle, the weight was smashing the ground and making it all loose. Von Tempsky moved up here and ran cattle, and then he brought in the Wattle tree because of the bark—it was good for tanning leather. To create a local industry. But then they didn't use it, and it became a weed up here. Hāna, Hāna Plantation—you know they took out all the trees and so all the trees come back up, now African Tulips. It was brought in because it was the [inaudible] that made up life jackets. When Hawai'i was more marine-orientated, when the Sandelwood mountains they grew that, and then the second row they developed Kapok from India—the cotton tree they call that, to make up life jackets. Now that is a weed growing all over Hāna. It is reforesting the areas. The forest that is growing in Hāna is not the native forest. It is not the *`ohia* that was there, and the *lauhala* that was solid along the coast like Nāhiku.

CSH: Did they eventually clear all those *koa* trees or—

SK: *Koa* was a saleable wood, so you cut every saleable wood to make money. Then they tried to replant, and it didn't come back fast enough. Hawaiian roots take too long. So then they did research, and in the 1880s they--by 1900s it's heavy already--it's *kalipa* or Eucalyptus. Fast growing hardwood. Of course, it's very combustible. Very burnable. But we don't have that problem because they plant 'em in very wet areas. But upper Kula no trees grew--no trees at all. So then they put in the black forest. The Scotch came in, and then they put in Gorse.

CSH: What was that Gorse for?

SK: Well, I have tried to find, somebody had one--it was kind of in Hawaiian and then there is supposed to be an English copy about a fist fight between two Scotchman in the Wailuku Hotel. There were two old men. One went after the other with a stick and the other one [thumped?] him for it. And they were senior gentlemen in their sixties and seventies when it happened. There is a Hawaiian person who got a hold of the records--I don't want to mention his name because I don't want to pick on the family. And the fight was, the guy said he had brought in the Gorse.

CSH: Who brought in the Gorse?

SK: One of the Scotchman. And the other one said, "you damn fool, you brought the scourge of Scotland here." And then they just went after each other--the two old guys. The two old guys, who were senior gentlemen. But the description about who brought the Gorse. The Gorse in Scotland was a wire-bush--you trim it and you make hedges out of it. And they are the original *pānini*, the pen of prickles. It's all over New Zealand. It takes over all kind of pasture. You cannot clear it, the Scotch brought it! You cannot clear it with a bulldozer. The shoots will stay in the ground fifteen to twenty years. So now in the areas around Lake Kaupō, that thing was really, really bad. And in the re-cleaning, they brought in spruce. California Spruce. And they grow those trees, and today New Zealand is the largest artificial forest in the world. Now why? Because Gorse took over and by growing spruce the tree grows faster, cuts the light off and the gorse dies. So up here they grow Japanese Blackpine to cut off the gorse. But gorse was a hedge rows in Scotland and you trim it, and the sheep couldn't go through. That's how the paddocks were measured, by gorse fencing. And when you get free labor to go out and cut the gorse--it's all needles, terrible job, the minute you abandon the land, the gorse grows outward. You see, it's one of these clever things.

CSH: They brought the gorse here for the same reason?

SK: Deliberate! That man said, "I brought the gorse here." And the other Scotsman got up and told him he was a damn fool. For the same reason, to make hedges in the upland. This is the cleverness of the European mind introducing the change of industry! Remember all those changes were agricultural in the beginning. African Tulip, the Kapok Tree, the Gorse, the funny tree--the tanning leather, Wattle. All these things were brought in deliberately because they were going to deliver a product for the farm! Now here's my observation--all the guys showed up with store-bought hats. Some ladies had *lauhala* hats and very few of them had feather hats. And yet in the '60s, no good rider would be caught with a store-bought hat. When they came to the Maui County Fair, the races--everyone wore their *lauhala* with their *kolahala* hat or peacock bands. My grandmother made peacock bands. Mrs. Ching them up in

Kula, Ching Store, they all make *kolohala* lei bands. That reminds me, I have to have someone unload my room here. I have an airtight box with some bands I put in there, and I think it's no good. Anyway, I have all green, all blue—you see, what they call the blue band has green, blue and purple in it. And the real blue *kolohala* only comes from here—

CSH: Oh, the neck area of the peacock.

SK: It's all neck, but only two spots on the side are what they call maroon-blue, or imperial blue. I have an imperial blue, a mixed blue—.

CSH: It's in an air tight bag?

SK: Yeah, but I think you no can keep feathers in one air tight bag. And it's been there for quite a while. I was worried about bugs so I put it away, but maybe I've done myself a disservice. Anyway, all the feather making, people don't do it anymore. See, we talk about the good old days. They still have some *paniolo* saddles—that is the secondary culture, that agricultural period. This place was famous for oxen and people who could shoe oxen. Farriers of the first order. Today we call farriers, blacksmiths. My dad was an iron monger, a blacksmith, a whitesmith, a farrier, and a cutler. Certificates are issued by the Kamehameha Schools.

CSH: What is a whitesmith?

SK: Today we call them tinsmiths. But tinsmiths today only bend metal. Old tinsmiths cast those lamps out of what we call pewter. But pewter was false tin. Tin was a metal that you made those things. White metal smithing was all the thin casting of various—and bronze and brass were done by whitesmiths. Because blacksmiths forge iron, it was all tempered. Iron mongering is the shaping of big metal. They get trip hammers for mongering, but before used to get many guys with hammers. Blacksmiths makes steel out of iron. White iron is steel, and black iron is wrought iron—wrought to hammer—and then you took the cold steel, white steel, white iron, and you pound it into smaller and smaller pieces. Then you heat it up so it becomes cherry-red, orange color, and you pull it through a piece of iron, and you made wire. Then you take two bricks like this and put these rods across, between the bricks, and you heat it up in the furnace, in the blacksmith furnace. Then you pour in carbon, and the carbon fuses to the wire. Then you open that, and you pound all those iron with carbon fused to it, you pound it into a single piece—that was steel. So blacksmith, there was so much in doing that and wrought ironing, hammering and all that, that is blacksmithing. Whitesmithing was brass, bronze, tin—mostly tin—and flat sheet work that was necessary. And some lead stuff was also called whitesmithing. And then cutlery was people who took the steel and made razors and knives, and shearing, and made the steel to adhere to an ax. You make an iron ax and you put the steel edge—just a little piece of steel. My dad could do that. That was old Kamehameha School. My father sent me on one goose chase—I had to go find a clock of the two Pi'ianai'a's. I go up ask Kamehameha, they don't know what the heck I'm talking about. So they say, "okay, this is the way we going tell you the story. In the time when the head of the school shot himself in the head—" I went, what? I gotta go up there and tell them they shot him in the head. He said yeah, "tell `em they shot him in the head." He was in the office at Bishop Hall. So I said, okay! He had one instructor that was German. He was the industrial instructor—that was my father's

story now! And, he made—that man made a clock. Carved the clock out of *koa*, which was two carved dolphins. That's why he said, "ka pi`inai`a ihu hope"—the nose down. Well, apparently in Bishop Hall, there was this clock of this carved Greek dolphins. And it had the kerosene—and my dad remembers that intimately because the clock was finished about the time he was there. And that had been moved to different halls, and nobody knew about it.

CSH: Where is it now?

SK: I've never seen it, but it is at Kamehameha Schools. My daughter said it was in so and so hall. I don't know if it is working, but I know the carving is there. And that was the old clock. And that is the man that taught the industrial arts and issued your certificate—. Now you had to work all year at school, and during the summer you went down to the Navy yard and become first an iron monger, then a smith, then work with the bronze, after so many years—and then when you *pau* all that, the shipyard and your instructor signed the paper that had a certificate. I want one of those certificates. I think that would be a treasure. It's a time gone. So I had to ask my dad, okay, these guys all blacksmiths? He said no they all farriers—they not even good. So I told him, what is one good one? What is a real farrier? For me pass the farrier test—you know about the mule shoe for climb the mountain? In the quarry? They talking about making mule shoes and having a piece of flat metal so the shoe can bite in for walking on hard stones.

CSH: Oh, like cleats?

SK: Yeah, like cleats. Nobody knows about that—nobody does it like that. Mining was done like that and you had to do that—Industrial shoeing. For Clydesdales and Belgians and large horses, they kick themselves. They have bad footing. You have to weight the shoes so that it would make the shoes go that way, because they can hurt themselves. When you push them, and they beginning to get a bad gait—so you had to weigh the shoes, you had to put weights on it. You had to know that. That was farriering to him. And so I said, so what was your test? You had to put the weights and see the animal? He said, no! They just brought the oxen, put it outside the school, okay, shoe that! Here's the iron—they throw you a piece of iron. You had to cut that piece of iron up into four and then eight and then into sixteens. They had to build two cleats like this and two like this—crisscross and weld them together, and they make two edges like that—for cloved-foot animals. And it is more tender than horse. The nail is not as long. And so you had to hot patch it to make it fit perfect. And you had to nail smaller. And I said, when you grew up did you have to do this [inaudible], already the oxen was going. Already mostly mules and tractors already. Steam tractors and [inaudible]. But the older mills here and in that description at the [inaudible] how many oxen they had. Two hundred something oxen. In that paper [inaudible]. OK. That's what they talk about. That's a farrier, one who could shoe the oxen.

CSH: A farrier.

SK: Farrier, farrier is a horeshoe man. I didn't even know that. I grew up with a blacksmith. And they said no, farrier.

CSH: Two books [Inadudible] had this kind [inaudible] people imagination, book smart, good at school.

SK: Try to remember, I am in the point[?]. I know the guys who trained for it, but it was already passing out of their lives. I'm the ones that fall down before the computer. Remember that if in 1900 you couldn't shoe a horse and you were somebody's damn fool. Because why? Everybody rode horses. High School in the 50's, if you couldn't type, you ain't gonna get a job. 'Cause typing was a big deal

CSH: You were going in the 50's?

SK: I'm 65. 1938. So you know, 50's. I mean that's the standard. We went, right after us, you have to use the business and homemaking, you got to use the calculating...

CSH: The ten key

SK: The ten key apua, and now who knows that. You know that. Then it was considered bad to use a calculator 'cause you couldn't figure. Now the kids who can't figure only can use a calculator. And now we get these kind of people like this. The [loma] is not like that. Pretty soon they gonna make ..., so [inaudible] talk constantly, and no pay attention hit the telephone pole. They're scolding everybody for turn off the machine in a movie. They go beep, beep, beep. They don't think they got them on. So, now if you got computer literate, no one can tell you about typing. They brought one up here for me to put my readings inside for [inaudible]. They want the records so they can be sent in. [Inaudible] computer. I could never get it to work.

CSH: The medical people set up the computer for you?

SK: Yes. I couldn't get it to work.

SK: You know what, I tell you it's funny. I get some big shields which are very unusual cups, I get all those. But the basic ones you never buy because they are plain and they were cheap, the highest was 50 bucks, somebody bought like forty, thirty, thirty-five dollars. Now, they all in the 600 dollar category. You know the perfect round ones with the stick, the toi mesas, they were common. Well, they're not common any more. There's one that is a coconut shape called *niu* [inaudible]. That's the two, the most common ones, like that. And there's some straight ones. I never got it 'cause I never thought they were elaborate. [Inaudible] without those. I have the hala, the bird-beak, the battle hammers, the gun stock.

CSH: But not the...

SK: I have a mace, a throwing mace, they call it a throwing mace, but this is a battle mace. It has a hundred dots on it. The time of xxx, they kill a chief, and people xxx in a certain manner so they don't get attacked by his spirit. The one that is in Arts and Crafts of the Pacific, so Pacific artifact, by Terrence Berrel[?]. Do you know who Terrence Berrel is? He's a xxx Japanese xxx, something pressed [?] from Japan. He's a New Zealander, and he wrote all that stuff and he has a picture of a particular Fijian [ax?], the primo piece. .. And made the mistake of selling me that one.

CSH: And now you have it.

SK: And now I have it. And I haven't seen it for now about 18 years. It's in a box. But I have a ta'a, there you see that ta'a there, you recognize that ta'a, that was given to me for a blessing. Right next to it that is an omen collection tongue-and-tattoo someone club. Next to that is a saw-bill kauai. The black mace, I made that. The Hawaiian war club is missing. Next to that is a Samoan club. I just came back with John Lake[?] from Rapa Nui when Hokulei was there. That is what was given to me. Those are fish vertebrae. It's a hui from Rapa Nui.

CSH: Which one?

SK: There, the club sitting against the wall, with the rattle [?]. So, it looks like a [inaudible]. Right next to the picture.

CSH: Yeah, the fish vertebrae.

SK: That's fish vertebrae. And for the eye too...[inaudible]. And next to that is a Fijian war club made modern, called the Order of the Sow,

CSH: Order of the Sow.

SK: Yeah, and I was given that. But you know that, the others that I have are old stuff. 1850.

CSH: And when you found them on e-bay..

SK: No, no, my freind is getting-, people breaking up collections, see, and they offer them for sale. I got my friend buying this stuff and he got six of those story masons and I ain't too good. Right now he's broke so he's not playing with the machine.

CSH: E-bay is so dangerous.

SK: What he does is this, he gets the average places and there you are competing with the best collectors, that's who pay the big money. They like them, you no go get them, 'cause, "opening bid 100 dollars" and they say final not reached, if it says final reached, I gotta say 2000, guys creeping up, yeah, but these guys who like stuff, dealers, 2000, they just [wrassle] everybody. See, you don't pay 2000, you pay from the last bidder, but they willing to chase it 2-3000. Well, from 100 to 2000 is a big place in between. At least I'm not up there. I get a war club, I no afford that. You know what a u`u is?

CSH: Oh what?

SK: An u`u. Have you ever seen an u`u?

CSH: Is that a weapon?

SK: You ever heard of the tata-ha- i-va? Alias Marquesans. You know where Marquesa is?

CSH: Yes.

SK: French Polynesia. Marquesa. I have one of their clubs.

- CSH: And these that you've collected over the years by visiting people, and they've become [inaudible]?
- SK: Well, four of those have been given to me, right there, it was given in ceremony. You know [inaudible] Hokulei [inaudible] so I tell these stories and they like them, you know, ko ko, and making people do that, and once you're giving these unusual stuff you tend to chase some things for around often. Now that long tai hau, I bless the Humata collection at the Bishop, at the Academy of Arts. I give pua nunis to come and chant and I did the blessing and everything. And they gave me kalani, this is, what do you want, I also did something else, inside the collection they had a Hawaiian war dagger to Wailua, Kauai. [Inaudible] This is delightful. Larry Bishop, he's the curator. He put the collection together for presenter. She told me, what she could do for me. I'm telling you, I like to open the case, take out that piece, put down paper, I gonna trace 'em. They got so shook up, they asked me to stay here with her. The son, says yeah, lets leave them there.
- CSH: Let's open that up!
- SK: So, I tell you what I meant from the tracing. That's it. There not symmetry, shaped as well. Collection, that's it.
- CSH: It's made of koa?
- SK: You can not say, no curly koa, Hawaiians called it ka-la-au-keiki. Or they call it lau olele. Twisted or ke ke. Ke ke Means crooked, eh.
- CSH: And you just traced 'em?
- SK: I made that. And everybody, of course, in the copy place, Oh, wow! They opened that case, huh? [Inaudible]. So I traced the thing out, and see I can make one. I said, look, it's wonderful that the Academy has it. Just wonderful. It's sort of sad that the Hawaiian doesn't have it. How will the Hawaiian have it? Well first he must have a packet. Then you must have the will. Then you must have the lau. You must not make bracelets with it or fine European furniture or music box or hair barrettes. You must make the kalakamoi. The real thing to the Hawaiian. I said, 'So, why did you want that?' 'Cause the three in Bishop Museum were sort of crude, while this big one that big and the symmetry is not done. This is the most well-balanced in symmetry. She said, 'Well, I guess we really have a wonderful thing.' I said, 'Yes, you do.' So, I laid it up. Then all the boys all at once, you know come to Wailuku, you no deserve one. You gotta pay your dues. You folks need to have boboa and palaulau, don't go and make the unusual. Make the one can use. You know I may call the supper on these guys. Xxx This is the most common weapon, at the end of the Kamehameha wars. this is koloa paho, this hau ila, xxx
- CSH: They are two different kinds because of their size?
- SK: Yeah. This is the most common. And he's using this hand with a capo over here
- CSH: Oh, to hide...
- SK: To block stones. You know they shooting stones. Boom. How you know, catch stones, you can heat spears, catch stone in head. So, you walk forward with this thing, the

javelin, you throw, if somebody swing xxx, block away xxx, so if I do this I put them here. You can not catch them with your fingers, too far xxx . The long xxx is to go beyond the elbow, so you can't bust the elbow. After you throw your spear, then this is your fighting weapon. Ka bu is like a dagger. And then, this a palaaou, maninki

CSH: Uncle, you sawed all these by hand and you brought them empty all by hand.

SK: Okay, let's go ahead and turn the tape off and we'll go into the garage and I'll show you my work.

CSH: Okay uncle—I want to thank you for taking the time to share with me your *manao* first. So Mahalo!

____End Interview____

Interview with Anonymous Informant (Informant)
January 16, 2003
Conducted at Makawao Forest Reserve
Interviewed by Melanie Mann (CSH)

CSH: And tell me a little bit about your grandfather.

Informant: My grandfather was a woodsmen. He cut wood for the plantation because the mill used to run with wood—with steam. So had plenty Portuguese in those days was all wood cutters. My grandfather used to own all this over here. He was a farmer. But my other grandfather, on my father's side, he was a wood cutter for the mill.

CSH: What mill was that?

Informant: Pā'ia Mill.

CSH: Oh Pā'ia Mill. And when did they come to Makawao?

Informant: My grandfather?

CSH: Yeah.

Informant: Wow, I don't remember. I wasn't even born yet. He worked Haleakalā Ranch. He worked part-time for the ranch, too. And eh, woodcutter and same time he living on the ranch—do some work for the ranch. Okay you turn the next right, you turn, that's Kahakapao. Which the name is wrong. The state put the name Kahakapao—this actually is Pauhinui. Kahakapao is way up, but the state come over here put up one sign says Kahakapao—wrong—but I guess we gotta go with that. Right here.

CSH: Okay.

Informant: This going up to the water treatment plant. This was all made—this road was all made—this road was all dirt. Even four-wheel-drive vehicles no can come through here when rain—so much mud. So the State decided to make this treatment plant up there in the State land. So they rebuilt all this road. Some of this road going into people's properties, some of it they got wrong. You know the State and County, they can never do anything correctly. They do mostly correctly, but some mistakes. And get all wild pigs, all in here—all through here.

CSH: This is an area where the hunters still go?

Informant: Ah—over here? Over here hardly get now. No more because plenty people bought, yeah. When they buy, no more pigs. I used to catch plenty pigs in this gulch right here.

CSH: Do you remember going pig hunting when you were small?

Informant: Oh yeah. I used to go with my parents and my older brothers.

- CSH: How many siblings do you have?
- Informant: Ah—I not going say like, what you call, it's siblings now, not seedlings okay [joking]. Siblings, I had nine—six brothers and four sisters—actually ten, but one died young.
- CSH: And you guys all used to go pig hunting up there?
- Informant: All pig hunters—from my grandfather, to my father, to us.
- CSH: What was a typical day when you guys went pig hunting?
- Informant: What was what?
- CSH: What was a typical day?
- Informant: The weekends, because during the week we gotta work or go school or something, yeah. But in here was full with *kalakala*. *Haole* call it gorse. You see this kind—every leaf is one thorn. You see this thing came in the 1800s over here. And this guys, this is one *pākē* guy, Tam, he own all this, used to own `em. Ah, that's all homestead land that the government gave away—he [Tam] took all this land but he never did take care of his land. This was full of gorse—thick with `em and the pigs used to hide under there.
- CSH: Who brought the gorse in?
- Informant: Some *haole* guys that says he was going use `em for fences. Used to raise sheep in the old days.
- CSH: Oh so they used to grow the gorse to make bushes.
- Informant: Yeah, but this thing get seeds and the seeds—and on a hot day the seeds can fly twenty to thirty feet away, and that things just keeps spreading and spreading. So when Tam got real old and he felt it was his last days on earth, then he hired somebody and started cleaning this all up and raising cattle. So you hardly see the gorse now.
- CSH: And the prison was opened up initially to—for the prison inmates to clear the gorse?
- Informant: Ah—not necessarily. They used to make roads, like Kahikinui Tower—get one bad section there that the prisoners made that road. And pass Kahikinui, they call that Waiopai, cut the cliffs and all. Okay, we are about to enter State land—from here on it's State land. This is called Makawao Forest Reserve. And the State call this Kahakapao.
- CSH: And you said this was called—?
- Informant: Pauhinui—just about ending, then going come Kahakapao. My grandfather guys used to cut wood all inside here. In fact, most of these trees were planted by them. And this gulch here is called Ginger Gulch, because this whole gulch

is full of ginger.

CSH: The red one?

Informant: No the regular ginger. A lot of pigs are caught in here. And this the bicycle trail—there it comes out right here.

CSH: Oh dirt bikes?

Informant: And this bike trail is my hunting trail. They started following me going around. Goes in the back of the treatment plant, all the way up to Waikamoi, and some guys go into Haleakalā Ranch, but it's illegal. Waikamoi is all State land and then come back down the loop, come around like this.

CSH: You know anyone who come pick flowers up here? What kind flowers get over here?

Informant: No more flowers—only get gingers. That's the only kind flower get. Get over here, but you gotta climb the trees, some trees high you know. No one like climb tree! No more flowers. This is one trail here again. Sometimes come out through the—. When we planted these trees here, this used to be one Jeep road where we take the trees inside, where we take the seedlings, right here.

CSH: Oh that road over there?

Informant: Yeah, stay on your side sometimes they come down through here real fast.

CSH: Do you know of any archaeological sites or historic sites in here?

Informant: Not in here—they all gone. The tractors knock them all down.

CSH: Before they knocked them all down had stuff in here?

Informant: Yes.

CSH: What kind stuff?

Informant: Oh like—the stone they used to use to make the canoes, you know they make 'em hot and then they chip off the charcoal to make the canoe. *Poi* pounders—not too many up here, *poi* pounders. The big ax for dig, made out of stone.

CSH: And you remember seeing them when you were young?

Informant: Yeah, yeah. I used to hunt pigs down there, used to take my friend with me—he was a collector. And get plenty trails in there from my mother guys—my mother guys used to live across here. Had a big camp, they called that Kalili, and they used to come down the gulch wash their clothes—that's where they washed their clothes. So they make all these trails and today the *haole* come by they say, "that's archaeological trails made by the Hawaiians"—that made by the Portuguese!

CSH: Portuguese who going wash clothes [laughing].

Informant: This the treatment plant. Yeah, right here. This is as far as we can go without four-wheel drive. There's one more road that goes from the gate—but locked, you no can go, ah—up to Waikamoi. But anyway, this is the treatment plant. And this ridge, you see right here, this all planted. The state had planted all this.

CSH: So this was all introduced then.

Informant: Yeah, all this not native to Hawai'i. Those pine trees there, you see that one with the cones and stuff, I don't know what kind pine is that, we used to call that short leaf pine, and we planted that, right around here. And this eucalyptus, the young kind, they grow by seed, yeah—but they find out later on that the leaves all blowing inside the—that's the catchment for the water over there. Get the cement blocks where the water go and the settlement stay, and then they go to the next pool, and then from there to the treatment plant—I used to catch a lot of pigs right inside of here. Sometime they right on the road.

CSH: This area, in pre-contact times, you know anything about the history before—?

Informant: Well, according to one old Game Warden, his name was Henry Lesiong, I don't know if you look up the history and stuff—he said when Kamehameha came to conquer this island most of the Hawaiians went run up Pi'iholo and hide up here.

CSH: Oh they were hiding—

Informant: Yeah, from Kamehameha. Kamehameha had come try conquer them, no could, they were really strong up here. So he just let them go and he went. So they lived over here for many many years, the Hawaiians, until become civilization.

CSH: In this Makawao area?

Informant: Right here in Makawao, that's Pi'iholo—because that's where had the water. You need water, yeah.

CSH: Right because that's where all the resources are.

Informant: And then they used to make canoes all—ah, I can show you places. They made the canoes with these big *koa* trees and they float 'em downstream—Māliko Gulch—to get 'em to the ocean.

CSH: Oh yeah, that's what I heard. I heard this place is real rich in canoe resources.

Informant: I can show you the big hole—where the trees was. They go cut the trees and the stump going rotten, yeah—but we gotta walk up Pi'iholo, kind of private property, get one different owner over there, he kind of wise guy.

CSH: So this place is actually really rich in cultural history then?

Informant: And there's a lot more that I never know before my time. You know, my parents and my grandfather they wasn't interested in that, in those things, so they never even bother with that. But you know, when they was cleaning in here, had one guy, what was his name now—oh, Mau, his last name is Mau—he picked up a lot of stuff. And this guy Gibson, Steven Gibson, he was operating the tractors and stuff so when they see the stone and stuff they take 'em, yeah. Take 'em home before going get destroyed.

CSH: And those guys, they all passed on?

Informant: No—they still alive. Harry Gibson, he live Ha'ikū—he can tell you some of this, too—he work for the state, plant trees and all, all over the place.

CSH: And how come they cleared all this place and planted?

Informant: They never replant this—that's all pasture. But they clear 'em to clean all the gorse. From here down, this all Homestead land—both sides of the road. And I don't know how, you know in those days, how the government could come here in the old days and tell—"this land is homestead and we giving it away." You see, my father was no cattlemen or horsemen, he worked for the Baldwins, but the people who was, they took a lot of land—like the Souza, they took two hundred acres, like Toni Tam, he took another two hundred acres.

CSH: And they were all working for the Baldwins?

Informant: No, they was on their own these people. They raise cattle and horses—those days horses were very valuable. The rest down here was all Baldwins—whatever you see down here, that's all Baldwin—thousands of acres, which I'm sure they never buy, they just took 'em. Some property was probably homestead, unclaimed lands—they took 'em all. They took thousands of acres—everywhere had water, they took 'em all. This is all the people that came late, they buy little pieces from the big land owners. This guy own this section here, he live in Lahaina, and he bought this right here.

CSH: And how old are you Steven?

Informant: I'm seventy-five. No, seventy-seven.

CSH: When were you born?

Informant: Twenty-five—ah, I'm what you call one antique already [laughing].

CSH: That's okay I like antiques—I get one Model-A myself.

Informant: And you know when I like vegetables, I come right here my friend he give me free, all I like—organic vegetables. That used to be my grandfather's farm, too that. He bought six acres over there—nice guy that guy, nice guy. Oh you know the bicycle path—you know where the treatment plant is, they call that the loop, yeah—the next gulch, the gulch right next to the treatment plant,

across there get the bicycle trail. Sometime they get dropped off at Waikamoi and they come around and come out where I told you they come out—oh, we pass `em already, inside the State land.

CSH: Do you know of any old Hawaiian trails?

Informant: Well most of the trails I'm following are old Hawaiian trails and then some of them are—. No, no go this way, this is Baldwin's ranch. He own three quarters of this island. When you get down there, where we went turn left, you take a right, you go up the hill, no you take a left going up the hill, go all the way around we going go to the old prison. I saw something in the paper you went send me about the baseball field, they had a very large baseball field over there—nah, never was that big, was small, just enough for play.

CSH: Get Warabi up here, too—the fern?

Informant: No, no more you gotta go Waikamoi or inside country. Waikamoi get the big kind—you know the mountain kind. Then you go *makai* below get the smaller one. This all homestead land, two side of this road, all the way over—all was given to the people before.

CSH: How's about birds? Any native birds over here?

Informant: I get one along this mountain, one old one, `iwi, but no, I no see them no more. When I first used to come around here, yeah I used to see some, but not that many, but some.

CSH: What else kind birds had? `iwi and what else?

Informant: `Ō`ō, I seen couple of `Ō`ō—they mate and then they leave, yeah. And then, I don't know the names, but the little brown one, more small—and lately I've been hearing this bird, so I look at `em and I went take one picture of the bird, hard to see `em and they fast moving bird. I took `em to Nature Conservancy and they said, "ah, this not one endangered bird, this one Japanese warbler." But I hardly see them though, now. When had the gorse, before they cleaned the gorse, plenty of them used to be inside the gorse, and then they cleaned the gorse and then no more—I don't know why. And then the little green birds, that is endangered, with the kind of big eyes, we call them mejiro. I think today they still get the mejiro name to `em, but I think get another *haole* name. That one, used to have hundreds of them, they used to be bad birds, they used to eat all the papayas and all the figs—nobody used to like that, they used to shoot them with the BB guns, and look today it's endangered. You know what happened here—I'm going tell you what happened with all these endangered birds. HC&S [Hawaiian Commercial and Sugar] EMI [East Maui Irrigation] they started using chemicals to kill the weeds along side the ditches, get four ditches that go clear across this island, and that's where the birds were drinking their water during the summer time. And all these chemicals sitting there—at first they were using DDT, then they turned to different chemicals, now the birds going go over there, drink the water, and eat the weeds, and get the seeds—get the chemical. Either they going die, or they going come sterile, or the eggs going come soft and no can hatch—and nobody

like bring that subject up you know, because against the big fires. This go way up far [talking about the road]. Get plenty turns up here, you have to be real careful. In the old days, they try for avoid the rich guys, yeah, they no like go through the rich guys property so they go all through the poor man's property [laughing].

CSH: Do you know of any burials over here?

Informant: Pi`iholo—oh Pi`iholo had couple over there—one whole family used to live over there. Get the cave, everything. Some *haole* kid went through there, they went broke `em all, you know, in order to find the artifacts, yeah. They went bust `em all up. Even the graveyard, all the stone went up—cross the river, get one small cave, you look inside the cave, all black, where they used to cook—and we found some artifacts there and plenty, you know when they make and no work out, they throw `em down the gulch, yeah. Yeah my friend found several over there—he found one *kukuihelepō*, you know what is that?

CSH: No what is that?

Informant: The stone where they put the fire inside and she burn all night—because in the olden days you gotta get fire, you no can put out your fire, or else you gotta go get fire from your neighbor, so they keep the fire burning all night. Next morning with the *kukui*, the *kukui* nut they get the *kukui* nut, stack `em up like this, yeah, and they light the first one, she burn, she come to the second one, she come to the third one, and by the end come morning time—and then they get the fire for start cooking in the morning and from then on, it keep on burning. All State land yet, on both sides of the road—that the government went give away—all this.

CSH: But the burials, they are not anywhere near where they want to put the trails but?

Informant: No—pretty close. Where I told you where the bicycles go up, where I told you that's my trail that, when you reach on top there, about eight minutes from there you reach the site.

CSH: And so that's by the Kahakapo Loop then? This Olinda Trail—no more nothing over there eh? Get any archaeological site or burials over there?

Informant: Get one spring you was talking about. But that spring has been dead for over fifty years or more, no more water.

CSH: They used to tap into the spring over there to get water?

Informant: No way—not that I know of. That spring is dry. You know in the old days used to rain a lot, so you get water all the time.

CSH: You guys used to go swimming in there?

Informant: Who me? No. I used to go hunting and when I get too dirty or too hot I just jump into the pond—you know mountain, sometime you carrying the pig

coming back, you come to one waterfall, you throw the pig down and you jump over [laughing].

CSH: Where did you grow up? Right over there by the Makawao Forest?

Informant: No—you know where Kawamoto Store, where we was inside there, about two miles below that. Had one ranch called Grove Ranch—owned by one Baldwin. My father worked there, he was a horse trainer. So we all grew up on the ranch.

CSH: How often you folks used to come up?

Informant: Almost every day we come up mountain. Us mountain people! Beach we hardly used to go until I met my wife—my wife Hawaiian, she that kind like go beach all the time. Then we was going beach, and that's when I learned how for throw net, I learned how to dive, I learned how to hook fish, I used to catch a lot of fish, because in those days no more boats yet. No more boats inside the bay. I used to catch mullet, twenty-four inches, two-foot kind mullet I used to catch. *Manini*—I used to come home—I used to hunt pigs in Pāpa`a`ea and the trail for go down the beach right across. Only thing it's rough. I catch one pig, I come back, I take `em off the truck, I cover `em all good for the flies no bother the pig, and then I go down the beach with my dogs, and I come home with fish and pork.

CSH: And where is your wife from?

Informant: My wife is from Kailua, before you get—just pass Huelo, about one fourth way to Hāna. So I was raised around this kind area, used to be in the forest almost every day. We used to ride horses from Makawao to the crater go shoot goats and then come back.

CSH: So you guys used to hunt in this area, goat and pig?

Informant: Over here pigs, in the old days not too much pigs here, the pigs used to be way in the forest, but gradually they came out here, yeah. You see, my father worked in the ranch he make small pay and we had to get something to substitute the pay, plus we had big family—so what used to be on the table was pork, most of the time, from wild pigs we would catch in the forest, and goat—we go hunt goats and catch goats. Fish, we were not fishermen, us, we dryland kind guys. And then my father go Kaho`olawe, the guys was staying Kaho`olawe, taking care the place, sometimes he go vacation three months, then my father go over there, he take us over there, then we used to fish over there. Over there you can shoot the *uhu* with the shotgun—and then goats, and turkeys—we used to put them in salt barrels. No more ice box and no more freezer, so we put them all in salt barrels and bring them home with us when we come.

CSH: And how you guys used to prepare the pig?

Informant: Ah, some we make sausage—was real fat kind, we call them pork pig *pilau*—sour, you know that kind, no can have baby, sour—and they come real

fat. Before plenty food in the mountain—bananas all over, now the sickness, banana sickness went kill `em all, no more now. The pigs was fat, and big kind pigs, bring `em all, we make sausage. And my mother used to cook `em, roast `em and stuff with potatoes and carrots and whatever—eh, that went help raise our family.

CSH: Those days you could really live off the land.

Informant: Oh yeah! I used to come home with *pepeiao*, pork *pepeiao*, warabi—you guys call it warabi, Hawaiians call it *pohole*. Every time you go mountain you come home with something—even if you no more pig you get something you can bring home—the *lū`au* leaves, the taro leaves—nowadays you go over there everything is no good for nothing.

CSH: Never have taro patches up here?

Informant: Wild taro, used to get wild taro patches. But over here no more because this kind dry area this, yeah. One gulch over there, Māliko Gulch, run water kind of regular because get springs in that gulch—but A&B [Alexander and Baldwin] get `em because that's their place—like I said, they went take, they came here looking for gold and silver, no had so they took the next valuable thing—land and water.

CSH: Somebody was telling me you know, like you said, this whole area was known for canoe making. They used to cut the trees down and they used to soak them, so no split the wood, keep `em moist, and then take `em down to the ocean by way of Māliko Gulch.

Informant: Yeah! Eh, high waterfalls, they float `em down. Hold `em with ropes go down—they make their own ropes.

CSH: And you said still get remnants because you can tell which one—?

Informant: Yeah, yeah! Yeah you can tell because this guy I take with me, like I said, he was a collector, and he tell me "how come get `opihi shells up here?" I look, oh yeah that `opihi shells.

CSH: Wow you guys would find `opihi shells all the way up here?

Informant: `Opihi shells they can last eighty, ninety, hundred years!

CSH: That's up by the Makawao Forest?

Informant: Yeah—more inside, up Pi`iholo side—but not far from where we was. I said, "oh yeah `opihi shells." And then get the big holes—and then he go tell me, "you know what this is? This is one old tree that they had cut and they make canoes and then they send `em down." `Cause Māliko in the old days, rain a lot, that gulch carry a lot of water, that's why that gulch is so big. And then a lot of branches falling in, so they try for cut the trees as close as they can to the gulch, so when they finish with the canoe they just bring `em inside the gulch, and soak `em in the water, in one pond, and then they float `em

downstream, go to Mālika. They never have two thousand or ten thousand canoes, but they had a few, yeah. And those guys knew how to make canoes—not like today.

CSH: Oh the nice up here.

Informant: Nice—all land given away. Too bad my father, my grandfather no was one farmer so that he could ask for some land too around here [laughing]. Some people went take a lot you know—like that guy Tam, I don't know how he got so much land. But the rules was, you had to clean the place up and you had to live on `em. Toni Apo never did that—that was the only guy that let his land neglect, let `em go—but still yet hold on to `em—now he own `em. It's worth millions of dollars. Nice yeah up here?

CSH: Yeah nice! And this road wraps right around and comes right into Olinda?

Informant: Right—right into Olinda. And one go straight up, go to Waikamoi. Crater—you can go by horse all the way up, but this side you got to go Haleakalā Highway.

CSH: You still horseback ride up here, too?

Informant: No—now only *haole* ladies. This start the State land again here—that's where get the Bird Sanctuary. Why the State plant these damn trees, you know why, they no can keep up with the gorse—the gorse that grow in their property, so they plant these pine trees so they can kill all the gorse, it kills itself.

CSH: Kind of like a canopy yeah?

Informant: Yeah. I planted some of these trees all in here.

CSH: For your work?

Informant: I worked for the State only for little while. This all belong to the bird sanctuary. You know this Bird Sanctuary, to me, it's nonsense—because they raising `em, they feeding `em by hand, they hand feeding them, then when they let them go, they die, they don't know how to find food—no more food for them. What they should do—they should go around and plant stuff, like wild oats, wild rice, or something that the birds can eat—they just let them go, what the heck they going eat, they no can eat pine trees! They going, going, going until they die—they no more even water. To me, that is useless.

CSH: They not helping them learn how to survive on their own.

Informant: Then they go out into the forest they find one nest and they go take the eggs or the babies away from the nest—ah, that's not right.

CSH: You know anybody who used to come up here and pluck feathers for make arts and crafts like that?

Informant: You mean catch the birds? No, no no. They used to shoot them and just leave them there, dead, shoot `em with the BB guns, and the just leave them

there—you know those kind kids.

CSH: And had pheasants up here you said?

Informant: Oh choke with pheasants. In fact till today some guys shoot in the fields around here. I get one guy, he one pheasant hunter right now, one of my friends, he brought me about twenty birds already. About twenty five—but I no can eat `em all. I take bout five or ten and then the rest I go give to my Filipino neighbors—they eat `em all, just like chicken. Over twenty, he brought about thirty already my house, but the season no *pau* yet. Okay right here you going take one right we going go back towards Makawao. This road go up to one gate, from there you go Waikamoi. Inside there I get stories for tell, but not real old—I guess stories, we made all the road and my father guys used to go over there and a couple other Portuguese—here, right here, I planted all these trees, me and one guy, Steven Gibson, we planted all these. Right here you going take one left—yeah right here you can drive inside.

CSH: When did you plant these trees?

Informant: Oh, I don't know when [laughing]. Okay, stop right here, we go talk story little while right over there. This is the baseball field—not very big you know. And then you like go walk inside little ways?

CSH: Yeah!

Informant: Okay we go. I show you where we used to plant the trees.

[Pause]

Informant: These all the pines.

CSH: Yeah, it smells nice up here.

Informant: This gate was open up here up until just lately, you used to be able to drive right in. It's cool yeah, you come up here at six in the morning and you shrink about one inch [laughing]. They no even make one place for walk through. Waihou Springs Trail right there, the loop, it's kind of far you know. Oh, we can go around—too good how they went make this, for cattle I guess. But anyway, this was the baseball field, in fact, have one building yet, right there by the field.

CSH: Oh like one dugout?

Informant: Yeah. And then the rest they raise their cattle, the prisoners—for their beef, for they eat. Oh you going be cold.

CSH: Oh nah! I'm okay.

Informant: And then inside here, I going show you, had one big garden, the State had, I work for them little while. They raise trees. Ninety-percent of the trees they raise was—Taeda pine, Sugi pine, and some other kind. This is one ancient

tree right here-[laughing].

CSH: One telephone pole [laughing]!

Informant: And eh—we used to raise them there, in the building, as seedlings, and then when they come about one foot tall we take them outside—and then from there, when come about two three feet high, we take `em in the trucks and we go Waipoli, above Kula. We take `em up there we plant, no more even trees up there, that place was all open and dry area. So, they figure they going plant trees there and going attract the clouds, they going hold the clouds for rain, for moist.

CSH: Oh for the moisture.

Informant: Yeah—only thing, they went plant the wrong kind trees [laughing]. Pine trees—pine trees no attract the moist. Yeah so, that's how screwed up the State was before, people running the State, they don't know what the heck they doing. Like they did in the Makawao Forest Reserve—they destroyed everything that was natural and go plant eucalyptus. You can tell this was planted because they kind of in rows, yeah. And then when you go up Polipoli, by the cabin, by what they call hunters cabin, from there you walk down the trail, you going come to one redwood forest—we used to go there every six months for trim the trees, for trim the branches. This is *poha*, you know what is *poha*?

CSH: The *poha* berry? Yes, it's `ono in ice cream!

Informant: This different kind pine, small the cones.

CSH: Yeah the tiny! Wow, if I lived up here, I would go jogging everyday.

Informant: You got to get up twelve o'clock—you sleep up here until twelve. You live up here you gotta get heater.

CSH: This is really nice up here. So this is one of the trails?

Informant: Not yet. This road was made, when they decided to make this a nursery—this land was given by—I forget who went give this land to the State, and then they decided to make one nursery and then they made this road, they made the nursery in there. And then one guy, one caretaker, he used to live up there, get one house up there—then caretaker and the warden from the prison afterwards, they used to live over there. After that, when I was working for the State, we used that to raise bugs, you know. They wanted something to kill the gorse, so they built one kind of moth that they said would kill the gorse, that they would put a web all around the gorse—never work out!

CSH: Oh the moth—?

Informant: Never work out. They let the moth go and you never see `em no more. And then couple other bugs were raised up there—just like we no more enough bugs around here. Okay, from here on that was the nursery. Used to be one gate

here. Right inside there is where we used to plant all the trees, after came out of the seeding room. This is part of the trail you are talking about.

CSH: Oh so right in here then--?

Informant: It's a loop, it goes and comes right back around. And the spring is right down here.

CSH: But the springs are all dead?

Informant: Yeah, all dead.

CSH: When was the prison opened?

Informant: I don't know--as far as I can remember. This was a lot of work in the old days. Now I hear Maui Pine using them for pick pineapple. Up here was--I don't know if I want to take you over there. Anyway, the place we used to raise the seedlings was in there. We go back over there we go walk, I no like take you over here, too rough. And you go through this road, right up there get one house. The warden's house. All these trees here were all planted--they used to call this the experiment station. Had two Nextel stations down the road, now it's no more, now somebody else get 'em.

CSH: Ah, next time I come, I going come with you and you can show me those trees.

Informant: Oh yeah, we used to plant a lot of trees up there. See the first guy for take care this place was one guy Joe Silva--old man Joe Silva. He was taking care this nursery and he planted those plum trees. Every year we used to come up here and pick up bags of plums--right there somebody went commit suicide. This young boy and one young girl, they came driving in here, I guess they were--they sure were in love, I don't know what happened, but they put all the glasses up from the car, and they went connect one hose from the tailpipe inside the car.

CSH: Oh carbon monoxide.

Informant: Yeah, they went kill themselves. No could find them for about two weeks. Finally, they came inside here--they was rotten inside the car. I used to be rescue so--help the firemen. You see, we get one club Maui [inaudible], I was part of the rescue team--they call us sometimes when [inaudible]. So all these trees here, that's all clear pasture.

CSH: Oh it was all pasture before the pine came?

Informant: Yup. And then we planted this, all in here.

CSH: So the whole Olinda area was pasture and you could see for miles--all flat land?

Informant: When the State went come over here it was nothing but trees--like I told you, we was planting eucalyptus trees all over the place like crazy, thinking for the

future, yeah. So then the guys that got the land, they have to clear their land.

CSH: So the areas in which they have proposed the trails, do you have any concerns with those areas?

Informant: I don't know, we never proposed that, was some *haole*—I guess that is his choice, I guess that is what he wanted—something for the people look, I guess. But I think if they made one trail for the people, the people who come over here, we call them *haole*—I think at least one trail should have Hawaiian trees, all this stuff is imported stuff from all over the world.

CSH: Hardly any native plants.

Informant: No more! You not going find nothing in here. Used to have pigs inside here you know. You know the loop trail, we are on it.

CSH: Oh the Waihou Springs trail?

Informant: Yeah. Get one branch you can go to the springs or you can just do one loop and go right around. Get one gulch right next to 'em.

CSH: Wow this is really nice. But like you said, no more native plants.

Informant: Ah nothing in here, this is what you call, what we used to call ash trees—we planted all this, but they get one different name today. Plenty thousands of these trees all over this place.

CSH: Now who did you work for? Tony was telling me you went retire from construction. What company was that?

Informant: Hawaiian Dredging and Pacific Construction, and then they went to Grace, and then Yoshimuri—about twenty different companies. Twenty-three years I work construction.

CSH: Oh twenty-three years—oh so what, you went retire from the Labors Union?

Informant: Yeah, Labors Union. Then I went County work—rubbish truck for a while, and then run grass cutter, and then drive one truck, and then retire. Two time I went retire, not too many guys can do that.

CSH: I know— young people like myself, we just lucky if we can retire from one place—and we lucky we can stay one place for more than twenty years.

Informant: So if we went up there—you know the trail going up, we would have came out right here.

CSH: Oh, it's just a loop that comes around?

Informant: Yeah, it's just a loop that comes around. It's more like an exercise loop. You like go to the springs?

CSH: Yeah okay!

Informant: We no go down `cause it's kind of hard to go down. We just go from the top and look down.

CSH: Okay. Eh next time I come, I going give you one weeks notice and we come over here and you can show me how for pig hunt—I like go.

Informant: You know, I was talking to the guy, you know where you went park your car, the guy over there is in charge of the park—Ameral. He tell me, "you not going take her for one far walk, eh" I said, "No! Not supposed to be, only for look around." [laughing] I trying for see if I can find deer marks, but no more deer! I just see them dog markings.

CSH: The prisoners, they was growing vegetables, too?

Informant: Yeah, they had vegetables. By and by we go down, stop over there. It's where you stay park. Get the Bird Sanctuary and then I show you where get the vegetable farm and then get the buildings where they learned how make crafts—make bowls and stuff, so when they go outside, they get something for do—they know how to do something.

CSH: Right.

Informant: Run bulldozers, they teach some guys. They go make roads for the State or the County. Now you no can use prison labor—somehow some guy from the mainland came and said that's cruelty, you cannot do that to the prisoners, so everybody went stop. The spring should be right down here—we only going on top and look down, cause get on switch back trail, kind of hard for go down, I no like take you down there. Right down there by the last tree that's the trail—you go down there maybe you going see one waterfall, dry. We can probahly see it from up here, no need go down.

CSH: How come it's all dry now?

Informant: Because like I told you, the weather has been changing over the last twenty years. The water has changed a lot—a lot of rain used to get. Plenty gulches all dry. The more they mess around with satellites and stuff, the worse the weather gets.

CSH: Had `ōpae inside?

Informant: I no remember. I never come over here for `ōpae, I used to go East Maui Irrigation Forest—when we go hunt pigs, you know the rivers get `ōpae, yeah, take the `ōpae net. Today they get this kind `ōpae net, before they had the one made with the guava stick—put `em by the stone, one stone at a time [laughing]. This trail was made by volunteers, not by the State—people come over here and volunteer make this trail over here, and the State give them permission—especially the Nature Conservancy and these preservation people—they give them thousands of acres of land and do what they want with `em—and people like us no can even buy half acre. They giving thousands of

acres away, and what they do? They just go over there and kill all the pigs, that's the first thing they do. Second thing they do is put fence, millions of dollars for fence up the area, and certain places where the pig concentration is plenty, they no make fence, so the pigs come inside the park, and then they kill them. Every damn person that come here do the same thing—eh, pigs not killing that much! You figure, pigs was here hundred years before they came. The spring right down here. We only going come to the edge right here—so not that far. Right across there is private property already—right across this gulch. Tam, that *pāke* guy, who own land all the way down to Makawao. Oh that is Haleakalā Ranch, Baldwins again. Where I told you get the gate for go Waikamoi, from there on until the crater is all Baldwins. Try listen? I thought I heard something—I thought I heard a deer.

CSH: You guys come up here and hunt deer, too?

Informant: No. Down my friends place—we past over there.

CSH: Eh deer is good meat.

Informant: I never shoot one deer in my life, I no care for eat deer. My wife go help me wash the meat like that, she break out all in hives.

CSH: Oh.

Informant: She's allergic to deer meat. I only have one deer—lives in my house, and I no like shoot `em because the bugga wash my clothes and everything [laughing]! That's my deer and I ain't going shoot `em. No I not going. The spring, just like real spring—people go over there thinking they going see water, and all dry. That's when you come back you so tired you can rest over there.

CSH: Oh, the bench.

Informant: That's the spring over there.

CSH: What is the name of this spring?

Informant: What they call this—Waihou Spring. No go near the edge, by and by I gotta go get you [laughing]. From here the gulch come real big, because no water getting into it now—get another branch. Ah right there the waterfall—no more already, *pau*. All over there, that's pasture land—civilization. So you came to the spring, how do you like it!?

CSH: Yeah, I like it—unfortunately it's dry, though.

Informant: You good walker. I thought maybe you not so good walker, but you can walk—you get good legs [laughing].

CSH: [Laughing] I can walk for days.

Informant: We call this gulch, Toni Tam's Gulch! Because all down there is his—all the way to Makawao. You see how deep the gulch? Just imagine, I up here and

my dogs are barking at the pigs down there—eh, I gotta go get `em—I gotta find one way for go down [laughing]. You like carve your name [in the tree]?

CSH: Nah. Oh this paper tree or what?

Informant: No this eucalyptus. This is the blue gum, blue gum they call this.

CSH: This one soft tree?

Informant: Yeah, get the hard one right over there—Robusta.

CSH: Oh the thing look like get some kind of infection.

Informant: This when you go get `em, the inside always red—strong wood. Wow, I never was in the woods for long time.

CSH: Do a lot of people use this trail?

Informant: Like I said, *haole*—locals no come here, though. They no like see this, locals. I'm out of condition.

CSH: Me too, don't worry.

Informant: A little huffing and puffing is okay. I stopped hunting about three years now—all together.

CSH: All together you just stopped?

Informant: Yup!

CSH: Getting to be too rough?

Informant: No—I getting too old already. You know like my doctor says, "someday they going find you dead in the woods." I said, "so what? I gotta die someplace." And no more as much pigs as used to get. I tried many times to quit hunting—because my kids all grow up, and they marry other kind people. Two of my daughters married *haole*—you bring one pig home they say, "eh what is that dad?" They rather go to the supermarket go buy—so, I catch a pig, I bring `em home, I clean `em, I make smoke meat. I tell them, "You guys, get some meat come get!" They tell me, "Eh—no need, we get from the last time, yet!" I bring `em home I make *laulau*, "you guys like *laulau*?" "Yeah okay we like." "Okay, how much you like?" "Give me three `nough." I made eighty, what the heck am I going to do with eighty? So afterwards, I catch one pig, I come through Makawao town, I look for one Filipino, I tell `em, "you like this pig?" "Oh yeah." I go give `em to him. Afterwards I think—what am I doing this for? Shoot—it's not a must anymore. Like I raised my family almost the way my father did—although I became an ocean man afterwards—fish, pig, goat—that's how I helped raise my family.

CSH: Times have really changed, now, yeah?

Informant: Oh yeah. When I first got married, I worked for seventy-five cents an hour--and then came up to two dollars an hour. My house note was thirty dollars a month, and I had hard time paying `em sometimes [laughing]--gotta squeeze for pay `em. I bought my place six thousand dollars. Come to our neighborhood, now it's two hundred thousand. Everything has come up.

CSH: You children, all of them still live here in Maui?

Informant: Oh yeah.

CSH: Right here in Makawao?

Informant: Kahului and Hawaiian Homes, and eh, Portuguese Terrace, and one in Wailuku, and one in Makawao, in Pukalani. If I ran away right now, you can get out of here?

CSH: Just gotta follow that path right up there.

Informant: Where we going left or right?

CSH: Left.

Informant: Eh you smart. Sometime I go hunting with these young guys I tell them, "where the truck stay from here?" Sometime they stay down there, and they pointing up--I tell them, "eh, you guys stay lost." So I tell `em, "you know when you guys walk, no just walk now--you gotta remember what you see, make marks in your mind."

CSH: I know, plenty people get lost hiking on O`ahu.

Informant: You know people from New York who never seen the forest before, they go take one six mile hike on one ridge--narrow--crazy people! Now we get big problem on this island with kayakers. That's another one. They go take people out, inexperienced people, they go out, get the channel from Hilo, then get the wind and the rough water, they no can come back--get the kids with the, one five year old kid--the life vest he get on, no even fit him. Big problems. They should make the guys who rent the kayaks, pay for the rescue. Next time you come, we go take the Kahakapao Loop--where I told you get the bicycle trail that's only about the worse spot right there, get one steep hill, but short, and then the land on top is flat, cross one small gulch, and then you stay in the back of the treatment plant already. Then you keep walking, you going come to the treatment plant, and then if you like go straight up--you no like go straight up, it's far and it's a climb all the way up. Twenty years ago I do that, today I no like. Then, I had hard time pig hunting, you know, every time I tell myself, I going stop--the edge is there, I going stop. Then one day I broke my smoke house down--then I no can go, no more. I used to make charsiu, smoke--and regular my way, everybody like my way! And sausage my way--you know people use the electric grinder come out like hamburger, us guys we make `em the old Portuguese way, we cut all by hand, little chunks like this--I give `em to guys they tell me, "oh I never eat this kind before, `ono, good!" I got to cure `em first, mix `em all up, put `em in the icebox, then night time I

come mix `em again, and then the next day I fill `em all up, and stuff `em.

CSH: What you use for the casing? The intestines?

Informant: Yeah, you can buy `em at the store, all clean and everything. In the old days, with my mother guys, we used to make our own. We kill the pig take the guts, only one certain gut, and then we go clean `em all good, salt and lemon, and then we go use that. Today, we go buy the casing.

CSH: You guys make vinha d'alhos style, too?

Informant: My wife use to make—she's one Hawaiian, but she learned from my mother. My son he like eat pork, he go buy—supermarket. Today you go market, pork butt, sixty-nine cents a pound—how cheap! You figure, you gotta buy one truck, you gotta keep four or five dogs—eh.

CSH: And then you have to invest couple hours.

Informant: Oh no, you gotta go all day. I used to leave my truck sometimes, seven in the morning, I no come back `till seven in the evening. You gotta know where you going. This used to be the pasture, where they raise their cows. This the house where we used to raise the seedlings.

CSH: In highschool we used to go Big Island once a year go plant *koa* seedlings—oh boy, that's hard work.

Informant: I no think *koa* one endangered species anymore, everybody planting *koa* nowadays.

CSH: Hard work for plant.

Informant: Polipoli we used to carry the pine trees, bags, on our backs, with one shovel—you take fifty trees, I take fifty trees—and we would be walking through gulches, we walk through bushes—

CSH: With the sack, and the shovel—! It was hard work when I went to plant seedlings.

Informant: Oh yeah—it's hard work. They talk about Haleakalā Park, used to have some Hawaiians living in there—I doubt had very much. They probably came from Kīpahulu—the other side of the mountain—but to live inside the crater, they no more the kind clothes we have today, warm clothes.

CSH: I can't imagine what it's like to live up there, already down here it's cold already.

Informant: From there up, you see the pasture, its all ranch. The ranch go around like this, all the way around up until the crater.

CSH: And you went plant all these trees?

Informant: Yeah, all the trees inside here—me and Steven Gibson. The rest, the whole gang went plant this. This came way later than this one.

CSH: And Steven Gibson was the guy who used to collect the artifacts?

Informant: No, the brother—Harry, he was the foreman. Jacob Mau was the number one foreman, but he never did care for that. Then Harry used to pick up some, not all. Eh they destroyed a lot over there. I can still show you little caves—where I told you had the burial grounds and all that. But even get *pahole* over there. Probably go walk down the beach every day—go down couple days, come back up again—take salt with them, *pa`akai* for salt the fish. Salt everything—. We lived without refrigeration, we lived with kerosene stoves and wood stoves. First, when we real young, we had wood stove, my mom wake up early make the fire, cook for my father go work—and then afterwards came to kerosene. The ranch my father work for, they used to give us kerosene for free, twenty gallons a month—because labor was so damn cheap, they no can afford to buy anything. They got free house, plantation house, big help—but they getting labor almost like free. Dig ditches all the way up, that's my wife's family guys, they dig out all those EMI [East Maui Irrigation] ditches coming out—they work there with the Chinese coolies. The bosses were mean to them. Every boss or foreman, Baldwin or whatever, carry one rifle with them on the horse to show `em, "no get stupid with me."

CSH: I guess you gotta show them control.

Informant: No get stupid with them or they go shoot you on site—and they get away with it. Right now I working for one Baldwin part-time. You know Makawao Town, part of Makawao Town belongs to one Baldwin, so my job is to keep the place clean, and no let anyone park inside the parking lot—it's private parking. Over there, get some radical people—sometimes they stay on drugs, they like fight you!

CSH: It's a nice place for relax over here.

Informant: It's beautiful. It's been nice talking to you and walking—I like it, you're a good person.

CSH: You too, uncle. I going come back and we go hiking.

Informant: Preferably on Saturday. You know where the road stay, turn inside there.

CSH: Okay.

Informant: Maybe we can go visit the Bird Sanctuary. From now on going get one steep grade so you go put `em in second gear, yeah—no go in drive.

CSH: Look that beautiful home.

Informant: That's the game warden had one—he used to live there, one guy, but the warden after he moved from up there, he moved over here—they went build him one new house over here. What the heck was his name? Al—oh, Al Souza,

he was the first game warden up here. I think he *make* already—I think he died already.

CSH: Oh, game warden?

Informant: No—warden for the prisoners! The game warden was living over there after the prison was gone, now I don't know who—someone with the forest reserve. This was all pasture—drive right in here [into the Bird Sanctuary]. We go walk around.

CSH: Open? No?

Informant: Come we go look around. That's one endangered gardenia [laughing]. Nah—not that. This *māmane*—how the heck they grow down over here? This is *pohā*, you know. The birds, where they get the birds, it's in the back. You know whose paying for this? You and I. [Inaudible]

CSH: Oh yeah, they are closed. That's okay, but they have the birds back there. Oh—

Informant: I wanted you for go see them.

CSH: You see the vegetables here, the cattle over there—you see, they hardly bought food, mostly rice and flour and stuff—the rest they raise their own.

Informant: So where do you want to go?

CSH: No, I think this is pretty good—I thank you for offering me so much information!

Informant: Thank you and you're welcome.

____End Interview____

APPENDIX D

COMMENT LETTERS ON THE DRAFT ENVIRONMENTAL ASSESSMENT RECEIVED DURING THE
PUBLIC COMMENT PERIOD AND RESPONSE TO COMMENTS

Comment Letters Received from:

<u>Name</u>	<u>Organization</u>
Randy DeCambra	DLNR, DOCARE
Don Hibbard	DLNR, Historic Preservation Division
Jason Koga	DLNR, Land Division
Genevieve Salmonson	Office of Environmental Quality Control
Colin Kippen	Office of Hawaiian Affairs
David Craddick	Maui County, Department of Water Supply
Kika Bukoski	State Representative, 10 th District (Maui)
J. Kalani English	State Senator, 5 th District (Maui)
Willard Stiuksa	Haleakala Ranch
Linda Nelson	Native Hawaiian Plant Society
Peter Kafka	Sierra Club, Maui Chapter
Bram DenHaan	Valley Isle Road Runners Association
Troy Helmer	Individual
Chocolate Helmer	Individual
Christopher Helmer	Individual
Jeffrey Derego	Individual
Jeff Merle	Individual
Mike Anderson	Individual
Lawrence Tabaco	Individual
Cheryl Tabaco	Individual
Martin Tabaco	Individual
Virginia Ross	Individual
Kawika Weaver	Individual
Patrick Wallace	Individual
Alvin Jardine	Individual
Marianne Loach	Individual
Larry Sarner	Individual
Jeff Affleck	Individual
Thomas Armstrong	Individual
Extreme Sports Maui	Petition

Form Letters in Support received from:

<u>Name</u>	<u>Organization</u>
Lorina Freitas	Individual
Helen Felsing	Individual
Geoff Sufficood	Individual
Extreme Sports Maui	Individual
Claire Crist	Individual
Nancy Bannerman	Individual
Steven Hardesty	Individual
Rick Cavoelli	Individual
Jayne Hunkins	Individual
Karen Devor	Individual
Kathy Czar	Individual
Celestine Casserley	Individual
Sarah Cutter	Individual
Jennifer Vockrodt-Sykes	Individual
Julio Spee	Individual
Kristina Amoral	Individual
Brittany Young	Individual

Frederic Martini	Individual
Sonia Zane	Individual
Kathleen Weld	Individual
Peter Martin	Individual
Cherri Redd	Individual
Paul & Holly Davis	Individual
Alicia Satterwhite	Individual
Julie McCould	Individual
Whitney White	Individual
Rhiannon & Susan Hernandez	Individual
Cynthia & Kelly Trawick	Individual
Belinda Ling	Individual
D. Nunan	Individual
Jillian Vickers	Individual
Lisa Cooper	Individual
Jacqueline Wilson	Individual
Donna Stuart	Individual
Kimiko Hirabayashi	Individual
John & Aandia Papasian	Individual
Barbara Meinke	Individual
Milano Trimino	Individual
Jill Cross	Individual
Jessica Martin	Individual
Debbie Cano	Individual
PK & Betty Martini	Individual
Gary Green	Individual
Sue Guille	Individual
Sandy Ellison	Individual
Mary Bonner-Naylor	Individual
Frank Foti	Individual
Steve Strasinger	Individual
Janice Simmons	Individual
Susan Rubenstein & Hana Smookler	Individual
Clayton Matchett	Individual
Matt & Felicia Provencal	Individual
Daniel & Carrie Owan	Individual
Mark Hutto	Individual
Susan Vandrhoude	Individual
Scot & Jill Mackie	Individual
Beth Strasinger	Individual
Dharma Feldmann	Individual
E. Brewerton	Individual
Angelee Meyer	Individual
Rowdy Fernandez	Individual
Linda Auger	Individual
Jacqueline Becker	Individual
Saundea Calo	Individual
Amber Coleman	Individual
Sarah Rogers	Individual
Sharon Shizekawa	Individual
Diana Custer	Individual
Jill Fairechild	Individual
Elizabeth Russell	Individual

Julie Jar	Individual
Harley Keird	Individual
Lori Thompson	Individual
Bill Russell	Individual
Christie Nakaganeke	Individual
Beverly Young	Individual
Carol Cornwell	Individual
Doug Smith	Individual
Melonie Fernandez	Individual
Eva & Gary Blumenstein	Individual
Daren O'Conner	Individual
Richard Spork	Individual
Margie Coon	Individual
Cathy Wright	Individual
Greg Davidge	Individual
Benjamin Barreras	Individual
Thomas Bachig	Individual
Pamela Gould	Individual
Hortense Joaquin	Individual
Ken Sirkus	Individual
JJ Costa	Individual
Rose Freitas	Individual
Elizabeth Carter	Individual
Holly Perdido	Individual
Tiara Perdido	Individual
Tye Perdido	Individual

Comment Letters Received After the Deadline from:

<u>Name</u>	<u>Organization</u>
Skippy Hau	DLNR, DAR
Floyd Miyazono	Maui County, Department of Parks & Recreation
Lafayette Young	Individual
Michelle Villanti	Individual
Meliss Kikkert & Teresa Lopez	Individual
Mary Smithson	Individual
Kirsten Peet	Individual
Leslie Heltzen	Individual
Kandi O'Brien	Individual
Diesel	Individual
Lori Stewart	Individual
Steve Fisher	Individual
Marsha Sarver	Individual
The Glauser Family	Individual
Jodi & Gina Santos Bras	Individual

STATE OF HAWAII
INVESTIGATION REPORT

Dept. DJNR
Div. DOCARE

CLASSIFICATION FORESTRY INV.; DRAFT ENVIRONMENTAL ASSESSMENT COMMENTS		3. ISLAND MAUI	1. REPORT NUMBER MAH02-452
5. COMPLAINANT (Firm Name, if Business)		6. SEX RACE AGE M	2. INVESTIGATOR DECAMBRA, RANDY
9. ADDRESS	10. SCHOOL EMPLOYED/SCHOOL ATTENDING	7. D.O.B.	4. DISTRICT PIIHOLO
11. LOCATION OF OFFENSE AND CLOSEST INTERSECTING STREET MAKAWAO FOREST RESERVE/KAHAKAPAO ROAD		8. OCCUPATION	
14. DESCRIBE LOCATION OF OFFENSE OR TYPE OF PREMISES STATE FOREST RESERVE		13. DATE/TIME REPORTED	
		15. HOW REPORTED	

16. VEHICLE INVOLVED	Year	Make	Model	Color(s)	License No.	I.D. Characteristics	
17. BOAT INVOLVED	Length	Make	Model	Color(s)	Name	HA No.	I.D. Characteristics
18. REGISTERED OWNER				Address		Res. Phone	

CODE: W = Witness S = Suspect (Fill in Composite Description) R = Reporting Person O = Other

19. NAME	Age	Sex	Code	Address	Res. Phone	Bus. Phone
		M				
		M				

20. SEX	Composite Description	Race	Age	Wt.	Build	Hair	Eyes	Complex	Clothes/I.D. Characteristics

21. INVESTIGATION: 1. Insert a synopsis of the crime or incident. 2. Summarize details of the crime or incident. 3. Denote persons from whom statements taken and who took them. 4. Identify additional suspects and witnesses. 5. Identify additional investigators. 6. Use opposite side for continuation of report, if necessary.

Synopsis
Assigned by Conservation Enforcement Supervisor Dexter TOM to review and submit comments in regards to a Draft Environmental Assessment (DEA) for the proposed construction of the KAHAKAPAO LOOP TRAIL.

REFER TO ATTACHMENT FOR DETAILS.

22. REPORT MADE BY Randy DeCambra	Badge No. 204	Date/Time 122001/1115hrs	23. SUPERVISOR APPROVING <i>[Signature]</i>	Badge No.
24. DISPOSITION		Citation/No.		
<input type="checkbox"/> Unfounded	<input type="checkbox"/> Arrested/Prosecution	<input type="checkbox"/> Adult	<input type="checkbox"/> Arrested/Prosecuted	<input type="checkbox"/> Other/No Arrest
25. Date/Time Reproduced	26. Distribution	27. Connecting Report No.		

MA#02-452
FORESTRY INVESTIGATION;
DRAFT ENVIRONMENTAL ASSESSMENT COMMENTS

ASSIGNMENT:

On Friday 12/14/01, I was assigned by Conservation Enforcement Supervisor to review and submit comments on a Draft Environmental Assessment (DEA) on the proposed construction of the KAHAKAPAO LOOP TRAIL. In reviewing the aforementioned document the following concerns and issues were identified as it relates to law enforcement

NON-DESIGNATED ACCESS:

The (DEA) states that access to the KAHAKAPAO LOOP TRAIL will be at the "locked gate" located at the MAKAWAO FOREST RESERVE boundary/KAHAKAPAO ROAD. Although this will be the designated access, mountain bikers could potentially be attracted to access said trail from the locked mauka Fong ridge boundary gate, due to the easy downhill ride. The Fong ridge gate is not a designated public access to the MAKAWAO FOREST RESERVE and should be posted as such (e.g. No public access!, etc...), so no trespassing problems with HALEAKALA RANCH would arise.

DESIGNATED ACCESS:

Currently, feral pig hunters mainly utilize the Fong ridge region of the MAKAWAO FOREST RESERVE. The feral pig hunters who I have had contact with there, have had a clear understanding of the legal/designated access to the Fong ridge region of the MAKAWAO FOREST RESERVE. Literature made available to the public should indicate the designated trail access and *not* illustrate the Fong ridge road connecting to the Idylwilde gate road, in an effort to minimize trespassers.

CURRENT PARKING SITUATION:

On the weekends, the lower region of the MAKAWAO FOREST RESERVE experiences high use, via the KAHAKAPAO entrance gate. Hunter's, hikers, mountain bikers park at the entrance gate along both sides of the road. With the proposed trail, I anticipate more vehicles seeking parking.

POSSIBLE PARKING CONCERNS:

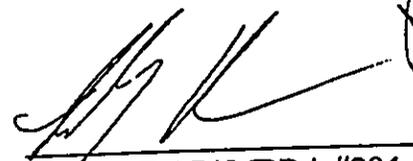
Adjacent resident, Dale TORTORELLI has expressed concerns about vehicles parking at the KAHAKAPAO entrance gate. Hopefully this increase in vehicles seeking parking will not block the entrance gate, denying access to county and state personnel wishing to access the area.

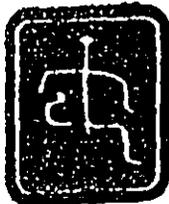
MA#02-452
FORESTRY INVESTIGATION;
DRAFT ENVIRONMENTAL ASSESSMENT COMMENTS
PAGE 2 OF 2

SIGNAGE:

The DEA indicates that signs would be posted at the trail entrances off Fong ridge. Even though KAHAKAPAO ROAD is not planned as part of the KAHAKAPAO LOOP TRAIL, I recommend that in addition to the trailhead signs, a sign depicting the prohibitions and/or permitted activities of the trail be posted at the KAHAKAPAO entrance gate. This entrance gate sign would inform trail users of prohibitions/permitted activities at the start of their journey, not mid way through. The sign should be easily understood, indicating that the prohibitions/permitted activity relate to specifically the trail and/or forest or both if applicable.

APPROVED BY: TA-SHLOCH
DATE/TIME: 12-21-01


OFC. R. DECAMBRA #204
122001/1610hrs; DLNR/DOCARE



NA ALA HELE
Hawaii Trail & Access System

MEMORANDUM

DATE: January 25, 2002

TO: Robert Hobdy, District Manager, DOFAW

ATTEN: Randy Awo, Branch Chief
OFC. R. DeCambra

FROM: Torrie Haurez, Na Ala Hele, Trails and Access Specialist

SUBJECT: Response to Your Comments on the Kahakapao Loop Trail Draft Environmental Assessments for State of Hawaii, Makawao Forest Reserve

Thank you for your comments on the Kahakapao Loop Trail Draft Environmental Assessment. We feel the trail will be a positive addition to the recreational value of the Makawao Forest Reserve. The following are the responses to your comments made as a result of the public review period.

1. "...mountain bikers could potentially be attracted to access said trail from the locked mauka Fong ridge boundary gate, due to the easy downhill ride. The Fong ridge gate is not a designated public access to the MAKAWAO FOREST RESERVE and should be posted as such..."

Illegal access is a constant problem, which shall be addressed through signage and education. All signs being constructed for the Kahakapao Loop Trail will be routed through the Division of Conservation and Resource Enforcement, DOCARE, for comment.

2. "...Literature made available to the public should indicate the designated trail access and ~~not~~ illustrate the Fong ridge road connection the Idyiwilde gate road, in an effort to minimize trespassers..."

The only literature being planned to illustrate the trail will be the Maui Recreation Map and the official Na Ala Hele (NAH) website (www.hawaiitrails.org). Neither of these sources are scheduled to be updated and neither currently show the trail or access through the Idyiwilde Gate. When updated, both of these references will designate the Kahakapao Road as

the official trailhead. This will also be the only location for official NAH signage advertising the trail location.

3. "...With the proposed trail, I anticipate more vehicles seeking parking..."

Currently, we are exploring our options to expand the parking area at the gate on Kahakapao Road. The concept of installing a cattle guard where the current gate exists and moving the gate to a lower position inside the Reserve is being considered. A parking area on the North side of the road just after the guardrail and before the culvert is being looked at. This area would be approximately 85' X 55'. The areas currently being utilized for parking would still be optional. Your office will be updated on these plans as they develop.

4. "...concerns about vehicles parking at the KAHAKAPAO entrance gate. Hopefully this increase in vehicles seeking parking will not block the entrance gate, denying access to county and state personnel wishing to access the area..."

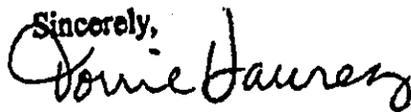
With the expansion of available parking, see above, this problem should be alleviated. If a problem does develop, signage will be established addressing the issue.

5. "...I recommend that in addition to the trailhead signs, a sign depicting the prohibition and/or permitted activities of the trail be posted at the KAHAKAPAO entrance gate...."

This is a very good suggestion and will be adhered to. As mentioned above, all proposed signs will be routed through the DOCARE office for comment.

If you have any further questions or comments, please contact Torrie Haurez of the Division of Forestry and Wildlife at 873-3508.

Sincerely,



Torrie Haurez
Na Ala Hele, Trails and Access Specialist

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



GILBERT S. COLOMA-AGARAN, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

DEPUTIES
JANET E. KAWELO
LINNEL NISHIOKA

STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES

HISTORIC PRESERVATION DIVISION
Kakuhiihewa Building, Room 555
601 Kamokila Boulevard
Kapolei, Hawaii 96707

HAWAII HISTORIC PRESERVATION
DIVISION REVIEW

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
COMMISSION ON WATER RESOURCE
MANAGEMENT
CONSERVATION AND RESOURCES
ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
LAND
STATE PARKS

Log #: 28907
Doc #: 0112CD32

Applicant/Agency: Torrie Haurez
Address: Na Ala Hele, Trails and Access System
Division of Forestry & Wildlife
Department of Land and Natural Resources
54 South High Street, Room 101
Wailuku, Hawaii 96793

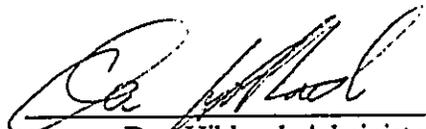
SUBJECT: National Historic Preservation Act Section 106 Review
Pursuant to the Hawaii Revised Statutes, Chapter 343 and the
Administrative Rules, Title 11, Chapter 200 Pertaining the
Draft Environmental Assessment for the Proposed Kahakupao
Trail Loop Construction

Ahupua'a: Ha'iku - Uka
District, Island: Makawao, Maui
TMK: (2) 2-4-16:002

1. We believe there are no historic properties present, because:
 a) intensive cultivation has altered the land.
 b) residential development/urbanization has altered the land.
 c) previous grubbing/grading has altered the land.
 d) an acceptable archaeological assessment or inventory survey found no historic properties.
 e) other: Dr. Melissa Kirkendall, SHPD Maui/Lana'i Island Archaeologist, conducted a field inspection of the proposed project area on or about 13 September 2001, and determined it unlikely that significant historic properties would be impacted by the proposed undertaking.

Thus, we believe that "no historic properties will be affected" by this undertaking.

2. This project has already gone through the historic preservation review process, and mitigation has been completed .



Don Hibbard, Administrator
State Historic Preservation Division
DEPUTY SHPD

Date: 1/3/02

RECEIVED
DEPT. OF LAND

JAN 22 2002

FORWARDED



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

54 South High Street, Room 101
Wailuku, Hawaii 96793-2198

AQUACULTURE DEVELOPMENT
PROGRAM
AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
CONSERVATION AND
RESOURCES ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
LAND DIVISION
STATE PARKS
WATER RESOURCE MANAGEMENT

MEMORANDUM

DATE: January 18, 2002
TO: Robert Hobdy, District Manager, DOFAW
ATTEN: Torrie Haurez, Na Ala Hele
FROM: Jason K. Koga, District Land Agent *J. Koga*
SUBJECT: Kahakapao Loop Trail and Ohai Trail Draft Environmental Assessments

The Maui District Land Office has the following comments in regards to the subject matter:

1. The Kahakapao Loop Trail appears to be within the Resources Subzone of the Conservation District. A Conservation District Use Application may be required.
2. The Ohai Trail appears to be within the General Subzone of the Conservation District. A Conservation District Use Application may be required.
3. The cover memorandum for the Ohai Trail references the Lahaina District. The Wailuku District should be referenced instead.

Thank you for allowing us to review and comment on the subject matter.

c: Maui Board Member
Central Files
District Files



NA ALA HELE
Hawaii Trail & Access System

MEMORANDUM

DATE: January 25, 2002
TO: Robert Hobby, District Manager, DOPAW
ATTEN: Jason K. Koga, District Land Agent
FROM: Torrie Haurer, Na Ala Hele, Trails and Access Specialist
SUBJECT: Kahakapao Loop Trail and Ohai Trail Draft Environmental Assessments

Thank you for your comments on the Kahakapao Loop Trail and Ohai Trail Draft Environmental Assessments.

You will find a copy of the memorandum by Gilbert S. Coloma-Agaran, Chairperson, BLNR enclosed. This memorandum addresses the need for DLNR divisions to perform Conservation District Use Applications which states, "...For work on existing DLNR Conservation lands, the Divisions would not be required to obtain a new CDUA..."

Thank you for pointing out the error regarding the Lahaina District instead of the Makawao District on the Ohai cover memorandum.

If you have any further questions or comments, please contact Torrie Haurer of the Division of Forestry and Wildlife at 873-3508.

Sincerely,
Torrie Haurer
Torrie Haurer
Na Ala Hele, Trails and Access Specialist

Enclosure

DOCUMENT CAPTURED AS RECEIVED



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

P.O. BOX 621
HONOLULU, HAWAII 96809

AGRICULTURE DEVELOPMENT
PROGRAM
AGRICULTURAL RESOURCES
BOATING AND OCEAN RECREATION
CONSERVATION AND
RESOURCES ENFORCEMENT
CONVEYANCES
FISHERY AND WILDLIFE
HISTORIC PRESERVATION
LAND DIVISION
STATE PARKS
WATER RESOURCE MANAGEMENT

Ref.: PB:SL

MEMORANDUM:

TO: Divisions

FROM: Gilbert S. Coloma-Agaran, Chairperson

SUBJECT: Procedures for Review of Department of Land and Natural Resources Initiated Projects on Conservation District Lands

This memorandum is being written to clarify the Department's position regarding division-wide compliance with Chapter 183C, Hawaii Revised Statutes (HRS).

In May 1992, former DLNR Director, Bill Paty, issued a memorandum to the Divisions and Offices of the DLNR to clarify procedures for review of Department-initiated projects on Conservation District Lands (attached).

That memorandum essentially transferred regulatory powers from the former, Office of Conservation and Environmental Affairs (OCEA) (the zoning authority for all Conservation lands) to each DLNR division. The basic logic was that the Department was mandated to carry out particular functions and that processing CDUAs through OCEA was duplicative and counterproductive. This effort was not fully implemented and the Planning Branch of the Land Division (formally OCEA) continues to process applications for some Department-initiated projects.

Chapter 183C, HRS was established to regulate the use of all conservation lands in the State, government or private. Title 13-5, Hawaii Administrative Rules gives the Department the specific regulatory authority to do this.

The law does not specify or designate a particular office to act as the sole regulatory authority.

All Divisions must adhere to the processes and guidelines of Chapter 183C, HRS and Chapter 343, HRS (Hawaii's environmental law). However, we believe that this can be accomplished more efficiently by deferring these functions to the respective Divisions for projects which they are mandated to do. This will allow Divisions to operate more efficiently and will not compromise the public's due process rights to participate in the permit and decision-making process. Each Division would comply with Chapters 183C, Chapter 343, HRS, and Title 13-5, HAR, and would be responsible for developing its own procedures for compliance. Land Division, Planning Branch would provide comments on the action(s), when asked.

For work on existing DLNR Conservation lands, the Divisions would not be required to obtain a new CDUA (Reference Section 13-5-22, HAR), but would be required to comply with other applicable State requirements, such as 343, HRS. Chapter 13-5, HAR provides for "allowable" uses within existing non-conforming facilities and also for facilities that have been approved under an existing CDUP. Sections 13-5-22 (P-9 & 10) and 13-5-23 (L-7), HAR address and provide for these uses.

For new parks, forest reserves, harbors or significant expansion of existing facilities, the Land Division Planning Branch would continue to process all CDUAs. Any action by a DLNR Division to obtain an authorization for the establishment of a new facility on public land should be administered by a third party, such as the Land Division, Planning Branch. As such, when there is a plan to establish a new park, forest reserve or harbor on public land, it would be done through a CDUA/Executive Order processed through the Land Division Planning Branch.

Actions to establish Forest or Watershed Partnership projects or trails, involving non-public lands but sponsored by DOFAW, may be administered by DOFAW provided that all applicable requirements under Chapters 183C and 343, HRS and Title 13-5, HAR are met.

As noted in the May 1992 memorandum, it is incumbent upon every affected division to set up a system for the preparation of environmental review documents and the

solicitation of comments by other divisions, government agencies and appropriate citizen groups, much in the same way the Planning Branch does. In addition, each division would be required to address criteria in 13-5-30(c), HAR, in their process.

The Land Division, Planning Branch is always available for training, advice, or instruction on the permitting process.

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CO:DLH:dc

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

May 29, 1992

- DEPUTY _____
- AOP _____
- AQUATIC RES _____
- CONVEY _____
- OOCARE _____
- DOFAW _____
- FISCAL _____
- HP _____
- LAND MGMT _____
- NAARS _____
- OCEA _____
- PERSONNEL _____
- ST PARKS _____
- WRM _____
- NL _____

MEMORANDUM

TO: Divisions and Offices

FROM: William W. Paty, Chairperson

SUBJECT: Procedures for Review of Department-Initiated Projects on Conservation District Lands

*Distributed
districts
6/4/92*

=====
The Department of Land and Natural Resources ("DLNR") is responsible for implementing various government programs which impact conservation district lands. Presently, government programs are processed via a two-track system:

- 1) the line division responsible for implementing a government program processes a particular project through the environmental review procedure and consults with the other divisions and affected governmental agencies before submitting the project for review and approval to BLNR; and
- 2) OCEA also processes the particular project by consulting with the other divisions and affected governmental agencies and submits the project for review and approval to the BLNR as a permitted use under our conservation district rules.

This procedure has created duplication of efforts between our line divisions and OCEA and has inhibited the implementation of government programs by DLNR. Further, with the loss of the Planning Office in DLNR, there is no need to centralize certain planning and environmental review processes in OCEA but rather, place these functions with the line division responsible for implementing the government program. Due to increasing demands on our staff and the need to coordinate processing of DLNR programs affecting conservation lands within DLNR, the following procedures shall be instituted.

When dealing with DLNR programs, the line divisions shall be responsible for the entire processing of a particular project for submittal to the BLNR for review and approval. DLNR programs are those government programs the department is charged to implement. This procedure shall not apply to projects for the use of State/conservation lands initiated by private parties or other State or governmental agencies. Further, this procedure shall not apply in those instances where DLNR is acting in its proprietary capacity (i.e. leasing of State lands to private parties).

not needed per discussion with Don Hamill 6/1
not needed for [unclear]

The line division shall be responsible for undertaking the environmental review process under chapter 343, Hawaii Revised Statutes, and the consultation with the divisions, other governmental agencies, and appropriate citizen groups before submitting the project to BLNR for review and approval. This includes the resolution of conflicts and the mitigation of adverse impacts discovered as a result of the environmental review and consultation process prior to BLNR review.

OCEA shall no longer be responsible for processing the government project under a conservation district use application but shall serve as a commenting division to the line division regarding conservation district matters. The DLNR project shall be processed as a government/permitted use under the conservation district administrative rules by the line division which shall be responsible for submitting conservation district considerations to BLNR for their review and approval including the determination of the DLNR project's permitted/government use status.

After completion of the chapter 343 process and after consultation with the divisions, governmental agencies and appropriate citizen groups, the line divisions shall present the DLNR project for review and approval to the BLNR. This procedure will eliminate the duplication of environmental review posed by the EIS and CDUA processes. Further, the responsibility for planning and coordination of the DLNR project will lie with the line division responsible for the project which will insure better accountability and streamline the review process.

It is incumbent upon every affected division to set up a system for the preparation of environmental review documents and the solicitation of comments by the divisions, governmental agencies, and appropriate citizen groups. I have asked OCEA to provide a training session for all divisions to assure that we are not losing any of the coordination and consultation services this office provides. Further, I have asked OEQC to also provide a training session on how to prepare environmental review documents.

BENJAMIN J. CAYETANO
GOVERNOR



GENEVIEVE SALMONSON
DIRECTOR

STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL
236 SOUTH BERETANIA STREET
SUITE 702
HONOLULU, HAWAII 96813
TELEPHONE (808) 586-4186
FACSIMILE (808) 586-4186

January 22, 2002

Mr. Gilbert Coloma-Agaran, Chair
Department of Land and Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Coloma-Agaran:

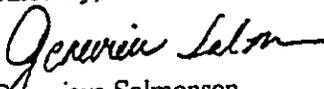
Subject: Draft Environmental Assessment for the Kahakapao Loop Trail, Maui

Thank you for the opportunity to review the subject document.

1. Please provide a site plan map that shows the informal parking areas.
2. Please describe if DLNR plans to build any formal parking lots in the future.
3. Please assess the cultural impacts of this project. What are the impacts of this project on gathering rights?
4. Please list the mitigation measures that DLNR will take to minimize impacts to the endangered species in the forest reserve. Is DLNR planning to build exclosures to protect the endangered species? What mitigation measures are planned for minimizing the spread of alien pest species?
5. Please provide your reasons for the finding of no significant impact in accordance with the criteria listed in section 11-200-12 of the EIS Rules. (See attached example.)
6. Please provide a list of all the permits that would be required for this project.

Should you have any questions, please call Jeyan Thirugnanam at 586-4185.

Sincerely,


Genevieve Salmonson
Director

From: Mokulele Highway/Puunene Bypass final EA (1997)

DETERMINATION, FINDINGS AND REASONS FOR SUPPORTING DETERMINATION

SIGNIFICANCE CRITERIA: According to the Department of Health Rules (I 1-200-12), an applicant or agency must determine whether an action may have a significant impact on the environment, including all phases of the project, its expected consequences both primary and secondary, its cumulative impact with other projects, and its short and long-term effects. In making the determination, the Rules establish "Significance Criteria" to be used as a basis for identifying whether significant environmental impact will occur. According to the Rules, an action shall be determined to have a significant impact on the environment if it meets any one of the following criteria:

- (1) Involves an irrevocable commitment to loss or destruction of any natural or cultural resources;

The proposed project will not impact scenic views of the ocean or any ridge lines in the area. The visual character of the area will change from the current agricultural land to an improved 4-lane highway which is compatible with the surrounding land use plans and programs being implemented for the region. The highway corridor is comprised of "Prime" agricultural land which is an important resource. Development of drainage systems will follow established design standards to ensure the safe conveyance and discharge of storm runoff. In addition, the subject property is located outside of the County's Special Management Area (SMA).

As previously noted, no significant archaeological or historical sites are known to exist within the corridor. Should any archaeologically significant artifacts, bones, or other indicators of previous onsite activity be uncovered during the construction phases of development, their treatment will be conducted in strict compliance with the requirements of the Department of Land and Natural Resources.

- (2) Curtails the range of beneficial uses of the environment;

Although the subject property is suitable for agricultural uses, the land area adjoining the Mokulele Highway is naturally suited for transportation purposes due to its location proximate to an existing highway system. To return the site to a natural environmental condition is not practical from both an environmental and economic perspective.

- (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 proposed development is consistent with the Environmental Policies established in Chapter 344, HRS, and the National Environmental Policy Act.

- (4) Substantially affects the economic or social welfare of the community or state;

The proposed project will provide a significant contribution to Maui's future population by providing residents with the opportunity to "live and work in harmony" in a high quality living environment. The proposed project is designed to support surrounding land use patterns, will not negatively or significantly alter existing residential areas, nor will unplanned population growth or its distribution be stimulated. The project's development is responding to projected population growth rather than contributing to new population growth by stimulating in-migration.

- (5) Substantially affects public health

Impacts to public health may be affected by air, noise, and water quality impacts, however, these will be insignificant or not detectable, especially when weighed against the positive economic, social, and quality of life implications associated with the project. Overall, air, noise, and traffic impacts will be significantly positive in terms of public health as compared to the "no action" alternative.

- (6) Involves substantial secondary impacts, such as population changes or effects on public facilities

Existing and planned large-scale housing development projects within Wailuku-Kahului and Kihei will contribute to a

... of public and private facilities and services. These

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improvements will become necessary as the overall population of Maui grows and settlement patterns shift. However, the proposed project will not in itself generate new population growth, but provide needed infrastructure the area's present and future population.

In addition, new employment opportunities will generate new sources of direct and indirect revenue for individuals and the County of Maui by providing both temporary and long-term employment opportunities during the construction period. Indirect employment in a wide range of service related industries will also be created from construction during project development.

(7) Involves a substantial degradation of environmental quality;

The proposed development will utilize existing vacant agricultural land. With development of the proposed project, the addition of urban landscaping will significantly mitigate the visual impact of the development as viewed from outside the site while the overall design will complement background vistas.

Makai views from the subject property are available, however, they are not significant nor generally, available to the public in the property's present restricted condition.

(8) Is individually limited but cumulatively has considerable effect on the environment, or involves a commitment for larger actions;

By planning now to address the future needs of the community and the State, improvement of the transportation system is consistent with the long term plans for Maui. No views will be obstructed or be visually incompatible with the surrounding area.

(9) Substantially affects a rare, threatened or endangered species or its habitat;

No endangered plant or animal species are located within the highway corridor.

(10) Detrimentially affects air or water quality or ambient noise levels;

Any possible impact to near-shore ecosystems resulting from surface runoff, will be mitigated by the establishment of on-site retention basins during the construction phases of development. After development, retention areas within the highway right-of-way will serve the same function to encourage recharge of the groundwater.

(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, freshwater, or coastal waters.

Development of the property is compatible with the above criteria since there are not environmentally sensitive areas associated with the project and the physical character of the corridor has been previously disturbed by agricultural uses. As such, the property no longer reflects a "natural environment". Shoreline, valleys, or ridges will not be impacted by the development.

(12) Substantially affects scenic vistas and view planes identified in county or state plans or studies;

Due to topographical characteristics of the property, views of the area to be developed are generally not significant although they are visible. The majority of the proposed project will not be visible, except from higher elevations by the general public or from persons traveling along the highway.

(13) Requires substantial energy consumption.

The location of the proposed project is between Maui's major growth areas. This relationship will reduce travel times and energy consumption after project build out through efficiencies gained by the increased capacity of the highway. Construction of the proposed project will not require substantial energy consumption relative to other similar projects.

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LINDA LINGLE
GOVERNOR OF HAWAII



GILBERT S. COLOMA-AGARAN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
DEPUTY DIRECTOR

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE
54 SOUTH HIGH ST., ROOM 101
WAILUKU, HAWAII 96793-2198

AQUACULTURE DEVELOPMENT
PROGRAM
AQUATIC RESOURCES
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CONSERVATION AND
ENVIRONMENTAL AFFAIRS
CONSERVATION AND
RESOURCES ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

December 20, 2002

Genevieve Salmonson
Office of Environmental Quality Control
State of Hawaii
235 South Beretania Street, Suite 702
Honolulu, Hawaii 96813

Re: Project: Kahakapao Loop Trail
TMK: 2-4-16:002

Dear Ms. Salmonson,

Mahalo to you and Jeyan Thirugnanam for taking the time to assist, review and comment on the Draft Environmental Assessment for the Kahakapao Loop Trail.

Included you will find a copy of your comments, a detailed list of reasons supporting a finding of no significant impacts and a site plan map that shows the informal parking area. At this time there are no plans to build any formal parking areas. The Makawao Forest Reserve boundary gate is closed and may be locked at any time, so all parking occurs informally roadside prior to the reserve boundary.

A contract has been awarded to Cultural Surveys Hawaii, Inc. to perform the Cultural Impact Assessment. That document is expected to be completed by the end of January 2003 and will be included in the Final Environmental Assessment.

In order to mitigate impacts to any endangered species, DLNR will provide fencing around any known occurrences of endangered species that occur within 50 feet of the trail corridor. At this time, the only known endangered species within that range are two individual *Cyanea asplendifolia* plants. These plants occur together beside the section of road that is to be rerouted around the water treatment facility. The road reroute is a mitigation measure in response to the County of Maui, Department of Water Supply's comments received April 11, 2002. (Letters with responses are included.)

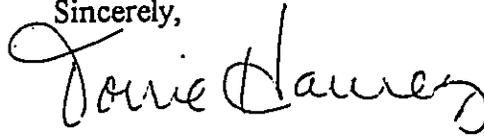
In order to mitigate the spread of alien species, interpretive and educational materials will be made available through our Wailuku DLNR office at 54 South High Street, Room 101.

Na Ala Hele will also maintain the trail corridor to keep it relatively free of noxious weeds. The area in which the trail is to be constructed is predominantly non-native.

There are no permits required to complete this project.

Should you have any questions, please feel free to contact me at 873-3508.

Sincerely,



Torrie Haurez,
Na Ala Hele, Trails and Access Specialist

Attachments

Cc: Robert Hobdy, District Manager, No attachments
Curt Cottrell, Na Ala Hele Program Manager, No attachments

DETERMINATION, FINDINGS AND REASONS FOR SUPPORTING DETERMINATION

SIGNIFICANT CRITERIA: According to the Department of Health Rules (I 1-200-12), an applicant or agency must determine whether an action may have a significant impact on the environment, including all phases of the project, its expected consequences both primary and secondary, its cumulative impact with other projects, and its short and long-term effects. In making the determination, the Rules establish "Significance Criteria" to be used as a basis for identifying whether significant environmental impact will occur. According to the Rules, an action shall be determined to have a significant impact on the environment if it meets any one of the following criteria:

- (1) Involves and irrevocable commitment to loss or destruction of any natural or cultural resources;**

The proposed trail will not impact the visual character of the area. The trail is compactable with the surrounding land use plans and programs being implemented for the region. The trail is located within the Makawao Forest Reserve, which is public land and will increase the public general accessibility to the area.

As previously noted, no archaeological or historical sites are known to exist within the trail corridor. Should any archaeologically significant artifacts, bones, or other indicators of previous onsite activity be uncovered during the construction phases of development, their treatment will be conducted in strict compliance with the requirements of the Department of Land and Natural Resources.

- (2) Curtails the range of beneficial uses of the environment;**

The trail will expand the range of beneficial uses within the environment. The trail is compatible with the range of uses for a forest reserve.

- (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 proposed development is consistent with the Environmental Policies established in Chapter 344, HRS, and the National Environmental Policy Act.

- (4) Substantially affects the economic or social welfare of the community or state;**

The proposed project will not affect the economic or social welfare of the community or state. The proposed project is designed to support surrounding

land use patterns, will not negatively or significantly alter existing residential areas, nor will unplanned population growth or its distribution be stimulate. The project's development is responding to public request for increase in hiking, equestrian and bicycle trails.

(5) Substantially affects public Health

The proposed project will provide a significant contribution to Maui's future population by providing residents with the opportunity to improve their general health and well being by exorcising and enjoying the natural beauty of the Makawao Forest Reserve. The activities associated with hiking, bicycling and equestrian trails work to dramatically increase one's health.

(6) Involves substantial secondary impacts, such as population changes or effects on public facilities

The proposed project in itself will not generate new population growth, but will provide needed recreational values to the area's present and future population.

(7) Involves a substantial degradation of environmental quality;

The proposed trail will utilize existing undeveloped forest reserve lands. The overall design of the project will complement the general use of the area.

(8) Is individually limited but cumulatively has considerable effect on the environment, or involves a commitment for larger actions;

Increasing the number of recreational opportunities and improving the Na Ala Hele trails system is compatible with the long-term goals of the State. No views will be obstructed or be visually incompatible with the surrounding area.

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

There are no rare, threatened or endangered species within the trail corridor. There is a cluster of two individual *Cyanea asplendifolia* near the relocation area of the access road. These two individuals will be fences within an enclosure to protect them.

(10) Detrimentially affects air or water quality or ambient noise levels;

There will be no impact to near-shore ecosystems resulting from surface runoff. Any impacts that may be associated with the project will only occur during the construct phase of the project and will be minimal. Impacts will be significantly positive in terms of public health and enjoyment as compared to the "no action" alternative.

- (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, freshwater, or coastal waters.**

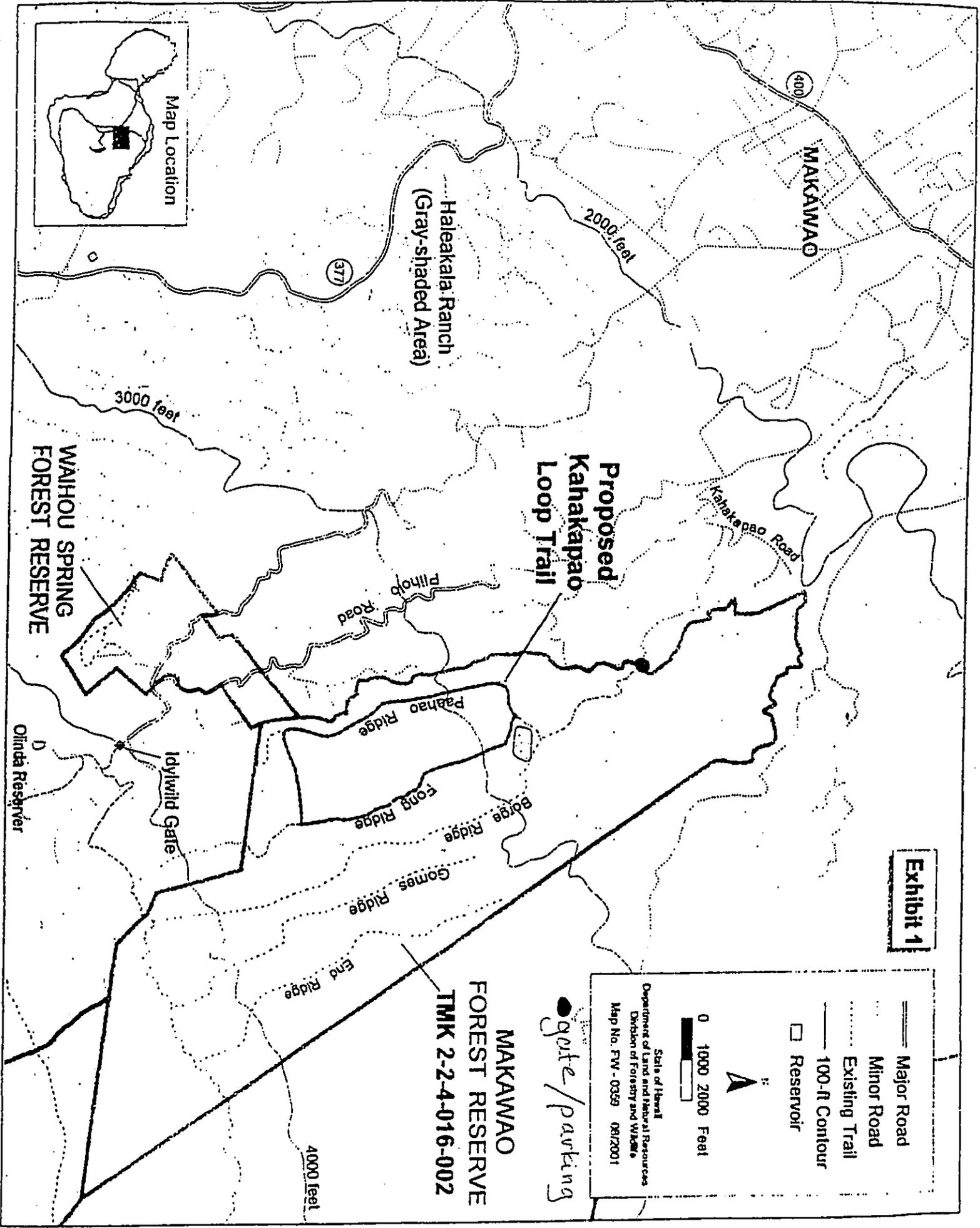
Development of the trail is compatible with the above criteria since there are not any environmentally sensitive areas associated with the trail corridor and the physical character of the corridor has been previously disturbed by tree plantations. As such, much of the forest reserve no longer reflects a "natural environment". Shoreline, valleys, or ridges will not be negatively impacted by the development. The project is compatible with the area.

- (12) **Substantially affects scenic vistas and views planes identified in county or stat plans or studies;**

Due to the topographical characteristics of the forest reserve, views along the trail are generally not significant. The majority of the trail will not be visible, except from higher elevations along the trail by persons traveling along the trail.

- (13) **Requires substantial energy consumption**

Construction of the proposed trail will not require substantial energy consumption. Na Ala Hele is a volunteer program. The general public provides the manual labor.



PHONE (808) 594-1888

FAX (808) 594-1865



STATE OF HAWAII
OFFICE OF HAWAIIAN AFFAIRS
711 KAPI'OLANI BOULEVARD, SUITE 500
HONOLULU, HAWAII 96813

HRD02-466

January 25, 2002

Ms. Torrie Haurez
Na Ala Hele Trails and Access Program--Maui District Office
54 South High Street, Room 101
Wailuku, HI 96793

Subject: Draft Environmental Assessment for Construction and Public Use of the
Kahakapao Loop Trail, Makawao Forest Reserve, Maui

Dear Ms. Haurez:

Thank you for the opportunity to comment on the above referenced project.

The Office of Hawaiian Affairs requests that the final EA adequately address cultural resources. The draft EA does not have a cultural impact statement, as required by Act 50, SLH 2000. While the draft EA states that traditional Hawaiian gathering has occurred in the Makawao Forest Reserve, the document fails to assess the project's impact on these practices, or to propose mitigation measures. The preparer of the cultural impact statement should consult with Native Hawaiian individuals and organizations to determine the impact of the trail on cultural practices. The final EA should include a discussion of the methods used to identify and select persons with knowledge of cultural practices and the results of consultation with them.

If you have questions, please contact Sharla Manley, policy analyst at 594-1944 or email her at sharlam@oha.org.

Sincerely,

A handwritten signature in black ink that reads "Colin C. Kippen Jr.".

Colin C. Kippen, Jr.
Deputy Administrator

cc: Board of Trustees
Clyde W. Namu'o, Administrator
Maui CAC

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE
54 SOUTH HIGH ST., ROOM 101
WAILUKU, HAWAII 96793-2198

January 31, 2002

GILBERT S. COLOMA-AGARAN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTY DIRECTOR
ERIC T. HIRANO

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HISTORIC PRESERVATION
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

Colin C. Kippen, Jr.
Deputy Administrator
State of Hawaii
Office of Hawaiian Affairs
711 Kapi'olani Boulevard, Suite 500
Honolulu, Hawaii 96813

Subject: Reference HRD02-466, Draft Environmental Assessment for Construction
and Public Use of the Kahakapao Loop Trail, Makawao Forest Reserve,
Maui

Representative Mr. Kippen, Jr.,

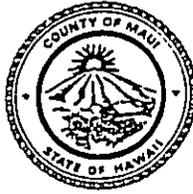
Thank you for taking the time to read and respond to the Kahakapao Loop Trail
DRAFT Environmental Assessment (EA). This is the first EA I have written and am
learning very quickly the complexities of the procedure. I appreciate your careful review
and your offer of assistance by Ms. Manley concerning my questions. I will be
contacting her for information regarding the creation of the cultural assessment and the
proper procedures to fulfill the requirements of Act 50, SLH 2000.

If you have any further questions or comments, please contact Torrie Haurez of
the Division of Forestry and Wildlife at 873-3508.

Sincerely,

A handwritten signature in cursive script that reads "Torrie Haurez".

Torrie Haurez
Na Ala Hele, Trails and Access Specialist



DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI
P.O. BOX 1109
WAILUKU, MAUI, HAWAII 96793-7109
Telephone (808) 270-7199 • Fax (808) 270-7833

January 31, 2002

Torrie Haurez
Division of Forestry & Wildlife
Maui District Office
54 S. High St. # 101
Wailuku, Hawaii 96793

Re: Project: Kahakapao Loop Trail
TMK: 2-4-16:002

Dear Ms. Haurez,

Thank you for the opportunity to review this application. The proposed trail is within 100 feet of DWS Piiholo Water Treatment Plant and Reservoir Facility. In addition, one of the proposed accesses to the trail is on a semi-public road that ends at the Piiholo Facility. Since the September 11th terrorism DWS water facilities have increased security to insure safe drinking water. Due to the proximity of the proposed trail and trailhead our existing facilities the Department of Water Supply has the following recommendations.

We suggest that an alternative route for the lower part of the trail be created to steer trail users away from our facilities and that there be no access from the Kahakapao Road to the proposed Kahakapao Loop Trail.

If you need more information, please contact our Water Resources and Planning Division at 270-7199.

Sincerely,

David R. Craddick
Director

mni

C: Engineering division
Department of Environmental Quality Control

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE
54 SOUTH HIGH ST., ROOM 101
WAILUKU, HAWAII 96793-2192

Gilbert S. Coloma-Agaran
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTY DIRECTOR
Eric T. Hirano

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CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

April 4, 2002

David R. Craddick
Department of Water Supply
County of Maui
P. O. Box 1109
Wailuku, Hawaii 97893-7109

Re: Project: Kahakapao Loop Trail
TMK: 2-4-16:002

Dear Mr. Craddick,

Mahalo to you and Paul Seitz for taking time out of your busy schedules to sit down with Ms. Torrie Haurez and myself to confer on the alignment of the Kahakapao Loop Trail and to discuss security concerns for your Pi'iholo Reservoir and water treatment facilities. As discussed in our meeting, we will redirect public access away from the water treatment facility. We also plan to relocate and redesign the current gate at the Makawao Forest Reserve Boundary in order to improve access to your facility.

As per our discussion, we also understand that your plans for the Kahakapao Water Treatment Facility include constructing security fencing around the perimeter of the facility and installing an electronic gate at the Makai boundary of this perimeter.

We have a proposal that we think you will find attractive regarding access in general to your facility and to our surrounding forest areas. We would like to reroute our forest access roads so that they no longer pass through your facility at all. This would leave you the sole user of the last part of the paved road into your facility.

During a site visit conducted on April 3, 2002, we located the alignment of the facilities old perimeter fence. We are proposing to reroute the Fong Ridge Road to circumvent the facility and remain outside of the old fence alignment. From this new route, the facility is out of sight and well away from public passage. The Kahakapao Loop Trailhead would then be located along this new route, directly addressing your concerns for increased security for the facility.

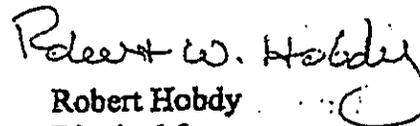
We would also like to propose constructing an alternate route below the facility accessing the Borge Ridge Road across the gulch to the east. The by pass leading to Borge Ridge would also be located outside of the old fence alignment and out of sight of the facility.

We have attached a map illustrating the proposed routes with reference to your facility boundary and the locations where the new DWS security gate will need to be installed.

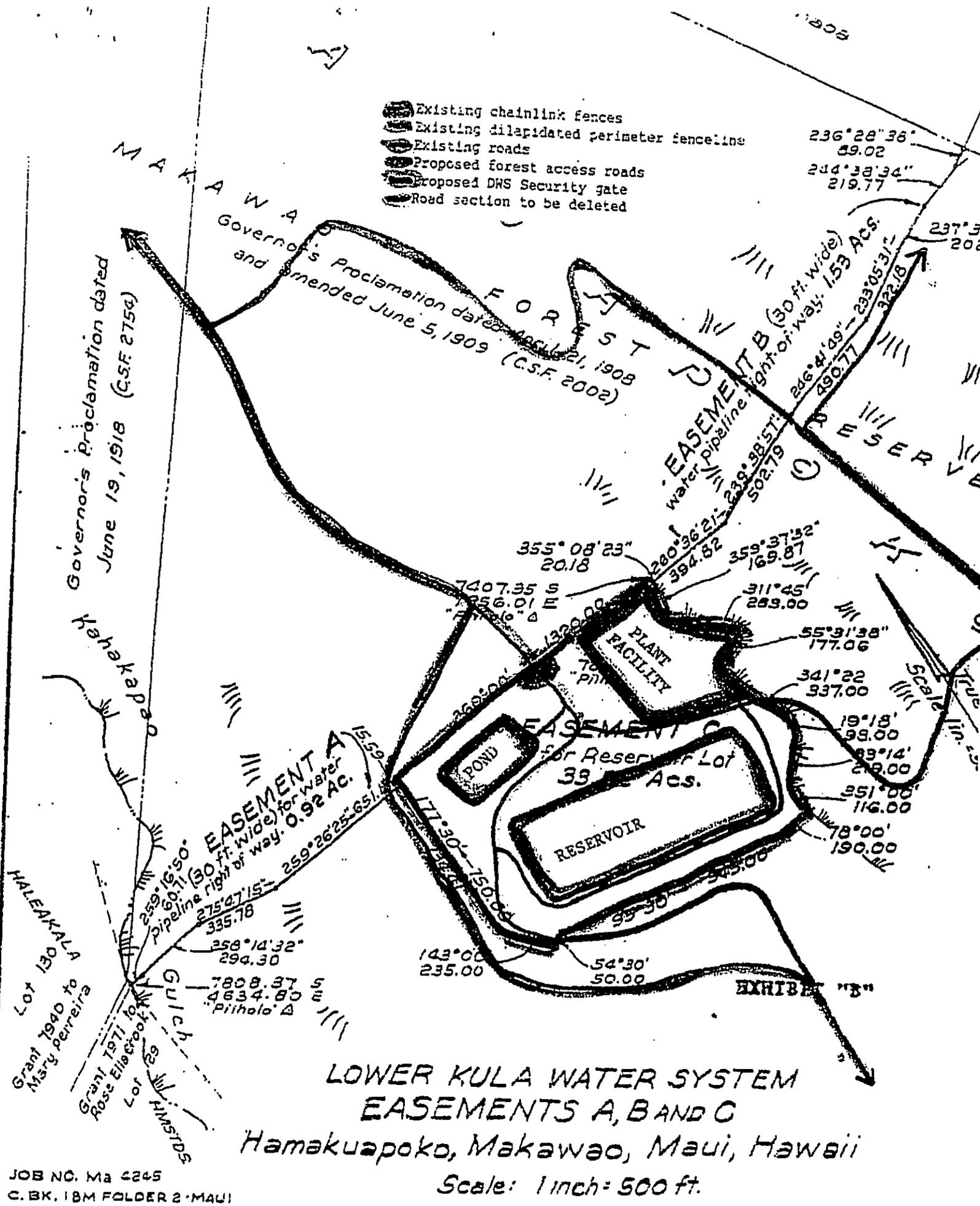
This proposal, if satisfactory to you, will allow us to move forward with our planned projects and alleviate your concerns for security.

If you have any questions or comments, feel free to contact me.

Sincerely,


Robert Hobby
District Manager

Cc: Torrie Haurcz, Na Ala Hele, Trails and Access Specialist



**LOWER KULA WATER SYSTEM
EASEMENTS A, B AND C
Hamakuapoko, Makawao, Maui, Hawaii**

Scale: 1 inch = 500 ft.

JOB NO. Ma 4245
C. BK. IBM FOLDER 2 MAUI

TAX MAP: 2-4-16

C. S. F. No. 16579

SURVEY DIVISION
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
STATE OF HAWAII

Amended Aug.
March 17, 197



DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI
P.O. BOX 1109
WAILUKU, MAUI, HAWAII 96793-6109
TELEPHONE (808) 270-7816 • FAX (808) 270-7833 • www.mauiwater.org

April 11, 2002

Mr. Robert Hobdy, District Manager
Department of Land and Natural Resources
Division of Forestry and Wildlife
State of Hawaii
54 South High Street, Room 101
Wailuku, HI 96793-2198

Dear Mr. Hobdy:

SUBJECT: KAHAKAPAO LOOP TRAIL, TMK: 2-4-16:002

Thank you for your letter dated April 4, 2002 and for providing for additional security at our Piihola Water Treatment Plant. We have no objections to your proposal and are willing to do our part to secure the facility.

We would appreciate receiving a timetable from you so we may plan accordingly.

Very truly yours,

DAVID R. CRADDICK
Director

"By Water All Things Find Life"





HOUSE OF REPRESENTATIVES

STATE OF HAWAII
STATE CAPITOL
HONOLULU, HAWAII 96813

January 23, 2002

Mr. Robert Hobdy
Dept. of Land & Natural Resources
Division of Forestry & Wildlife
54 South High Street, Suite #101
Wailuku, Hawaii 96793

Aloha Mr. Hobdy:

Recently I received a letter from Mr. Jeff Merle; one of my constituents, regarding the tentative plans to implement new trails for the Makawao State Forest Reserve. Mr. Merle is very concerned about this project and is convinced that it would be detrimental to the Pi'iholo Road area.

Could you please send me the specifics regarding this issue, as I would like to investigate it further.

Thank you very much for your time and cooperation. Please feel free to call me with any questions.

Malama Pono,

A handwritten signature in cursive script, appearing to read "Kika G. Bukoski".

Rep. Kika G. Bukoski
House Representative 10th District

cc: Jeff Merle

Jeff Merle
60 Makaanani Rd.
Makawao, HI 96768

Robert Hobdy
Dept. of Land & Natural Resources
Div. of Forestry & Wildlife
54 South High St., Room 101
Wailuku, HI 96793

Dear Mr. Hobdy,

I am writing to you in regards to the new trails planned for Makawao State Forest Reserve.

I bought property over 20 years ago up Piiholo Rd., bordering Makawao forest, to have my privacy and to have it quiet; I value this. All of us up here drive an extra 30 minutes a day to have this peace and quiet. The planned trail is basically in our backyards. How would you feel about this trail if you were us? Please have some respect for our style of living.

The traffic up Piiholo is bad enough as it is. Trucks pulling trailers up skinny Piiholo Rd. is a problem already. Piiholo stables are up here and some of us have had close calls with horse trailers. Why make it worse? Parking, turning around, etc. will make it worse for the residents up here.

I travel to the mainland every year for hunting, hiking and back country fishing. Every time horse or hiking trails are put in erosion is a problem. Now you want to do it in a rain forest? I thought one of the reasons for pig eradication was to slow down erosion? The area of topic is very steep and on normal years it gets a substantial amount of rain. Horse trails or trails period do not do well up here. Look at the Waihou Springs Trail. It is a lot drier there - maybe 1/3 the rainfall and major damage happens there - without horses or bikes - to add to it. I don't quite understand why a drier area isn't chosen. I don't follow your train of thought.

The hunters just recently were told they lost access to Waikamoi. Now it looks like they may lose Makawao Forest. Why should they be "rousted" out of this area too? A lot of hunters hit this area early and late in the day, before and after work on weekdays because it's close to their homes. Some of us even walk out of our houses to hunt up here. I have a hard time imagining that we can all use this area together. Sooner or later there will be problems between hunters,

horses, hikers and bikers. In the long run hunting and people who hunt out of their houses lose. This area is already being used by a group of people. Who are you to say your group is more important than another?

Financially how can we afford this now? From what I read in the paper these are hard times for the State and County financially. I look at these projects as frivolous - things you do when times are good. \$75,000 is a fair chunk of change.

Then in the Maui News January 5 article you ask for volunteers to help with trails because you "need help to maintain existing trails". This means you can't maintain what you have already.

Maybe, just maybe, we should slow down a tad and enjoy what we have.

From living on Maui for almost 30 years I have learned that Hawaii is about quality and not quantity. For us living up Piiholo we are trying to keep this quality. Please don't take another piece of it away and replace it with quantity.

Thank you for your time.

Sincerely,

Jeff Merle

Cc: Na Ala Hele
Representative Kika Bukoski
Senator J. Kalani English

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE
54 SOUTH HIGH ST., ROOM 101
WAILUKU, HAWAII 96793-2198

GILBERT S. COLONA-AGARAN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTY DIRECTOR
ERIC T. HIRANO

AQUACULTURE DEVELOPMENT
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HISTORIC PRESERVATION
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

January 30, 2002

Representative Kika G. Bukoski
House of Representative 10th District
State of Hawaii
State Capitol
Honolulu, Hawaii 96813

Dear Representative Bukoski:

Enclosed you will find a copy of the rebuttal sent to Mr. Jeff Merle in regards to his comments made as a result of the public review of the **DRAFT** Environmental Assessment of the proposed Kahakapao Loop Trail in the Makawao Forest Reserve.

This office has received a total of 82 letters of response. Of those 7 have been against the construction of the trail, 69 favoring the trail construction, 2 interagency Departmental programs requesting more information, and 4 letters stating no comment at this time from: Hawaii Historic Preservation Division, Aquatic Resources Division, Department of Transportation and the Natural Resources Conservation Service. As you can see, the overwhelming proportions of responses were in favor of the construction of this trail.

If you have any further questions or comments, please contact Torrie Haurez of the Division of Forestry and Wildlife at 873-3508.

Sincerely,

A handwritten signature in black ink that reads "Robert W. Hobdy". The signature is written in a cursive style with a large, looping "y" at the end.

Robert W. Hobdy
District Manager

BERNARD J. DAYTANO
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

P.O. BOX 621
HONOLULU, HAWAII 96809

January 28, 2002

Timothy E. Johns
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTY

Janet E. Kawelo

AQUACULTURE DEVELOPMENT PROGRAM
AQUATIC RESOURCES
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HISTORIC PRESERVATION
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT
WATER RESOURCE MANAGEMENT

Mr. Jeff Merlo
60 Makanani Road
Makawao, Hawaii 96768

Mr. Merlo,

Thank you for taking the time to read and respond to the Kahakapao Loop Trail DRAFT Environmental Assessment. The following is a response to your comments made as a result of the public review period.

We feel the trail will be a positive addition to the recreational value of the Makawao Forest Reserve.

The access to the Kahakapao Loop Trail is through the Kahakapao Road. This road is located approximately 1.5 miles up Pihiolo Road from Makawao Avenue. The road to this point travels through agricultural fields and is fairly straight and wide with adequate shoulders. The increase in traffic to the upper, more populated portion of Pihiolo Road will not increase dramatically as a result of the opening of this trail. The Pihiolo area has seen an accelerated increase in the number of homes being constructed in the past several years, as many areas on Maui have. This is more likely the cause of increased traffic to the area, not increased recreational use.

The location for the trail was determined for several reasons. This is the driest corner of the Reserve and also the most isolated. When proper construction techniques are utilized, annual rainfall will not be a detrimental factor in the maintenance of the trail. Major storm events can produce serious damage. These events are unpredictable and liable to strike any recreational area.

The construction of the Kahakapao Loop Trail will not affect the legal hunting availability of the area. Weekends and Holidays will continue to be open to hunting in this area. This will not change because of the trail. Hunters are welcome to use the trail to access the area and to ease the retrieval of meat. Signs warning of hunter's presence will be posted. The relative isolation of the trail will help to separate the user groups to a large extent.

The Makawao Forest Reserve is a multi-use area and has always been designated as such. Under this designation there is no one-user group that carries more authority or has more rights to an area than any other user group. The Makawao Forest Reserve was established in part to provide recreation for the public. Public access is not determined by residency. Until 1997 when the Kahakapao Road was opened to the water treatment facility, there was no legal public access to the Makawao Forest Reserve. The area was accessible through private property only. Public lands continue to be under heavy demand for recreation, including hunting, hiking, bicycling, equestrian use, etc., etc. All user-groups must show respect to others encountered in the forest. By using a few good manners and common sense, many unfortunate incidents can be avoided.

Na Ala Hele is a volunteer program established in 1988 through Chapter 198D, Hawaii Revised Statutes, initially in response to public concern about the increasing loss of public access to trails and the threat to historic trails from development pressure. In the last year nearly 170 volunteers donated approximately 2,285 hours of their time to the maintenance and construction of trails in Maui County. We utilize the strength and ability of community members who want to be of service to their fellows.

If you have any further questions or comments, please contact Torrie Haurez of the Division of Forestry and Wildlife at 873-3508.

Sincerely,

Torrie Haurez

Torrie Haurez
Na Ala Hele, Trails and Access Specialist

ROBERT BUNDA
PRESIDENT
COLLEEN HANABUSA
VICE PRESIDENT
JONATHAN CHUN
CAL KAWAMOTO
MAJORITY LEADERS
J. KALANI ENGLISH
MAJORITY FLOOR LEADER
SAM SLOM
MINORITY LEADER
FRED HEMMINGS
MINORITY FLOOR LEADER
BOB HOGUE
MINORITY POLICY LEADER

The Senate
The Twenty-First Legislature
of the
State of Hawaii

STATE CAPITOL
HONOLULU, HAWAII 96813



January 29, 2002

Mr. Robert Hobby
Department of Land and Natural Resources
Division of Forestry and Wildlife
54 South High Street, Room 101
Wailuku, HI 96793

Dear Mr. Hobby:

I have received a copy of an undated letter addressed to you from Mr. Jeff Merle regarding the new trails planned for Makawao State Forest Reserve.

I am attaching a copy of the letter for your convenience. May I request your thoughts on Mr. Merle's concerns?

I look forward to hearing from you shortly.

Warm Personal Regards,

J. Kalani English
Senator
5th District

Enclosure.

c: Mr. Jeff Merle

JKE:kk

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SECOND DISTRICT
DAVID M. MATSUURA
THIRD DISTRICT
RUSSELL S. KOKUBUN
FOURTH DISTRICT
JAN YAGI BUEN
FIFTH DISTRICT
J. KALANI ENGLISH
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AVERY B. CHUMBLEY
SEVENTH DISTRICT
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EIGHTH DISTRICT
SAM SLOM
NINTH DISTRICT
MATT MATSUNAGA
TENTH DISTRICT
LES IHARA, JR.
ELEVENTH DISTRICT
BRIAN T. TANIGUCHI
TWELFTH DISTRICT
CAROL FUKUNAGA
THIRTEENTH DISTRICT
ROD TAM
FOURTEENTH DISTRICT
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FIFTEENTH DISTRICT
DONNA MERCADO KIM
SIXTEENTH DISTRICT
NORMAN SAKAMOTO
SEVENTEENTH DISTRICT
DAVID JOE
EIGHTEENTH DISTRICT
RON MENOR
NINETEENTH DISTRICT
CAL KAWAMOTO
TWENTIETH DISTRICT
BRIAN KANNO
TWENTY-FIRST DISTRICT
COLLEEN HANABUSA
TWENTY-SECOND DISTRICT
ROBERT BUNDA
TWENTY-THIRD DISTRICT
BOB NAKATA
TWENTY-FOURTH DISTRICT
BOB HOGUE
TWENTY-FIFTH DISTRICT
FRED HEMMINGS
CHIEF CLERK
PAUL T. KAWAGUCHI

Jeff Merle
60 Makaanani Rd.
Makawao, HI 96768

Robert Hobdy
Dept. of Land & Natural Resources
Div. of Forestry & Wildlife
54 South High St., Room 101
Wailuku, HI 96793

Dear Mr. Hobdy,

I am writing to you in regards to the new trails planned for Makawao State Forest Reserve.

I bought property over 20 years ago up Piihoho Rd., bordering Makawao forest, to have my privacy and to have it quiet; I value this. All of us up here drive an extra 30 minutes a day to have this peace and quiet. The planned trail is basically in our backyards. How would you feel about this trail if you were us? Please have some respect for our style of living.

The traffic up Piihoho is bad enough as it is. Trucks pulling trailers up skinny Piihoho Rd. is a problem already. Piihoho stables are up here and some of us have had close calls with horse trailers. Why make it worse? Parking, turning around, etc. will make it worse for the residents up here.

I travel to the mainland every year for hunting, hiking and back country fishing. Every time horse or hiking trails are put in erosion is a problem. Now you want to do it in a rain forest? I thought one of the reasons for pig eradication was to slow down erosion? The area of topic is very steep and on normal years it gets a substantial amount of rain. Horse trails or trails period do not do well up here. Look at the Waihou Springs Trail. It is a lot drier there – maybe 1/3 the rainfall and major damage happens there – without horses or bikes – to add to it. I don't quite understand why a drier area isn't chosen. I don't follow your train of thought.

The hunters just recently were told they lost access to Waikamoi. Now it looks like they may lose Makawao Forest. Why should they be "rousted" out of this area too? A lot of hunters hit this area early and late in the day, before and after work on weekdays because it's close to their homes. Some of us even walk out of our houses to hunt up here. I have a hared time imagining that we can all use this area together. Sooner or later there will be problems between hunters,

horses, hikers and bikers. In the long run hunting and people who hunt out of their houses lose. This area is already being used by a group of people. Who are you to say your group is more important than another?

Financially how can we afford this now? From what I read in the paper these are hard times for the State and County financially. I look at these projects as frivolous – things you do when times are good. \$75,000 is a fair chunk of change.

Then in the Maui News January 5 article you ask for volunteers to help with trails because you "need help to maintain existing trails". This means you can't maintain what you have already.

Maybe, just maybe, we should slow down a tad and enjoy what we have.

From living on Maui for almost 30 years I have learned that Hawaii is about quality and not quantity. For us living up Piiholo we are trying to keep this quality. Please don't take another piece of it away and replace it with quantity.

Thank you for your time.

Sincerely,

Jeff Merle

Cc: Na Ala Hele
Representative Kika Bukoski
Senator J. Kalani English

BENJAMIN J. CAYetano
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE
54 SOUTH HIGH ST., ROOM 101
WAILUKU, HAWAII 96793-2198

February 13, 2002

Senator J. Kalani English
5th District
The Twenty-First Legislature
State of Hawaii
State Capitol
Honolulu, Hawaii 96813

Gilbert S. Coloma-Agaran
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTY DIRECTOR
Eric T. Hiraño

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HISTORIC PRESERVATION
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

Senator Mr. English,

Enclosed you will find a copy of the rebuttal sent to Mr. Jeff Merle in regards to his comments made as a result of the public review of the DRAFT Environmental Assessment of the proposed Kahakapao Loop Trail in the Makawao Forest Reserve.

This office has received a total of 138 letters of response. Of those, 131 were from the general public and consisted of 16 being against the construction of the trail and 115 favoring construction. As you can see, the overwhelming proportions of responses were in favor of the construction of this trail.

If you have any further questions or comments, please contact Torrie Haurez of the Division of Forestry and Wildlife at 873-3508.

Sincerely,

Robert Hobdy
Mr. Robert Hobdy
District Manager

BENJAMIN J. CAVETANO
GOVERNOR OF HAWAII



GILBERT S. COLOMA-AGARAN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTY DIRECTOR
ERIC T. HIRANO

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE
54 SOUTH HIGH ST., ROOM 101
WAILUKU, HAWAII 96793-2198

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CONVEYANCES
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HISTORIC PRESERVATION
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

January 29, 2002

Mr. Jeff Merle
60 Makanani Road
Makawao, Hawaii 96768

Mr. Merle,

Thank you for taking the time to read and respond to the Kahakapao Loop Trail DRAFT Environmental Assessment. The following is a response to your comments made as a result of the public review period.

We feel the trail will be a positive addition to the recreational value of the Makawao Forest Reserve.

The access to the Kahakapao Loop Trail is through the Kahakapao Road. This road is located approximately 1.5 miles up Piihoho Road from Makawao Avenue. The road to this point travels through agricultural fields and is fairly straight and wide with adequate shoulders. The increase in traffic to the upper, more populated portion of Piihoho Road will not increase dramatically as a result of the opening of this trail. The Piihoho area has seen an accelerated increase in the number of homes being constructed in the past several years, as many areas on Maui have. This is more likely the cause of increased traffic to the area, not increased recreational use.

The location for the trail was determined for several reasons. This is the driest corner of the Reserve and also the most isolated. When proper construction techniques are utilized, annual rainfall will not be a detrimental factor in the maintenance of the trail. Major storm events can produce serious damage. These events are unpredictable and liable to strike any recreational area.

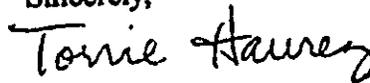
The construction of the Kahakapao Loop Trail will not affect the legal hunting availability of the area. Weekends and Holidays will continue to be open to hunting in this area. This will not change because of the trail. Hunters are welcome to use the trail to access the area and to ease the retrieval of meat. Signs warning of hunter's presence will be posted. The relative isolation of the trail will help to separate the user groups to a large extent.

The Makawao Forest Reserve is a multi-use area and has always been designated as such. Under this designation there is no one-user group that carries more authority or has more rights to an area than any other user group. The Makawao Forest Reserve was established in part to provide recreation for the public. Public access is not determined by residency. Until 1997 when the Kahakapao Road was opened to the water treatment facility, there was no legal public access to the Makawao Forest Reserve. The area was accessible through private property only. Public lands continue to be under heavy demand for recreation, including hunting, hiking, bicycling, equestrian use, etc., etc. All user-groups must show respect to others encountered in the forest. By using a few good manners and common sense, many unfortunate incidents can be avoided.

Na Ala Hele is a volunteer program established in 1988 through Chapter 198D, Hawaii Revised Statutes, initially in response to public concern about the increasing loss of public access to trails and the threat to historic trails from development pressure. In the last year nearly 170 volunteers donated approximately 2,285 hours of their time to the maintenance and construction of trails in Maui County. We utilize the strength and ability of community members who want to be of service to their fellows.

If you have any further questions or comments, please contact Torrie Haurez of the Division of Forestry and Wildlife at 873-3508.

Sincerely,



Torrie Haurez
Na Ala Hele, Trails and Access Specialist

HALEAKALA RANCH

ESTABLISHED IN 1888

January 21, 2002

Na Ala Hele, Trails and Access Program
54 South High Street, Room 101
Wailuku, HI 96793

Attn: Torrie Haurez

RE: Comments on the Draft EA for Kahakapao Loop Trail

The "Background Statement" on page 3 states, in part: "One of the two roads accessing the Reserve is a private road through the Idylwilde Gate and Haleakala Ranch property." There is no agreement that permits public access through this gate or to use the private road through Haleakala Ranch property. All references to this gate and the private road should be deleted from the Environmental Assessment, and Exhibit 1 should be revised so that it does not label or show the location of the Idylwilde Gate and any roads on private property. In addition, the Idylwilde Gate and private roads should not be shown on any future maps or signs that may be printed of the trail or the Makawao Forest Reserve. Have approvals been obtained from the County of Maui to use the access road leading from Kahakapao Road to the Piihoho Reservoir?

The section entitled "Public Access" on page 6 states: "The Trail has entry points (trail heads north and south) along Fong Ridge." There is no public access from the north. Therefore there is no north trail head. The proposed trail has only one entry point or trail head, which is the south trail head near the Piihoho Reservoir. All references to "2 trailheads", "the north trailhead", or "both trailheads" should be deleted.

The section entitled "Major Impacts - Positive" states in part: "The gate at the top of Fong's ridge has a history of vandalism, with the increased presence of hikers, vandalism may be discouraged." Is there any historical evidence to support this statement? It may be that because this trail will bring more people into the area there will be more, not less, vandalism of the gate and adjacent fences. Will the State repair or pay for repairs to adjacent private fences and gates that are damaged by trail users? How will the State prevent trail users from trespassing onto adjacent private land?

The section entitled "Public Utilities" on page 6 states: "There are no public utilities (electrical, water, sewer, or other) within three miles of any part of the trail." The Maui County Piihoho Water Treatment facility is immediately adjacent to the proposed trail. What security measures will be taken to ensure this critical public water supply is protected from acts of vandalism and/or terrorism?

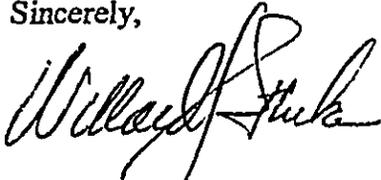
The second paragraph on page 10 refers to "hikers, hunters, equestrians and mountain bikers" using the proposed trail. Will there be any controls on how and when the proposed trail will be used by each of these groups of users? Rule 13-130-28 prohibits use of horses unless specifically authorized.

The fourth paragraph on page 10, under the section entitled "Major Impacts – Negative" states in part: "Na Ala Hele is empowered to restrict access or close trail areas should impacts prove too severe for continued public use without program intervention." What criteria or measurements will be used to determine when the impacts are "too severe for continued public use"?

The section entitled "Alternatives Considered" indicates that the proposed trail will form a "significant firebreak". How wide will the trail clearing be?

Thank you for the opportunity to comment on this Draft Environmental Assessment.

Sincerely,

A handwritten signature in black ink, appearing to read "Willard J. Stluka". The signature is written in a cursive style with a large, prominent initial "W".

Willard J. Stluka
President

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE
54 SOUTH HIGH ST., ROOM 101
WAILUKU, HAWAII 96793-2198

GILBERT S. COLOMA-AGARAN
CHAIRPERSON
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HISTORIC PRESERVATION
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

January 29, 2002

Mr. Willard J. Stluka
c/o Haleakala Ranch Company
529 Kealaloa Avenue
Makawao, Hawaii 96768

Mr. Stluka,

Thank you for taking the time to read and respond to the Kahakapao Loop Trail DRAFT Environmental Assessment. The following is a response to your comments made as a result of the public review period.

"...There is no agreement that permits public access through this gate or to use the private road through Haleakala Ranch property. All references to this gate and the private road should be deleted from the Environmental Assessment and Exhibit 1 should be revised so that it does not label or show the location of the Idylwilde Gate and any roads on private property..."

I was mistakenly under the impression that all accesses had to be listed for the DRAFT Environmental Assessment (EA). After digging deeper into the requirements I found this is not the case. All references to the Idylwilde Gate will be removed. There have never been any plans to include that access on any public maps or websites. This access is utilized for emergency evacuations and management purposes only.

"...All references to "2 trailheads", "the north trailhead", or "both trailheads" should be deleted..."

When initially writing the DRAFT EA, it was proposed to have the two trailheads, but after careful consideration, it was decided to create a loop trail down the Fong Ridge back to the lower trailhead. Any reference to the "2 trailheads", the "north trailhead" or "both trailheads" is purely an over site on my part and will be removed.

"...Will the State repair or pay for repairs to adjacent private fences and gates that are damaged by trail users? How will the State prevent trail users from trespassing onto adjacent private lands..."

It is indeterminable if increased numbers will help decrease damage to the gates by the presence of more watchful eyes or if more people simply means more damage to gates and fences. It is also very hard to determine if the vandals damaging neighboring fences and gates are actually trail users. To say the addition of this trail will be the cause of an increase in vandalism or if vandalism will increase even without the addition of this trail is impossible. We will utilize signs and education to deter people from trespassing on to neighboring private lands. We wish to work closely with our neighbors in doing everything possible to keep these instances down while still maintaining our mandate to provide public access and recreation.

“...What security measures will be taken to ensure this critical public water supply is protected from acts of vandalism and/or terrorism...”

The County Board of Water Supply handles the security of the water treatment plant. We comply with their request and mandates. The gate along Kahakapao Road was installed to provide security for this facility. The public is not encouraged to drive into the facility. If the threat of terrorism becomes so heightened that additional security measures are required, we will respond to any request at that time. Closing of the gate is always an option. The gate is left open or closed by the facility staff, not the Department of Land and Natural Resources.

“...Will there be any controls on how and when the proposed trail will be used by each of these groups of users...”

This trail will be governed by the Forest Reserve and Na Ala Hele rules and regulations as established by law. Hunting legally occurs during weekends and Holidays only. The Kahakapao Loop Trail will be a designated equestrian and bicycle trail, thus allowing the use of horses and bicycles.

“...What criteria will be used to determine when the impacts are “too severe for continued public use”...”

Na Ala Hele utilizes a reference marker-photo point management system to document natural and human-related impacts. This system can also be incorporated to monitor existing and new weed populations, plant succession, benchmarks and research plots. Reference markers will be established with photos being taken at the 4 cardinal directions, up-trail and down-trail. Trail conditions determine photo point locations. Additional photo points can be added to the system as required. These photos are used to determine the degree of acceptable change for existing trail conditions and to determine future management actions.

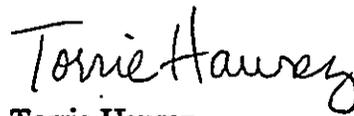
“How wide will the trail clearing be...”

The trail width will vary from three to four feet. Because the trail will be constructed for equestrian use, the trail bed must be fully cut into the hillside, thus not utilizing the removed material as fill. This allows for a more stable base. The

significance of the trail for fire fighting is two-fold. Firstly in that there is no trail in the current location. By creating the trail, access is made considerably easier. Secondly, the construction of the trail will allow for ground level fires to be contained when it reaches the mineral soil of the trail, thus starving the fire of necessary fuels.

I appreciate your careful review of this DRAFT Environmental Assessment. Your insightful comments have definitely given me a deeper appreciation for the entire process. If you have any further questions or comments, please contact Torrie Haurez of the Division of Forestry and Wildlife at 873-3508.

Sincerely,

A handwritten signature in cursive script that reads "Torrie Haurez".

Torrie Haurez
Na Ala Hele, Trails and Access Specialist

NATIVE HAWAIIAN PLANT SOCIETY
PO BOX 5021
KAHULUI, HI 96733-5021

January 31, 2002

Ms. Torrie Haurez
Na Ala Hele, Trails and Access Program
54 South High Street, Rm 101
Wailuku, HI 96793

Dear Ms. Haurez,

The Native Hawaiian Plant Society Board of Directors and members have discussed the Draft Environmental Assessments (DEA's) prepared for the proposed Ohai Trail and the Kahakapao Loop Trail. Here are our comments.

Ohai Trail: We are very happy to see the development of a new hiking area, especially with the chance to observe endangered native plants along the trail. The Ohai enclosure near the trail is very important to us. We appreciate that you have taken the time to give additional protection to this very rare native plant. We are happy to be involved with the enclosure, having pledged to weed the enclosure once a year and to be open to discussing other projects in the area.

As the trail will hopefully attract many visitors, we urge you to include information in your signage about the native plant communities found along the trail. In addition, a trail guide such as that made for the Waihee Ridge trail would be very useful. We also urge you to make ample safe parking one end of the trail and instruct the public to return along the trail rather than on the highway.

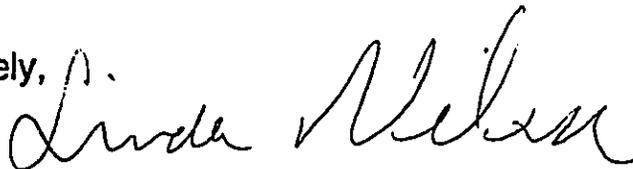
Kahakapao Loop Trail: Here, we are happy to see public access to this large upland forest for non-hunters. We agree that the area will provide opportunities for nature study, photography and hiking. We urge that your trail care program provide for identification and monitoring (leading to

eradication) of weeds and invasive alien species. We understand that hikers can bring in weeds inadvertently and urge you to make sure that new weeds do not become established along the trail. Further, we urge that the area be managed for native species restoration where appropriate. We realize that much of the area is plantation forest, but areas with a native plant community should be managed to restore it. We especially urge that the trail give wide clearance to any really rare plant species as this could prevent accidental trampling or vandalism. We hope that your signage will educate hikers about the plants and history of the area. We expect that they will instruct hikers to stay on the trail. Here, too, we would like to see a trail guide. On access, please clarify where the public will access the trail. The walk up Kahakapao Road from the gate is at least one-half mile on a steep, dangerous road. Because of the steepness, automobiles would have a difficult time avoiding walkers. We urge that this access not be used.

Finally, we urge you to make adequate parking for all types of users. This trail may not have commercial users but it will be popular with the public.

We are delighted that Na Ala Hele is providing two new hiking opportunities on Maui.

Sincerely,

A handwritten signature in black ink, appearing to read "Linda Nelson". The signature is fluid and cursive, with a large initial "L" and "N".

Linda Nelson, President
Native Hawaiian Plant Society

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE
54 SOUTH HIGH ST., ROOM 101
WAILUKU, HAWAII 96793-2198

January 31, 2002

GILBERT S. COLOMA-AGA
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTY DIRECTOR
ERIC T. HIRANO

AQUACULTURE DEVELOPMENT
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FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

Ms. Linda Nelson, President
Native Hawaiian Plant Society
P. O. Box 5021
Kahului, Hawaii 96733-5021

Ms. Nelson,

Thank you for taking the time to read and respond to the Ohai and Kahakapao Loop Trail DRAFT Environmental Assessments. The following is a response to your comments made as a result of the public review period.

Ohai Trail: Signage developed for the Ohai Trail will be done with an emphasis towards education/interpretation of native coastal strand vegetation. We look forward to working closely with the Native Hawaiian Plant Society in developing these signs and discussing the possibility of an interpretive brochure.

At this time, there are no plans to increase the ample parking sites located at the trailheads. Hikers will be encouraged to return to their vehicles along the trail.

Kahakapao Loop Trail: The Department of Land and Natural Resources, Division of Forestry and Wildlife is currently studying this area of the Makawao Forest Reserve to increase the public parking area. The areas currently being utilized would still be optional along with the expanded parking area inside the Reserve boundary. Work on this project is proceeding according to plan and will alleviate future parking congestion.

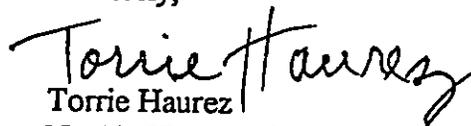
The sign on the Kahakapao Road gate states, "This gate may be locked at any time." Those who do not heed the warning stand the chance of having their vehicle locked inside. It is recommended that all vehicles park outside of the gate to avoid this possibility. Although there is very little traffic past the gate, foot traffic should stay well off the road to avoid mishaps with cars.

We invite the Native Hawaiian Plant Society to draft a proposal for an interpretive brochure for this trail. Safety, spread of non-native plants and hiker etiquette are important topics that can be expounded upon in a brochure along with information about the remnant native plant species. Signage for this area may include warning signs about;

hunters in the area, all pets must be leashed, do not litter, and other hazard of the area.
There are no really rare plant species in the immediate vicinity of the proposed trail.

If you have any further questions or comments, please contact Torrie Haurez of
the Division of Forestry and Wildlife at 873-3508.

Sincerely,



Torrie Haurez

Na Ala Hele, Trails and Access Specialist

NA ALA HELE
Hawaii Trail & Access System
Attn: Torrie Haurez
Room 101
54 South High Street
Wailuku, HI 96793

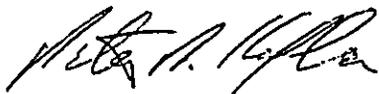
1/22/02

I am writing on behalf of the Sierra Club, Maui Group in response to the draft environmental assessment for construction and public use of the Kahakapao Loop Trail proposal for the Makawao Forest Reserve received December, 2001. The Sierra Club - Maui Group is very much supportive of this proposed trail. The loop trail as described will give hikers and outdoor enthusiasts access to a section of the Makawao Forest Reserve that has been difficult to reach since construction of the new reservoirs and tighter restrictions imposed on hikers entering from the top of Olinda Road.

Upon discussion at a recent Sierra Club executive meeting the only matter of concern was the issue of parking. I made a reconnaissance trip up to the access point of the proposed trail and also concur that parking might need to be addressed further. Also, the signage on the gate at the entrance to the Makawao Forest Reserve should be clarified. The sign now states, "This gate may be locked at any time". However there is no indication that one should not drive through the gate. If a hiker were to drive through the gate, would there be the possibility of getting locked in while out on the trail? It would seem that this possibility would need to be addressed in some manner.

Perhaps the best way to address the tight parking situation along the narrow county road would be to create a trail head and parking area either outside the gate or just inside the gate and move the gate further down the road. Recent personal experience has reminded me that county law enforcement does not look favorably upon parking on the shoulders of county roads. This is true at the gate on the top of Olinda Road and I suspect could become an issue at the end of Kahakapao Road as well. There is very little room to turn a vehicle around on Kahakapao road and since it is often wet in the area, the prospect of getting stuck or tearing up the road shoulders will be an issue.

Apart from the parking issues the club is excited about the prospect of this trail and we look forward to supporting you on this project.



Peter R. Kafka
Sierra Club, Maui Group
P.O. 2000
Kahului, HI 96733

BENJAMIN J. CAVETANO
GOVERNOR OF HAWAII



GILBERT S. COLOMA-AGARAN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTY DIRECTOR
ERIC T. HIRANO

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE
54 SOUTH HIGH ST., ROOM 101
WAILUKU, HAWAII 96793-2198

January 30, 2002

AQUACULTURE DEVELOPMENT
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HISTORIC PRESERVATION
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

Mr. Peter R. Kafka
c/o Sierra Club
P. O. Box 2000
Kahului, Hawaii 96733

Mr. Kafka,

Thank you for taking the time to read and respond to the Kahakapao Loop Trail DRAFT Environmental Assessment. The following is a response to your comments made as a result of the public review period.

The Department of Land and Natural Resources, Division of Forestry and Wildlife is currently studying this area of the Makawao Forest Reserve to increase the public parking area. The areas currently being utilized would still be optional along with the expanded parking area inside the Reserve boundary. Work on this project is proceeding according to plan and will alleviate future parking congestion.

The sign on the Kahakapao Road states, "This gate may be locked at any time." Those who do not heed the warning stand the chance of having their vehicle locked inside. It is recommended that all vehicles park outside of the gate to avoid this possibility.

If you have any further questions or comments, please contact Torrie Haurez of the Division of Forestry and Wildlife at 873-3508.

Sincerely,

A handwritten signature in cursive script that reads "Torrie Haurez".

Torrie Haurez
Na Ala Hele, Trails and Access Specialist

DOCUMENT CAPTURED AS RECEIVED



Aloha Torrie Hauere
my name is Bram Dentloan
vice president of Valley Isle Road
Runners. we want to get involved
with the new trail in Makawao
forest reserve. Our club has
450 members and I know most
of us support this trail. I
understand there is resentment
from the hunters. So we are
here to support you mahalo

Bram Dentloan
573-7584 cell 741 2726

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE
54 SOUTH HIGH ST., ROOM 101
WAILUKU, HAWAII 96793-2198

January 29, 2002

Mr. Bram DenHaan
c/o Valley Isle Road Runners Association
P.O. Box 330099
Kahului, Hawaii 96732

Mr. DenHaan,

Thank you for taking the time to read and respond to the Kahakapao Loop Trail
DRAFT Environmental Assessment.

If you have any further questions or comments, please contact Torrie Haurez of
the Division of Forestry and Wildlife at 873-3508.

Sincerely,

A handwritten signature in cursive script that reads "Torrie Haurez".

Torrie Haurez
Na Ala Hele, Trails and Access Specialist

GILBERT S. COLOMA-AGARAN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTY DIRECTOR

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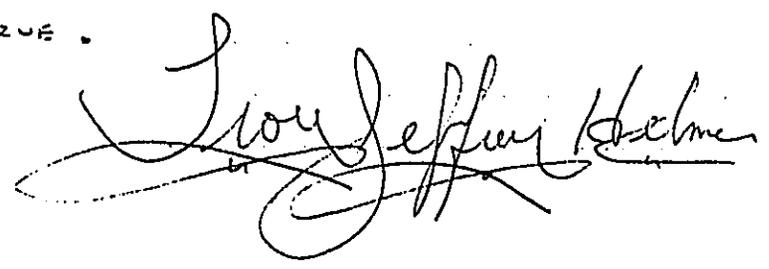
CARRIE HAUREZ / Robert Hobdy

My NAME is TROY JEFFREY HELMER AND I AM WRITTING TO YOU OPPOSING THE CONSTRUCTION OF THE KAHAKAPAO LOOP TRAIL IN THE MAIKAWAO FOREST RESERVE ON MAUI. AS IT STATES IN THE ENVIRONMENTAL ASSESSMENT ON THE PROPOSED KAHAKAPAO LOOP TRAIL THAT " THE RESERVE WAS ESTABLISHED IN 1908 TO PROTECT THE IMPORTANT WATER SHED." WHAT KIND OF PROTECTION IS CONSTRUCTING A MAJOR TRAIL FOR RECREATIONAL USERS? BY CONSTRUCTING THIS TRAIL IN ANYWAY IT IS " OPENING THE DOOR " SO TO SPEAK - TO FUTURE TRAILS IN YEARS TO COME. WHY DOES THE "STATE" WANT TO ALLOW MORE ACCESS INTO OUR PRECIOUS WATER SUPPLY THAT THE "STATE" IS SO DESPERATELY TRYING TO PROTECT. WHY DOES SOMEONE WHOM WANTS TO GO ON A NATURE HIKE WANT TO HIKE RIGHT PAST A WATER TREATMENT FACILITY ANYWAYS? WILL THESE TRAIL USERS DISTURB NORMAL OPERATION OF THE FACILITY BY USING PHONES, RESTROOMS, WATER ETC..? IS THERE A CAP ON HOW MANY PEOPLE WILL BE USING TRAIL? LET'S START FROM THE BEGGINING - PARKING - PARKING IS LIMITED AND WILL PARKING PROBLEM ALSO HINDER WATER TREATMENT FACILITY? BLOCKING GATE WHEN LOCKED OR WHEN GATE IS OPEN CARS DRIVING UP SO PEOPLE DON'T HAVE TO WALK UP THE FIRST STEEP GRADE (SHORT CUTS). WHAT ABOUT HORSE TRAILERS - WHERE ARE THEY GOING TO TURN AROUND? NEXT STEP - STARTING THE HIKE - ALREADY PRESENT TODAY ARE TRAIL MARKERS - BLUE RIBBONS - " PEOPLE TRASH " " VISUAL POLLUTION " - WHAT KIND OF " WILDERNESS TRAIL " HAS SUCH SCENIC VALUES AS PIECES OF BLUE RIBBON TIED ON TRAIL EVERY 10 FT? ONCE THIS

TRAIL is established MORE TRAILS will follow -
via shortcuts or easier ways around gulches
and obstacles - people will be exploring further
of trails or people will want to hike up to see
the Reservoirs where are water supply could be
easily contaminated (extreme example). Next thing
the trail will have additional Loops on
Borge Ridge, Gomes Ridge, End Ridge, and
the Road Access to Old Joes Looping the
Entire MAKAWAO STATE FOREST thru a series
of Looping trails. Where are the Hikers going
to use the rest room? What if they don't
carry water or run out of water will they
contract a disease from drinking stream water -
Leptospirosis? What is the proposed width
of this trail in feet? The MAUI mountains
including MAKAWAO STATE FOREST HAVE UNSEEN
DANGERS that the AVERAGE person may not be
able to content with and could result in bodily
injury and even death example: recent Landslide,
death in Piinaw - Lava tubes - slippery waterfall and
dangerous cliffs. ONCE the STATE opens this trail
it will soon be advertised in "The Hiking
MAUI BOOK" now we have wide publicity of
MAKAWAO FOREST PRESERVE. Known by tourists and
Residents both. There will be more people exercising
their "gathering rights" more access - less trails
and possible endangering other native plants and foliage.
What about the spread of invasive species that
hikers may bring in and help spread. Now
the trail is constructed - now we have TRAIL
MAINTENANCE. Spraying Herbicides on a so
called wilderness trail which is supposed to
have no evidence of man no has dead

Foliage due to spraying Round up - garbon
3 & 4. What about erosion and soil
that becomes sterile. What about pesticides?
RAT Poisons? When our dogs eat sprayed
grass or possible ingest poisoned RATS or
even eat LEFT OVER Human picnics - chicken
bones etc... What's gonna protect our dogs
from conducting the "Service" they offer safely?
Hunters have helped control animal damage
in the watershed for years, this "Service"
helps keep our vital water supply clean & pure.
Our dogs also help control unwanted mammals
such as FERAL cats, pigs, deer, mice, RATS, and
mongoose. RECREATIONAL users will definitely
interfere w/ hunters by pushing game around
and potentially farther into the watershed
where they are more difficult to remove.
Kahakapao is the only and easiest state
Hunting Area that allows Hunting w/ Dogs
and once this trail is established its only gonna
be a matter of time till there's a serious
confrontation. Are there gonna be special rules
and regulations established for using this trail
to help stop one interest from interfering with
another? example biker bombing down hills at
high rate of speed running into other trail users -
Horses being spooked by dogs - hikers or naturalists
hearing us catch a pig or see us carry out a
200 lb dead, bloody, pig and possible cut up dogs
(BOB PARKER incident) - what about lost hikers
who are you gonna call for help? - someone
who knows this area like the Hunters! Next
thing you know there will be overnight camping
and campground established.

If the TRAIL does get built everyone
"No exceptions" should be required to
wear BLAZE ORANGE on upper torso to
comply with states requirements during
legal hunting days. I understand as a
hunter that we are responsible for our
dogs and should have control of them -
what about a hikers dogs that might start
a fight with mine - who's at fault when my
dogs grow up on his? Hikers will definitely
SCARE AWAY game mammals by yelling, talking
etc... which will result in less game being
caught. I share the meat I catch in
the mountains with family and friends.
CANT SHARE if I DON'T catch! Opening
this trail means more access - more access means
more people - more people means more parking and
more TRASH - more TRASH brings rats & mongoose
when is more gonna be enough. I can think
of a lot of examples of potential dangerous
situations if this trail is opened and becomes
established but the BEST solution to avoid
all potential problems is DON'T EVEN OPEN
this trail at all. I 100% oppose this
trail being established in MAKAWAU STATE
FOREST PRESERVE.



TRUY JEFFREY HELMER
1-808-572-5278
FEEL FREE TO CALL ME

Aloha Tues.
Jan 29, 08

To Whom It May Concern,

I AM WRITING TO YOU IN REGARDS TO THE EXPANSION OF THE KAHAKAPUA TRAIL. MY MAIN CONCERN IS THE ENDANGERMENT OF OUR WATER SUPPLY. I AM VOICING MY OPINION TO OPPOSE YOUR PLAN. OPENING THE TRAIL TO THE PUBLIC WILL ONLY CREATE PROBLEMS. SUCH AS TRAFFIC, PARKING, LITTERING, PEOPLE GROOMING, PAKALO, CONFRONTATIONS WITH HUNTERS & HIKERS, HUNTERS & HIKERS w/ ANIMALS OR EVEN WITH HORSES. MAUI IS BEAUTIFUL BECAUSE THERE ARE PLACES STILL LIMITED OR UNTOUCHED. LETS TRY TO KEEP IT THAT WAY. YOU KNOW THERE ARE SOME PEOPLE JUST DONT READ SIGNS AND STAY ON TRAILS. INSTEAD, THEY TRY TO ADVENTURE OFF THINKING ITLL BE COOL TO EXPLORE. WELL, WHAT HAPPENS WHEN THOSE IDIOTS GETS LOST? IS OUR TAXPAYERS MONEY THATLL BE SPENT TO RESCUE THEM. IN THE BEST OF INTEREST OF KEEPING MAUI CAPPED AND NOT EXPLOITED, I VOTE AGAINST YOUR PLAN.

Maui
Stephen Jones

Attn. Carrie Hauvez

My name is Christopher Helmer and I am 13 yrs. old. I enjoy hunting alot. I don't like the idea of opening a trail in Kahakapao.

I enjoy the mountain and respect it by not littering when I hunt. Too many people allowed access will only make things worse. I want to keep that area the way it is so I will be able to hunt with my dad for many more years to come. I also don't want to see our water supply contaminated. I am still young and can't walk as far as a grown up. And if other people scare the pigs further in the water shed I won't be a successful hunter and won't catch many pigs. I enjoy catching pigs and deer in Kahakapao hunting area and so I can hunt there in the next generation so please don't change it for the worst.

Thank you.

Christopher Helmer.

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE
54 SOUTH HIGH ST., ROOM 101
WAILUKU, HAWAII 96793-2198

March 19, 2002

GILBERT S. COLOMA-AGAR
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTY DIRECTOR
ERIC T. HIRANO

AQUACULTURE DEVELOPMENT
PROGRAM
AQUATIC RESOURCES
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RESOURCES ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

Mr. Troy Jeffery Helmer
Mrs. Chocolate Helmer
Mr. Christopher Helmer
17 Hoolai Street
Makawao, Hawaii 96768

The Helmer Family,

Thank you for taking the time to read and respond to the Kahakapao Loop Trail DRAFT Environmental Assessment. The following is a response to your comments made as a result of the public review period.

The construction of the Kahakapao Loop Trail will not affect the legal hunting availability of the area. Weekends and Holidays will continue to be open to hunting in this area. This will not change because of the trail. Hunters are welcome to use the trail to access the area and to ease the retrieval of meat. Signs warning of hunter's presence will be posted.

The Makawao Forest Reserve is a multi-use area and has always been designated as such. Under this designation there is no one user-group that carries more authority or has more rights to an area than any other user group. Until 1997 when the Kahakapao Road was opened to the water treatment facility, there was no legal public access to the Makawao Forest Reserve. The area was accessible through private property only.

Public lands continue to be under heavy demand for recreation, including hunting, hiking, bicycling, equestrian use, etc., etc. All user-groups must show respect to others encountered in the forest. By using a few good manners and common sense, many unfortunate incidents can be avoided.

The Makawao Forest Reserve was established in part to provide recreation for the public. Many Maui residence that enjoy hiking bicycling and horseback riding live in the Upcountry area. This large section of the population deserves to have public areas accessible to them as equally as others.

The Department of Land and Natural Resources, Division of Forestry and Wildlife is currently studying this area of the Makawao Forest Reserve to increase the

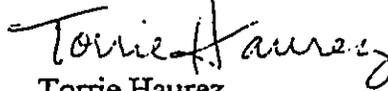
public parking area. The areas currently being utilized would still be optional along with the expanded parking area inside the Reserve boundary. Work on this project is proceeding according to plan and will alleviate future parking congestion.

The planned route of the trail will by-pass the water treatment plant. Access to the facility will be limited by construction of gates and fencing currently being proposed by the County Water Department.

The blue flagging delineating the proposed trail is a temporary marker and will be removed when the final route has been designated and construction begins. No further trails are planned for the Makawao Forest Reserve. Camping is not permitted within the Forest Reserve. Na Ala Hele never has and does not plan to utilize rodenticides.

If you have any further questions or comments, please contact Torrie Haurez of the Division of Forestry and Wildlife at 873-3508.

Sincerely,



Torrie Haurez

Na Ala Hele, Trails and Access Specialist

JEFFERY C. DEREGO

133 A Hea Street
Palani, HI 96768
(808) 573-1964 (H)
(808) 281-2611 (Cell)

January 16, 2002

Na Ala Hele, Trail and Access Program
54 South High Street, Room 101
Wailuku, HI 96793

Dear Na Ala Hele Trail and Access Program,

I am writing to comment regarding your proposed Kahakapao loop trail. It is hard to understand why more and more of our hunting areas are being taken or more so being shared. There are a lot of reasons why the trail should be made elsewhere. It's difficult to be hunting in an area that is to be shared with a hiker. All hunters are required to wear blaze orange for safety reasons. Hikers are not. This proposes a safety hazard to hikers. Kahakapao has been a hunting area for a very long time and there is no need for a hiking trail to be made there. At this location parking is not sufficient. There would be all kinds of people that would come to hike at the proposed Kahakapao trail, some that would cherish the area and some that would not care about the surroundings and wilderness. Having this area open to hikers would open it up for illegal activities that could occur. The first people that would be to blame would always be the hunters. There are certain areas that should be just left alone and Kahakapao is one of them. There is a lot of State land in the area of West Maui, these areas are not hunted. Maybe, a trail should be made there. Furthermore, a few miles away from Kahakapao, there is already an existing trail on Olinda Road by Waihou Springs. This area that you're proposing to make a trail, Kahakapao, is one of the most frequently used hunting areas. The reason being is that it is close to where a lot of upcountry hunters live, which makes it one of the most accessible hunting spots.

I hope you take my letter into consideration and try to look elsewhere. Thank you for your time.

Sincerely,



Jeffery C. DeRego

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



GILBERT S. COLOMA-AGARAN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTY DIRECTOR
ERIC T. HIRANO

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE
54 SOUTH HIGH ST., ROOM 101
WAILUKU, HAWAII 96793-2198

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CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

January 29, 2002

Mr. Jeffery C. Derego
133 A Ihea Street
Pukalani, Hawaii 96768

Mr. Derego,

Thank you for taking the time to read and respond to the Kahakapao Loop Trail DRAFT Environmental Assessment. The following is a response to your comments made as a result of the public review period.

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The Makawao Forest Reserve is a multi-use area and has always been designated as such. Under this designation there is no one-user group that carries more authority or has more rights to an area than any other user group. Until 1997 when the Kahakapao Road was opened to the water treatment facility, there was no legal public access to the Makawao Forest Reserve. The area was accessible through private property only.

Public lands continue to be under heavy demand for recreation, including hunting, hiking, bicycling, equestrian use, etc., etc. All user-groups must show respect to others encountered in the forest. By using a few good manners and common sense, many unfortunate incidents can be avoided.

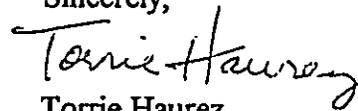
The Makawao Forest Reserve was established in part to provide recreation for the public. Many Maui residences that enjoy hiking, bicycling and horseback riding live in the Upcountry area. This large section of the population deserves to have public areas accessible to them as equally as others.

The Department of Land and Natural Resources, Division of Forestry and Wildlife is currently studying this area of the Makawao Forest Reserve to increase the public parking area. The areas currently being utilized would still be optional along with

the expanded parking area inside the Reserve boundary. Work on this project is proceeding according to plan and will alleviate future parking congestion.

If you have any further questions or comments, please contact Torrie Haurez of the Division of Forestry and Wildlife at 873-3508.

Sincerely,

A handwritten signature in cursive script that reads "Torrie Haurez".

Torrie Haurez

Na Ala Hele, Trails and Access Specialist

Jeff Merle
60 Makaanani Rd.
Makawao, HI 96768

Robert Hobdy
Dept. of Land & Natural Resources
Div. of Forestry & Wildlife
54 South High St., Room 101
Wailuku, HI 96793

Dear Mr. Hobdy,

I am writing to you in regards to the new trails planned for Makawao State Forest Reserve.

I bought property over 20 years ago up Piiholo Rd., bordering Makawao forest, to have my privacy and to have it quiet; I value this. All of us up here drive an extra 30 minutes a day to have this peace and quiet. The planned trail is basically in our backyards. How would you feel about this trail if you were us? Please have some respect for our style of living.

The traffic up Piiholo is bad enough as it is. Trucks pulling trailers up skinny Piiholo Rd. is a problem already. Piiholo stables are up here and some of us have had close calls with horse trailers. Why make it worse? Parking, turning around, etc. will make it worse for the residents up here.

I travel to the mainland every year for hunting, hiking and back country fishing. Every time horse or hiking trails are put in erosion is a problem. Now you want to do it in a rain forest? I thought one of the reasons for pig eradication was to slow down erosion? The area of topic is very steep and on normal years it gets a substantial amount of rain. Horse trails or trails period do not do well up here. Look at the Waihou Springs Trail. It is a lot drier there – maybe 1/3 the rainfall and major damage happens there – without horses or bikes – to add to it. I don't quite understand why a drier area isn't chosen. I don't follow your train of thought.

The hunters just recently were told they lost access to Waikamoi. Now it looks like they may lose Makawao Forest. Why should they be "rousted" out of this area too? A lot of hunters hit this area early and late in the day, before and after work on weekdays because it's close to their homes. Some of us even walk out of our houses to hunt up here. I have a hard time imagining that we can all use this area together. Sooner or later there will be problems between hunters,

horses, hikers and bikers. In the long run hunting and people who hunt out of their houses lose. This area is already being used by a group of people. Who are you to say your group is more important than another?

Financially how can we afford this now? From what I read in the paper these are hard times for the State and County financially. I look at these projects as frivolous – things you do when times are good. \$75,000 is a fair chunk of change.

Then in the Maui News January 5 article you ask for volunteers to help with trails because you “need help to maintain existing trails”. This means you can’t maintain what you have already.

Maybe, just maybe, we should slow down a tad and enjoy what we have.

From living on Maui for almost 30 years I have learned that Hawaii is about quality and not quantity. For us living up Piiholo we are trying to keep this quality. Please don’t take another piece of it away and replace it with quantity.

Thank you for your time.

Sincerely,

Jeff Merle

Cc: Na Ala Hele
Representative Kika Bukoski
Senator J. Kalani English

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE
54 SOUTH HIGH ST., ROOM 101
WAILUKU, HAWAII 96793-2198

January 29, 2002

GILBERT S. COLOMA-AGARAN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTY DIRECTOR
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HISTORIC PRESERVATION
LAND MANAGEMENT
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WATER AND LAND DEVELOPMENT

Mr. Jeff Merle
60 Makanani Road
Makawao, Hawaii 96768

Mr. Merle,

Thank you for taking the time to read and respond to the Kahakapao Loop Trail DRAFT Environmental Assessment. The following is a response to your comments made as a result of the public review period.

We feel the trail will be a positive addition to the recreational value of the Makawao Forest Reserve.

The access to the Kahakapao Loop Trail is through the Kahakapao Road. This road is located approximately 1.5 miles up Piihoho Road from Makawao Avenue. The road to this point travels through agricultural fields and is fairly straight and wide with adequate shoulders. The increase in traffic to the upper, more populated portion of Piihoho Road will not increase dramatically as a result of the opening of this trail. The Piihoho area has seen an accelerated increase in the number of homes being constructed in the past several years, as many areas on Maui have. This is more likely the cause of increased traffic to the area, not increased recreational use.

The location for the trail was determined for several reasons. This is the driest corner of the Reserve and also the most isolated. When proper construction techniques are utilized, annual rainfall will not be a detrimental factor in the maintenance of the trail. Major storm events can produce serious damage. These events are unpredictable and liable to strike any recreational area.

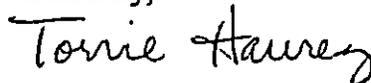
The construction of the Kahakapao Loop Trail will not affect the legal hunting availability of the area. Weekends and Holidays will continue to be open to hunting in this area. This will not change because of the trail. Hunters are welcome to use the trail to access the area and to ease the retrieval of meat. Signs warning of hunter's presence will be posted. The relative isolation of the trail will help to separate the user groups to a large extent.

The Makawao Forest Reserve is a multi-use area and has always been designated as such. Under this designation there is no one-user group that carries more authority or has more rights to an area than any other user group. The Makawao Forest Reserve was established in part to provide recreation for the public. Public access is not determined by residency. Until 1997 when the Kahakapao Road was opened to the water treatment facility, there was no legal public access to the Makawao Forest Reserve. The area was accessible through private property only. Public lands continue to be under heavy demand for recreation, including hunting, hiking, bicycling, equestrian use, etc., etc. All user-groups must show respect to others encountered in the forest. By using a few good manners and common sense, many unfortunate incidents can be avoided.

Na Ala Hele is a volunteer program established in 1988 through Chapter 198D, Hawaii Revised Statutes, initially in response to public concern about the increasing loss of public access to trails and the threat to historic trails from development pressure. In the last year nearly 170 volunteers donated approximately 2,285 hours of their time to the maintenance and construction of trails in Maui County. We utilize the strength and ability of community members who want to be of service to their fellows.

If you have any further questions or comments, please contact Torrie Haurez of the Division of Forestry and Wildlife at 873-3508.

Sincerely,



Torrie Haurez
Na Ala Hele, Trails and Access Specialist

Attn. Carrie Haurer

I am writing about the proposed trail in Kanakapao. I think by opening a trail your opening doors for confrontation, and possible tragedies. Take a look at some of the trails on neighboring islands. Quite a few of missing persons, lost persons, and serious injuries on these trails. Who rescues these people? and who pays for the rescue? the state and tax payers. These trails aren't easy and you must be in good condition to use these trails. Whether it be age, mental, or physical health problems not everybody will be suited for these types of trails. Also you would be inviting people to use these areas for illegal use. Such as cultivating, which means people will be making more trails branching from this main trail. Which means more visual pollution and much more forest damage. I thought our intention in Hawaii is to preserve the forest not destroy it. By opening such a trail is a invitation to forest destruction and forest pollution. Hunters are now using this area to help maintain the feral population. This includes, mice, rats, deer, mongoose, pigs. Which helps preserve the forest and especially our precious water supply. All it would take is one wrong person to contaminate our water supply to the east side. Us hunters provide a service for the state. We EARN our privilege to hunt. What do hikers do to preserve this precious land (especially tourist who don't respect the land like the people who live here). Not only do hunters provide a service for the state we also provide food for family & friends. I oppose of this trail!!!!

HERE ARE SOME Questions we should think about

- Where is the trash + human waste going to be put?
- PARKING; where are all these people going to park?
especially horse trailers.
- What chemicals will be used to maintain trails? Pesticides? environmentally safe or not?
- Confrontation; Hunting dogs - domestic dogs; horses - bike riders; Dogs - horses; Hiker - Hunters so on so forth. possible accident or tragedy. Who is at fault?
- Will camping be legal? Because there will be people camping, which means fires and garbage.

These are only a few questions I thought of. please respond soon

Thank you for your time



MIKE AWOLESON
P.O. BOX 1071
HAICK, HI 96708

808 575-2021

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE
54 SOUTH HIGH ST., ROOM 101
WAILUKU, HAWAII 96793-2198

January 31, 2002

GILBERT S. COLOMA-AGARAN
CHAIRPERSON
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HISTORIC PRESERVATION
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STATE PARKS
WATER AND LAND DEVELOPMENT

Mr. Mike Anderson
P. O. Box 1071
Haiku, Hawaii 96708

Mr. Anderson,

Thank you for taking the time to read and respond to the Kahakapao Loop Trail DRAFT Environmental Assessment. The following is a response to your comments made as a result of the public review period.

The construction of the Kahakapao Loop Trail will not affect the legal hunting availability of the area. Weekends and Holidays will continue to be open to hunting in this area. This will not change because of the trail. Hunters are welcome to use the trail to access the area and to ease the retrieval of meat. Signs warning of hunter's presence will be posted. Hunters are required to leave their animals on leashes until actually hunting. All other pets must be leashed at all times.

The Makawao Forest Reserve is a multi-use area and has always been designated as such. Under this designation there is no one user-group that carries more authority or has more rights to an area than any other user group. Until 1997 when the Kahakapao Road was opened to the water treatment facility, there was no legal public access to the Makawao Forest Reserve. The area was accessible through private property only.

Public lands continue to be under heavy demand for recreation, including hunting, hiking, bicycling, equestrian use, etc., etc. All user-groups must show respect to others encountered in the forest. By using a few good manners and common sense, many unfortunate incidents can be avoided.

The Makawao Forest Reserve was established in part to provide recreation for the public. Many Maui residences that enjoy hiking, bicycling and horseback riding live in the Upcountry area. This large section of the population deserves to have public areas accessible to them as equally as others.

The Department of Land and Natural Resources, Division of Forestry and Wildlife is currently studying this area of the Makawao Forest Reserve to increase the public parking area. The areas currently being utilized would still be optional along with

the expanded parking area inside the Reserve boundary. Work on this project is proceeding according to plan and will alleviate future parking congestion.

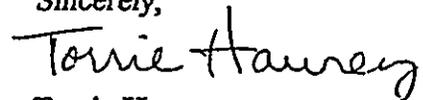
Signs advising all users to "Pack it In, Pack it Out" will be posted. No trash receptacles are currently maintained in the Makawao Forest Reserve. Most of our recreational areas do not have maintained trash receptacles. Largely, the type of person who visits our forest is not the type who litters, although there are exceptions to this rule.

The light use of herbicides will be kept to a minimum and only relied upon as a last resort. Roundup (Isopropylamine salt of Glyphosate) and Garlon 3A (Tricopyr) may be utilized.

Camping is not permitted.

If you have any further questions or comments, please contact Torrie Haurez of the Division of Forestry and Wildlife at 873-3508.

Sincerely,



Torrie Haurez

Na Ala Hele, Trails and Access Specialist

January 25, 2002

Re: Na Ala Hele Trails and Access Program

Dear Sir,

I oppose of any hiking trails in the area of Kahakapao Gultch in the Makawao Forrest Reserve. It is the only place in the Makawao area that is open to the public to hunt pigs with the use of dogs and not required to have an EMI waiver.

I have experienced hikers yelling and shouting in the hunting area and that will chase the pigs away. Also hikers take their dogs with them and that will cause some dog fights.

There are other areas that we are not allowed to hunt, with the use of dogs, that can be used for hiking trails. Hunting in this area goes back to our grandfathers days. Now I take my son and his youth friends there. If we lose this spot there is no other place close by to take them.

This place should be left for the local state tax payers. Hiking trails will bring in many outsiders and spoil one of the few areas we have left to hunt.

I feel that we hunters contribute a lot to our economy. We adopt dogs from the Humane Society. We buy a lot of dog food. We pay for our hunting license. We pay vetinary expenses and dog tags. We lose our fishing ground to surfers and now we are losing our hunting grounds to hikers and bikers.

I strongly feel that this place should be left alone for pig hunting for the tax payers of our state.

Sincerely yours,



Lawrence Tabaco
Maui Hunters and Sportsman Club

Lawrence Tabaco
2123 Kokomo Road
Haiku, Maui, HI

CORRECTION

THE PRECEDING DOCUMENT(S) HAS
BEEN REPHOTOGRAPHED TO ASSURE
LEGIBILITY
SEE FRAME(S)
IMMEDIATELY FOLLOWING

January 25, 2002

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I strongly feel that this place should be left alone for pig hunting for the tax payers of our state.

Sincerely yours,



Lawrence Tabaco
Maui Hunters and Sportsman Club

Lawrence Tabaco
2123 Kokomo Road
Haiku, Maui, HI

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE
54 SOUTH HIGH ST., ROOM 101
WAILUKU, HAWAII 96793-2198
January 31, 2002

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Mr. Lawrence Tabaco
2123 Kokomo Road
Haiku, Hawaii 96708

Mr. Tabaco,

Thank you for taking the time to read and respond to the Kahakapao Loop Trail DRAFT Environmental Assessment. The following is a response to your comments made as a result of the public review period.

The construction of the Kahakapao Loop Trail will not affect the legal hunting availability of the area. Weekends and Holidays will continue to be open to hunting in this area. This will not change because of the trail. Hunters are welcome to use the trail to access the area and to ease the retrieval of meat. Signs warning of hunter's presence will be posted. The Makawao Forest Reserve is a multi-use area and has always been designated as such. Under this designation there is no one user-group that carries more authority or has more rights to an area than any other user group. Until 1997 when the Kahakapao Road was opened to the water treatment facility, there was no legal public access to the Makawao Forest Reserve. The area was accessible through private property only.

Public lands continue to be under heavy demand for recreation, including hunting, hiking, bicycling, equestrian use, etc., etc. All user-groups must show respect to others encountered in the forest. By using a few good manners and common sense, many unfortunate incidents can be avoided. On the Island of Maui there are several Game Management Areas managed by the Department of Land and Natural Resources, which allow hunters to utilize dogs and do not require reservations to access. A free map depicting these areas can be obtained at the State Building on 54 South High Street, Room # 101, Wailuku.

If you have any further questions or comments, please contact Torrie Haurez of the Division of Forestry and Wildlife at 873-3508.

Sincerely,
Torrie Haurez
Torrie Haurez
Na Ala Hele, Trails and Access Specialist

January 29, 2002

To whom it may concern:

Re: Hiking trails in the Makawao State Forrest ^{Na} Ala Huli Trails & Access Program

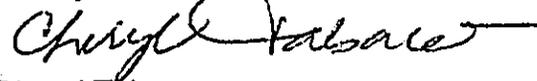
My husband, son and I have all completed the Hunter's Education classes and go to the Kahakapao Gulch area with our dogs for a family hunting experience. It is the only place in the Makawao area where we can go and hunt without having to call and make a reservation for the spot.

Every Monday night my family spends about 20 minutes trying to call for a place to hunt the following Saturday. The places itself are limited and there are times we don't get a place. My son is 11 years old and enjoys hunting tremendously.... my son took the class with myself as soon as he turned 10 years old. The Kahakapao area is safe and close to home... we take our dogs there to get trained and if they do get lost we can make a trip later in the day since it is close by.

Maui has been growing at a very rapid rate and slowly the hunters have been losing areas to hunt. It is a priveledge to be able to hunt.... we respect the area and always take care of the place. My son hopes to take his son there one day to hunt also.

It is very dangerous to have hunters and hikers in the same area. There are many other places to put hiking trails... please leave this area as it is for the hunters. As a family and as a mother please let us continue to hunt in this area. It is a safe area and convenient location to take a young child when they are first learning to hunt. My son has many fond memories of catching a pig in that area.... please let him have many more and not just a thing of the past.

Thankyou kindly



Cheryl Tabaco

Cheryl Tabaco
2123 Kokomo Road
Haiku, Maui, HI

Hunter, wife of a hunter, mother of a hunter

Re: Na Ala Hele Trails & Access Program

Dear Sir,

I'm an eleven year old boy. Please do not put the trails at Kaha Kapa'o. Kaha Kapa'o is the only place my dad can take me and my friends hunting on the weekends without reserving a place.

It's close to home and it's a big beautiful area. I am a member of the Mavi hunters and sportsmans club and alot of pigs were caught there. Everyone likes that place. If hunters can't reserve a hunting area, that's ~~it~~ one of the ^{a couple of} places they can go.

We hunters are being limited of hunting areas very fast. I love hunting and all the hunters will tell you the same.

My dad took me hunting when I was 6 years old. There was alot of pigs. Now that we are limited to hunting areas and people want to build or use are hunting areas for something else, there is not that much pigs left.

When I grow up and have kids of my own, I want to take them hunting too. If this stuff keeps on going

there will be no hunting places left.

Hunting was past on for a long time by Hawaiian's and now it just ^{going} end? No! We hunters want it to go on for a long time more! ~~Our~~ Kids past it on to their kids and to theirs.

As I said, It's a big area. That's the only place that ~~I~~ can go to hunt. If we don't reserve another hunting area. All the hunter oppose to this idea.

So please, don't put the trail there!!

Sincerely,

Martin Tabao 11 years old
6th grade
Kalama School
1-29-02

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



GILBERT S. COLOMA-AGARAN
CHAIRPERSON
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DEPUTY DIRECTOR
ERIC T. HIRANO

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WAILUKU, HAWAII 96793-2198
January 31, 2002

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Mrs. Cheryl Tabaco
2123 Kokomo Road
Haiku, Hawaii 96708

Mrs. Tabaco,

Thank you for taking the time to read and respond to the Kahakapao Loop Trail DRAFT Environmental Assessment. The following is a response to your comments made as a result of the public review period.

The construction of the Kahakapao Loop Trail will not affect the legal hunting availability of the area. Weekends and Holidays will continue to be open to hunting in this area. This will not change because of the trail. Hunters are welcome to use the trail to access the area and to ease the retrieval of meat. Signs warning of hunter's presence will be posted. The Makawao Forest Reserve is a multi-use area and has always been designated as such. Under this designation there is no one user-group that carries more authority or has more rights to an area than any other user group. Until 1997 when the Kahakapao Road was opened to the water treatment facility, there was no legal public access to the Makawao Forest Reserve. The area was accessible through private property only.

Public lands continue to be under heavy demand for recreation, including hunting, hiking, bicycling, equestrian use, etc., etc. All user-groups must show respect to others encountered in the forest. By using a few good manners and common sense, many unfortunate incidents can be avoided. On the Island of Maui there are several Game Management Areas managed by the Department of Land and Natural Resources, which allow hunters to utilize dogs and do not require reservations to access. A free map depicting these areas can be obtained at the State Building on 54 South High Street, Room # 101, Wailuku.

If you have any further questions or comments, please contact Torrie Haurez of the Division of Forestry and Wildlife at 873-3508.

Sincerely,
Torrie Haurez
Torrie Haurez
Na Ala Hele, Trails and Access Specialist

TO WHOM IT MAY CONCERN, JANUARY 10, 2002.

THIS LETTER IS ON BEHALF OF THE NA ALA HELE
TRAILS AND ACCESS PROGRAM IN MAKAWAO
STATE FOREST.

I HAVE BEEN LIVING IN HAWAII 19 YEARS
AND HAVE SEEN STATE PARKS AND LANDS
BE CLOSED OFF DUE TO ONE THING OR ANOTHER.

1- SACRED FALLS -

2- STAIRWAY TO HEAVEN

3- LA PEROUSE BAY AND HANAWANIOA LIGHT
HOUSE.

4- KAUPU GAP - FROM HALEAKALA CRISTATOR.

HIKING TRAILS, HUNTING AREAS AND FISHING AREAS,
AND CAMPING AREAS
ARE JUST SOME AREAS THAT THE PUBLIC HAS
LOST ACCESS TOO.

MAKAWAO STATE FOREST MUST REMAIN OPEN
TO HUNTING ON WEEKENDS AND HOLIDAYS SO OUR

FAMILY HAS A FOOD SOURCE STILL. HAWAIIAN

LANDS ARE PRIVATE EVERYWHERE AND OUR
WILD GAME THAT WE EAT FOR SURVIVAL IS

BE THREATENED EVERY DAY WITH POLITICS AND LAND
SALES. WE STILL HAVE A CHANCE TO SAVE THIS

FOREST WITH ALL FAIRNESS TO ALL ACTIVITIES.

WE HOPE THIS CAN HELP IN LIGHTEN YOU

ON OUR CONCERNS REGARDING ~~THE~~ THE

LANDS OPEN TO THE PEOPLE THAT ONLY WANT
TO PRESERVE NATURE AND SURVIVE NATURALLY

ON OUR NATURAL FOOD SOURCE. THE SPARRING OF
PIGS AND THE FENCE LINES UP ALONG EMI PROPERTY.

LET'S KEEP SOME LANDS FOR THE PEOPLE.

VIRGINIA M. ROSS

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



GILBERT S. COLOMA-AGARAN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTY DIRECTOR
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STATE OF HAWAII
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STATE PARKS
WATER AND LAND DEVELOPMENT

January 29, 2002

Mrs. Virginia M. Ross
99 Kawe Road
Haiku, Hawaii 96708

Mrs. Ross,

Thank you for taking the time to read and respond to the Kahakapao Loop Trail DRAFT Environmental Assessment. The following is a response to your comments made as a result of the public review period.

"...Makawao State Forest MUST remain open to hunting on weekends and Holidays so our family has a food source still..."

The construction of the Kahakapao Loop Trail will not affect the legal hunting availability of the area. Weekends and Holidays will continue to be open to hunting. This will not change because of the trail. Hunters are welcome to use the trail to access the area and to ease the retrieval of meat.

If you have any further questions or comments, please contact Torrie Haurez of the Division of Forestry and Wildlife at 873-3508.

Sincerely,

A handwritten signature in cursive script that reads "Torrie Haurez".

Torrie Haurez
Na Ala Hele, Trails and Access Specialist

To Whom It May Concern,

1-0-0-0

THIS LETTER IS REGARDING THE
NA ALA HOLE TRAILS AND ACCESS
PROGRAM:

I HAVE BEEN HUNTING THE ISLANDS
FOR 28 YRS. I WAS BORN ON THE ISLAND
AND BEEN HUNTING MAKAWAO STATE FOREST
FOR OVER 15 TO 20 YEARS. THE CONCERN
I HAVE IS THE TRAIL SHOULD REMAIN
OPEN TO THE PUBLIC FOR HUNTING ON
WEEKENDS AND HOLIDAYS. SO ALL COULD
HAVE THE PRIVILEGE TO USE STATE
LAND AND NOT BE CLOSED TO CERTAIN
ACTIVITIES THAT DON'T CAUSE HARM TO
THE ENVIRONMENT. THE IRADICATION OF
PIGS AND THE FENCET LINE BEING PUT IN
IS GOING TO CLOSE OFF A LOT OF FOOD SOURCE
FOR THE HUNTERS THAT GO ON A REGULAR
BASIS FOR A SOURCE OF FOOD FOR THEIR
FAMILIES. WE WOULD LIKE TO MAKE SURE
THESE CONCERNS ARE ADDRESS AS A TAX
PAYER IN THE STATE OF HAWAII AND AS
A HAWAIIAN DESENDANT. KAWIKA WEAVER.
KAWIKA WEAVER

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
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GILBERT S. COLOMA-AGARAN
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January 29, 2002

Mr. Kawika Weaver
c/o Virginia M. Ross
99 Kawe Road
Haiku, Hawaii 96708

Mr. Weaver,

Thank you for taking the time to read and respond to the Kahakapao Loop Trail DRAFT Environmental Assessment. The following is a response to your comments made as a result of the public review period.

"...The concern I have is the trail should remain open to the public for hunting on weekends and Holidays so all could have the privilege to use State land and not be closed to certain activities..."

The construction of the Kahakapao Loop Trail will in no way affect the legal hunting availability of the area. Weekends and Holidays will continue to be open to hunting. This will not change because of the trail. Hunters are welcome to use the trail to access the area and to ease the retrieval of meat.

If you have any further questions or comments, please contact Torrie Haurez of the Division of Forestry and Wildlife at 873-3508.

Sincerely,

A handwritten signature in cursive script that reads "Torrie Haurez".

Torrie Haurez
Na Ala Hele, Trails and Access Specialist

January 09 / 02

Na Ala Hele
Trails and Access Program
54 South High St. Room 101
Wailuku , HI 96793

To whom this concerns:

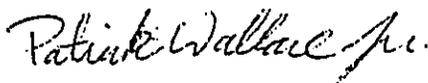
My name is Patrick Wallace Jr. I am the secretary of the Maui Hunters And Sportsman Club. My reason for this letter is focused directly on opposing the proposal for the Kahakapau Loop Trail

As a born and raised resident of this island, I have grown to see different actions by various organizations to constantly minimize and deplete our hunting lands here in Hawaii. Hunting has been a means of survival and a great tradition for many generations.

The Makawao State Forest is one of the few productive hunting areas here on Maui. It doesn't take reality to know what will be the outcome towards anti-hunter attitude if this trail were to exist. There are already too many hikers and tourist colliding with hunters in the mountain.

Hunting preservation deserves more rights than providing forest access for people who can hardly say they are a resident here. How is the increasing number of hunters dealing with decreasing hunting areas supposed to contribute to less unfortunate incidents from happening. The Nature Conservancy and other groups has already taken away thousands of acres of prime hunting and breeding grounds for game animals. Surely you can conduct your nature study and establish trails there. Hawaii isn't Hawaii without local tradition. Leave Makawao State Forest alone.

Sincerely,



Patrick Wallace Jr.

January 09 / 02

Na Ala Hele
Trails and Access Program
54 South High St. Room 101
Wailuku , HI 96793

To whom this concerns:

My name is Patrick Wallace Jr. I am the secretary of the Maui Hunters And Sportsman Club. My reason for this letter is focused directly on opposing the proposal for the Kahakapau Loop Trail

As a born and raised resident of this island, I have grown to see different actions by various organizations to constantly minimize and deplete our hunting lands here in Hawaii. Hunting has been a means of survival and a great tradition for many generations.

The Makawao State Forest is one of the few productive hunting areas here on Maui. It doesn't take reality to know what will be the outcome towards anti-hunter attitude if this trail were to exist. There are already too many hikers and tourist colliding with hunters in the mountain.

Hunting preservation deserves more rights than providing forest access for people who can hardly say they are a resident here. How is the increasing number of hunters dealing with decreasing hunting areas supposed to contribute to less unfortunate incidents from happening. The Nature Conservancy and other groups has already taken away thousands of acres of prime hunting and breeding grounds for game animals. Surely you can conduct your nature study and establish trails there. Hawaii isn't Hawaii without local tradition. Leave Makawao State Forest alone.

Sincerely,



Patrick Wallace Jr.

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE
54 SOUTH HIGH ST., ROOM 101
WAILUKU, HAWAII 96793-2198

January 29, 2002

GILBERT S. COLOMA-AGARAN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTY DIRECTOR

ERIC T. HIRANO

AQUACULTURE DEVELOPMENT
PROGRAM
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CONSERVATION AND
RESOURCES ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

Mr. Patrick Wallace, Jr.
P. O. Box # 1261
Haiku, Hawaii 96708

Mr. Wallace,

Thank you for taking the time to read and respond to the Kahakapao Loop Trail DRAFT Environmental Assessment. The following is a response to your comments made as a result of the public review period.

The construction of the Kahakapao Loop Trail will not affect the legal hunting availability of the area. Weekends and Holidays will continue to be open to hunting in this area. This will not change because of the trail. Hunters are welcome to use the trail to access the area and to ease the retrieval of meat. Signs warning of hunter's presence will be posted. The Makawao Forest Reserve is a multi-use area and has always been designated as such. Under this designation there is no one-user group that carries more authority or has more rights to an area than any other user group. Until 1997 when the Kahakapao Road was opened to the water treatment facility, there was no legal public access to the Makawao Forest Reserve. The area was accessible through private property only. Public lands continue to be under heavier demand for recreation, including hunting, hiking, bicycling, equestrian use, etc., etc. All user-groups must show respect to others encountered in the forest. By using a few good manners and common sense, many unfortunate incidents can be avoided.

Public trails cannot be established on private property without the authority of the landowner. The Makawao Forest Reserve was established in part to provide recreation for the public. Public access is not determined by residency.

If you have any further questions or comments, please contact Torrie Haurez of the Division of Forestry and Wildlife at 873-3508.

Sincerely,

A handwritten signature in cursive script that reads "Torrie Haurez".

Torrie Haurez
Na Ala Hele, Trails and Access Specialist

Alvin Jardine
678 Akaku St
Wailuku, HI. 96793-9218

Hope! and I know ^{FOR}
This letter will go in and out
of all who's affected and who's time
it takes, responding and how the same
aloha (love) as it was, in the beginning
of time, with all of the Hawaiian Islands ^{Earth}
before you and me. First - there was only WATER ^{NO}
_{LAND}

I born on the big island, raised in
Honolulu for 24 years then moved me and
my family (wife + 3 child) on Maui '73
our reason for moving here was simple -
Dood Fishing and Hunting - 80% to 95%

since then Fishing went down about 80%
Hunting? (Pigs) went down little more 90%
why? Simple!!! the circle has been
Broken - Yeh!

what goes around, comes around!?? yeh.
Simple!!!

and I now have 3 boys + 2 daughters ^{ages} 26 to 36 years
12 Grand children + 3 Homes - I own 2 of the

I reside at Wailea side (Waiahu area)
I still Hunt and Fish today - go to the
big island, Hunt Pig on Puna land - very good hunting

I feel very SAD + BAD for any one or body
who makes the wrong decisions. By swearing +

(Pigs) and fencing out the circle, that our God had put on
His EARTH in 6 DAYS, FOR ALL TO ENJOY AND MULTIPLY IN His
JAY ONLY - Simple Yeh!!! His way or NO way - IN AND OUT!!!!

LAW on MAUI "HUNTING ON WEEKENDS + HOLIDAYS" ANY THING
AFTER THAT DO WHAT YOU LIKE DO!!!!!! ^{cut trail} MAKE TRAILS

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE
54 SOUTH HIGH ST., ROOM 101
WAILUKU, HAWAII 96793-2198

January 30, 2002

GILBERT S. COLOMA-AGARAN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTY DIRECTOR
ERIC T. HIRANO

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CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

Mr. Alvin Jardine
678 Akakuu Street
Wailuku, Hawaii 96793-9218

Mr. Jardine,

Thank you for taking the time to read and respond to the Kahakapao Loop Trail
DRAFT Environmental Assessment.

If you have any further questions or comments, please contact Torrie Haurez of
the Division of Forestry and Wildlife at 873-3508.

Sincerely,

A handwritten signature in cursive script that reads "Torrie Haurez".

Torrie Haurez
Na Ala Hele, Trails and Access Specialist

Torrie Haurez, Maui, NAH

From: "Torrie Haurez" [REDACTED]
To: "Torrie at work" <nahmaul@aloha.net>
Sent: Wednesday, January 23, 2002 3:54 AM
Subject: Fw: Na Ala Hele

----- Original Message -----

From: Marianne Loach <pices@hgea.org>
To: Tori Haurez <[REDACTED]>
Sent: Tuesday, January 22, 2002 8:09 PM
Subject: Na Ala Hele

- > Hi Torrie,
- > I'm in support of Na Ala Hele and the new Kahakapao Loop Trail.
- > Mountain bikers have almost no legal places to ride here on Maui, yet
- > Maui is supposed to be an eco friendly place. A sport that promotes
- > fitness and well being such as mountain biking cannot be well pursued
- > here as the only legal place to ride is Poli Poli. This is a tragedy.
- > So I'm expressing my support of the new proposed trail which will be
- > legally accessible to mountain bikers as well as hikers, hunters and
- > horse back riding.
- > Thank you.
- > Marianne Loach
- >

1/24/2002

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Torrie Haurez, Maui, NAH

From: "Tomie Haurez, Maui, NAH" <nahmaui@aloha.net>
To: <pices@hgea.org>
Sent: Thursday, January 24, 2002 1:54 PM
Subject: Responce to e-mail

Ms. Loach

Your email concerning the Kahakapao Loop Trail was received at our office on January 23, 2002. Thank you for taking the time to express your concerns.

Sincerely,
Tomie Haurez
Na Ala Hele, Trails and Access Specialist
873-3508

1/24/2002

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21-Jan-02

Torrie Huarez
Na Ala Hele
DLNR
54 High St.,
Wailuku, HI 96793

Dear Ms. Huarez,

With this letter I would like to put my support behind the construction of trails in the Makawao Forest area, as proposed, for hikers, pedal bikers as well as for horses & riders.

There are far too few legal hiking and horse trails on Maui for the ever-growing number of hikers. And equestrian trails on public lands in the 1000 to 4000 ft elevation area are almost non-existent.

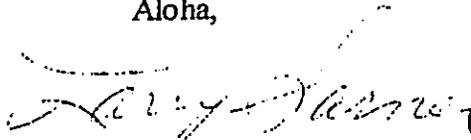
If hunters feel that these trails would be incompatible with their needs, I would prefer that they hunt further around toward the Keanae and Hana direction on EMI lands, etc. Actually, I would prefer that all pigs and goats be eradicated from the proposed area and hunting allowed for them by permit for the sole purpose of continued eradication.

I am a Maui home owner and first moved to Maui in 1972 and have enjoyed hiking many trails, and would like to see hiking possibilities expand.

In addition, I am an active member of the Mauna Ala Hiking Club, and at a recent meeting the attending club membership expressed unanimous support for these trails.

Thank you.

Aloha,



Larry Sarner

PO Box 1347
Haiku, HI 96708

808-575-9695
Lsarner@maui.net

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE
54 SOUTH HIGH ST., ROOM 101
WAILUKU, HAWAII 96793-2198

GILBERT S. COLOMA-AGARAN
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HISTORIC PRESERVATION
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

January 29, 2002

Mr. Larry Sarnier
P.O. Box 1347
Haiku, Hawaii 96708

Mr. Sarnier,

Thank you for taking the time to read and respond to the Kahakapao Loop Trail DRAFT Environmental Assessment. The following is a response to your comments made as a result of the public review period.

"... There are far too few legal hiking and horse trails on Maui for the ever-growing number of hikers. And equestrian trails on public lands in the 1000 to 40900 feet elevation area are almost non-existent..."

The Kahakapao Loop Trail is being constructed to allow more legal access to mountain bike riders and equestrians and to stem the illegal construction of trails within the Makawao Forest Reserve.

If you have any further questions or comments, please contact Torrie Haurez of the Division of Forestry and Wildlife at 873-3508.

Sincerely,

Torrie Haurez
Na Ala Hele, Trails and Access Specialist

January 21, 2002

Torrie Haurez
Na Ala Hele
54 S. High Street, Room 101
Wailuku, Hawaii 96793

Re: Kahakapao Loop Trail

I am writing this letter in support of the Kahakapao Loop Trail. I ride my mountain bike in this area at least once a week and the existing trails are inadequate. I would also like to volunteer to help work on this project.

Sincerely,



Jeff Affleck
808 572-6954

P.S. I understand that you have received negative feedback from hunters. Fact is I see a lot more hikers and mountain bikers using this area for recreation than hunters. Also, the proposed trail covers a small area and should not pose a threat to the hunters.

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE
54 SOUTH HIGH ST., ROOM 101
WAILUKU, HAWAII 96793-2188

GILBERT S. COLOMA-AGARAN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTY DIRECTOR
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HISTORIC PRESERVATION
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

January 28, 2002

Mr. Jeff Affleck
c/o Alltemp, Inc.
269 East Papa Place, Unit # 10
Kahului, Hawaii 96732

Mr. Affleck,

Thank you for taking the time to read and respond to the Kahakapao Loop Trail DRAFT Environmental Assessment. The following is a response to your comments made as a result of the public review period.

"...I ride my mountain bike in this area at least once a week and the existing trails are inadequate. I would also like to volunteer to help work on this project..."

The Kahakapao Loop Trail is being constructed to allow more legal access to mountain bike riders and to stem the illegal construction of trails within the Makawao Forest Reserve.

Your support through volunteering is appreciated. To contact the Na Ala Hele, Volunteer Coordinator, Mark Peyton, please phone 873-3509.

If you have any further questions or comments, please contact Torrie Haurez of the Division of Forestry and Wildlife at 873-3508.

Sincerely,

Torrie Haurez
Na Ala Hele, Trails and Access Specialist

1/17/02

ALOHA

I am writing this letter to show my support of the proposed "KAHAKAPAO Loop trail" in the MAKAWAO Forest Reserve.

MAUI HAS A SHORTAGE OF MOUNTAIN BIKE TRAILS (ONLY 3 FOR THE WHOLE ISLAND). We desperately need more TRAILS!

The "KAHAKAPAO Loop - TRAIL" will be a MULTI use TRAIL so it CAN be enjoyed by several RECREATIONAL user groups (Hiker, Bikers, hunters and equestrian

It is necessary to continue to open - ACCESS TO STATE LANDS so that the public CAN enjoy what is their LAND.

THANK YOU Thomas Armstrong
THOMAS ARMSTRONG
P.O. BOX 689
MAKAWAO, HAWAII
96768

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BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE
54 SOUTH HIGH ST., ROOM 101
WAILUKU, HAWAII 96793-2198

GILBERT S. COLOMA-AGARAN
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STATE PARKS
WATER AND LAND DEVELOPMENT

January 29, 2002

Mr. Thomas Armstrong
P. O. Box 689
Makawao, Hawaii 96768

Mr. Armstrong,

Thank you for taking the time to read and respond to the Kahakapao Loop Trail DRAFT Environmental Assessment. The following is a response to your comments made as a result of the public review period.

"...Maui has a shortage of mountain bike trails (only 3 for the whole island). We desperately need more trails..."

The Kahakapao Loop Trail is being constructed to allow more legal access to mountain bike riders and to stem the illegal construction of trails within the Makawao Forest Reserve.

If you have any further questions or comments, please contact Torrie Haurez of the Division of Forestry and Wildlife at 873-3508.

Sincerely,

Torrie Haurez
Na Ala Hele, Trails and Access Specialist

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FROM : EXTREME SPORTS MAUI

PHONE NO. : 808 871 8453

Jan. 31 2002 02:06PM P1

Kahakapao Trail supporters signature

EXTREME SPORTS MAUI

360 Papa Place Unit F
Kamahi, HI 96732

808-871-7954
808-871-8453

extreme@maui.net

January 30, 2002

To:
State of Hawaii
County of Maui

Re: New Multi-use trail near Makawao Town (Kahakapao Loop) The following petition is in support of Na Ala Hele's efforts to make this trail a reality. We feel that it would benefit both our economy, ecology by doing the following.

1. Keeping mountain bikers and others from accessing illegal trails, by providing them with more choices. Maui has a population of about 100,000 people and only one legal trail (Oahu, Kauai, Lanai, and Molokai all have lots of trails for locals and tourists to choose from).
2. Attracting new visitors to our island that may choose the outer islands because we can't sufficiently provide them with an attractive spot for them to go mountain biking. Which is one of the fastest growing sports today.
3. By attracting new visitors, we would in turn see a boost in our local economy, which is highly needed in today's market.
4. Spreading out the traffic on the only other legal trail, would make it a safer and more ecologically sound way to enjoy our sport.

We would also like to note that our group has had a very positive relationship with the local hunters. We have, on a few occasions helped them to locate lost dogs and even help them to find the areas the pigs are hiding in, when we see them or if they ask.

We believe that the expansion of the trail would help to sustain the great relationship we have with the local hunters, which is what we want.

We have also taken the initiative to clean the trail that is there now, by moving trees that have fallen and keeping the trail free of anything that could cause an unsafe ride.

Lastly, we wish to reiterate the fact that this would be an ecologically sound way to create and maintain harmony between Mountain bikers, hunters, bikers and all others who would have access to these areas.

Thank you for taking our opinions to heart.

FROM : EXTREME SPORTS MAUI

PHONE NO. : 808 871 8453

Jan. 31 2002 02:07PM P2

Name	Address (optional)	Signature
Glen Fuller	Stable Road	<i>[Signature]</i>
Robert Leiker	Stable Road	<i>[Signature]</i>
Janice DeQuary	73 Maunani Pl. Hahaione	<i>[Signature]</i>
Lee Nakayama	Waialeale	<i>[Signature]</i>
John Henderson	Kaia Hi	<i>[Signature]</i>
Charm Haslock	Kula HI	<i>[Signature]</i>
Scott Saxon	Waialeale	<i>[Signature]</i>
STAN O'DONOGHUE		<i>[Signature]</i>
Ronda Pacheco	Kula, HI.	<i>[Signature]</i>
Rickard Alford	Pukalani HI	<i>[Signature]</i>
JERRY ANTONIO	LAHAINA	<i>[Signature]</i>
TYLER STABBS	Makawao	<i>[Signature]</i>
Sheena Carney		<i>[Signature]</i>
Brooke Gibson		<i>[Signature]</i>
Paul Parrish		<i>[Signature]</i>
Steve Holtz		<i>[Signature]</i>
Dante BARLECO	Kula maui	<i>[Signature]</i>
Kevin Parker	Kula maui	<i>[Signature]</i>
Jose Franco		<i>[Signature]</i>
Alexander Pacheco		<i>[Signature]</i>
STEVE MORGAN		<i>[Signature]</i>
Thyrry Ukasaya		<i>[Signature]</i>
Keahi Lee	Kapili	<i>[Signature]</i>
Kula	A. SMITH	<i>[Signature]</i>



NA ALA HELE
Hawaii Trail & Access System

January 31, 2002

To Whom It May Concern,

Aloha and Mahalo for taking the time to read and respond to the Kahakapao Loop Trail DRAFT Environmental Assessment.

If you have any further questions or comments, please contact Torrie Haurez of the Division of Forestry and Wildlife at 8873-3508.

Sincerely,

Torrie Haurez
Na Ala Hele, Trails and Access Specialist

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SAMPLE FORM LETTER IN SUPPORT
AND SAMPLE RESPONSE LETTER
FOLLOWED BY LIST OF THOSE SENDING FORM LETTER

January 29, 2002

DLNR-DOFAW-Na Ala Hele
54 S. High St. #101
Wailuku, HI 96793

To Whom It May Concern:

I am writing in support of the development of the Kahahapao Loop Trail in the Makawao Forest Reserve in Maui. I understand this will be an equestrian/bike use trail. There is a great need for horse trails on Maui. We have few places to ride our horses. The shoulders of the roads in Kula are now filled up with guard rails that leave little room for horses or even people to walk on. I enjoy going on a nice trail ride and currently the only places available are Poli Poli and the Crater. I am very excited about the prospect of a new equestrian trail. Thank you for planning this trail for us. We look forward to riding on it in the near future.

Sincerely,


Elizabeth A. Carter



NA ALA HELE
Hawai'i Trail & Access System

January 31, 2002

To Whom It May Concern,

Aloha and Mahalo for taking the time to read and respond to the Kahakapao Loop Trail DRAFT Environmental Assessment.

If you have any further questions or comments, please contact Torrie Haurez of the Division of Forestry and Wildlife at 8873-3508.

Sincerely,

Torrie Haurez
Na Ala Hele, Trails and Access Specialist

Lorina Freitas
P.O. Box 900
Paia, Hawaii 96779

Geoff Sufficood
P.O. Box 2689
Wailuku, Hawaii 96793

Claire Crist
189 Piimauna Rd.
Pukalani, Hawaii 96788

Steven Hardesty
840 Piiholo Rd.
Makawao, Hawaii 96768

Jayne M. Hunkins
160 Keonekai, 11-101
Kihei, Hawaii 96732

Kathy Czar
480 Olinda Rd.
Makawao, Hawaii 96768

Sarah Cutter
1270 Olinda Rd.
Makawao, Hawaii 96768

Julio Spee
42 Nonohe Pl.
Paia, Hawaii 96779

Brittany Young
650 Cooke Rd.
Kula, Hawaii 96790

Helen Felsing
108 Kupuna Street
Kihei, Hawaii 96753

Extreme Sports Maui
360 Papa Pl., Unit F
Kahului, Hawaii 96732

Nancy Bannerman
840 Piiholo Rd.
Makawao, Hawaii 96768

Rick Cavoselli
c/o St. Anthony School
1618 L. Main St.
Wailuku, Hawaii 96793

Karen Devor
Box 342
Haiku, Hawaii 96708

Celestine Casserley
676 Holopuni Rd.
Kula, Hawaii 96790

Jennifer Vockrodt-Sykes
P.O. Box 1855
Makawao, Hawaii 96768

Kristina Amoral
P.O. Box 270
Makawao, Hawaii 96768

Frederic H. Martini
5071 Hana Hwy.
Haiku, Hawaii 96708-5954

Sonia Zane
1027 Mahanani Pl.
Makawao, Hawaii 96768

Kathleen Weld
5071 Hana Hwy.
Haiku, Hawaii 96708

Peter Martin
10 Kapii Street
Haiku, Hawaii 96708

Cherri Redd
P.O. Box 1901
Makawao, Hawaii 96768

Paul & Holly Davis
P.O. Box 499
Haiku, Hawaii 96708

Alicia Satterwhite
P.O. box 913
Puunene, Hawaii 96784

Julie McCould
P.O. Box 1650
Makawao, Hawaii 96768

Whitney White
c/o Starlight Farms
1135 Olinda Road
Makawao, Hawaii 96768

Rhiannon and Susan Hernandez
32 B Makani Rd.
Makawao, Hawaii 96768

Cynthia and Kelly Trawick
c/o Island Animal Hospital
P.O. Box 1202
Haiku, Hawaii 96708

Belinda Ling
99 Kapuai Rd.
Haiku, Hawaii 96708

D. Nunan
260 Awalau Rd.
Haiku, Hawaii 96708

Jillian Vickers
c/o Piiholo Stables
135 Makana Rd.
Makawao, Hawaii 96768

Lisa Cooper
201 Holomakani Pl.
Kula, Hawaii 96790

Jacqueline Wilson
17842 Haleakala Hwy.
Kula, Hawaii 96790

Donna Stuart
P.O. Box 1831
Wailuku, Hawaii 96793

Kimiko Hirabayashi
117 Hapapa Rd.
Kula, Hawaii 96790

Barbara Meinke
2692 Akalani Loop
Pukalani, Hawaii 96768

Jill Cross
350 Holpuni Rd.
Kula, Hawaii 96790

Debbie Cano
P.O. Box 790630
Paia, Hawaii 96779

Gary Green
3549 Malima Pl.
Kihei, Hawaii 96753

Sandy Ellison
c/o Happy Hula Horse Ranch
612 Omaopio Rd.
Kula, Hawaii 96790

Frank Foti
P.O. Box 471
Makawao, Hawaii 96768

Janice Simmons
75 Awakea Lp.
Pukalani, Hawaii 96768

John and Aandia Papasian
26 Pea Pl.
Kula, Hawaii 96790

Milano Trimino
780 E. Kuiaha Rd.
Haiku, Hawaii 96708

Jessica Gladstone Martin
480 Olinda Rd.
Makawao, Hawaii 96768

PK & Betty Martini
99 Haumana
Haiku, Hawaii 96708

Sue Guille, President
c/o Hawaii Equestrian & Trails Assn.
P.O. Box 4026
Kahului, Hawaii 96733

Mary Bonner-Naylor
980 Hoomanamana Pl.
Makawao, Hawaii 96768

Steve Strasinger
2586 Haupoa Pl.
Haiku, Hawaii 96708

Susan Rubenstein
Hana Smookler
33 Lohelani Pl.
Haiku, Hawaii 96708

Clayton Matchett, D.V.M.
c/o Maui Equine Vet. Services
P.O. Box 880668
Pukalani, Hawaii 96788

Matt & Felicia Provencal
320 L. Kimo Dr.
Kula, Hawaii 96790

Daniel & Carrie Owan
84 Uakoko Pl.
Haiku, Hawaii 96708

Mark Hutto
333 Naele
Kula, Hawaii 96790

Susan Vandrwoude
P.O. Box 512
Kula, Hawaii 96790-0512

Scot & Jill Mackie
2835 Kokomo Rd.
Haiku, Hawaii 96708

Beth Strasinger
2586 Haupoa Place
Haiku, Hawaii 96708

Lanikai Vacation Rental
c/o Dharma Feldmann
181 Lanikai Pl.
Haiku, Hawaii 96708

E. Brewerton
88 Hawea Pl.
Makawao, Hawaii 96768

Angelee Meyer
12 Pokoa Pl.
Haiku, Hawaii 96708

Rowdy A. Fernandez
936 Makani Rd.
Makawao, Hawaii 96768

Linda Marie Auger
P.O. Box 36
Kahului, Hawaii 96733

Jacqueline Becker
P.O. Box 880558
Pukalani, Hawaii 96788

Saundea J. Calo
88 Kino St.
Pukalani, Hawaii 96768

Amber R. Coleman
1129 Mano Dr.
Kula, Hawaii 96790

Sarah Rogers
577 Omaopio Rd.
Kula, Hawaii 96790

Sharon Shizekawa
404 Copp Rd.
Kula, Hawaii 96790

Jill Fairechild
P.O. Box 1177
Kula, Hawaii 96790

Julie Jar
87 A Mahiai Pl.
Makawao, Hawaii 96768

Lori Thompson
577 Omaopio Rd.
Kula, Hawaii 96790

Christie Nakaganeku
80 Alapio Pl.
Makawao, Hawaii 96768

Carol Cornwell
SR Box 62
Kula, Hawaii 96790

Melonie D. Fernandez
936 Makani Rd.
Makawao, Hawaii 96768

Daren O'Conner
41 Kamila St.
Kula, Hawaii 96790

Diana M. Custer
375 W. Kuiaha Rd., Ste. 30
Haiku, Hawaii 96708

Elizabeth Russell
58 Kealakapu Rd.
Kula, Hawaii 96790

Harley L. Keird
726 Pelehaka Pl.
Makawao, Hawaii 96768

Bill Russell
HC-1 Box 58
Kula, Hawaii 96790

Beverly Young
SR Box 42
Haiku, Hawaii 96708

Doug Smith
834 Naalae Rd.
Kula, Hawaii 96790

Eva & Gary Blumenstein
20 N. Laelua Pl.
Paia, Hawaii 96779-8112

Richard Spork
2589 Lemi Place
Haiku, Hawaii 96708

Margie Coon
455 Liholiho St.
Wailuku, Hawaii 96793

Greg Davidge
263 Kula Way
Kula, Hawaii 96790

Thomas Bachig
RR2 Box 167
Kula, Hawaii 96790

Hortense Joaquin
285 Mena Road
Makawao, Hawaii 96768

JJ Costa
67 C Maha Rd.
Makawao, Hawaii 96768

Cathy Wright
111 UaOa Loop
Haiku, Hawaii 96708

Benjamin Barreras
c/o World Wide Publications
668-A Luakini St.
Lahaina, Hawaii 96761

Pamela Gould
4020 Kula Highway
Kula, Hawaii 96790

Ken Sirkus
P.O. Box 4003
Kahului, Hawaii 96732

Rose Freitas
1341 Makawao Ave.
Makawao, Hawaii 96768

COMMENT LETTERS RECEIVED AFTER THE DEADLINE
AND SAMPLE RESPONSE LETTER

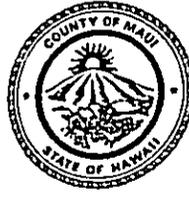
DIVISION OF AQUATIC RESOURCES - MAUI
DEPARTMENT OF LAND & NATURAL RESOURCES
130 MAHALANI STREET
Wailuku, Hawaii 96793
Phone # (808) 243-5834
February 12, 2002

To: Ms. Torrie Haurez, Trails and Access Specialist
From: *Sh* Skippy Hau, Aquatic Biologist
Subject: Kahakapao Loop Trail (TMK 2-2-4-016-002)
and Ohai Trail (TMK 2-3-1-003-006)

I reviewed the environmental assessment reports and had no comments.

The proposed plans to improve the trails and protection of native plants will help protect the watershed and reduce runoff. There were no streams in close proximity to these areas.

JAMES "KIMO" APANA
Mayor



FLOYD S. MIYAZONO
Director

GLENN T. CORREA
Deputy Director

(808) 270-7230
Fax (808) 270-7934

DEPARTMENT OF PARKS & RECREATION
1580-C Kaahumanu Avenue, Wailuku, Hawaii 96793

February 7, 2002

Ms. Torrie Haurez
Na Ala Hele, Trails and Access Program
54 South High Street, Room 101
Wailuku, Hawaii 96793

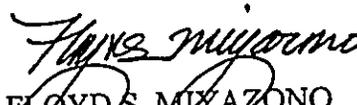
Dear Ms. Haurez:

SUBJECT: KAHAKAPAO LOOP TRAIL, MAUI, HAWAII
TMK: 2-2-4-016-002

Thank you for the opportunity to review the Draft Environmental Assessment for the Kahakapao Loop Trail project. We are in support of the proposed project.

If there are any questions, please contact me or Mr. Patrick Matsui, Chief of Parks Planning and Development, at 270-7387.

Sincerely,


FLOYD S. MIYAZONO
Director

c: Patrick Matsui, Chief of Planning and Development

Quality Seamless Service – Now and for the Future

SUPPORT FORM LETTER (EXAMPLE INCLUDED)

Lafayette Young
SR Box 42
Haiku, Hawaii 96708

Meliss Kikkert
Teresa K. Lopez
121 Oili Rd.
Haiku, Hawaii 96708

Kirsten Peet
P.O. Box 10667
Lahaina, Hawaii 96761

Kandi S. O'Brien
147 Halona St.
Kihei, Hawaii 96753-8523

Lori Stewart
P.O. Box 1184
Makawao, Hawaii 96768

Michelle Villanti
1135 Makawao Ave.
PMB#340
Makawao, Hawaii 96768

Mary Smithson
P.O. Box 1555
Makawao, Hawaii 96768

Leslie Heltzen
129 Pumauma St.
Pukalani, Hawaii 96768

Diesel
P.O. Box 604
Kula, Hawaii 96790

SUPPORT LETTER (INCLUDED)

Steve Fisher
P.O. Box 12506
Lahaina, Hawaii 96761

Marsha Sarver
18 Haiku Nani Place
Haiku, Hawaii 96708

The Glauser Family
1392 Hiahia St.
Wailuku, Hawaii 96793

OPPOSED (INCLUDED)

Jodi Santos Bras
Gina Santos Bras
170 W. Kauai St.
Kahului, Hawaii 96732

February 5, 2002

DLNR-DOFAW-Na Ala Hele
54 S. High St. # 101
Wailuku, HI 96793

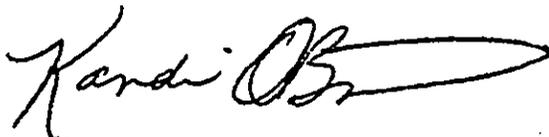
To Whom It May Concern:

I am writing in support of the development of the Kahahapao Loop Trail in the Makawao Forest Reserve in Maui. I understand this will be an equestrian use trail. There is a great need for horse trails, we have few places to ride our horses. We are very excited about the prospect of a new equestrian trail. Out door living is what Maui is all about. Thank you for allowing us to enjoy it's beauty by making this opportunity possible.

Thank you for planning this trail. If I can be of any assistance or help please let me know.

We look forward to riding on it in the near future.

Sincerely,



Kandi S. O'Brien
Maui Resident since 1986

808-879-7461

4/3/2002

Aloma,

This is a letter written to you and your department in support of more access to trails on Maui, especially the Makawao Forest. I am an avid hiker, biker, and forest runner. Please take this letter and others that are written to you concerning hiking/biking trails seriously.

I appreciate your openness and work in securing more trails for tourists and Maui locals.

Thank-you,

Steve Fisher

January 27, 2002

Torrie Haurez
Na Ala Hele
54 S. High Street
Wailuku, HI 96793

Dear Torrie,

I fully support Na Ala Hele & the construction of the new Kahakapao Trail in Makawao. While Na Ala Hele has created & maintained some of the best hiking trails on the island, legal trails are limited on this island, and there is a need for more multi-use areas. Please sign me up to volunteer when the Kahakapao Trail gets started.

Sincerely,



Marsha Sarver
18 Haiku Nani Place
Haiku, HI 96708
575-9796

1392 Hiahia Street
Wailuku, HI 96793

March 2, 2002

Torrie Haurez
Na Ala Hele
54 S. High Street, Room 101
Wailuku, HI 96793

RE: Kahakapao Loop Trail

We would like to let it be known that we support Na Ala Hele's efforts in providing trail access for multiple users. Development of the Kahakapao Loop Trail will defiantly help fill a community need for access to natural places. As Maui becomes more urbanized, this need continues to become greater.

As avid hikers and mountain bikers we are stunned by the dearth of legal areas to enjoy these activities on Maui. Going into a natural place after a hard day at work can help reduce one's stress level. We feel Maui would be a more desirable place to live if there was more trail access.

Sincerely,



The Glauser Family

DOCUMENT CAPTURED AS RECEIVED

Jodi Santos Bras
170 West Kauai Street
Kahului, HI 96732

January 30, 2002

Na Ala Hele Trails and Access Program
54 South High Street Room 101
Wailuku, HI 96793

Regarding : Trails on Makawao State Land

Dear Sir or Ma'am,

I disagree on this proposal, Me and my family have been hunting on the Makawao State Land for many years and believe this trails will interfere with our hunting areas.

Please reconsider another area for trails.

Thank you in advance for your time.

Should you have any further questions, please do not hesitate to write me.

Sincerely,



Jodi J. Santos Bras

cc: Governor Ben Cayatono
Mayor James Apana

Gina Santos Bras
170 West Kauai Street
Kahului, HI 96732

January 30, 2002

Na Ala Hele Trails and Access Program
54 South High Street Room 101
Wailuku, HI 96793

Regarding : Trails on Makawao State Land

Dear Sir or Ma'am,

I strongly disagree on this proposal for trails and access to the Makawao State Land. I have been hunting with my husband for many years and know that trails will make it difficult to hunt in this area for many reasons and probably there will be accidents bound to happen between hunters and hikers.

Please reconsider another area for trails.

Thank you in advance for your time.

Should you have any further questions, please do not hesitate to write me.

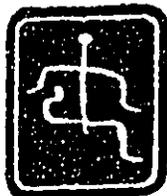
Sincerely,



Gina Santos Bras

cc: Governor Ben Cayatono

Mayor James Apana



NA ALA HELE
Hawai'i Trail & Access System

March 19, 2002

To Whom It May Concern,

Aloha and Mahalo for taking the time to read and respond to the Kahakapao Loop Trail DRAFT Environmental Assessment. The deadline for acceptance of comments was January 31, 2002. Your letter was received after that date, but will be kept on file.

If you have any further questions or comments, please contact Torrie Haurez of the Division of Forestry and Wildlife at 873-3508.

Sincerely,

Torrie Haurez
Na Ala Hele, Trails and Access Specialist