

DEPARTMENT OF HAWAIIAN HOME LANDS  
**MOLOKA'I ISLAND PLAN**



THE DEPARTMENT OF  
HAWAIIAN HOME LANDS



STATE OF HAWAII

**GROUP 70**  
INTERNATIONAL

June 2005





# Moloka'i Island Plan

June 2005

Department of Hawaiian Home Lands



State of Hawai'i





---

## Executive Summary







## EXECUTIVE SUMMARY

### TABLE OF CONTENTS

ES.1	Department of Hawaiian Home Lands Planning Guidance .....	ES-1
ES.2	Moloka'i Island Plan and General Plan Policies .....	ES-1
ES.3	Land Use Plan.....	ES-2
ES.3.1	‘Ualapu’e Land Use Plan .....	ES-5
ES.3.2	Kapa’akea, Kamiloloa, Makakupa’ia Land Use Plan .....	ES-7
ES.3.3	Kalama’ula Land Use Plan .....	ES-9
ES.3.4	Kalaupapa-Pālā’au (Apana 3) Land Use Plan .....	ES-11
ES.3.5	Ho’olehua- Pālā’au (Apana 1 & 2) Land Use Plan.....	ES-13
ES.4	Priorities for Residential Development.....	ES-14
ES.4.1	Residential Priority 1: ‘Ualapu’e.....	ES-14
ES.4.2	Residential Priority 2: Kapa’akea, Kamiloloa, Makakupa’ia .....	ES-16

### LIST OF FIGURES

Figure ES.1	DHHL Planning System.....	ES-2
Figure ES.2	DHHL Landholdings on Moloka’i .....	ES-3
Figure ES.3	‘Ualapu’e Preferred Land Use Plan.....	ES-6
Figure ES.4	Kapa’akea, Makakupa’ia, Kamiloloa Preferred Land Use Plan .....	ES-8
Figure ES.5	Kalama’ula Preferred Land Use Plan.....	ES-10
Figure ES.6	Kalaupapa-Pālā’au Land Use Plan .....	ES-12
Figure ES.7	Ho’olehua-Pālā’au Preferred Land Use Plan .....	ES-15

### LIST OF TABLES

Table ES.1	DHHL Land Use Designations .....	ES-4
Table ES.2	Acreage Summary by Land Designation Under the MIP .....	ES-4







## EXECUTIVE SUMMARY

### ES.1 DEPARTMENT OF HAWAIIAN HOME LANDS PLANNING GUIDANCE

The Hawaiian Homelands Program was started in 1921 with the passage of the Hawaiian Homes Commission Act which was enacted by the U.S. Congress as a homesteading program to place native Hawaiians, defined as “any descendant of not less than one-half part of the blood of the races inhabiting the Hawaiian Islands previous to 1778”, on designated lands. As the responsible authority to implement the Act, the mission of the Department of Hawaiian Home Lands (DHHL) is to manage its landholdings held in trust effectively and to develop and deliver these lands to native Hawaiians. To accomplish this, DHHL uses a tiered Planning System that begins with the DHHL General Plan (GP) for developing long-term strategies to determine responsible uses of these lands (*Figure ES.1*).

The second tier of the DHHL Planning System includes the development of Island Plans, which are regional 20-year visioning documents that designate areas for residential, agricultural, pastoral homestead as well as conservation, special district, community use, and income generating uses.

### ES.2 MOLOKAI ISLAND PLAN AND GENERAL PLAN POLICIES

The Moloka'i Island Plan (MIP) provides recommendations for the future use of the 25,899 acres and indicates specific areas for priority homestead development. With respect to the island of Moloka'i, the primary objectives of the GP that guided the development of the MIP included the following:

- Designate all DHHL lands with one of the land use categories under the General Plan;
- Deliver at least 400 Residential homesteads, or an average of 20 new lots per year;
- Provide space for and designate a mixture of appropriate land uses, economic opportunities and community services in a native Hawaiian-friendly environment;
- Ensure existing homestead neighborhoods are maintained as healthy and attractive communities for future generations;
- Provide agriculture and pastoral homestead lots for subsistence and supplemental purposes;
- Provide general lease agriculture and pastoral lots of adequate size for commercial farming or ranching business purposes by native Hawaiians.
- Identify and establish a clear understanding of existing water resources available to the Hawaiian Home Trust;
- Preserve and protect significant natural, historic and community resources on Trust lands;
- Manage interim land dispositions in a manner that is environmentally sound and does not jeopardize their future uses;
- Allow native Hawaiian use of natural resources on Trust lands for traditional and cultural purposes;
- Use no more than 1% or 266 acres on Moloka'i of DHHL lands for Commercial and Industrial uses by 2014; and
- Establish and implement a planning system that increases beneficiary participation in the development and use of Hawaiian home lands and improves communications between DHHL and the beneficiary community.





Figure ES.1 - DHHL Planning System

### ES.3 LAND USE PLAN

The planning process for the MIP was initiated in August 2004 and was developed over a 10-month period that included input from DHHL staff, commissioners, and beneficiaries. The planning process began with a review of previously conducted studies, reports, and analyses and included a survey of beneficiaries to gather information about their lease and, location preferences, and desired community facilities. This information was synthesized and analyzed through the creation of a Geographic Information System (GIS) that was used to formulate a baseline understanding of environmental, socio-economic, and cultural features of the land parcels and the potential range of alternative scenarios. These alternatives were presented at a series of community meetings held throughout the island and were refined based on input gathered during these meetings, whereupon preferred land use alternatives were formulated. Based upon evaluating criteria that included order of magnitude costs and an assessment of community needs, priority areas for development were identified.

DHHL lands on Moloka'i are situated in five major areas that include 'Ualapu'e, Kapa'akea, Makakupa'ia, Kamiloloa, Kalama'ula, Kalaupapa, Pālā'au, and Ho'olehua and comprise a total of 25,899 acres (Figure ES.2). A synopsis of the major land use designations for these lands (Table ES.1 and ES.2) as provided in the MIP are discussed below.

**Residential Homesteads** - The plan proposes 417 new residential homesteads at a total cost of \$44.8 million. The priority Residential uses will be focused in 'Ualapu'e, Kapa'akea, Makakupa'ia, and Kamiloloa. Residential areas on DHHL lands on Moloka'i consists of 742 acres.







*Agriculture Homesteads* – The plan calls for the completion of the previously awarded 58 Nā'iwa Agricultural lots in Ho'olehua and proposes to allow the subdivision of specific lands in Ho'olehua that could potentially yield 544 agriculture homesteads at a cost of \$25.8 million (M). However, the limiting factor for this development is securing an adequate provision of a potable water source to support the projected demand of 1.53 mgd. Approximately 2,350 acres have been designated for Subsistence Agriculture while an additional 5,862 acres have been classified as Supplemental Agriculture.

*Pastoral Homesteads* – The existing pastoral uses on approximately 1,927 acres will be maintained.

*General Agriculture* – Over 8,498 acres of land island-wide are designated General Agriculture. This designation preserves the land for a possible future use and makes it available for groups or individuals to lease it for farming and ranching. Beneficiaries interested in large scale agriculture or ranching are encouraged to lease general agriculture areas. General agriculture areas are located in 'Ualapu'e, Kapa'akea, Makakupa'ia, Kamiloloa, Kalama'ula, and Ho'olehua.

*Special District* – The 5,558 acres designated Special District includes environmentally or culturally sensitive lands in 'Ualapu'e, Kapa'akea, Makakupa'ia, Kamiloloa, Kalama'ula, Kalaupapa, and Ho'olehua. Lands in this category should be protected but also made available for certain community and commercial uses.

*Community Use* – A total of 234 acres are designated Community Use and includes areas in residential communities such as school and parks sites as well as community use areas with regional significance. Activities related to Community Based Economic Development are also in this category. Community uses are found in all DHHL tracts on the island.

*Conservation* – 655 acres of environmentally sensitive areas in Kalaupapa and Ho'olehua are designated as Conservation lands and are consistent with the boundary demarcations set by the State Land Use Commission.

*Commercial* – 58 acres of land are designated in Kalama'ula and Ho'olehua as Commercial for income generation purposes for DHHL.

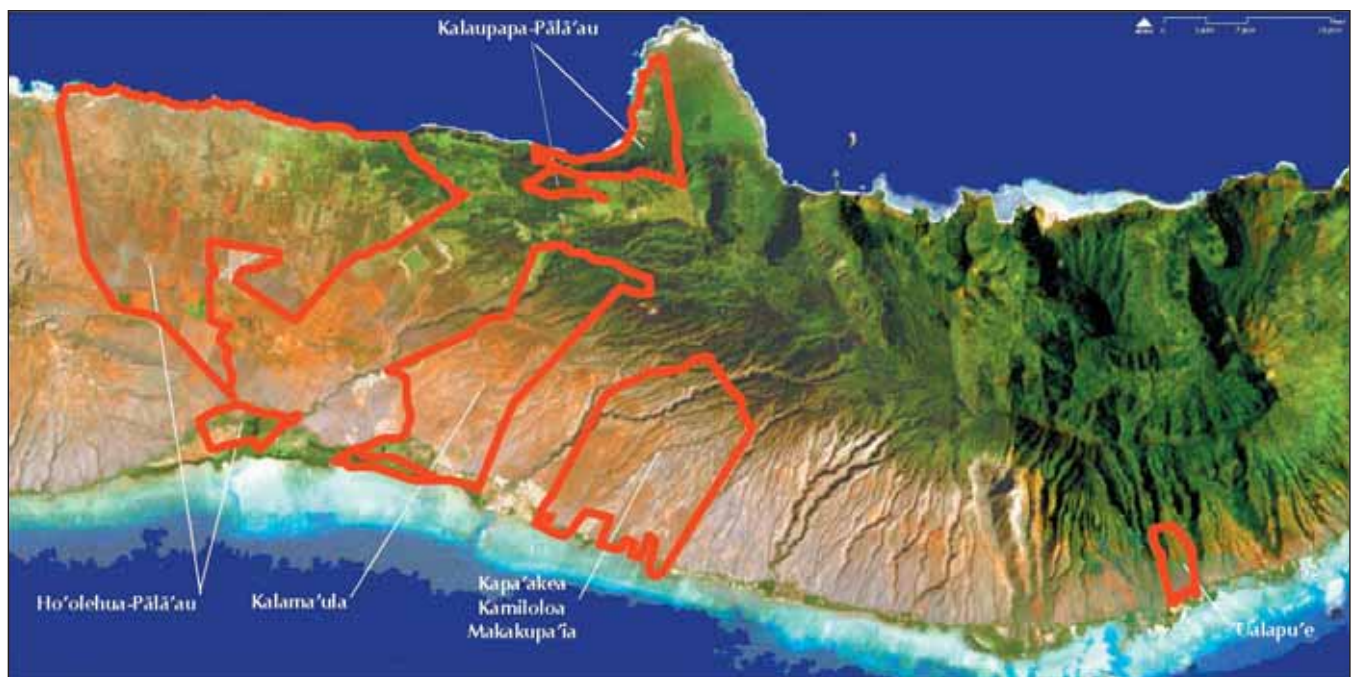


Figure ES.2 - DHHL Landholdings on Moloka'i





SETTING/INTENT PURPOSE		LOT SIZE	MINIMUM INFRASTRUCTURE
<b>Residential (Homestead)</b>	Residential subdivisions built to County standards in areas close to existing infrastructure	≤ 1 acre	County Standards
<b>Subsistence Agriculture (Homestead)</b>	Small lot agriculture. Lifestyle areas intended to allow for home consumption of agricultural products. Occupancy optional.	≤ 5 acres	Water (catchment or potable or surface) Road access
<b>Supplemental Agricultural (Homestead)</b>	Large lot agriculture. Intended to provide opportunities for agricultural production for supplemental income & home use. Occupancy optional. Farm plan & 2/3 cultivation required.	≤ 40 acres	Water (catchment or surface) Road access
<b>Pastoral (Homestead)</b>	Large lot agriculture specifically for pastoral uses. Occupancy optional. Ranch plan & fencing required.	≤ 1,000 acres	Road access & livestock drinking water
<b>General Agriculture</b>	Intensive or extensive farming or ranching allowed. Uses subject to HRS Chapter 205. May serve as an interim use until opportunities for higher & better uses become available.	TBD	N/A
<b>Special District</b>	Areas requiring special attention because of unusual opportunities and/or constraints. e.g. natural hazard areas, open spaces, raw lands far from infrastructure (difficult to improve), mixed use areas, green-ways	TBD	To be determined (TBD)
<b>Community Use</b>	Common areas for community uses. Includes space for parks & recreation, cultural activities, CBED, & other public amenities	TBD (see standards)	County standards
<b>Conservation</b>	e.g. watersheds, endangered species, sensitive historic & cultural sites	TBD	N/A
<b>Commercial</b>	e.g. retail, business and commercial activities	TBD (see standards)	County standards
<b>Industrial</b>	e.g. processing, construction, manufacturing, transportation, wholesale and warehousing	TBD	County standards

Table ES.1 - DHHL Land Use Designations

Land Use Designation	'UALAPU'E (Acres)	KAPA'AKEA, MAKAKUPAI'A, KAMILOLOA (Acres)	KALAMA'ULA, PALĀ'AU (Acres)	KALAUPAPA, PALĀ'AU (Acres)	HO'OLEHUA (Acres)	TOTAL (Acres)
Residential	25	264	398	0	55	742
Subsistence Agriculture	0	0	213	0	2,138	2,350
Supplemental Agriculture	0	0	0	0	5,862	5,862
Pastoral	0	465	539	0	923	1,927
General Agriculture	299	2,165	2,353	0	3,681	8,498
Special District	85	2,247	1,719	847	660	5,558
Community Use	3	61	83	14	73	234
Conservation	0	0	0	609	46	655
Commercial	0	0	13	4	40	58
Industrial	0	16	0	0	0	16
<b>TOTALS</b>	<b>412</b>	<b>5,218</b>	<b>5,318</b>	<b>1,474</b>	<b>13,478</b>	<b>25,899</b>

Table ES.2 - Acreage Summary by Land Designation Under the MIP





*Industrial* – 16 acres in Kapa'akea are designated Industrial for an existing cinder quarry yard.

Order of magnitude costs are provided for homestead developments. These estimates are conservative figures and there may be opportunities to reduce costs. For example, the Department may work with the County or private developers to share the expense of costly off-site infrastructure improvements such as a wastewater treatment facility.

### **ES.3.1 'UALAPU'E LAND USE PLAN (FIGURE ES.3)**

*Residential Homesteads* – Although the opportunities for developing the land for residential use are constrained by existing natural conditions, the proposed residential area will provide (74) 10,000 sq. ft. residential lots on 25 acres to be developed in two phases. Phase 1 will consist of developing the east end and provide (27) 10,000 sq. ft. lots on 9 acres. Phase 2 will commence after the completion of Phase 1 and will consist of (47) 10,000 sq. ft. lots on 16 acres along the west end.

*General Agriculture* – 299 acres are designated General Agriculture to preserve the land for future uses while making it available to individuals and groups for short-term leases. Much of this land is very rugged and unsuitable for most types of activities and development. Proposed uses for this area could include limited opportunities for diversified agricultural or pastoral use; establishing portions of the mauka regions as an extension of the proposed subsistence access for hunting and gathering purposes; expanding the proposed cultural resource management area around Kaluaonākukui Heiau.

*Special District* – Approximately 85 acres have been designated as Special District in 'Ualapu'e. The upper mauka area under Special District consists of 78 acres and will serve as a natural resource management and subsistence (NRM-SB) area for the protection of several endangered and/or threatened flora species. There are over 40 species whose habitat lies within the upper Moloka'i Forest Reserve. Further this region will also be designated as a subsistence forest area as it was identified by the community as an area currently utilized for gathering forest and stream resources for cultural and subsistence practices.

The Special District Area for Kaluaonākukui heiau is comprised of 7 acres and includes a buffer zone that extends out from the physical structure of the heiau to a minimum distance of 100' within the DHHL property. This area outside of the physical boundary is to provide protection but also can be used for the future creation of a cultural resource management (CRM) area that include the development of a cultural garden.

*Community Use* – Approximately 3 acres within 'Ualapu'e have been designated as Community Use. The first Community Use area is comprised of two acres and is designated as a cemetery to serve as the future expansion area of the existing 'Ualapu'e Cemetery. The second Community Use area is deemed for purposes of either a park and/or a community center. Given the richness of cultural and natural resources that exist and the anticipated growth of a new community, community-based initiatives can be considered in creating opportunities for learning, sharing, and sustaining the needs of the community, creating programs for youth or adult camps or other retreat activities that emphasize the relationships between mauka and makai-based ecosystems and wahi pana (traditional sacred places).

The overall cost to develop 'Ualapu'e is estimated to be \$4.0 million (M). Major infrastructure improvements include water storage facilities, individual wastewater systems, and road improvements. 'Ualapu'e is identified as a high priority development area.





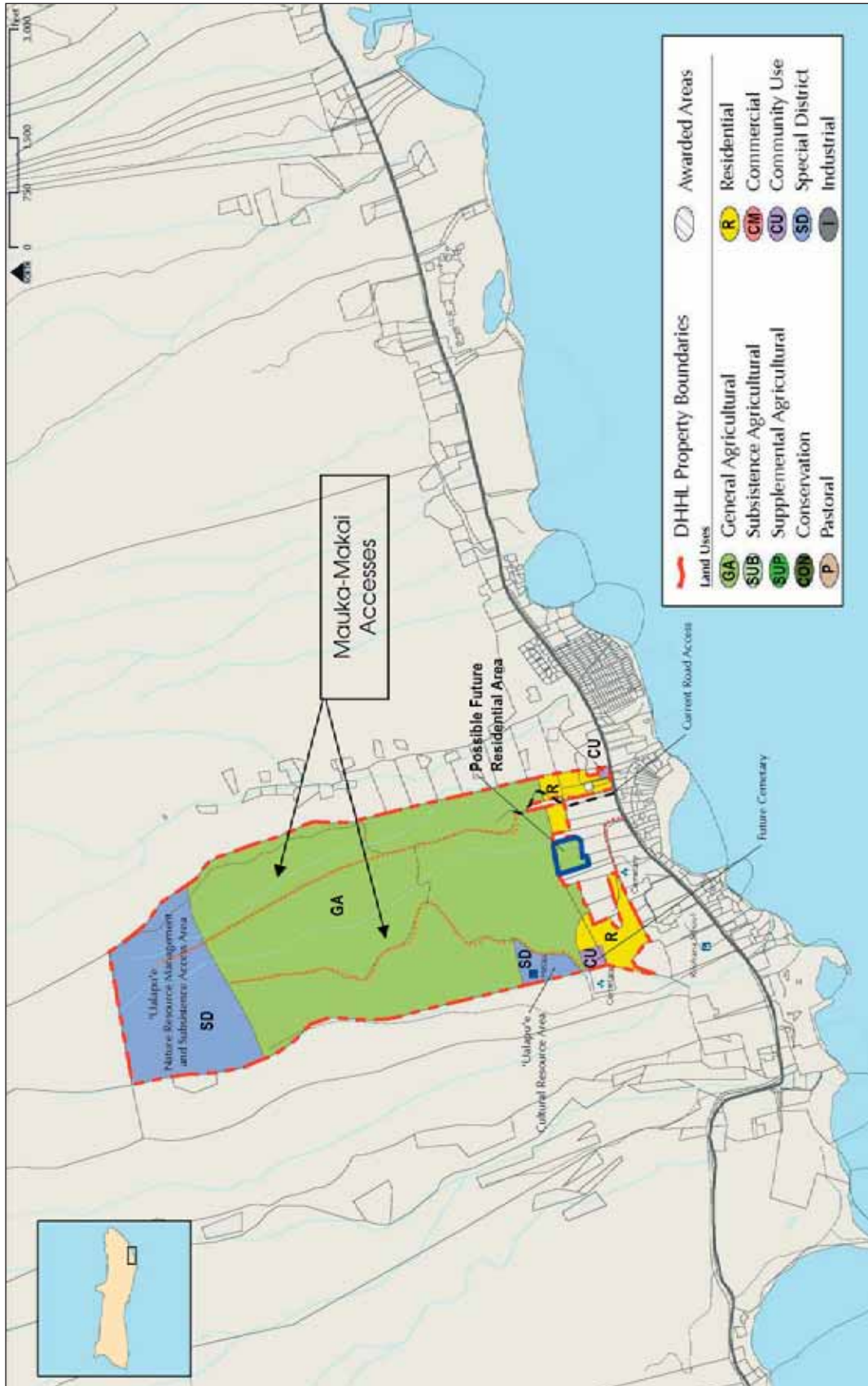


Figure ES.3 - 'Ualapu'e Preferred Land Use Plan







### ES.3.2 KAPA'AKEA, KAMILOLOA, & MAKAKUPA'IA LAND USE PLAN (FIGURE ES.4)

*Residential Homesteads* - Currently, there are 72 residential leases situated on 60 acres ranging from 0.3 to one-acre lots. 45 of these lots are clustered in the coastal homestead of Kapa'akea while the remaining 27 lots are situated along the coastline between Kamiloloa and Makakupa'ia.

The new residential area is comprised of 204 acres situated within the central region of the DHHL parcel and mauka of Kamehameha V Highway and would provide (286) half-acre lots. Existing limitations of the area is that potable water service to the area can only be provided to the 150' elevation level. Any proposed development further mauka would require the provision of booster pump stations and storage tanks which would be cost prohibitive at this time.

*Pastoral Homesteads* – Approximately 465 acres are currently used for Pastoral activity. There are no plans for future expansion of pastoral lots within the area. However, lands that are designated within the General Agriculture areas could be considered for cooperative farming and/or ranching activities.

*General Agriculture* – Over 2,165 acres of these DHHL lands are designated as General Agriculture and the land for future uses while making it available to individuals and groups for short-term leases. Some of these lands could be the site of future homesteads beyond the 20-year planning framework identified in this plan.

*Special District* – Of a total 2,247 acres in Special District, over 2,040 acres of the upland region are designated as Special District as a subsistence forest area that was identified by the community as an area utilized for hunting and gathering forest and stream resources for cultural and subsistence practices. The remaining 207 acres within the Special District designation will serve to protect existing historical sites of a traditional habitat and agricultural complex. This CRM area will be programmatically linked with the restoration and care of One Ali'i and Kaloko'eli fishponds that are situated makai of the CRM area. A small one-acre parcel has been set aside for an on-site wastewater treatment facility for the new residential development.

*Community Use* – Approximately 58 acres of lands have been designated in two areas as Community Uses, consisting of two traditional fishponds that remain intact but are in need of restoration. Plans call for One Ali'i and Kaloko'eli fishponds in collaboration with many others along the south shore of Moloka'i to be restored and managed by local residents for primarily subsistence, cultural and educational uses. An additional 2-acre site was identified as Community Use within the new residential area. It is anticipated that this site would be a neighborhood park to meet the recreational needs of a future and growing community.

*Industrial* – 17 acres in Kapa'akea are designated Industrial for an existing cinder quarry yard.

The overall cost to develop Kapa'akea, Makakupa'ia and Kamiloloa is estimated to be \$29.2 million. Major infrastructure improvements include a new storage and transmission facilities for potable water; a new wastewater treatment facility, and road improvements.



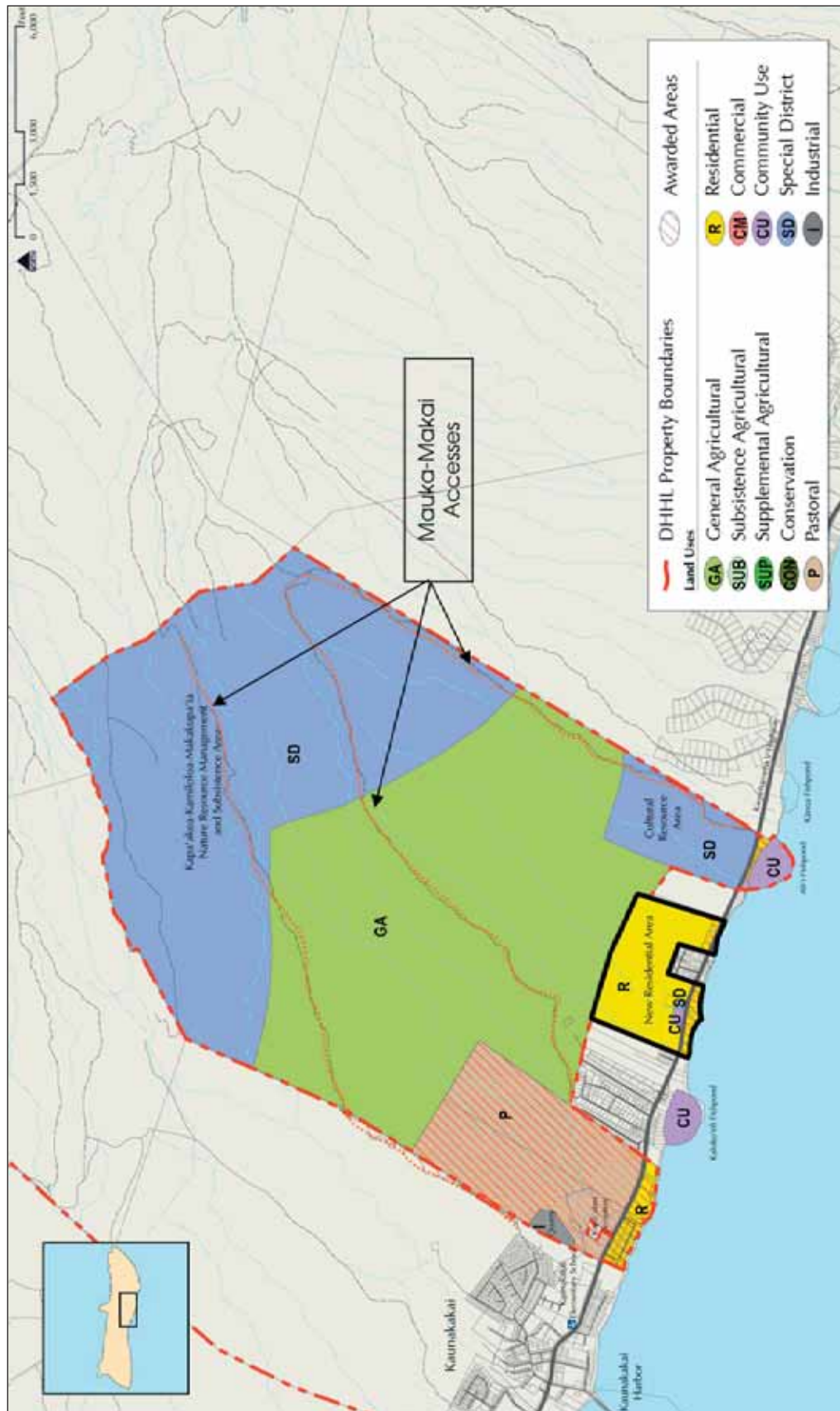


Figure ES.4 - Kapa'akea, Makakupa'ia, Kamiloloa Preferred Land Use Plan





### ES.3.3 KALAMA'ULA LAND USE PLAN (*FIGURE ES.5*)

*Residential Homesteads* - Currently, Kalama'ula has 160 existing or awarded and undeveloped lots on 210 acres. The plan proposes a limited growth of new residential development in Kalamaula that would entail 49 1-acre lots on 70 acres in the eastern portion of the parcel and 8 1-acre lots on 11 acres in the section of the parcel adjacent and makai of Maunaloa Highway.

*Agriculture Homesteads* - In Kalama'ula, 72 lots on approximately 212 acres have been leased for agricultural homesteads and are designated in the MIP as Subsistence Agriculture. These lots vary in size from 2-4 acres and are considered large enough for small-scale agriculture and keeps beneficiaries eligible for certain types of U.S. Department of Agriculture (USDA) loans.

*Pastoral Homesteads* - Three pastoral homestead leases are awarded within Kalama'ula and consist of 539 acres. Some of the land currently designated as General Agriculture under the MIP is leased under a revocable permit to the Moloka'i Homestead Livestock Association for pastoral use.

*General Agriculture* - Approximately 2,353 acres of central interior of Kalama'ula is designated General Agriculture. This will preserve the land for future uses while making it available to individuals and groups for short-term leases.

*Special District* - The Kalama'ula tract has three Special District Areas with a total acreage of 1,719 acres. The first area consists of 363 acres within the existing coastal wetlands near the Pālā'au district. The second Special District Area is comprised of 12 acres and is a flood control area located within the southwestern corridor just makai of Maunaloa Highway. The final area is a Natural Resource Management and Subsistence Access (NRM-SB) area in the northeastern corridor to the northern boundary of the parcel consisting of 1,344 acres.

*Community Use* - Approximately 76 acres have been designated for Community Use within Kalama'ula. These areas include the existing "church row," the Kulana 'Ōiwi Multi-Services Center, Homelani Cemetery, Kapuāiwa Grove, and future plans for community park space and kūpuna housing or service center.

*Commercial* - Approximately 12 acres of land are designated in Kalama'ula as Commercial for income generation purposes for DHHL. Potential ideas for commercial development include additional support for research and development of diversified organic and non-Genetically Modified Organisms agricultural products; multi-cropping species for aquaculture; conservation operations for watershed planning and reforestation; a media production facility for community and educational programs; long-term health care services; commercial kitchen to support a native Hawaiian health diet program; a center for recycling goods; and landscaping production area.

The overall cost to develop Kalama'ula is estimated to be \$13.8 M for road improvements and site improvements as well as off-site potable water infrastructure. Individual Wastewater Systems (IWS) will provide wastewater treatment.



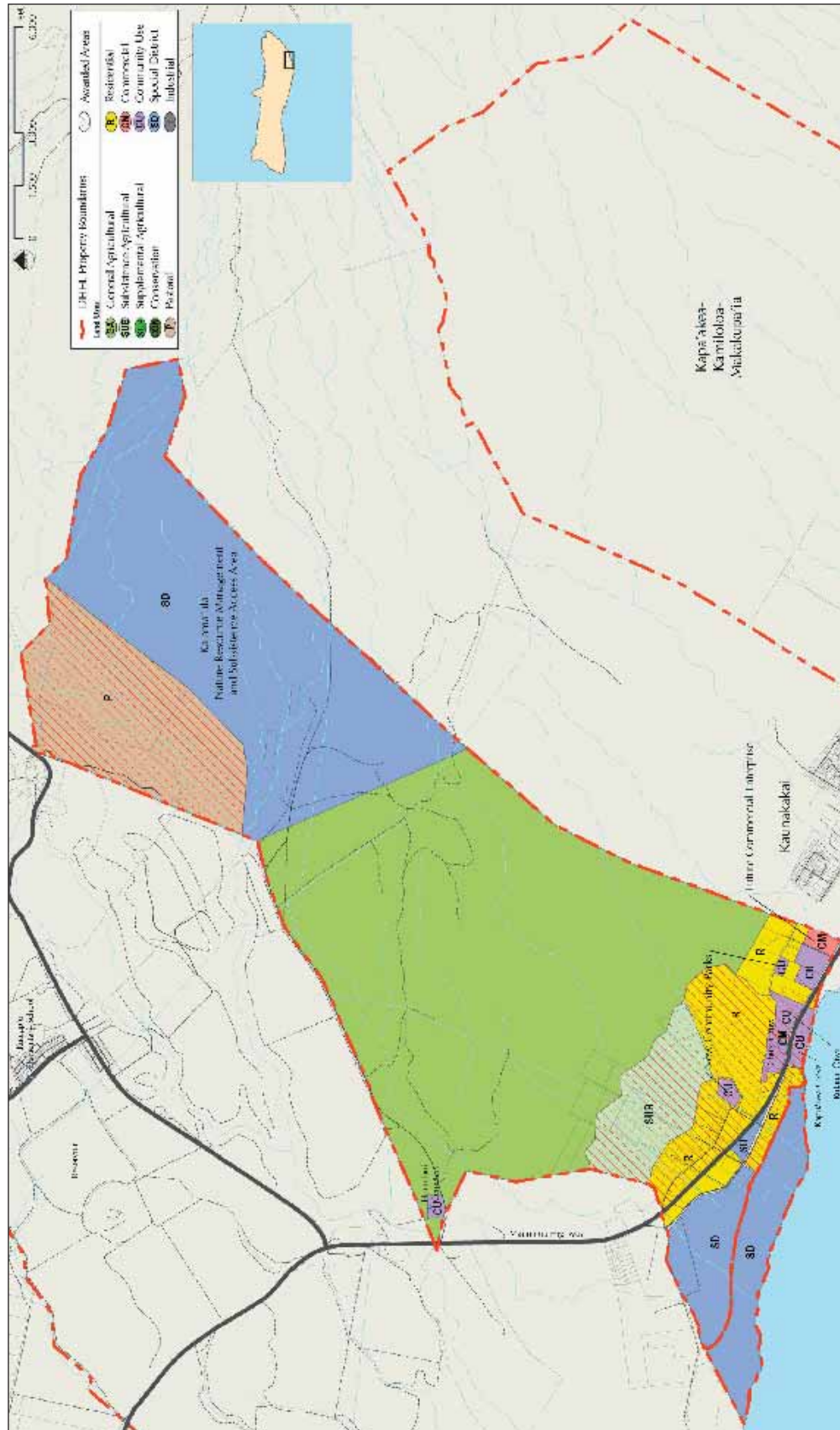


Figure ES.5 - Kalama'ula Preferred Land Use Plan







### ES.3.4 KALAUPAPA & PĀLĀ'AU (APANA 3) LAND USE PLAN (*FIGURE ES.6*)

The character of Kalaupapa will be retained as a unique community whose legacy is to be defined by its wide range of historical uses.

*Special District* – Approximately 224 acres in the Pālā'au (Apana 3) tract will remain as a forested reserve area that could continue to be used as for recreational purposes. There are no plans for development in this area. Over 621 acres are designated as Special District in the Kalaupapa Peninsula which encompasses the existing historical settlement area. This designation would allow for the current lease agreement with National Park Service (NPS) to continue. However, guidelines will need to be established with the Patient's Advisory Council, Department of Health (DOH), NPS, and DHHL as to further considerations to the long-term uses of this designated area.

*Community Use* – Approximately 7 acres in two areas on the peninsula have been designated as Community Use. The first area is situated along the northern coastal border of the parcel that is out of the historical settlement area. The second Community Use area near the pier landing fronting Awahua Bay and the trailhead leading to the cliff trail would serve a similar future purpose but would require funds for infrastructure. No structures exist within this area but could be utilized for culturally-related activities and access. Community Use sites would be licensed to an organization of native Hawaiian patients.

*Conservation* – The 609-acres of Conservation District along the cliffs is also designated as such under the State Land Use District.

*Commercial* – The MIP emphasizes the creation of a cultural community center in Pālā'au that is appropriate to the perpetuation of the traditional cultural practices of Hawai'i specific to the historical legacy of Moloka'i and Kalaupapa.

This center would assist halau on Moloka'i and other community educational initiatives in building a community center that reflects the values and principles that are invoked through their respective traditional cultural practices. DHHL will seek to develop a wide range of partners in the development of the center's master plan. It is envisioned that this center could be a hub of community economic opportunity that through the creation of programs that stem from the people of Moloka'i could be used to reach fellow kamaaina and local residents as well as scholars and visitors from around the world.

Major improvements to infrastructure were only considered for the Pālā'au (Apana 3) parcel and include site preparation, provision of water and utilities for the proposed commercial area. The total cost is approximately \$5.8 M for transport and storage of potable water; road site preparation; drainage; and electricity for the new center.



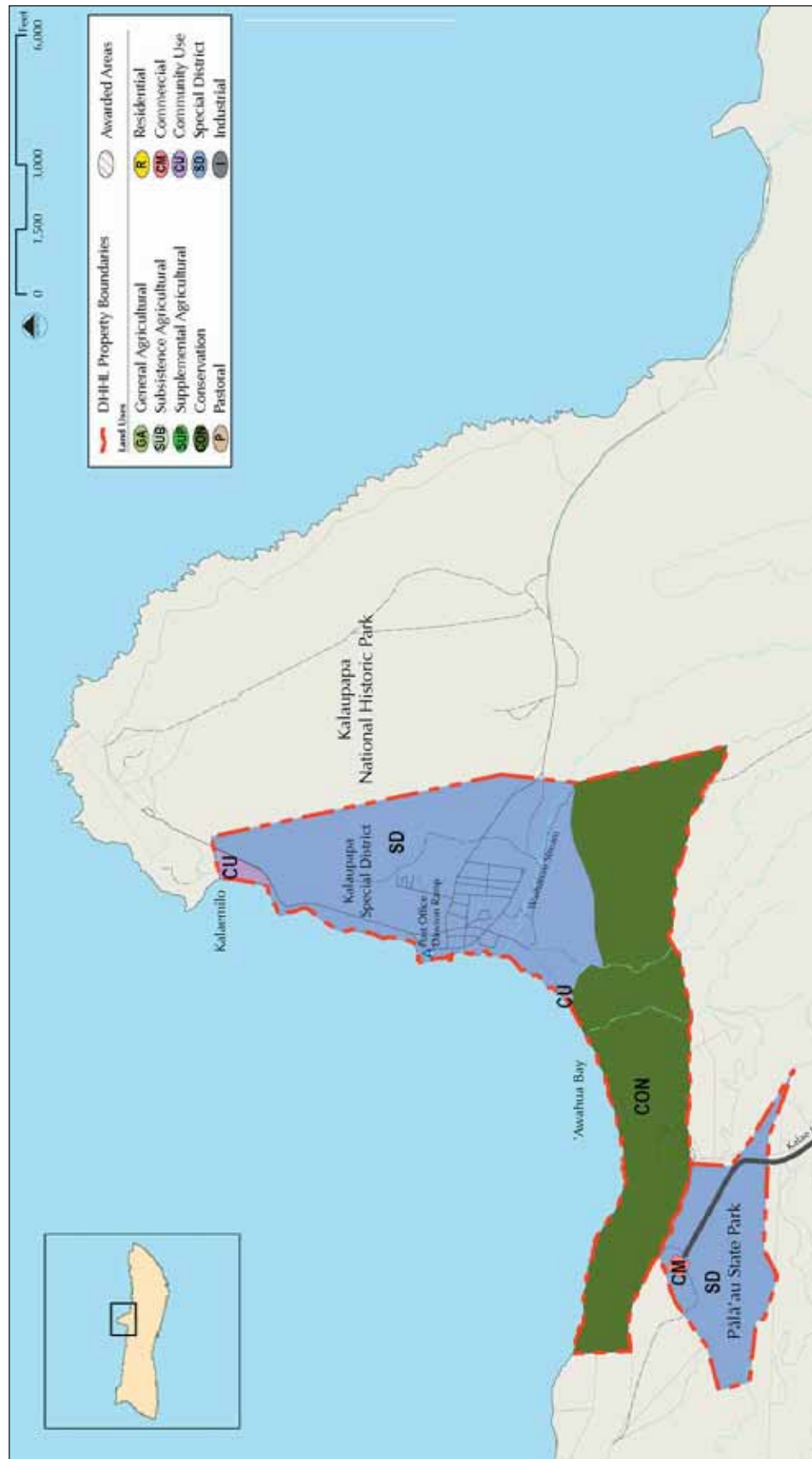


Figure ES.6 - Kalaupapa and Pālā'au (Apana 3) Preferred Land Use Plan





### ES.3.5 HO'OLEHUA-PĀLĀ'AU (APANA 1 & 2) LAND USE PLAN (FIGURE ES.7)

The general approach for the land use plan of Ho'olehua is to maintain the integrity of large parcels of agricultural land for existing and future agricultural use while assessing where future homestead growth can be directed to minimize impacts to agriculture activities. The plan evaluated necessary infrastructure development or improvements to provide the means for multiple generations of families to live and work together. A major limiting factor currently is providing potable and irrigation water from existing sources to meet anticipated demand.

*Residential Homesteads*—There are two existing areas that comprise approximately 55 acres in Ho'olehua that are designated as Residential. The first area is bounded by Farrington Avenue, Pu'u Kape'elua Avenue, and Pu'u Kapele Avenue and consists of half-acre to 5 acre lots that are serviced by paved roads, potable and irrigation water. These lots are considered to be the central emphasis for a rural residential core area. Many of the homesteaders that reside on these lots have detached 40 acre agricultural lots in lands south of Keonelele Avenue.

*Agriculture Homesteads* – Approximately 5,862 acres have been designated as Supplemental Agriculture. Within the MIP, these lands are comprised of the existing 40 acre parcels that have been split into two parcels, one consisting of 35 acres designated as Supplemental Agriculture. The remaining five acres within these parcels are designated as Subsistence Agriculture. The MIP designates 287 lots on 2,138 acres as Subsistence Agriculture. These lots vary in size from 2-4 acres and are considered large enough for small-scale agriculture and keep beneficiaries eligible for certain types of U.S. Department of Agriculture (USDA) loans. Several alternative lot schemes were developed and discussed among interested community members which included ohana members and the Moloka'i Homestead Farmers Alliance. The preferred option is to split the 5-acre Subsistence Agricultural lot into one 2-acre and 3-acre parcel.

*Pastoral Homesteads* – Over 697 acres of the 922 acres of pastoral land are situated in the northwest section of the Ho'olehua tract. The remaining 225 acres are situated along the northern coastline. Fifteen of the existing 24 lots have been awarded.

*General Agriculture* – Most of the 3,681 acres designated as General Agriculture consists of rugged or difficult terrain without existing infrastructure for irrigation water and limited road access via unimproved dirt roads.

*Special District* – There are two designated Special District areas within Ho'olehua. The first is a 372 acre parcel in the northwest section of the tract which is currently leased to the U.S. Air Force until 2013 as a radio receiver site. Community members and historical documents verify that this area has significant cultural sites that warrant future preservation. The second Special District Area is comprised of 288 acres and is situated along the northeastern tract that lead to the Conservation Area above the Kalaupapa Peninsula. The area includes Pu'u Eleuweuwe (1,145 ft). No development is proposed in this area as this area has been designated as a Nature Reserve with a medium density of endangered or threatened plant life.

*Community Use* – The concentration of 73 acres designated as Community Use are located near the central core of Ho'olehua and the northwest corner of the parcel. The land use designation applies to existing facilities including Lanikeha Community Center, Ho'olehua Fire Station, Ho'olehua Cemetery, Moloka'i High School, several churches and other educational and social service organizations that have revocable licenses to utilize DHHL lands, which comprise approximately 23 acres. Future proposed community uses include an expansion of recreation facilities at the Lanikeha Community Center. The purpose of these lands is to complement the existing rural residential community.





An additional 50 acres at Mo'omomi have also been designated as Commercial Use. This area represents part of a community resource conservation/stewardship agreement with the Department of Land and Natural Resources (DLNR) for coastal and marine resources at Mo'omomi. This use is a quintessential representative of the traditional Hawaiian value of mālama 'āina. The land is managed by a community group under these principles.

*Conservation*–The 46-acres of Conservation District along the northeastern section of the Ho'olehua tract are also designated as such under the State Land Use District.

*Commercial*– Within Ho'olehua, approximately 40 acres have been designated for Commercial use. Existing commercial use areas include the U.S. Post Office and First Hawaiian Homes Credit Union that are located on the southeast corner of Farrington Avenue and Pu'u Peelua Avenue. As a focal node, the northeastern corner of the same intersection has been designated as Commercial for other necessary facilities that would need to accommodate the potential needs of a growing community in Ho'olehua.

## **ES.4 PRIORITIES FOR RESIDENTIAL DEVELOPMENT**

One agricultural homestead community in Ho'olehua and the two residential communities of 'Ualapu'e and Kapa'akea, Kamiloloa, and Makakupa'ia were identified as priority areas. The residential areas are undeveloped lands with provisions of road access and an available supply of potable water. The non-prioritized residential area of Kalama'ula is also on undeveloped land but part of an established residential community.

These priority areas were determined by an assessment of beneficiary preferences, the location of the parcels, the physical conditions of the land, and development costs. In the ranking of these priorities, it was determined that the awarded but unbuilt Nā'iwa Agricultural homestead development would be the first priority for completion.

At full build-out, the 361 residential lots provided in the two areas address 90% of the housing goals of the DHHL General Plan. Although not a priority due to high development costs, the provision of lots in Kalama'ula would also exceed the goals of the General Plan. Further, the addition of homes in the proposed subdivision of agriculture lots in Ho'olehua, which is currently restricted by an inadequate potable water source for a full build-out of subdivided lots, would further add to the housing total and contribute to reducing the waiting list.

The residential community in 'Ualapu'e is the first priority of the MIP for new residential areas and is planned for development in two phases. This community includes 74 residential homesteads and approximately 3 acres of community use that includes a park and cemetery.

### **ES.4.1 RESIDENTIAL PRIORITY 1: 'UALAPU'E**

'Ualapu'e was selected as the first priority for several reasons. The area was ranked high by beneficiaries in the survey conducted at the beginning of the planning process. Comments at the community meetings reinforced the interest in the 'Ualapu'e area. The area is nestled along the southeastern shores of Moloka'i island. The scenic views, access to potable water and reasonable infrastructure costs also make it practical to develop an appropriately scaled community in this area.

The west end phase is composed of 47 house lots on 16 acres. Road access will be provided from Kamehameha V Highway and along an existing unimproved road that will be modified to County standards for rural areas as outlined in the Moloka'i Community Plan. This west end area is phased first because it is in closest proximity to existing infrastructure including water storage and pump as





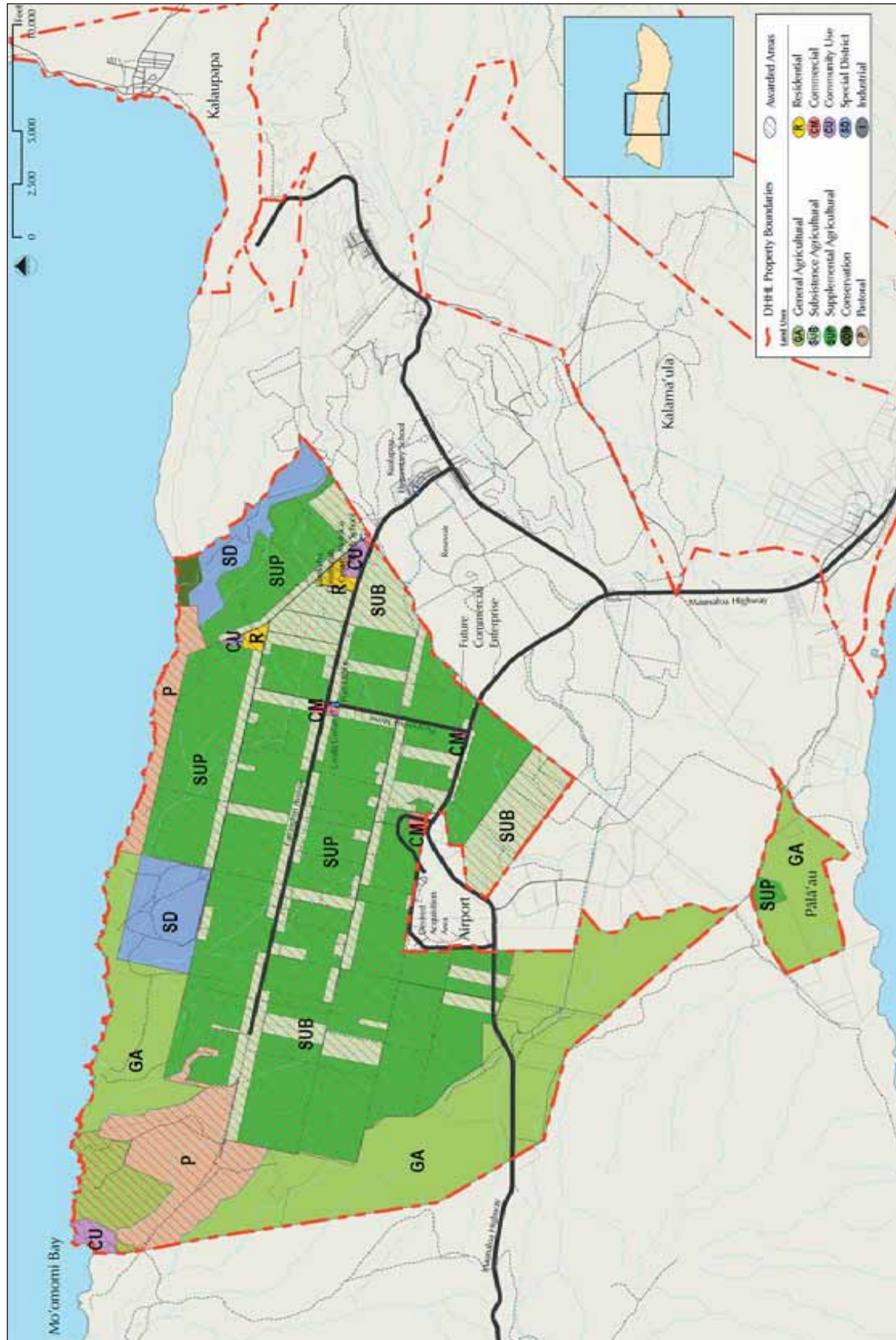


Figure ES.7 - Ho'olehua and Pālā'au (Apana 1) Preferred Land Use Plan





well as in close proximity to existing community uses such as Kilohana School and the cemetery. Also with this development, it is anticipated that a cultural resource management plan will be in place for Kalauonākukui Heiau that may include some buffer and physical landscaping elements to protect the site.

#### **ES.4.2 RESIDENTIAL PRIORITY 2: KAPA'AKEA, KAMILOLOA, AND MAKAKUPA'IA**

The second residential priority area is Kapa'akea, Kamiloloa, and Makakupa'ia homestead which is currently comprised of 72 lots on 40 acres. The area has a rich cultural resources and community area such as One Alii Fishpond but is currently in need of a neighborhood residential park. Tentative plans which will require future negotiations with the existing lessee are to acquire approximately 2 acres adjacent to the existing residential community and provide a coastal neighborhood park.

Kapa'akea, Kamiloloa, and Makakupa'ia was selected as the second priority due to its gently sloping topography, access to an available potable water source with sufficient supply, and reasonable infrastructure costs. Also, Kapa'akea, Kamiloloa, and Makakupa'ia is a desirable residential location because of its proximity to Kaunakakai town.

A single phase of development for the middle portion of the tract is proposed. This phase will yield 286 half-acre lots on 204 acres. To support this buildout, an onsite wastewater treatment facility will be required.





## TABLE OF CONTENTS

<b>1.0 Introduction</b>	
1.1. Overview & Background of DHHL .....	1-3
1.2. DHHL Planning System .....	1-4
1.3. Molokai Island Plan Planning Process .....	1-5
1.4. Planning Team .....	1-7
<b>2.0 Island-Wide Analysis</b>	
2.1 Island Profile .....	2-1
2.2 Overview of Beneficiaries .....	2-4
2.3 Land Use Designations .....	2-7
2.4 Infrastructure Cost Estimates .....	2-11
<b>3.0 'Ualapu'e</b>	
3.1. Existing Conditions .....	3-1
3.2. Opportunities and Constraints .....	3-1
3.3. Community Concerns .....	3-3
3.4. Land Use Plan .....	3-4
<b>4.0 Kapa'akea-Kamiloloa-Makakupa'ia</b>	
4.1. Existing Conditions .....	4-1
4.2. Opportunities and Constraints .....	4-1
4.3. Community Concerns .....	4-3
4.4. Land Use Plan .....	4-4
<b>5.0 Kalama'ula</b>	
5.1. Existing Conditions .....	5-1
5.2. Opportunities and Constraints .....	5-1
5.3. Community Concerns .....	5-3
5.4. Land Use Plan .....	5-4
<b>6.0 Kalaupapa-Pālā'au (Apana 3)</b>	
6.1. Existing Conditions .....	6-1
6.2. Opportunities and Constraints .....	6-1
6.3. Community Concerns .....	6-4
6.4. Land Use Plan .....	6-4
<b>7.0 Ho'olehua-Pālā'au (Apana 1 &amp; 2)</b>	
7.1. Existing Conditions .....	7-1
7.2. Opportunities and Constraints .....	7-1
7.3. Community Concerns .....	7-4
7.4. Land Use Plan .....	7-4
<b>8.0 Development Priorities and Phasing Schemes</b>	
8.1. Priority Areas .....	8-2





## 9.0 Conclusion

9.1. Island Plan Goals and Objectives .....	9-1
9.2. Residential Priority .....	9-2
9.3. Agriculture and Pastoral .....	9-3

## 10.0 References

10.1. Bibliography .....	10-1
10.2. GIS Data .....	10-4

## LIST OF FIGURES

Figure 1.1	DHHL Landholdings on Moloka'i .....	1-2
Figure 1.2	DHHL Planning System.....	1-4
Figure 1.3	Study Methodology .....	1-6
Figure 2.1	Award Type Preferences.....	2-5
Figure 2.2	Residential Homestead Preferences .....	2-6
Figure 3.1	DHHL Parcel in 'Ualapu'e.....	3-2
Figure 3.2	'Ualapu'e Preferred Land Use Plan.....	3-5
Figure 4.1	DHHL Parcel in Kapa'akea, Makakupa'ia, Kamiloloa .....	4-2
Figure 4.2	Kapa'akea, Makakupa'ia, Kamiloloa Preferred Land Use Plan .....	4-5
Figure 5.1	DHHL Parcel in Kalama'ula.....	5-2
Figure 5.2	Kalama'ula Preferred Land Use Plan.....	5-5
Figure 6.1	DHHL Parcel in Kalaupapa-Pālā'au. ....	6-2
Figure 6.2	Kalaupapa-Pālā'au Land Use Plan .....	6-5
Figure 7.1	DHHL Parcel in Ho'olehua-Pālā'au .....	7-2
Figure 7.2	Ho'olehua-Pālā'au Preferred Land Use Plan.....	7-6
Figure 8.1	'Ualapu'e Residential Phasing .....	8-3
Figure 8.2	Kapa'akea - Kamiloloa – Makakupa'ia Residential Area.....	8-4

## LIST OF TABLES

Table 2.1	DHHL Land Use Designations .....	2-7
Table 2.2	Summary of Existing and Proposed Land Use Designations.....	2-8
Table 2.3	Infrastructure Improvements Included in Cost Estimates.....	2-12
Table 3.1	'Ualapu'e Total Infrastructure Costs .....	3-4
Table 3.2	'Ualapu'e Infrastructure Costs.....	3-7
Table 4.1	Kapa'akea, Makakupa'ia, Kamiloloa Total Infrastructure Costs .....	4-6
Table 4.2	Kapa'akea, Makakupa'ia, Kamiloloa Infrastructure Costs .....	4-7
Table 5.1	Kalama'ula Total Infrastructure Costs.....	5-6
Table 5.2	Kalama'ula Infrastructure Costs .....	5-6
Table 6.1	Kalaupapa-Pālā'au Infrastructure Costs.....	6-7
Table 7.1	Ho'olehua-Pālā'au Total Infrastructure Costs .....	7-7
Table 7.2	Ho'olehua-Pālā'au Infrastructure Costs .....	7-7
Table 8.1	'Ualapu'e Residential Phases Infrastructure Costs .....	8-4
Table 8.2	Kapa'akea- Kamiloloa-Makakupa'ia Residential Phases Infrastructure Costs .....	8-4
Table 9.1	Acreage Summary by Land Designation Under the MIP .....	9-1
Table 9.2	Summary of Lot Development & Infrastructure Costs .....	9-2







**APPENDICES (IN SEPARATE REPORT)**

<i>Appendix A</i>	Engineering Cost Estimates
<i>Appendix B</i>	Comments on Plan
<i>Appendix C</i>	Community Meeting Attendees
<i>Appendix D</i>	Lessee and Applicant Survey Report
<i>Appendix E</i>	Fact Sheets





---

## Section 1.0

### Introduction





## 1.0 INTRODUCTION

The Moloka'i Island Plan (MIP) provides recommendations for the future use of the 25,899 acres on Moloka'i under the jurisdiction of the Department of Hawaiian Home Lands (DHHL) (*Figure 1.1*). The plan is intended to guide overall land use patterns and development on Moloka'i for the next 20 years.

The plan assigns Land Use Designations (LUDs) for all DHHL lands on Moloka'i and identifies specific areas for priority homestead development.

This introductory section provides an overview of DHHL and summarizes the MIP planning process.

Section 2.0 of the plan provides an overview of the island and the beneficiary population and their preferences. This section also introduces DHHL's 10 land use designations and summarizes the land uses under each LUD in the Plan. A brief overview of infrastructure costs is also provided in this section.

Sections 3.0 to 7.0 detail the land use plan for each of the five DHHL planning areas on Moloka'i. Each section begins with a general discussion of the area's existing natural and built environment, opportunities and constraints for improvements and future growth potential in the area. These sections also propose land use designations, development themes, and include a discussion of infrastructure improvements and an estimate of improvement costs.

Section 8.0 recommends the previously awarded Nā'iwa Agricultural Subdivision and the future planned residential development of 'Ualapu'e and Kapa'akea, Kamiloloa, and Makakupa'ia as the priority areas of the MIP. This section also includes a discussion of the phasing for the non-priority areas.

Section 9.0 provides a summary of land use designations for the island plan.

Section 10.0 provides a list of references used in developing the plan.

The concluding section summarizes the major findings of the MIP and proposes points for future planning studies.

### **PLAN OVERVIEW**

#### **1.0 Introduction**

- Overview of DHHL
- Planning process

#### **2.0 Island-Wide Analysis**

- Island profile
- Beneficiary preferences
- Land use designations
- Infrastructure cost estimates

#### **3.0 - 7.0 Land Use Plans**

- Existing conditions
- Opportunities and Constraints
- Community Concerns
- Land use plan

#### **8.0 Priorities & Phasing**

#### **9.0 Land Use Summary**

#### **10.0 References**



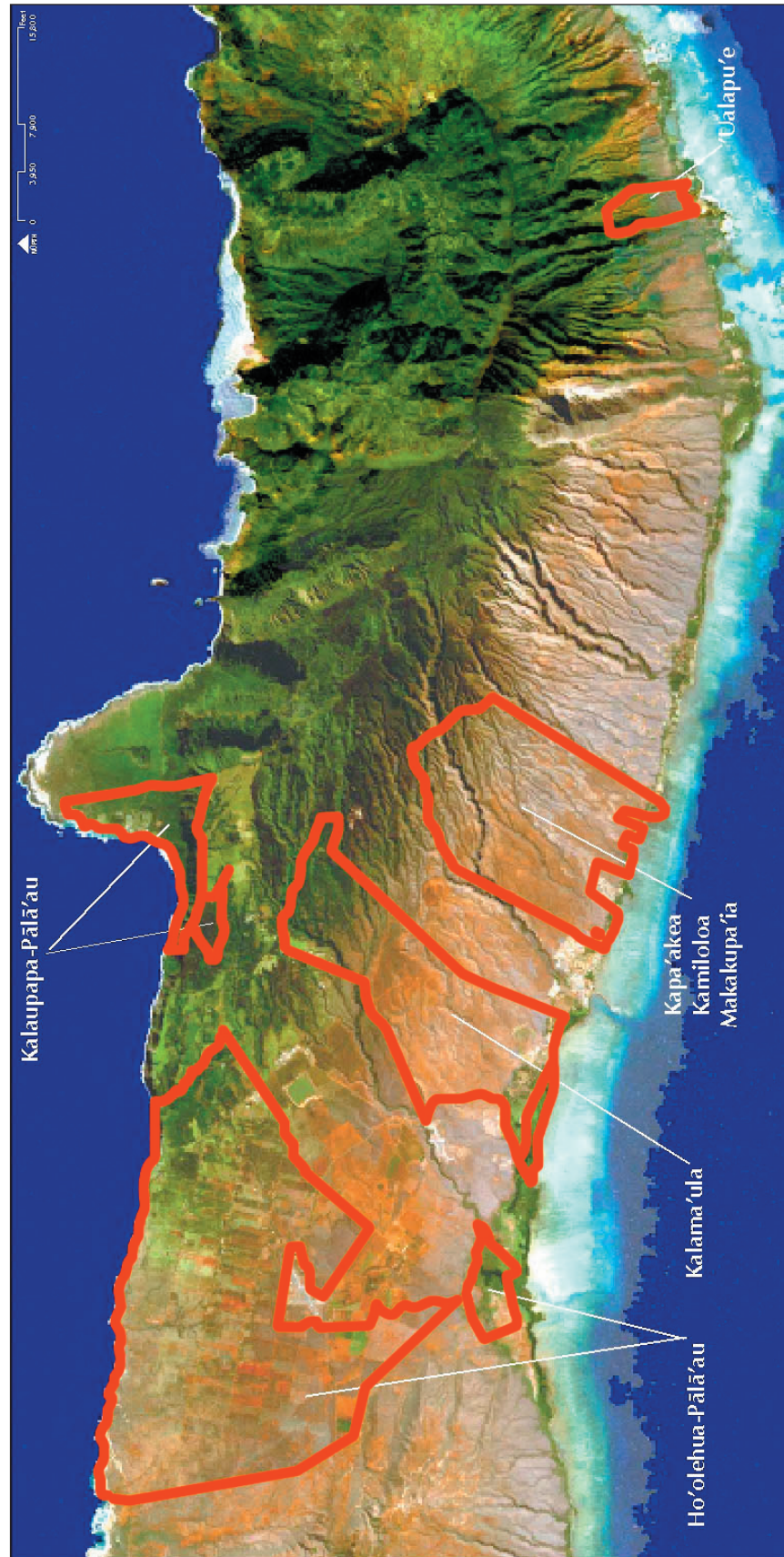


Figure 1.1 - DHHL Landholdings on Moloka'i







## 1.1 OVERVIEW & BACKGROUND OF DHHL

The mission of DHHL is to manage its landholdings held in trust effectively and to develop and deliver these lands to native Hawaiians.

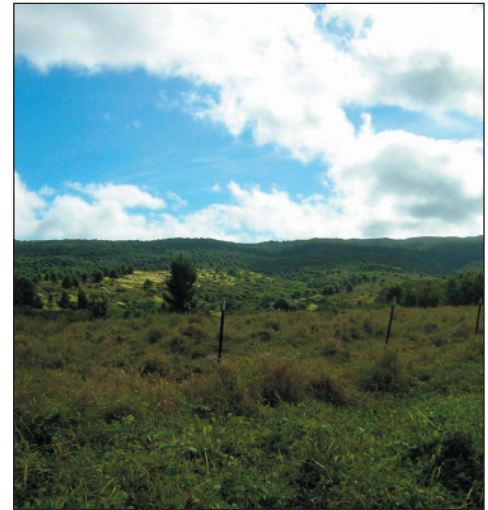
The Hawaiian Homelands Program was started in 1921 with the passage of the Hawaiian Homes Commission Act ("Act"), which was enacted by the U.S. Congress as a homesteading program to place native Hawaiians (defined as "any descendant of not less than one-half part of the blood of the races inhabiting the Hawaiian Islands previous to 1778") on designated lands. The introduction and successful passage of the Act was due to the committed efforts of Prince Jonah Kūhiō Kalaniana'ole, known to his people as Ke Ali'i Maka'āinana (The People's Prince). Initial implementation of the Act was difficult at the onset due to a lack of financial resources and very little usable land.

The program was faced with numerous challenges its first 70 years of its enactment. However, specific legislative amendments ratified between 1990 and present have improved the role and organization of DHHL, its finances and land base, and further asserted its rights of adequate water.

The main method by which DHHL serves its native Hawaiian beneficiaries is through the provision of 99-year homestead leases. The leases are provided for specific land use activities that include residential, pastoral, and agricultural uses for an annual fee of one dollar.

As of March 2005, 7,504 homestead lease awards have been issued, while approximately 35,148 applications remain un-awarded. However, the 35,148 count reflects approximately 20,976 individual applicants since a qualified applicant may apply for two types of awards. One of the highlighted achievements cited in the 2004 Annual Report is that nearly 2,100 acres of developable land acquired by the Department will result in future homeownership opportunities for approximately 4,000 beneficiaries.

Award recipients are required to make arrangements to finance home construction and renovations as well as financing agricultural or ranching activities on their awarded land. The Department works with lessees to offer direct loans or loan guarantees for home purchase or construction/renovation as well as development of farms and ranches. The Department has also explored new approaches to home building by developing a partnership with Habitat for Humanity, developing "self-help" housing projects, and offering kūpuna rentals.



*DHHL Mission:  
To manage the Hawaiian Home  
Lands Trust effectively, and  
to develop and deliver land to  
Native Hawaiians.*



*Prince Jonah Kūhiō Kalaniana'ole  
Author of Hawaiian Homes Commission Act*







The Department manages land not currently used for homesteading and negotiates leases that generate income and license agreements for public uses such as utilities or for homestead organizations. Approximately 43% of the 200,000 plus acres of DHHL lands statewide are managed for long and short term uses. Leases keep lands productive while minimizing trespassing, illegal dumping, and vandalism activities while protecting its liability. The leases also generate revenues for the homesteading program. Statewide revenues from general leases, revocable permits, and licenses were \$ 8.25 million in fiscal year 2003-2004.

## 1.2 DHHL PLANNING SYSTEM

The MIP is part of the DHHL Planning System (Figure 1.2), which emanates with the Department's General Plan (GP) that was approved by the Hawaiian Homes Commission in February 2002. The GP provides a set goals and objectives in specific focus areas that include: land use planning, residential uses, agricultural and pastoral uses, water resources, land and resource management, economic development, and building healthy communities.

### **DHHL STATEWIDE PROFILE**

- 7,500 homestead leases
- 33,000 applications unawarded
- 20,000 individual applicants
- 200,000 plus acres



Figure 1.2 - DHHL Planning System





With respect to the island of Moloka'i, the planning objectives of DHHL for the next 20 years include the following:

- Designate all DHHL lands with one of the land use categories under the General Plan;
- Deliver at least 400 Residential homesteads, or an average of 20 new lots per year;
- Provide space for and designate a mixture of appropriate land uses, economic opportunities and community services in a native Hawaiian-friendly environment;
- Provide agriculture and pastoral homestead lots for subsistence and supplemental purposes;
- Provide general lease agriculture and pastoral lots of adequate size for commercial farming or ranching business purposes by native Hawaiians.
- Identify and establish a clear understanding of existing water resources available to the Hawaiian Home Trust;
- Preserve and protect significant natural, historic and community resources on Trust lands;
- Manage interim land dispositions in a manner that is environmentally sound and does not jeopardize their future uses;
- Allow native Hawaiian use of natural resources on Trust lands for traditional and cultural purposes;
- Use no more than 1% (or 266 acres on Moloka'i) of DHHL lands for Commercial and Industrial uses by 2014; and
- Establish and implement a planning system that increases beneficiary participation in the development and use of Hawaiian home lands and improves communications between DHHL and the beneficiary community.

### 1.3 MOLOKA'I ISLAND PLAN PLANNING PROCESS

The MIP was developed over a 10-month period. Adoption of the plan is scheduled for June 2005 (*Figure 1.3*).

#### 1.3.1 BACKGROUND INFORMATION

The planning process began in August 2004 by looking at environmental, cultural, and socioeconomic data for the island of Moloka'i. A Geographic Information System (GIS) was developed to analyze the environmental, socioeconomic, and cultural features of the property. The types of data analyzed are summarized in the table to the right.

This background research also included a beneficiary survey conducted by SMS Research which gathered information on beneficiary lease preference, location preference, and desired community facilities.

#### **DHHL GENERAL PLAN GOALS**

- Land use planning
- Uses for residential, agriculture and pastoral land
- Water resources
- Land and resource management
- Economic development
- Building healthy communities



#### **BACKGROUND INFORMATION**

- Topography & elevation
- Streams & waterways
- Soil types & productivity
- Threatened and endangered species
- Wetlands & flood zones
- Rainfall
- Natural hazards
- Public facilities
- Cultural sites
- State land use designations
- County zoning and General Plan





This information is summarized in fact sheets included in Appendix F and in a Baseline Information Report that was submitted in December 2004. This information was also presented in a series of one-on-one meetings with representatives from homestead associations and beneficiary groups, State and local government agencies, and private land owners. These smaller working group sessions were supplemented by a series of community meetings held in 'Ualapu'e, Kalama'ula, Ho'olehua, and Kalaupapa. This approach continued to be a source of community guidance throughout the planning process in evaluating existing conditions and proposing any planning considerations.

### 1.3.2 ALTERNATIVE DEVELOPMENT SCENARIOS

Several development alternatives were developed for each DHHL area based on the background information and input from the community, agencies, and private landowners. Generally, the alternatives provided a range of low, medium, and high intensity development options. To assess the range of necessary infrastructure improvements, order of magnitude costs were calculated by Engineering Solutions, Inc.

These alternatives were presented to the DHHL staff, the Hawaiian Homes Commission (HHC), and to the community at two meetings on Moloka'i. Beneficiaries were also given the opportunity to tour the DHHL properties and were encouraged to make suggestions and critique the alternatives.

### 1.3.3 PREFERRED DEVELOPMENT SCENARIOS

Preferred Development Alternatives were chosen based on community input and DHHL policies. The planning factors used to assess these alternatives are summarized on the following page. The alternatives were presented in smaller working groups, to DHHL Staff, and to the community at a meeting held in Ho'olehua on Moloka'i. Comments were recorded at each presentation.

### PARTICIPANTS IN PLANNING

- Homestead Associations
- Individual Homesteaders
- Hui Kako'o
- State DBEDT
- State DOT (Harbors, Highways, Airport)
- State DLNR (OCCL, SHPD, DOFAW, DSP)
- State DOA
- State DOE
- County Water Supply
- County Planning
- County Public Works and Environmental Management
- County Fire Control
- County Police
- County Parks and Recreation
- Empowerment Zone
- USDA Rural Development
- Agricultural Extension
- Kalaupapa Patient's Council
- National Park Service
- Community Service Organizations
- Moloka'i Homestead Farmers Alliance
- Moloka'i Properties Ltd.

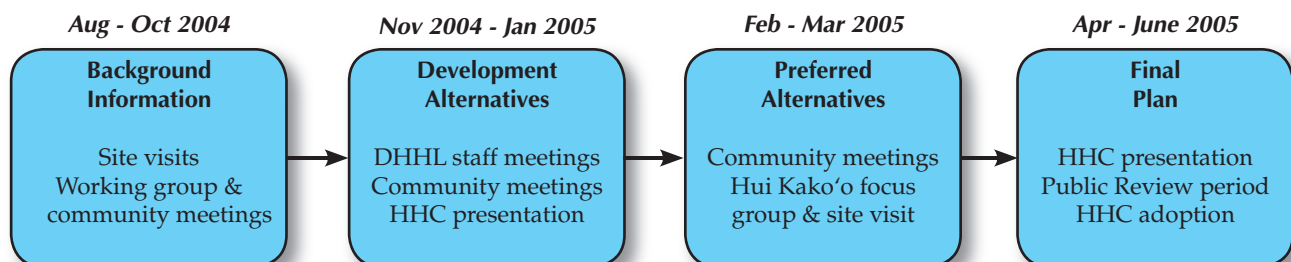


Figure 1.3 - Study Methodology





#### 1.3.4 FINAL PLAN

A staff submittal report was presented to the Hawaiian Homes Commission in early May 2005 on Moloka'i. A decision was made by the HHC to defer the adoption of the plan to allow one final opportunity for public comment and review. The plan was approved for adoption by the HHC in June 2005.

#### 1.4 PLANNING TEAM

The DHHL Planning Office provided the primary oversight in the development of the MIP. The planning consultant team was led by Group 70 International, Inc. which gathered the background information, coordinated the public meetings, solicited input from beneficiaries and other interests, and developed the alternatives and preferred land use plans that define the Island Plan. In support, SMS Research conducted the beneficiary survey while Engineering Solutions, Inc. conducted a preliminary infrastructure analysis that evaluated necessary improvements and the associated costs for those improvements.

A key component to the plan was hosting a series of smaller group meetings composed of representatives from the homestead associations, Hui Kako'o 'Āina Ho'opulapula, local and state government agencies, and private landowners convened several times over the course of the 10-month period to provide input into the planning process. In addition, beneficiaries commented on the proposed land use alternatives at three community meetings in February and April 2005 and were encouraged to provide comment and input throughout the process. A formal two-week public comment and review period was provided in May with the final plan prepared in June 2005.

#### **PLANNING FACTORS**

- **Beneficiary preferences (survey)**
- **Community input**
- **Returns (number of lots)**
- **Infrastructure costs (roads, sewage, water, etc.)**
- **Land conditions**
- **Protection of cultural sites**
- **Time frame (20+ years)**
- **Community views**
- **Community based economic development (CBED) opportunities**
- **DHHL revenue generation through commercial development**
- **Suitability to State and County land use designations**
- **Evaluating adjacent land uses**
- **Integrating DHHL General Plan goals**
- **Applying DHHL policies**





Section 2.0

---

Island-Wide Analysis







## 2.0 ISLAND-WIDE ANALYSIS

This island-wide analysis sets the context for the Island Plan and provides an overview of the Department's Moloka'i lands, beneficiary preferences, and proposed land uses.

### 2.1 ISLAND PROFILE

Moloka'i is the fifth largest island in the Hawaiian chain, comprised of a land area of approximately 170,000 acres. Located 26 miles southeast of O'ahu and 9 miles northwest of Maui, Moloka'i is 38 miles long and 10 miles wide with approximately 88 miles of beautiful coastline dotted by many historic Hawaiian fishponds. DHHL lands on the island consist of approximately 26,000 acres and comprise 15 % of the total land area of Moloka'i

The total island population of Moloka'i is almost 7,404 people, of which 1,741 people reside on DHHL lands<sup>1</sup>. The main town of Kaunakakai is the center of commerce and government services for the island. The island is part of Maui County except for the Makanalua Peninsula that makes up Kalawao County, home of the Kalaupapa settlement area.

Moloka'i is often described as the "most Hawaiian" of all the islands or the last surviving piece of the old rural Hawai'i. This can be attributed to the people and their way of life. Moloka'i has the greatest proportion of native Hawaiian people, more than any of the other islands (62.1%). This may be due in large part to the fact that Moloka'i was the site of the first lease awards given out by the Department of Hawaiian Home Lands in 1923.

The native Hawaiian's inextricable link to the land is apparent and essential on this small island. A 1994 study commissioned by the State of Hawai'i found that subsistence activities supplied 28% of the food to Moloka'i residents and 38% of the food to native Hawaiians on Moloka'i. The people of Moloka'i live off the land, therefore preserving access to fishing, hunting, and gathering sites is critical to maintaining the lifestyle and livelihood of the Island. Moloka'i people supplement their diet with subsistence out of necessity as well as lifestyle.

In the 2000 U.S. Census, Hawaiian Home Lands were added for the first time as a geographic entity type and included statistics for all areas of DHHL lands on Moloka'i except for 'Ualapu'e. According to the 2000 U.S. Census, statistics reveal that while the unemployment rate for the entire State hovered around 4.5%, the rate for Moloka'i residents was 11.2%, while the



Map of the Hawaiian Islands

### **MOLOKA'I POPULATION OVERVIEW**

- **Total land area - 170,000 acres**
- **Total island population - 7,404**
- **Largest population center - Kaunakakai (2,726 people)**
- **Major ethnic group on the island are native Hawaiians (62.1%)**
- **38% of food supply for native Hawaiian families is provided through subsistence activities**

<sup>1</sup> 2003 State of Hawai'i Data Book, Table 1.17 Resident Population of Hawaiian Home Lands, by Native Hawaiian Race, by Island: 2000





unemployment rate for the population residing on Hawaiian Home Lands on Moloka'i was 12.9%. The statistics are similar for the percentage of population below the poverty level; at a statewide level 10.7% of the population falls under the poverty line, whereas on Moloka'i it is 16.0% and for Hawaiian homesteaders on Moloka'i it is 15.7%. Additionally, median income for Moloka'i residents is quite a bit lower than State averages. Moloka'i's median income is \$33,398 compared to \$49,820 for the State as a whole, and Hawaiian Homesteaders on Moloka'i had an average median income of \$37,714.

To address the challenging economic situation on the island, community members worked together to apply to the United States Department of Agriculture (USDA) to become designated as an Empowerment Zone community. The application outlined some less than desirable statistics regarding the economic situation of the island.

- 24.4% of the island resident population received food stamps
- 32.5% of the resident population received Medicaid
- 20% of the population 18 years and over does not have a high school diploma

The community developed a detailed strategy to move from the island's current situation, which they described as a "post-plantation/under-developed economy remnant of a departed pineapple growing and processing economy" toward greater economic prosperity.

The application acknowledged recent efforts by the State Government to support the development of diversified agriculture and tourism as a means of compensating for the departure of the pineapple industry, but outlined the need for more assistance. The Moloka'i community efforts paid off and in 1999 the island was granted Empowerment Zone status which means approximately \$7 million in grant funds over 10 years.

A variety of projects have been or are being funded by the Empowerment Zone initiative such as the development of an island slaughter house, Brownfield redevelopment, establishment of a native plant nursery, a commercial kitchen for agricultural growers providing a limited but emerging stimulus for new job growth.

### **MOLOKA'I ISLAND ECONOMIC OVERVIEW**

- **Unemployment rate - 11.2%**
- **Below poverty level - 16%**
- **Median income - \$33,398**

### **MOLOKA'I HOMESTEAD ECONOMIC OVERVIEW**

- **Unemployment rate - 12.9%**
- **Below poverty level - 15.7%**
- **Median income - \$37,714**



*Kaunakakai Town, Central Moloka'i*



*Main port of Kaunakakai Harbor (Photo by U.S. Army Corps of Engineers, Honolulu District)*





### 2.1.1 TOURISM

Tourism is one of the primary economic generators within Maui County. Growth in domestic and international arrivals by air to Moloka'i in 2002 and a longer length of stay by these visitors contributed to a 14.9% increase in visitor days for Moloka'i. Statistics from the State Department of Business Economic Development and Tourism indicate that for all the visitors to the State of Hawai'i in 2002, the average daily visitor census for Maui County was 42,742. Moloka'i's share of the County's daily census was 955 visitors with the majority seeking some level of eco-tourism based experiences like hiking the trail to Hālawa Valley on the east end of the island.<sup>2</sup>

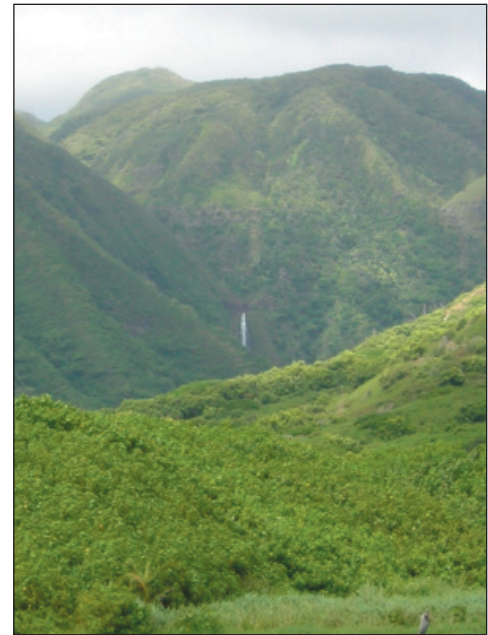
In 2003, 94,106 people visited the island of Moloka'i a 25% increase from 2002. Approximately 38% of these visitors were first time guests to the island. Approximately 50% of visitors to Moloka'i also visited the islands of Maui and O'ahu as part of their vacation experience.

Future growth in tourism on Moloka'i is based upon marketing trends. Currently, Moloka'i has 33 visitor "properties" that are comprised of six condominium hotels (including the Moloka'i Shores), two hotels (Hotel Moloka'i and The Lodge and Beach Village at Moloka'i Ranch), 2 bed and breakfast establishments, and 22 individual vacation units. Among the 33 properties, there are 299 units of which 140 units are within the condominium hotels and an additional 114 units are in the two hotels. Most of the rooms (44%) are designated as "standard" units that range in price between \$101 and \$250 a night.

Currently there are no planned additions or new visitor development projects for Moloka'i. However, Moloka'i Ranch has plans to re-open Kaluako'i Resort, although plans at this time do not estimate the number of visitor units. Further, the cruise ship industry continues to grow throughout the islands and while Moloka'i has resisted allowing cruise ships to dock in Kaunakakai, Moloka'i is still influenced by the increasing numbers of travelers that travel by cruise ship yet island hop as well. For Moloka'i, approximately 2,852 people visited the island while part of a cruise ship package, which increased 162% to 7,480 people in 2003.

### 2.1.2 AQUACULTURE & AGRICULTURE

Since Moloka'i, from a native Hawaiian standpoint was historically an affluent community with an abundance of coastal resources and boasting the most fishponds in the



*Hālawa Valley, East Moloka'i*



*Moloka'i Ranch, Beach Lodge Villa in Kaupoa, West Moloka'i*



*Aquaculture cages used to grow long ogo on Moloka'i (Photo by UA Environmental Research)*

<sup>2</sup> 2003 State of Hawai'i Data Book, Table 7.06 Average Daily Visitor Census, By Counties and Islands: 2001 and 2002







islands, some propose that aquaculture can become a growing market for Moloka'i. Tiger shrimp are already exported to O'ahu restaurants and hotels, but the emerging export market is tropical fish. The U.S mainland imports more than \$10 million of tropical fish annually from Indonesia and other Far East locations, some believe that Moloka'i's domestic tropical fish will be well received in U.S. markets.

As for agriculture, according the Hawai'i Data Book, Moloka'i produces 75-85% of Hawai'i's sweet potatoes and offers a unique opportunity as an island because it remains isolated from many of the viruses and diseases affecting crops on other Hawaiian islands. Moloka'i's lettuce and alfalfa are being produced for export, as well as taro and long ogo, a crunchy gourmet seaweed used in relishes, salsa, and namasu. Additionally, Moloka'i's onions, tomatoes, and coffee will continue to show up on grocery shelves throughout Hawai'i for years to come. Papaya and mangos have also become popular crops on Moloka'i. Moloka'i is particularly suitable for growing organic papayas.

### 2.1.3 HOUSING

Regarding housing, Moloka'i is feeling a bit of the real estate boom taking place statewide. Almost daily there are articles about housing prices rising throughout the Islands. A May 10, 2004 article from the Pacific Business News (PBN) mentions that, *"The demand for homes on Maui has spilled over to Moloka'i, according to Paul Harris of Harris Co. consulting group. More Realtors are taking clients to Moloka'i to look at less-expensive lots and homes."* A recent home sale on Moloka'i in April 2004 was for \$147,000; meanwhile anecdotal accounts of rising house prices are abundant.

The median home price on the island is approximately \$130,000 with approximately 61.1% of these homes being owner-occupied. As for the housing trends for DHHL Homesteads, approximately 86% of total existing homes are at least 15 year old, with 41% over 45 years old. Approximately 8% of DHHL homes lack a complete kitchen, 4.4% lack complete plumbing, and 6% with no telephone service.

## 2.2 OVERVIEW OF BENEFICIARIES

Beneficiaries must be 18 years of age and must have a blood quantum of at least 50 % Hawaiian in order to be eligible for a Hawaiian homestead. Beneficiaries may apply for one of three lease types: Residential, Agriculture, Pastoral; or a combination of Residential with either Agriculture or Pastoral. Beneficiaries may not apply for all three types of leases.



Harvest of long ogo (Photo by UA Environmental Research)

### MOLOKA'I HOUSING TRENDS

- Median price for a home \$137,000
- 61.1% of homes are owner-occupied
- 41% of DHHL homes on Moloka'i are over 45 years old



Residence on DHHL lands in Kapa'akea





The 2004 Department of Hawaiian Home Lands Annual Report indicates that 835 leases have been awarded on Moloka'i. Agricultural and residential leases, which compose the majority of the awards, are concentrated in Ho'olehua and Kalama'ula. Residential leases are primarily split between Ho'olehua and Kalama'ula with 153 and 160 leases respectively. An additional 74 residential leases are for the Kapa'akea and One Ali'i area. Composing the majority of awarded lands on Moloka'i, approximately 347 (82%) of all 421 agriculture leases on the island are located in Ho'olehua with the remainder in Kalama'ula. Additionally, 21 of the 27 pastoral leases are also situated in Ho'olehua with 3 leases in Kapa'akea and 3 in Kalama'ula. The location and types of awards are summarized in the table to the right.

According to the 2004 DHHL Annual Report, there were a total of 1,325 new homestead applications submitted to the department. Of this statewide total, 37 applications were submitted for the island of Moloka'i that included 19 new homestead applications submitted for a residential homestead, 14 for an agriculture homestead, and 4 applications for a pastoral lot.

### 2.2.1 BENEFICIARY PREFERENCES

In September 2004, a beneficiary survey was conducted to gather information about beneficiary preferences. Some of the findings are summarized below.

***Residential is the preferred award type*** – Since beneficiaries may apply for more than one type of award, applicants were asked in a survey about their preferred award type. While agriculture applications make up the largest type of applications, when asked for their first choice of award, 68% of beneficiaries expressed a residential award preference (Figure 2.1).

***Agricultural & pastoral applicants want to live on their homesteads*** – Agricultural and pastoral applicants overwhelmingly reported that they wanted to live on their homesteads. This preference would require infrastructure improvements which significantly increases the cost of development. No agricultural or pastoral applicants plan to solely use their land for farming or ranching.

***Existing agricultural lessees have barriers to farming*** – About half of the existing agricultural lessees are either not farming or only growing a few plants or trees. The main reasons cited are lack of equipment, need for training, lack of water, and inability to afford the costs of farming. Most agricultural applicants and lessees want to do some level of subsistence farming.

## **EXISTING HOMESTEADS**

**Total - 835 Leases**

### **Residential Homesteads**

- Kalama'ula - 160
- Ho'olehua - 153
- Kapa'akea - 45
- One Ali'i - 29

### **Agriculture Homesteads**

- Ho'olehua - 347
- Kalama'ula - 74

### **Pastoral Homesteads**

- Ho'olehua - 21
- Kalama'ula - 3
- Kapa'akea - 3

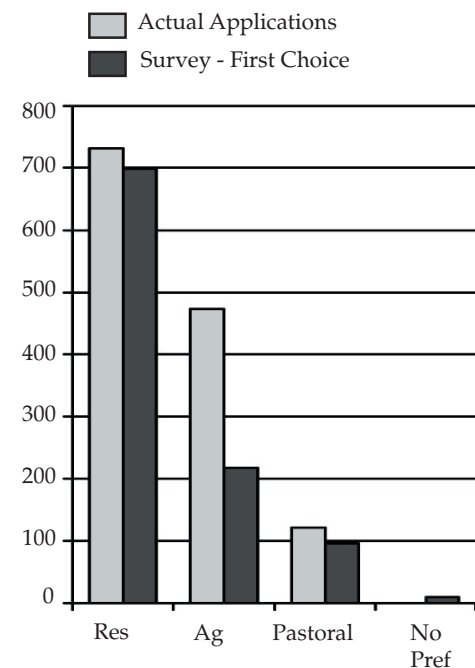


Figure 2.1 - Award Type Preferences







**Preference is for small agriculture lots** – Most agriculture applicants, whether they plan to farm at a subsistence or supplemental level, prefer a lot that is 3 to 5 acres. Most applicants are interested in having land for small-scale agriculture operations or home gardens.

**Award location preference** - The survey revealed that most applicants have no preference regarding location of award. Those who did indicate a preference want to live in either Ho'olehua-Pālā'au or Kalama'ula (Figure 2.2).

**Finances are a barrier for Applicants** – Data from the survey suggests that relatively large numbers of current applicants may not have the level of financial resources to qualify for standard home financing. Common barriers are households with no adults employed, low combined household incomes, and existing low rent/shelter payments

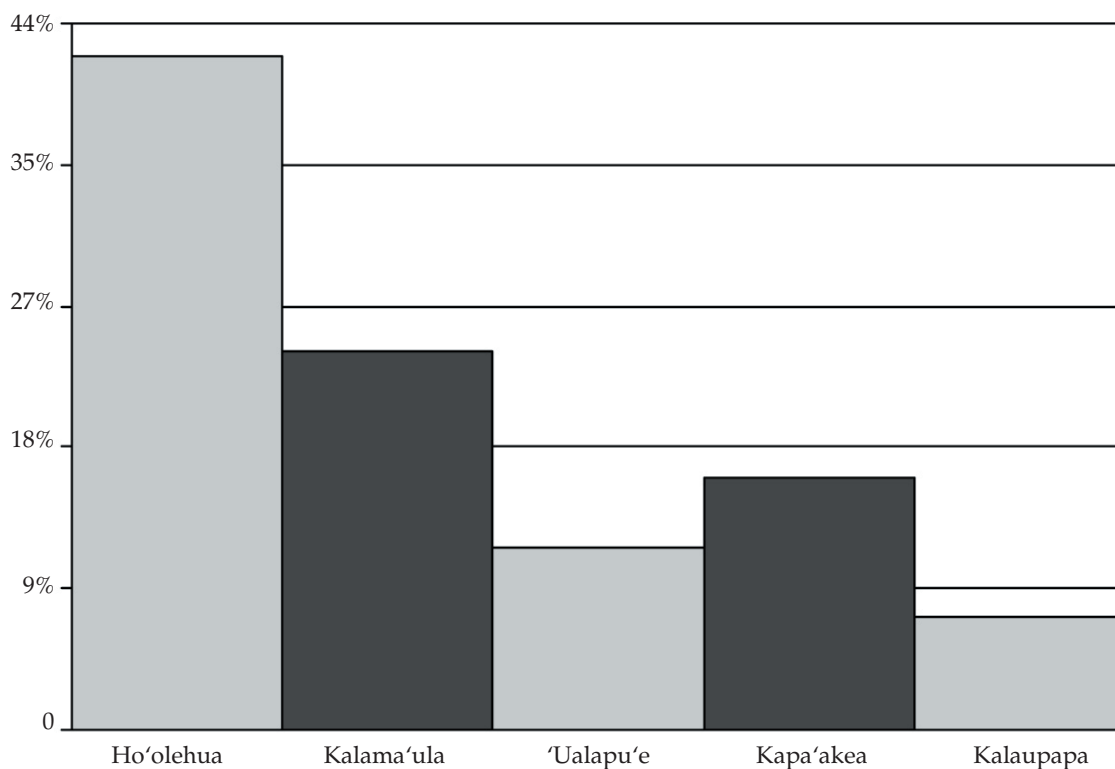
**Lessees are happy with their communities** – When asked to describe what they like about their homestead community two common themes emerged. Leaseholders appreciate the spacious setting of their homestead lots and they enjoy their neighbor's friendliness and 'ohana spirit.

**Homestead communities need infrastructure improvements** – When asked what improvements they would like to see in their homestead community, the lessees overwhelmingly cited

## MOLOKA'I HOMESTEAD LAND USES SUMMARY

Total - 835 Leases

TYPE OF USE	# OF LEASES	ACRES
Residential	387	673
Agricultural	421	8,212
Pastoral	27	923
Community Use	-	219
<b>TOTAL</b>	<b>835</b>	<b>10,227</b>



Information reflects applicants' top two preferences in a 2004 survey.

Figure 2.2 - Residential Homestead Preferences





infrastructure issues. There is a desire to clean out abandoned vehicles, clear vacant lots, improve and maintain roads, and develop more recreational activities.

### 2.3 LAND USE DESIGNATIONS

The DHHL General Plan provides 10 possible land use designations for Hawaiian Home Lands. *Table 2.1* describes the intent of these land use designations, the lot sizes, and minimum infrastructure requirements while *Table 2.2* summarizes where these land uses are planned on Moloka'i. Certain key planning concepts or themes have directed when and where to designate each of the ten DHHL land uses, which include:

- Creating full-service communities;
- Using the ahupua'a concept where feasible;
- Identifying income generating opportunities;
- Designating General Agriculture areas for hui and individual entrepreneurs to lease and develop;
- Designating Special Districts for special areas to create a Hawaiian sense of place; and
- Preserving and enhancing the use and management of water rights and resources.

#### **DHHL LAND USE DESIGNATIONS**

- Residential
- Subsistence Agriculture
- Supplemental Agriculture
- Pastoral
- General Agriculture
- Special District
- Community Use
- Conservation
- Commercial
- Industrial

SETTING/INTENT PURPOSE		LOT SIZE	MINIMUM INFRASTRUCTURE
<b>Residential (Homestead)</b>	Residential subdivisions built to County standards in areas close to existing infrastructure	≤ 1 acre	County Standards
<b>Subsistence Agriculture (Homestead)</b>	Small lot agriculture. Lifestyle areas intended to allow for home consumption of agricultural products. Occupancy optional.	≤ 5 acres	Water (catchment or potable or surface) Road access
<b>Supplemental Agricultural (Homestead)</b>	Large lot agriculture. Intended to provide opportunities for agricultural production for supplemental income & home use. Occupancy optional. Farm plan & 2/3 cultivation required.	≤ 40 acres	Water (catchment or surface) Road access
<b>Pastoral (Homestead)</b>	Large lot agriculture specifically for pastoral uses. Occupancy optional. Ranch plan & fencing required.	≤ 1,000 acres	Road access & livestock drinking water
<b>General Agriculture</b>	Intensive or extensive farming or ranching allowed. Uses subject to HRS Chapter 205. May serve as an interim use until opportunities for higher & better uses become available.	TBD	N/A
<b>Special District</b>	Areas requiring special attention because of unusual opportunities and/or constraints. e.g. natural hazard areas, open spaces, raw lands far from infrastructure (difficult to improve), mixed use areas, green-ways	TBD	To be determined (TBD)
<b>Community Use</b>	Common areas for community uses. Includes space for parks & recreation, cultural activities, CBED, & other public amenities	TBD (see standards)	County standards
<b>Conservation</b>	e.g. watersheds, endangered species, sensitive historic & cultural sites	TBD	N/A
<b>Commercial</b>	e.g. retail, business and commercial activities	TBD (see standards)	County standards
<b>Industrial</b>	e.g. processing, construction, manufacturing, transportation, wholesale and warehousing	TBD	County standards

Table 2.1 - DHHL Land Use Designations





Land Use Designation	'Ualapu'e (Acres)	Kapa'akea, Makakupa'ia, Kamiloloa (Acres)	Kalama'ula, Pālā'au (Acres)	Kalaupapa, Pālā'au (Acres)	Ho'olehua (Acres)	Total (Acres)
Residential	25	264	398	0	55	742
Subsistence Agriculture	0	0	213	0	2,138	2,350
Supplemental Agriculture	0	0	0	0	5,862	5,862
Pastoral	0	465	539	0	923	1,927
General Agriculture	299	2,165	2,353	0	3,681	8,498
Special District	85	2,247	1,719	847	660	5,558
Community Use	3	61	83	14	73	234
Conservation	0	0	0	609	46	655
Commercial	0	0	13	4	40	58
Industrial	0	16	0	0	0	16
<b>TOTALS</b>	<b>412</b>	<b>5,218</b>	<b>5,318</b>	<b>1,474</b>	<b>13,478</b>	<b>25,899</b>

Table 2.2 - Summary of Existing and Proposed Land Use Designations

These themes are discussed throughout the MIP as they relate to specific land use designations and planning issues.

### 2.3.1 RESIDENTIAL HOMESTEADS

Residential homesteads are one of the priority land use designations in the MIP. Proposed residential development will be designed and constructed to county standards.

A total of 742 acres are designated Residential in the MIP. The 327 proposed residential homestead lots would be located in 'Ualapu'e, Kapa'akea, and Kalama'ula.

The emphasis will be on completing holistic master-planned, vibrant and healthy communities, rather than a simple provision of houses with no adequate auxiliary support services such as parks, schools, and community centers.

### 2.3.2 AGRICULTURE HOMESTEADS

Under agricultural homesteads, there are two land use designations: Subsistence or small agriculture lots that are less than 5 acres; and Supplemental or large agriculture lots that are between 5 and 40 acres. Although development costs are high, sustaining the existing and anticipated future needs of agricultural homesteads is a priority of the MIP.



*Supplemental Agriculture lands in Ho'olehua*





As the only DHHL area with a dedicated irrigation water system, Ho'olehua has some of the best agricultural lands in the State. The typical large lot size of 40 acres, excellent soil quality and drainage, fairly even topography, and access to irrigation water via the MIS system are some of the assets of this area. Additionally, there is a farm supply cooperative; a community college training farm; and a UH Extension Research and Demonstration Farm and technical support services on the island, providing resources to an island community that is supportive of agriculture as the primary economic engine.

Subsistence agriculture homestead areas are proposed on 2,350 acres in Ho'olehua and Kalama'ula. Portions of these lands are considered for limited subdivision, which is further discussed in section 7.0 of this report. Further, there are 5,862 acres that are situated in Ho'olehua proposed for supplemental agriculture and would remain as the primary region for continued agricultural activity and growth within the island.

### 2.3.3 PASTORAL HOMESTEADS

Pastoral homesteads are not as high a priority as agriculture and residential homesteads in the MIP. Nearly 1,927 acres have been designated as pastoral and are situated within Kapa'akea, Kalama'ula, and Ho'olehua areas. Development costs per lot for pastoral homesteads are the most expensive of the homestead options.

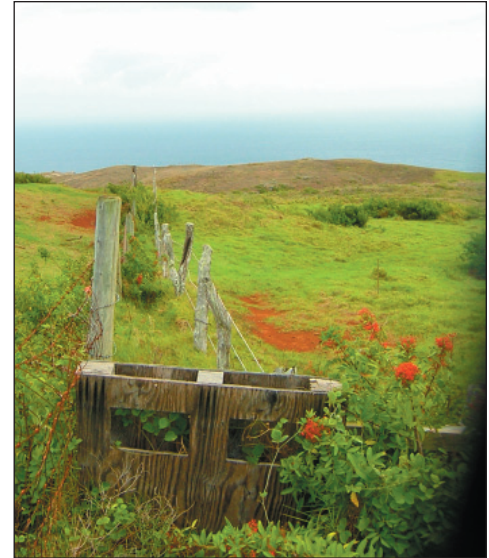
However, it is envisioned that the Moloka'i Slaughterhouse Project, which is managed by the Moloka'i Livestock Cooperative under the Moloka'i Rural Development Program, will be an asset to those beneficiaries with pastoral leases to help bolster the ranching and livestock community while promoting economic diversification on the island.

### 2.3.4 GENERAL AGRICULTURE

Land designated General Agriculture can be leased for farming to generate income for the Department. This designation is also used as an interim designation until higher and better uses become available.

Most of DHHL lands on Moloka'i land (8,498 acres or 33%) is designated as General Agriculture. Only the Kalaupapa and Pālā'au tracts do not have land in this category.

Much of the land in this category is unsuitable for homestead development because of the steep topography or because of difficult access and the high cost of development. However, beneficiaries and others are encouraged to prepare land use plans and apply to use these areas for agriculture and pastoral uses under permits, licenses, or general leases. Further, other viable activities for these lands does include the development



*Pastoral lands in Ho'olehua*



*General Agricultural lands in Kalama'ula*







of cooperative farming for purposes of promoting commercial agriculture among participating Native Hawaiians.

### 2.3.5 SPECIAL DISTRICT

The Special District designation is for land with special opportunities such as natural, cultural or historic resources or severe constraints such as flood control or endangered species. This category is applied to environmentally or culturally sensitive land that requires some conservation principles but can also be used for compatible activities if managed correctly. Ideally, native Hawaiian beneficiaries will oversee these lands and use them to create a Hawaiian sense of place for all beneficiaries living on Moloka'i.

DHHL lands totaling 5,558 acres (22% of the island total) are designated Special District in 'Ualapu'e, Kapa'akea, Kalama'ula, Kalaupapa, and Ho'olehua. This designation protects special areas while making them available for certain justified uses.

The Special District areas are significant for the entire island, not just the parcel in which they are located. For example, in Kalama'ula, the identified wetland area can serve as a natural drainageway for flood control and as a wildlife habitat refuge.

Special Districts play a role, as well, for the ahupua'a. Often special district areas will provide the corridor for pathways or linkages between the mountain and ocean resources. In some cases the Special District designation protects water sources such as irrigation ditches and other special features.

### 2.3.6 COMMUNITY USE

The Community Use land use designation includes a variety of community uses such as parks and open spaces, cultural centers, Community Business Economic Development (CBED) projects, schools, camping areas, meeting pavilions, social service centers, cemeteries, and other amenities. Commercial activities not intended as income generation tools for DHHL are generally designated Community Use. Such current activities include the Lanikeha Community Kitchen, which is managed by the Moloka'i Community Services Council, for purposes of providing a fully equipped commercial kitchen for convenient food preparation for large party events and entrepreneurs interested in developing a product.

Community Use areas totaling 234 acres are designated in 'Ualapu'e, Kapa'akea, Kalama'ula, Kalaupapa, and Ho'olehua. A distinction is made throughout the plan between community uses related to a residential area such as a school or park and more regional community uses such as the social service centers proposed in Kalama'ula.



*Native ecosystem within Kamakou Preserve that is adjacent to Special District area of Makakupa'ia*



*Community Use lands at One Ali'i Fishpond in Kamiloloa*



*Community Use lands at "Church Row" in Kalama'ula*





### 2.3.7 CONSERVATION

Conservation areas are designated in Kalaupapa and Ho'olehua to be consistent with State Land Use Designations. The Conservation area totals 655 acres. Conservation areas protect the resources of the ahupua'a including water resources.

### 2.3.8 COMMERCIAL AND INDUSTRIAL

Commercial and Industrial designations are both income generating uses for the Department. The lease revenues can be used to fund homestead development. Limited Commercial uses are designated in Kalama'ula, Pālā'au, and Ho'olehua. Further, an existing quarry in Kapa'akea is designated as Industrial. These land use types comprise 74 acres and represent 0.28% of all DHHL lands on Moloka'i and thereby comply with the DHHL General Plan requirement that stipulates that not more than 1% of the Department's land statewide should be used for these purposes.

## 2.4 INFRASTRUCTURE COST ESTIMATES

The MIP provides rough order of magnitude costs for each land use designation. Infrastructure costs include a breakdown between on-site and off-site costs. All costs are considered on-site improvements except for sewage treatment plants, wells, water storage facilities, drainage improvements, and intersection improvements (*Table 2.3*).

All residential homestead cost estimates are based on County standards and provide infrastructure for beneficiaries to live on lots. The estimates for agricultural and pastoral costs also are based on County rural standards. Costs include potable water, waste water treatment, roads, site preparation, and electricity. Irrigation costs are not included because this cost is difficult to determine since it depends on the future of implementing varying agricultural strategies for different crop type initiatives on Moloka'i and the necessity to improve and perhaps expand the existing irrigation water system.

It should be noted that water demand needs for Commercial and Community Use are included in the overall water demand calculations for a specific area. However, no estimates are provided for General Agriculture, Special District, or Conservation. The cost estimates are conservative figures and there may be opportunities to reduce infrastructure costs. The Department could work with the County or private developers to share the expense of building costly off-site improvements such as sewage treatment plants. Furthermore, Agriculture and Pastoral costs could be minimized by reducing the infrastructure provided to only gravel roads and potable water.



U.S. Post Office (Commercial) in Ho'olehua

### INFRASTRUCTURE COST ESTIMATE CRITERIA

- Costs are preliminary estimates based upon known infrastructure factors
- Based upon County of Maui Rural Standards
- Irrigation water costs are not included in calculations
- Potable water demand for Commercial and Community Use lands are included in overall water demand for each area







LAND USE	INFRASTRUCTURE
Residential (Homestead)	Potable water, wastewater, roads, site prep, drainage, electricity
Agriculture & Pastoral (Homestead)	Potable water, irrigation service, improvements for areas connected to existing MIS, wastewater, rural roads, site preparation, electricity
General Agriculture	None
Special District	None
Community Use	Water storage
Conservation	None
Commercial	Water storage, sewage treatment
Industrial	Water, wastewater, roads, electricity

**Table 2.3 - Infrastructure Improvements Included in Cost Estimates**



Section 3.0

---

‘Ualapu’e





## 3.0 'UALAPU'E

### 3.1 EXISTING CONDITIONS

The Department owns 412 acres in 'Ualapu'e, which is located on the eastern end of the island. As part of a 1994 settlement that awarded DHHL approximately 16,500 acres statewide, the Department was deeded over the lands of 'Ualapu'e. However, the land transfer did not occur until 1999.

The parcel lies mauka of Kamehameha V Highway and is highlighted by its sloped terrain (11-20%) from its mountainous regions interspersed by the deep ravines of Kahananui Gulch, Ki'inohu Gulch, and Mo'omuku Gulch (*Figure 3.1*). Pockets of residences dot the coastal area adjacent to the parcel. The coastal area in this region is primarily comprised of traditional fishponds some of which remain in use today. Kilohana Elementary school and the Kilohana Community Center are the only community facilities near the parcel.

The elevation ranges from 25 to 1,000 feet above sea level. The lower elevations receive 35 inches of rain per year while the upper elevations receive 45 inches per year. The parcel is characterized as undeveloped with an existing revocable permit.

The 'Ualapu'e lands are primarily located within the Agriculture State Land Use designation except for its upper mauka boundary which abuts the Conservation district and its lower boundary that is adjacent to an Urban-designated area.

### 3.2 OPPORTUNITIES AND CONSTRAINTS

The major factors influencing possible land uses in 'Ualapu'e are summarized below.

*Topography & Soils* – Impressive views are available from the high and cool elevations. However, the steep isolated plateaus and valleys that predominate in 'Ualapu'e make development challenging and increase costs. Soil is poorly drained over soft weathered rock and characterized as agriculturally unproductive.

*Limited Residential Land* – The area of the parcel between the 20 to the 80 foot elevation is a gentle slope with good scenic views that makes this portion a good site for residential development.

*Limited Road Access* – Access to the property is provided along Kamehameha V Highway, which is a two-lane divided highway. Within the undeveloped 'Ualapu'e parcel, a single mauka unimproved paved roadway access extends from Kamehameha V Highway. Any future development of the area will require substantial roadway improvements.

#### EXISTING USES

- No homesteads
- 2.1 acres under license to Ka Hale Pōmaika'i
- Several cultural sites within parcel
- Small neighborhoods, cemetery, school, and community center are adjacent to the parcel



County DWS Water Tank above 'Ualapu'e

#### COMMUNITY VOICE

*" 'Ualapu'e is a special place... planning for this area should consider the ahupua'a as one working system from mauka to makai..."*



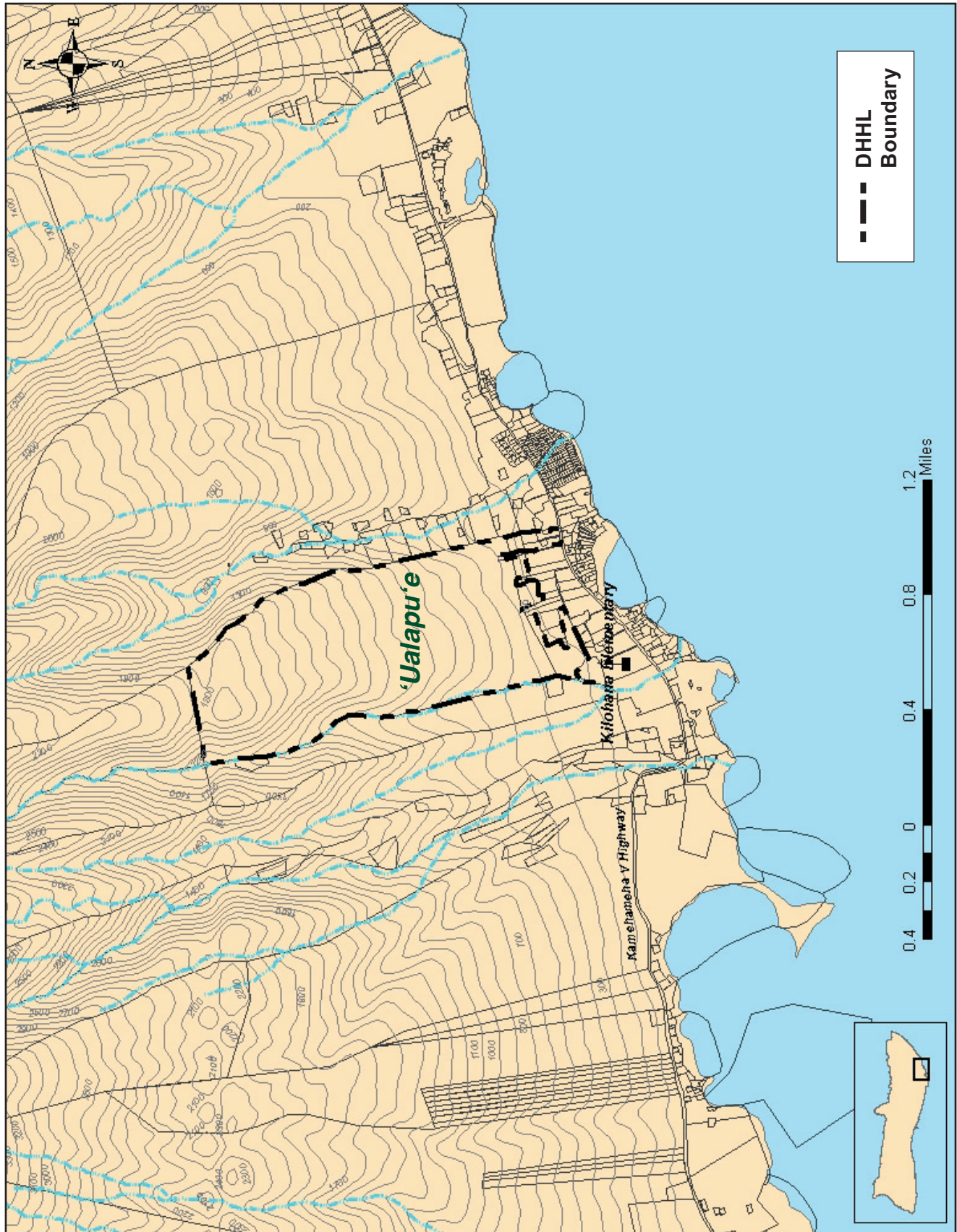


Figure 3.1 - DHHL Parcel in 'Ualapu'e





### 3.4 LAND USE PLAN

Figure 3.2 illustrates the proposed uses for this expansive property. The land uses are also summarized in the table to the right.

Development in 'Ualapu'e will be centered on residential homesteads and community uses in the lower mauka areas to take advantage of existing topography, road, and utility access to the area.

Approximately 85 acres of the upper mauka portions and the Kalauonākukui Heiau are designated as Special District. The scenic upper mauka area will serve a dual role as a natural resource management area as this area is home to several endangered and/or threatened flora species.

This upland region will also be designated as a subsistence forest area as it was identified by the community as an area utilized for gathering forest and stream resources for cultural and subsistence practices.

The Special District designation for Kalauonākukui Heiau will preserve this important cultural resource and the integrity of its cultural space as well as create opportunities for groups to engage with this wahi pana (traditional sacred site) for educational purposes and create linkages with the coastal cultural resources such as 'Ualapu'e Fishpond.

Vehicular and trail accesses between the Special Districts and residential area will be maintained and improved via existing 4-wheel drive roads and hiking trails.

Most of 'Ualapu'e will remain in General Agriculture to preserve it for future uses. Potential interim uses include agriculture or limited pastoral activities. The overall cost to develop 'Ualapu'e is estimated to be \$4.1 million (Table 3.1)

Major infrastructure improvements include water storage facilities, individual wastewater systems, and road improvements. 'Ualapu'e is identified as a high priority development area. Priorities are discussed further in Section 8.0.

#### 3.4.1 RESIDENTIAL

The 'Ualapu'e residential community is the first of two priority residential developments outlined in Section 8.0. Although the opportunities for developing the land for residential use are constrained by existing natural conditions, the proposed community development will provide (74) 10,000 sq. ft. residential lots on 25 acres. The development of the residential growth within 'Ualapu'e will be planned communities that are designed and implemented in two separate phases. Phase 1 will consist of developing the east end and provide (27) 10,000 sq.

#### LAND USE PLAN

##### Residential

- (27) 10,000 sq ft residential lots on 9 acres - East
- (47) 10,000 sq ft residential lots on 16 acres - West

##### Community Use

- 2.9 acres

##### Special District Areas

- 'Ualapu'e Natural Resource Management and Subsistence Access Area (78 acres)
- Kalauonākukui Heiau CRM Area (7 acres)

##### General Agriculture

- 299 acres
- ~30 acres suitable for future development with infrastructure improvements

	Cost (Millions)
On-Site	\$3.3
Off-Site	\$0.8
<b>TOTAL</b>	<b>\$4.1M</b>

Table 3.1 - 'Ualapu'e Total Infrastructure Costs







*Water* – The parcel is currently not serviced. However, 'Ualapu'e is within the region currently serviced by the Maui County DWS system. The water district sub-areas under the DWS include Kawela-Kaunakakai, 'Ualapu'e, Kala'e, and Hālawā. The two County well sources in 'Ualapu'e provide a source supply of .18 mgd that stems from an estimated 2.5 mgd available source in the 'Ualapu'e Aquifer. Other user groups utilize an additional .44 mgd from the 'Ualapu'e Aquifer. The proposed DHHL development in 'Ualapu'e discussed below would demand an estimated .049 mgd of potable water for residential use. With an adequate potable source, project development would require coordination with DWS to consider future expansion of county source storage and transmission to the area.

*Wastewater* – It is not feasible to connect to the County wastewater system situated in Kaunakakai Town. The total lots within each of the two distinct planned residential areas allow for the use of an Individual Wastewater System (IWS).

*Cultural Resources* – Cultural sites within the parcel such as the Kalauonākukui heiau should be protected and integrated with the protection and restoration efforts of 'Ualapu'e fishpond.

### 3.3 COMMUNITY CONCERNS

In addition to the community meetings that were held at Kulana 'Ōiwi and the Lanikeha Community Centers through the process, an additional meeting was held in 'Ualapu'e at the Kilohana Community Center in November 2004. Some of the key concerns expressed at this meeting and subsequent meetings regarding the proposed alternatives included the following:

- The east end of Moloka'i is becoming highly visible as a potential area for high-end development. If development were to occur in 'Ualapu'e, assurances need to be made that the land is not sold to non-Hawaiians.
- This area has many cultural sites of great importance.
- The mauka areas of the DHHL parcel in 'Ualapu'e and its flora, fauna, and historical/cultural resources need to be preserved for future generations.
- Allowances should be made for subsistence hunting in the upland regions.
- The area needs an additional park or recreational space.
- No commercial use is desired.
- Lands should be reserved for a cemetery.
- First choice for awards should go to East Moloka'i people on the DHHL waiting list.

## Planning Considerations

### OPPORTUNITIES

- Great views and cool temperatures at high elevations
- Suitable land for limited residential development
- Access to sufficient potable water source
- Important cultural sites

### CONSTRAINTS

- Mostly steep, mountainous terrain and isolated valleys
- No existing wastewater infrastructure for future development
- Road access limited to unimproved dirt roads
- Potential for drainage problems



*Mauka region of 'Ualapu'e*



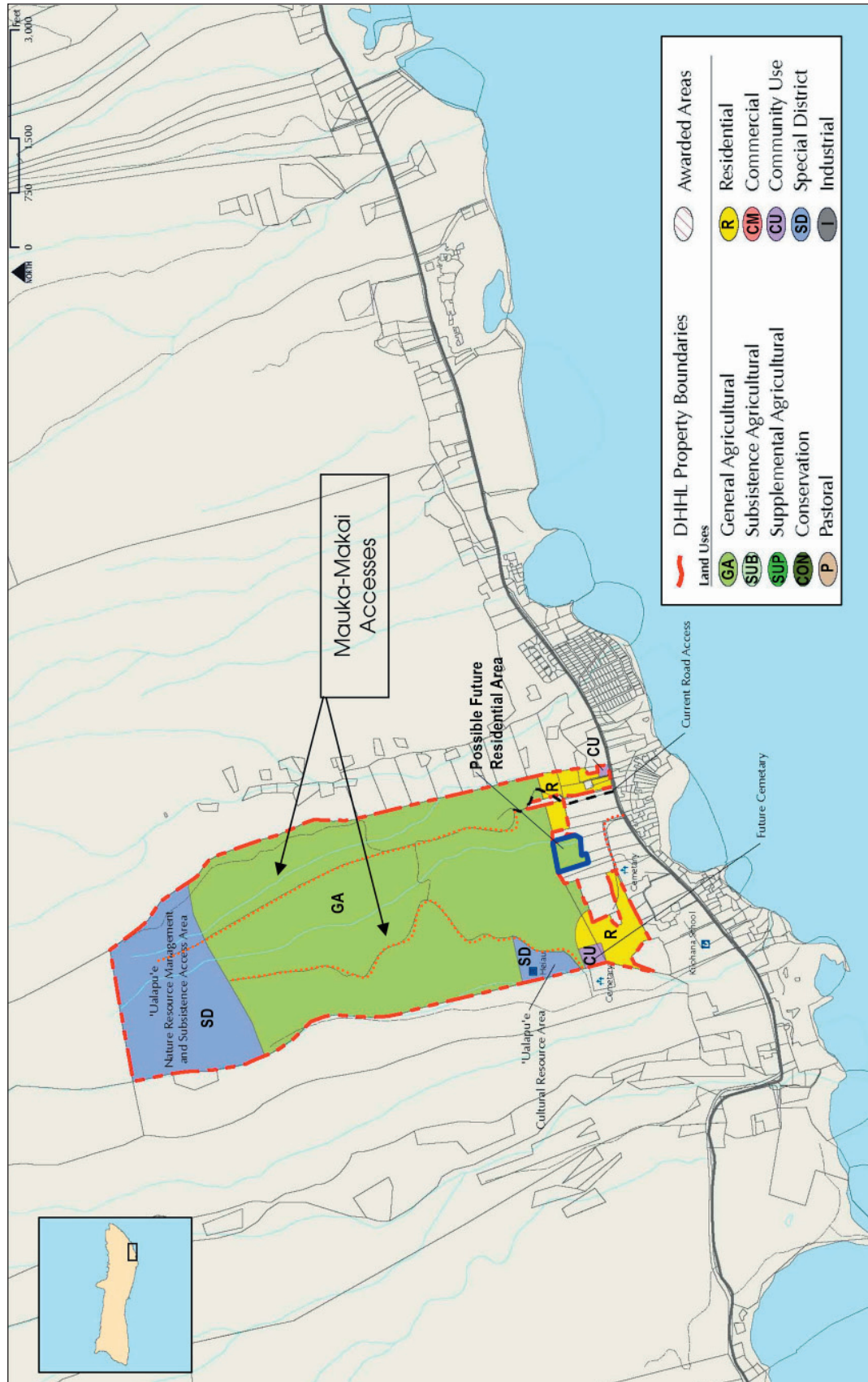


Figure 3.2 - 'Ualapu'e Preferred Land Use Plan





ft. lots on 9 acres. Phase 2 will commence after the completion of Phase 1 and will consist of (47) 10,000 sq. ft. lots on 16 acres along the west end.

The 10,000 sq. ft. allotment for the residential lots size was not the initial preference of the beneficiaries. Most of the beneficiaries had an expressed a desire of a minimum half-acre to 1-acre. However, this would sharply diminish the number of lots that could be developed, thereby dramatically increasing the cost per lot. The 10,000 sq. ft. lot size would still maintain the rural character of the area, thus providing an opportunity for a new community to grow. The slightly increased density reduces overall infrastructure costs and provides more awards.

The 'Ualapu'e development will be a complete community with provided amenities such as a park, community center, cemetery, and access to upland and coastal cultural and natural resources. Access to the residential community will be provided via Kamehameha V highway and road design may include an interior looped local street. Pedestrian links should be provided between the two separated residential areas.

Table 3.2 summarizes the development costs. As this parcel is undeveloped, the proposed residential development will require potable water storage and transmission, road, drainage and storm water management, electrical utility provisions. In accordance with State regulations, an individual wastewater system (IWS) is a viable option for these two distinct residential developments within the 'Ualapu'e parcel. Connection to an existing and sufficient potable water source will require coordination with the County Department of Water Supply.

### 3.4.2 GENERAL AGRICULTURE

The majority of 'Ualapu'e (299 acres) is designated General Agriculture. This will preserve the land for future uses while making it available to individuals and groups for short-term leases. Much of this land is very rugged and unsuitable for most types of activities and development. Care must be taken to ensure that permitted uses are compatible and do not lead to further erosion of the land.

Approximately 30 acres within the central core of the parcel but currently designated as General Agriculture has preliminary identified as a potential area for an unplanned phase of future residential development that is beyond the 20-year planning framework of this plan. Currently this area is only accessible by 4-wheel drive.

Proposed uses for lands within General Agriculture could include limited opportunities for diversified agricultural or pastoral use; establishing portions of the mauka regions as an extension of the proposed subsistence access for hunting and

### **RESIDENTIAL**

#### **East End**

- (27) 10,000 sq ft residential lots
- 9 acres total

#### **West End**

- (47) 10,000 sq ft residential lots
- 16 acres total

#### **Costs**

- \$54,527 per lot

#### **Community Use**

- 2.9 acres total



*Residences adjacent to DHHL parcel in 'Ualapu'e*







gathering purposes; expanding the proposed cultural resource management area around Kaluaonākukui Heiau. These uses could continue within the General Agriculture designation. Other possible activities include tropical forestry or hiking tours focusing on eco-education or adventuring touring.

In general, no infrastructure improvements are proposed within this area. However, the roads should be maintained in their current condition.

### 3.4.3 SPECIAL DISTRICT AREAS

The area around the upper mauka boundary and Kaluaonākukui Heiau have been designated as Special District. According to historical documents, Kaluaonākukui Heiau is an agricultural heiau that is dedicated to the akua (god), Lono. The heiau has been measured as 125' in length, 85' in width, and 6' in height. The Special District Area for this heiau is comprised of 7 acres and includes a buffer zone that extends out from the physical structure of the heiau to a minimum distance of 100' within the DHHL property. This area outside of the physical boundary is to provide protection but also can be used for the future creation of a cultural resource management (CRM) area that includes the development of a cultural garden to cultivate resource such as the various kinolau (physical manifestations) of Lono that would be appropriate ho'okupu (a tribute to invoke the spiritual mana of the akua within the heiau) that is appropriate to Kaluaonākukui. The CRM area could include a staging area whereby community members that take on the responsibility for the long-term care of the heiau could conduct informal talk-story sessions and formal educational forums for visitors to the area.

The upper mauka area under Special District consists of 78 acres and will serve as a natural resource management and subsistence (NRM-SB) area for the protection of several



General Agricultural lands in 'Ualapu'e



Mauka resource of hapu'u fern for food and fabric

	POTABLE WATER	WASTE- WATER	SITE PREP & ROADS	DRAINAGE	ELECTRICITY	TOTAL
<b>Major Factors</b>	Transmission lines, cxn to existing source	IWS	Enhance and construct new roads	Assume 5' depth	Transmission lines	
<b>On-Site</b>	\$0.2 M	--	\$1.9 M	\$0.7 M	\$0.5 M	\$3.3 M
<b>Off-Site</b>	\$0.1 M	--	\$0.5 M	--	\$0.1 M	\$0.7 M
<b>TOTAL</b>	<b>\$0.3 M</b>	<b>--</b>	<b>\$2.4 M</b>	<b>\$0.7 M</b>	<b>\$0.6 M</b>	<b>\$4.0 M</b>

Table 3.2 - 'Ualapu'e Infrastructure Costs





endangered or threatened flora species. There are over 40 species whose habitat lies within the upper Moloka'i Forest Reserve. Further this region will also be designated as a subsistence forest area as it was identified by the community as an area currently utilized for gathering forest and stream resources for cultural and subsistence practices. In discussion with community members, the forest area was identified as both a dry and wet forest with distinct transitions in the abundance of species types within each unique ecosystem. Directly mauka of this designated NRM-SB is the East Moloka'i Watershed Partnership (EMWP), whose purpose is to protect and enhance the quality of Hawai'i's rainforest communities. Currently the EMWP works with landowners to manage their respective section of the watershed by protecting the upper forest with a contour fence, reducing goat populations, and establishing a monitoring system to help assess stream flow and the reduction of siltation which both are contributing factors to the integrity of near-shore reef and fishpond ecosystems along the coastline.

The Pelekunu and Kamakou Preserves are two specific areas within the East Moloka'i Watershed that are managed by the Nature Conservancy in collaboration with the State Department of Land and Natural Resources, Division of Forestry and Wildlife. The Kamakou Preserve lies in the upland regions between the 'Ualapu'e and Kapa'akea tracts of DHHL This Preserve is home to a wide variety of native plants including the alani (*Pelea* spp.), the 'ōlapa (*Cheirodendron* spp.), the hapu'u fern (*Cimbotium* spp.), and the 'ōhi'a lehua (*Metrosideros polymorpha*). Further, native birds such as the oloma'o (Moloka'i thrush), the kākāwahie (Moloka'i creeper), and the 'amakihi (endemic Hawaiian honeycreeper) have been sighted within this habitat. Currently, DHHL is not a partner with the EMWP but given the existing partnerships that do exist for watershed protection, it is strongly recommended that the Department apply to the EMWP to become a participating member to facilitate its own natural resource management program.

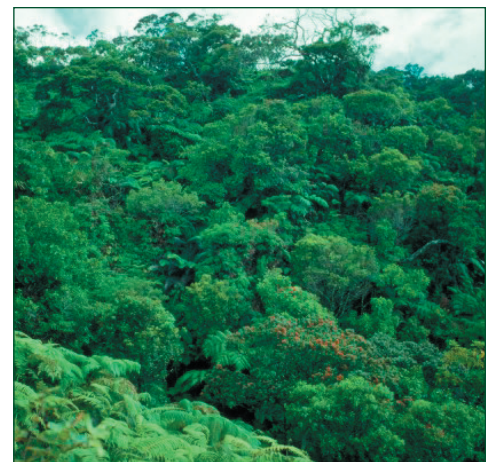
Other appropriate uses that could be considered include utilizing parts of the Reserve Area as a passive recreation area where individuals and community groups can hike to take advantage of the serenity and scenic views. No infrastructure improvements are proposed for the special district areas. However, the existing 4-wheel drive access should be maintained. If specific groups wish to develop programs and facilities in the Special District, additional infrastructure such as hunter stations, water catchment systems, or access trails would need to be evaluated and developed as appropriate to maintain the integrity and quality of the area's natural habitats.



Native 'amakihi (honeycreeper) resting on 'ohi'a lehua branch



Endemic 'olapa on O'ahu (Photo by Charles H. Lamoureux)



'Ohi'a lehua and fern forest in Pelekunu, Moloka'i







### 3.4.4 COMMUNITY USE

Two areas within 'Ualapu'e have been designated as Community Use. The first Community Use area is comprised of two acres and is designated as a cemetery to serve as the future expansion area of the existing 'Ualapu'e Cemetery. Some grading activity may be required to provide road access and level ground surface. Access to water for landscape irrigation will also be required.

The second Community Use area is deemed for purposes of either a park or a community center. Given the richness of cultural and natural resources that exist and the anticipated growth of a new community, community-based initiatives can be considered in creating opportunities for learning, sharing, and sustaining the needs of the community, creating programs for youth or adult camps or other retreat activities that emphasize the relationships between mauka and makai-based ecosystems and wahi pana. Such activities could be linked with the restoration and use of 'Ualapu'e Fishpond through a partnership between the Department and existing community and cultural organizations that currently mālama the area. It is envisioned that the community center would be the place that much of these activities could be managed in conjunction with providing a meeting space for community functions.



*View along hiking trail in Kamakou Preserve, Moloka'i*



*Entrance to existing 'Ualapu'e Cemetery (Community Use)*







Section 4.0

---

Kapa'akea-Kamiloloa-Makakupa'ia





## 4.0 KAPA'AKEA - KAMILOLOA - MAKAKUPA'IA

### 4.1 EXISTING CONDITIONS

The DHHL lands of Kapa'akea, Kamiloloa, and Makakupa'ia are situated along the southern portion of Moloka'i and are approximately 1 mile east of Kaunakakai town. These three ahupua'a parcels are comprised of 5,218 acres.

Most of these DHHL lands are situated mauka of Kamehameha V Highway, highlighted by variable slope (10-35%) and major drainage channels that help form the wetlands near the shoreline (*Figure 4.1*). The slopes are mild and severed with steep rocky areas and gentle sloping agricultural lands. The coastal area in this region is characterized as a flat coastal plain with two existing fishponds fronting its shores, One Ali'i and Kaloko'eli, respectively.

The area has no parks or schools but does have one cemetery. The closest school is Kaunakakai Elementary School which is less than 5 miles away. The elevation ranges from sea level to its mauka boundary at 2,000 feet above sea level. The lower elevations receive 15 inches of rain per year while the upper elevations receive 40 inches per year.

Similar to 'Ualapu'e, the Kapa'akea, Kamiloloa, and Makakupa'ia lands are primarily located within the Agriculture State Land Use designation with its upper slopes within the Conservation district and its lower western section within an Urban-designated area. The fishponds and their surrounding coastal edge are within the Conservation District.

### 4.2 OPPORTUNITIES AND CONSTRAINTS

The discussion below summarizes the major factors influencing possible land uses in Kapa'akea, Kamiloloa, and Makakupa'ia.

*Topography & Soils* – The majority of mauka lands is densely covered with boulders and loose rocks and primarily suitable for pastoral or as a nature reserve. The coastal area is a mixture of sand and silty clay.

*Drainage and Flood* – Surface runoff is a major issue within this area. Residents within Kapa'akea tract experience severe flooding events on an annual basis in the coastal area. Heavy seasonal rainfall contributes to flooding in the areas and proper maintenance and cleaning of the drainage channels is necessary. The US Army Corps of Engineers (USACE) has looked at a diversion ditch mauka of the highway and at improving the drainage channel under Kamehameha V Highway leading into the Kapa'akea makai DHHL neighborhood; however, funds for implementing this flood control project were not allocated.

#### EXISTING USES

- 72 residential leases
- 4 pastoral leases
- Fee simple residential areas situated between boundaries of DHHL lands
- Extensive historical and cultural sites on the east end of parcel
- Existing County cemetery
- Existing cinder quarry

#### COMMUNITY VOICE

*"The homestead of Kapa'akea, Kamiloloa, and Makakupa'ia represents a small but close community of good neighbors where everyone knows each other's families and each values and cares for the resources provided by the nearby ocean..."*



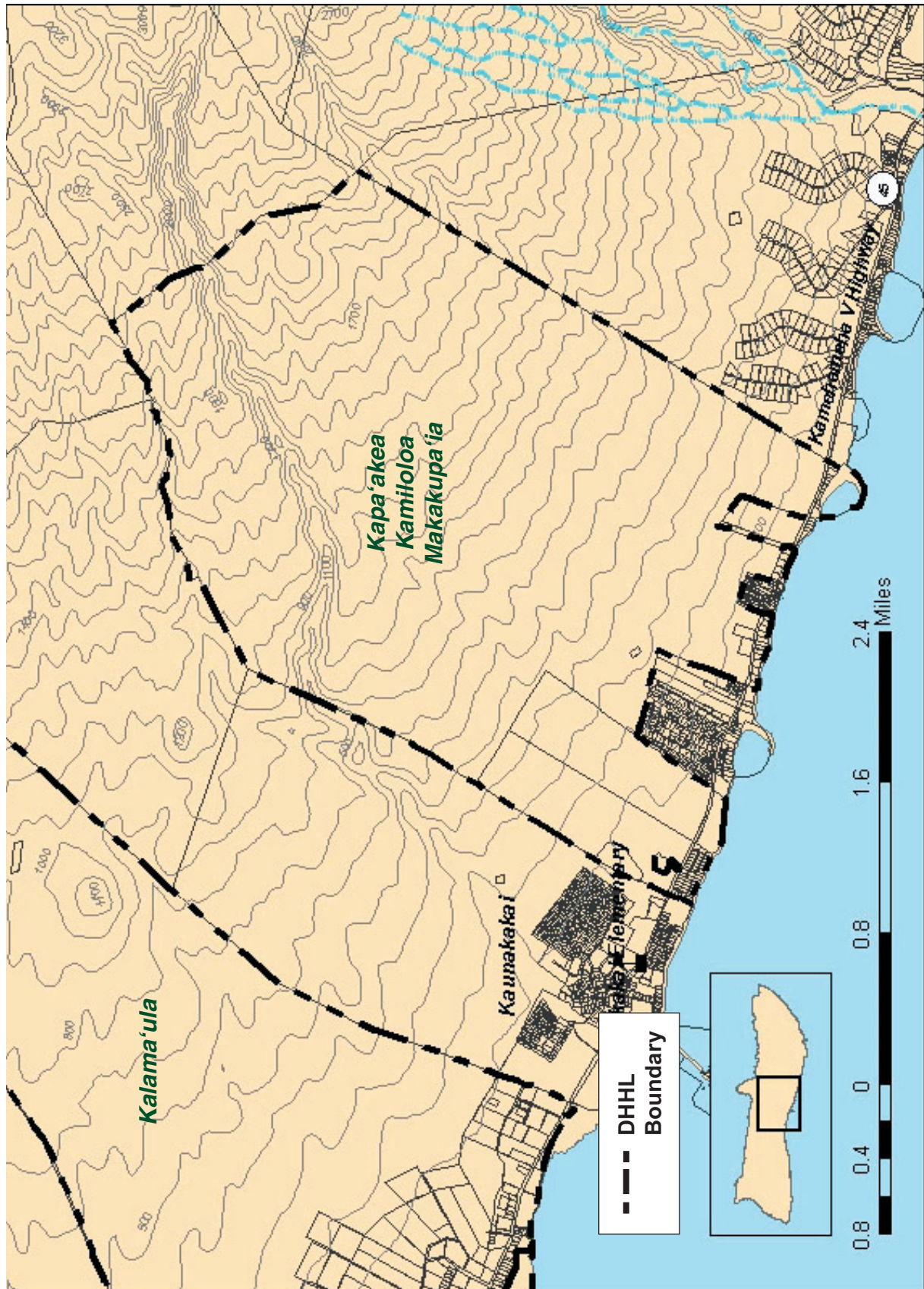


Figure 4.1 - DHHL Parcel in Kapa'akea, Makakupa'ia, Kamiloloa





*Limited Road Access* – Two makai light-duty paved roads provide access points to Kapa'akea off of Kamehameha V Highway that run through the parcels. The local collector street in the homestead is a looped light-duty road which connects to the two access points. An additional unimproved road provides access to the mauka region that leads up to the Kapa'akea Cemetery.

*Water* – The area is currently serviced by the Maui County DWS system with available potable water of approximately .93 mgd. Proposed development discussed below would require .18 mgd. However, if development exceeds the 150' elevation, water transmission would be cost prohibitive as it would require booster tanks.

*Wastewater* – The proposed development of residential units would require the development of onsite wastewater treatment facility.

*Cultural Resources* – Cultural sites within the parcel such as the fishponds and the Habitation and Agricultural Complex within Makakupa'ia should be protected and perpetuated.

### 4.3 COMMUNITY CONCERNS

The areas of Kapa'akea, Kamiloloa, and Makakupa'ia were discussed in all of the main community meetings held on Moloka'i. Additionally, individual group meetings, including one meeting with the homestead associations emphasized some of the key community issues and concerns that included the following:

- Addressing the flooding and drainage issue as the primary concern in coordination with stream rehabilitation.
- A community park or playground for kids of the area is needed.
- Uneven paving of Kapa'akea Loop Road heightens impacts by creating a sloped effect for flood runoff to residences.
- Need to create communities not subdivisions.
- Maintain upland resources and access for subsistence hunting and gathering
- Need to provide for the expansion of existing cemetery.
- Preserve fishponds and consider developing a cultural resource center at these sites.

## Planning Considerations

### OPPORTUNITIES

- Suitable land for limited residential development
- 3 fishponds as important cultural sites and potential community resource for CBED and subsistence activities
- Upland resources for hunting and gathering

### CONSTRAINTS

- Variable slope
- Need new water source
- Flooding and drainage issues
- Residential development would require wastewater treatment facility



*Uneven paving along Kapa'akea Loop Road*







#### 4.4 LAND USE PLAN

An Inventory and Preliminary Analysis Report was conducted for this area in 1982. The purpose of this condensed analysis was to evaluate the existing conditions, summarize then opportunities and constraints, and evaluate the significance of these lands for future residential homesteads. This study was used as a baseline of information as some of the key concerns and issues were still prevalent. *Figure 4.2* illustrates the proposed uses for this expansive property. The land uses are also summarized in the table to the right.

Proposed land use development in the area will be centered on a new residential homestead with support services within Kamiloloa. Other proposed land uses for future consideration include the transformation of the makai portion for community use with a proposed coastal park and restoration of an inland fishpond that currently is an non-managed wetland system as well as provisions for a future cemetery. Plans call for the Makakupa'ia region to become a cultural center that extends mauka to makai.

The upland region is designated as Special District for the purposes of serving as a subsistence forest area as it was identified by the community as an area utilized for hunting and gathering forest and stream resources for cultural and subsistence practices. Links between the Special Districts and Kamehameha V Highway will be provided by 4-wheel drive roads and hiking trails.

The Special District designation within the Kamiloloa area will serve to protect existing historical sites of a traditional habitat and agricultural complex within the region. This CRM area will be programmatically linked with the restoration and care of One Ali'i Fishpond that is situated makai of the CRM area.

Most of the Kapa'akea, Kamiloloa, and Makakupa'ia area will remain in General Agriculture to preserve it for future uses. Potential interim uses include agriculture or limited pastoral activities. Further, the Kapa'akea quarry area is designated as Industrial.

The overall cost to develop Kapa'akea, Makakupa'ia and Kamiloloa is estimated to be \$29.2 million. The off-site and on-site costs are summarized in *Table 4.1* and discussed further in the following sections. Major infrastructure improvements include a new source, storage, and transmission of potable water; individual wastewater systems, and road improvements (*Table 4.2*).

These DHHL lands are identified as a medium priority development area. Priorities are discussed further in Section 8.0 of this document.

#### **LAND USE PLAN**

##### **Existing Residential**

- (74) lots ranging from .3 to 1 acre lots

##### **New Residential**

- (286) 1/2 acre mauka lots on 204 acres
- (5) 1/2 acre makai lots on 4 acres

##### **Pastoral**

- 465 acres

##### **Community Use**

- One Ali'i and Kaloko'eli Fishpond restoration (61 acres)
- Future consideration for community park, cemetery expansion, and inland fishpond restoration (23 acres, not shown)

##### **Special District Areas**

- Natural Resource Management and Subsistence Access Area (2,040 acres)
- CRM Area (207 acres)
- Flood control (29 acres)

##### **General Agriculture**

- 2,165 acres

##### **Industrial**

- 16 acres for existing quarry



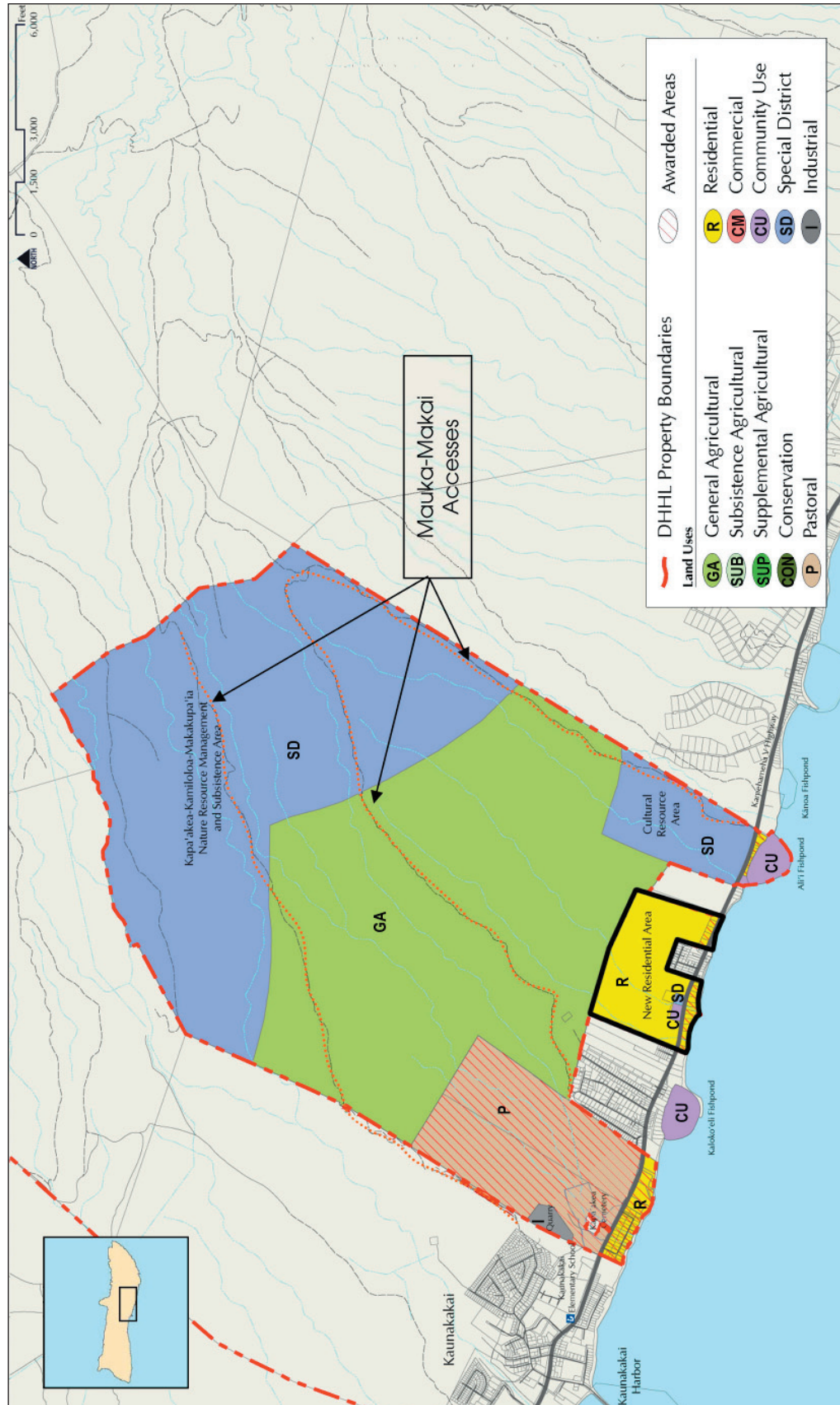


Figure 4.2 - Kapa'akea, Makakupa'ia, Kamiloloa Preferred Land Use Plan



#### 4.4.1 RESIDENTIAL

With a sufficient potable water source from the County DWS systems and suitable land for limited residential development, the second area of emphasis for new residential growth is within the Kapa'akea, Kamiloloa, and Makakupa'ia tract. Currently, there are 72 existing residential leases situated on 60 acres ranging from .3 to one-acre lots. Of these lease, 45 residences are clustered in the coastal homestead of Kapa'akea while the remaining 27 lots are situated along the coastline between Kamiloloa and Makakupa'ia.

The new residential area is comprised of 204 acres situated within the central region of the DHHL parcel and mauka of Kamehameha V Highway and would provide (286) half-acre lots. Existing limitations of the area is that potable water service to the area can only be provided to the 150' elevation level. Any proposed development further mauka would require the provision of booster pump stations and storage tanks which would be cost prohibitive.

According to State regulations, general requirements for wastewater treatment stipulate that any new proposed development of fifty or more single family residential units does not allow for the use of an IWS. As such, infrastructure requirements for the new development area will require a wastewater treatment facility. Residential development within this DHHL tract will fortify and expand a rural community with planned provisions for amenities such as a park, community center, cemetery, and access to upland and coastal cultural and natural resources. Access to the new residential community will be provided via Kamehameha V highway.

Table 4.2 summarizes the development costs. As this parcel is undeveloped, the proposed residential development will require potable water, road, drainage and storm water management, electrical utility provisions. Connection to the existing County potable water source will require coordination with the County Department of Water Supply.

#### 4.4.2 PASTORAL

There are three pastoral leases that currently utilize 465 acres within this DHHL tract. There are no plans for future expansion of pastoral lots within the Kapa'akea, Kamiloloa, and Makakupa'ia area. However, lands that are designated within the General Agriculture areas could be considered for cooperative farming and/or ranching activities.

One of the existing concerns within an existing pastoral lot is the severe flooding and drainage problem that limits its usability. Any future consideration of approximately 29 acres within the existing pastoral lease as a flood control management area will

	Cost (Millions)
On-Site	\$29.2
Off-Site	--
<b>TOTAL</b>	<b>\$29.2 M</b>

Table 4.1 - Kapa'akea, Kamiloloa, Makakupa'ia Total Infrastructure Costs



Residential parcel in Kapa'akea homestead



Undeveloped future site of residential area in Kamiloloa







require coordination and planning between the Department, the existing lessee, and representatives from the U.S. Army Corps of Engineers, Honolulu District.

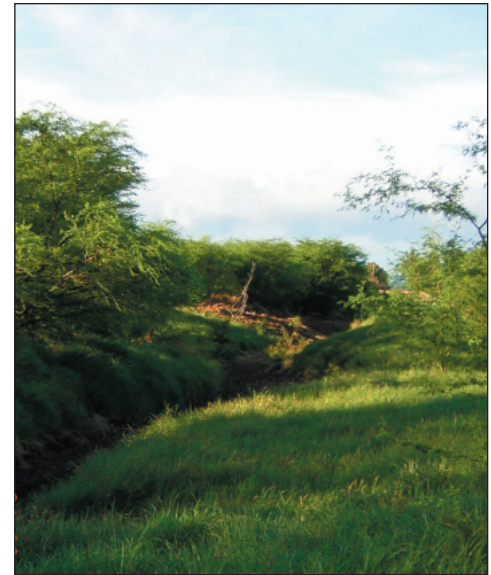
#### 4.4.3 SPECIAL DISTRICT

Along the eastern boundary of the tract and mauka of Kamehameha Highway lies an abundance of historical and cultural resources in an area designated as the Makakupa'ia Habitation and Agricultural Complex. According to data provided by the State Historic Preservation Division, this area is comprised of 207 acres and consists of numerous terraces, retaining walls, stone mounds, modified outcrops, enclosures, and habitation sites that are still intact.

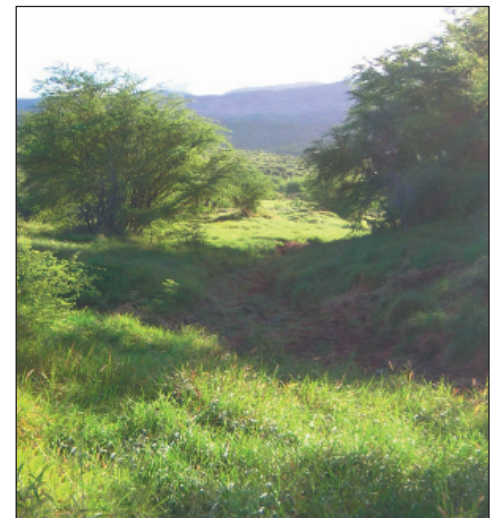
One of the ongoing projects of the Moloka'i Rural Development Program (RDP) is the provision of in-class and field archaeology training for Moloka'i students. This part of a partnership with the Society of Moloka'i Archaeology, the RDP, Kamehameha Schools, the University of Hawai'i Department of Anthropology, the Maui Community College Moloka'i Education Center, and the Enterprise Community. It is recommended that the Department establish a partnership with this existing working group to help plan, implement, and maintain this designated area as a culture resource area and perhaps develop a cultural legacy project whose programs could be linked with the proposed restoration and care of the adjacent One Ali'i Fishpond.

The second Special District area consists of approximately 2,040 acres of the upper mauka boundaries of the Kapa'akea, Makaupa'ia, and Kamiloloa parcels, serving as a Nature Resource Management and Subsistence Area (NRM-SB). This upland area is a natural wildlife habitat for axis deer; feral pigs and goats; and a variety of gamebirds including ring-necked pheasants, chukar, francolins, and quail.

Hunting regulations in a State-designated public hunting area land above the DHHL boundary are currently managed by the State Department of Land and Natural Resources, Forestry and Wildlife Division (DOFAW), which establishes rules pertaining



*Pastoral lands in Kapa'akea homestead*



*Mauka view of existing drainage from Pastoral lands of Kapa'akea to NRM-SB (Special District) mauka lands*

	POTABLE WATER	WASTE-WATER	SITE PREP & ROADS	DRAINAGE	ELECTRICITY	TOTAL
<b>Major Factors</b>	Transmission	Treatment facility	Enhance and construct additional	Assume 5' depth	Transmission lines	
<b>On-Site</b>	\$3.1 M	\$12.5 M	\$9.6 M	\$1.4 M	\$2.6 M	\$29.2 M
<b>Off-Site</b>	--	--	--	--	--	--
<b>TOTAL</b>	<b>\$3.1 M</b>	<b>\$12.5 M</b>	<b>\$9.6 M</b>	<b>\$1.4 M</b>	<b>\$2.6 M</b>	<b>\$29.2 M</b>

Table 4.2 - Kapa'akea, Kamiloloa, Makakupa'ia Infrastructure Costs





to types of hunting allowed in certain areas; daily bag limits; open hunting periods and days; and any special conditions and restrictions.

As with 'Ualapu'e, the proposed DHHL NRM-SB will require future coordination and partnerships with DOFAW officials and other members of the East Moloka'i Watershed Partnership that have an interest in land use activities adjacent to the DHHL boundaries to establish policy guidelines that design best management practices for this area. These practices would be to ensure that wildlife habitats that are home to endangered and threatened species are protected from human and ungulate-related activities. These practices should include an annual count of available game; maintenance and upkeep of access roads; enforcement of hunting regulations; and fire protection; and the upkeep of hunter check-in stations.

One of the key concerns within the Special District and General Agricultural areas is the propensity of wildfires during hot and dry summer months. Wildfires pose the greatest threat on Moloka'i. A Maui Times article describes a 12,000-acre wildfire on Moloka'i in 1998 that cost \$1 million dollars to extinguish. According to the Pacific Disaster Center, wildfire affects Hawai'i and other Pacific Island environments on several levels, in addition to native plant destruction. Wildfires also cause soil erosion, which leads to soil runoff into the ocean, killing seaweed and fish that local populations rely on for food and cultural practices. For example, the island of Moloka'i has experienced three 10,000-acre fires in the past decade on the slopes of mountains that runoff directly to the longest continuous reef in the United States. Since the island experiences high unemployment, many residents rely on shoreline fishing for sustenance. The health of the reef and shoreline areas of Moloka'i and the other islands are impacted after such wildfires.

The County of Maui, Department of Fire Control (DFC) has mutual aid agreements with the State Department of Transportation, Airports Division, Crash Fire Rescue Unit (CFRU) and DLNR-DOFAW. CFRU has historically supported the DFC fighting wildfires on DHHL lands. The DFC in turn has provided both medical and fire response services to airport emergencies. Management of the NRM-SB and General Agriculture areas will also require the development and implementation of a wildfire management and protection program.



*Mauka view from One Ali'i Fishpond (Community Use) of Habitation and Agricultural Complex (Special District) in Makakupa'ia*



*Common example of wildfires that occur in similar dryland areas in Kapa'akea (Photo by Maui County Civil Defense)*



*NOAA-NOS aerial photograph of Kaunakakai used by Maui County Fire Department to plan for wildfire emergencies (Photo by Pacific Disaster Center)*







#### 4.4.4 COMMUNITY USE

Two of the rich cultural resources of the area are One Ali'i Fishpond and Kaloko'eli Fishpond, each comprised of 30 acres and 28 acres, respectively. These fishponds are situated along the eastern coastline of the DHHL parcel and are traditionally known as a loko kuapā, a designed rock enclosure with a makaha (sluice gate) that allows for ocean water to circulate within the pond. The walls of One Ali'i Fishpond measure 2,700' long, 4' wide, and 4.5' high at its prime. As the name suggests, this pond was reserved for the ali'i, or ruling chiefs during traditional times. According to local residents, schools of 'āholehole (Hawaiian flagtail) can still be found within the pond's waters. Kaloko'eli was restored in the 1920s after the walls were destroyed. Each fishpond has two sluice gates to account for seasonal shifts in the tidal patterns. Coconut palms dot the shoreline and mangrove is visible along the shoreline and the edge of both pond walls. The community envisions that these fishponds in collaboration with many others along the south shore of Moloka'i can be restored and managed by local residents for primarily subsistence use and cultural educational tools. Secondary considerations of using the fishpond would include some limited community-oriented economic development or eco-tourism. One of the key issues to restoring historic fishponds has been attaining the necessary permits required under existing statutory and regulatory controls designed to protect the pristine nature of the coastal environment. Past precedence with other fishpond restorations have illustrated that the permitting process can be time consuming and limiting. The Department will need to work with key community interests and the regulatory agencies such as the U.S. Army Corps of Engineers, the State Department of Business, Economic Development, and Tourism, Office of Planning, Coastal Zone Management Program, and the County of Maui Department of Planning. Future development of programs for this fishpond could be linked with the proposed creation of a cultural resource management area of a traditional agricultural and habitation complex located mauka of the Ali'i Fishpond.

An approximately 2-acre site was identified as Community Use within the new mauka residential area. It is anticipated that this site would be a neighborhood park to meet the recreational needs of future and growing community. Although not identified as land uses in Kapa'akea, Kamiloloa, and Makakupa'ia, other important community uses were identified and discussed during the planning process and are subject to a subsequent revision to the proposed MIP. Expansion of existing County cemetery and establishing a community park along the coastal area of the existing Kapa'akea homestead were other community



*Makai view of One Ali'i Fishpond in Makakupa'ia*



*Kaloko'eli Fishpond, Kamiloloa*



*School of 'āholehole (flagtail), a native fish that is found in One Ali'i fishpond (Photo by NPS)*





uses identified. However, the areas within the tract that meet the baseline criteria for these proposed uses occur on lands already leased out for pastoral and residential use. Although the leases that are issued by the Department do have a clause to recall lands for a public purpose, this act would require further consultation with the existing lessee to ensure that mutual benefits are provided to both parties. Finally, during the planning process, a former loko wai (inland fishpond) that currently exists in the form of a grassland marsh was identified on lands currently leased as residential. Potential restoration of this 3-acre parcel was discussed during the planning process but would require a similar level of future coordination and negotiation with the existing lessee.

#### 4.4.5 GENERAL AGRICULTURE

Approximately 2,165 acres of these DHHL lands are designated General Agriculture and the land for future uses while making it available to individuals and groups for short-term leases. Some of these lands could be the site of future homesteads beyond the 20-year planning framework identified in this plan. As with 'Ualapu'e, much of the land in Kapa'akea, Kamiloloa, and Makakupa'ia is very rugged and unsuitable for most types of activities with limited development options. Care must be taken to ensure that permitted uses are compatible and do not lead to further erosion of the land. Proposed uses for this area could include limited opportunities for pastoral use and for providing access for subsistence hunting and gathering. Further needs could also include expanding the CRM area as more sites may be discovered that are need of protection and preservation. No infrastructure improvements are proposed for this area. The roads should be maintained in their current condition.

#### 4.4.6 INDUSTRIAL

According to the State Department of Accounting and General Services, Survey Division, the existing Kapa'akea Quarry site is comprised of approximately 17 acres adjacent to Pu'u Maninikolo and produces cinder block and cinderlite.



*Area under future consideration for wetland and fishpond restoration in existing Residential lands under lease in Kapa'akea*



*Existing County Cemetery in Kapa'akea that may require future expansion on lands in existing Pastoral lease*









## 5.0 KALAMA'ULA

### 5.1 EXISTING CONDITIONS

The DHHL properties in Kalama'ula consist of 5,318 acres, which are located west of Kaunakakai town. This parcel lies mauka of Kamehameha V Highway and is characterized as a gentle slope (0-10%) upland that leads up to Pu'u Luahine (372 ft. elevation) transected with the declining slopes of Kuhuaawi Gulch and Kaluaohē Gulch, located north of the pu'u (Figure 5.1). The area consists of multiple uses with a growing residential community in the lowlands and coastal region, a wetlands to the southwestern corridor, pastoral use permitted to the Moloka'i Homestead Livestock Association; Kapuāiwa Grove, a noted cultural and community resource area fronting the area's shorelines, Church Row; and Kulana 'Ōiwi, a community services center that houses the island branch offices of DHHL, Office of Hawaiian Affairs, and the Queen Lili'uokalani Children's Center.

The elevation ranges from sea level to 1,800 feet above sea level. The lower makai elevations receive 20 inches of rain per year while the upper forested elevations receive 40 inches per year. The Kalama'ula lands are primarily located within the Agricultural State Land Use designation except for its upper mauka boundary which abuts the Conservation district and its lower boundary which includes a Rural-designated area and the wetlands which lie in Conservation District and is comprised of a thick mangrove forest.

### 5.2 OPPORTUNITIES AND CONSTRAINTS

The discussion below summarize the major factors influencing possible land uses in Kalama'ula.

*Topography & Soils* – There are multiple soil types ranging from salty marsh lands to rocky and stony outcrops in the uplands. There is some agricultural potential with the provision of an adequate source of irrigation water.

*Established Community* – The existing residential homestead known as the Kalaniana'ole Colony is the center of the rural community in Kalama'ula that is supported by several social service organizations and churches within the immediate vicinity.

*Drainage and Flooding* – In Kalama'ula, most of the land makai of Maunaloa Highway is subject to flooding. A flood area also extends into the center of the Kalaniana'ole Colony where several runoff streams converge.

#### **EXISTING USES**

- 161 residential leases
- 76 agriculture leases
- 3 pastoral leases
- Various general lease, licenses, revocable permits to churches, community groups, Moloka'i Homestead Livestock Association
- Provision of social services at Kulana 'Ōiwi

#### **COMMUNITY VOICE**

*" Kalama'ula is a homestead of friendly and kind neighbors that provides a central and convenient location to other places of work, recreation, and subsistence and addresses the essential needs of Hawaiian families on Moloka'i..."*





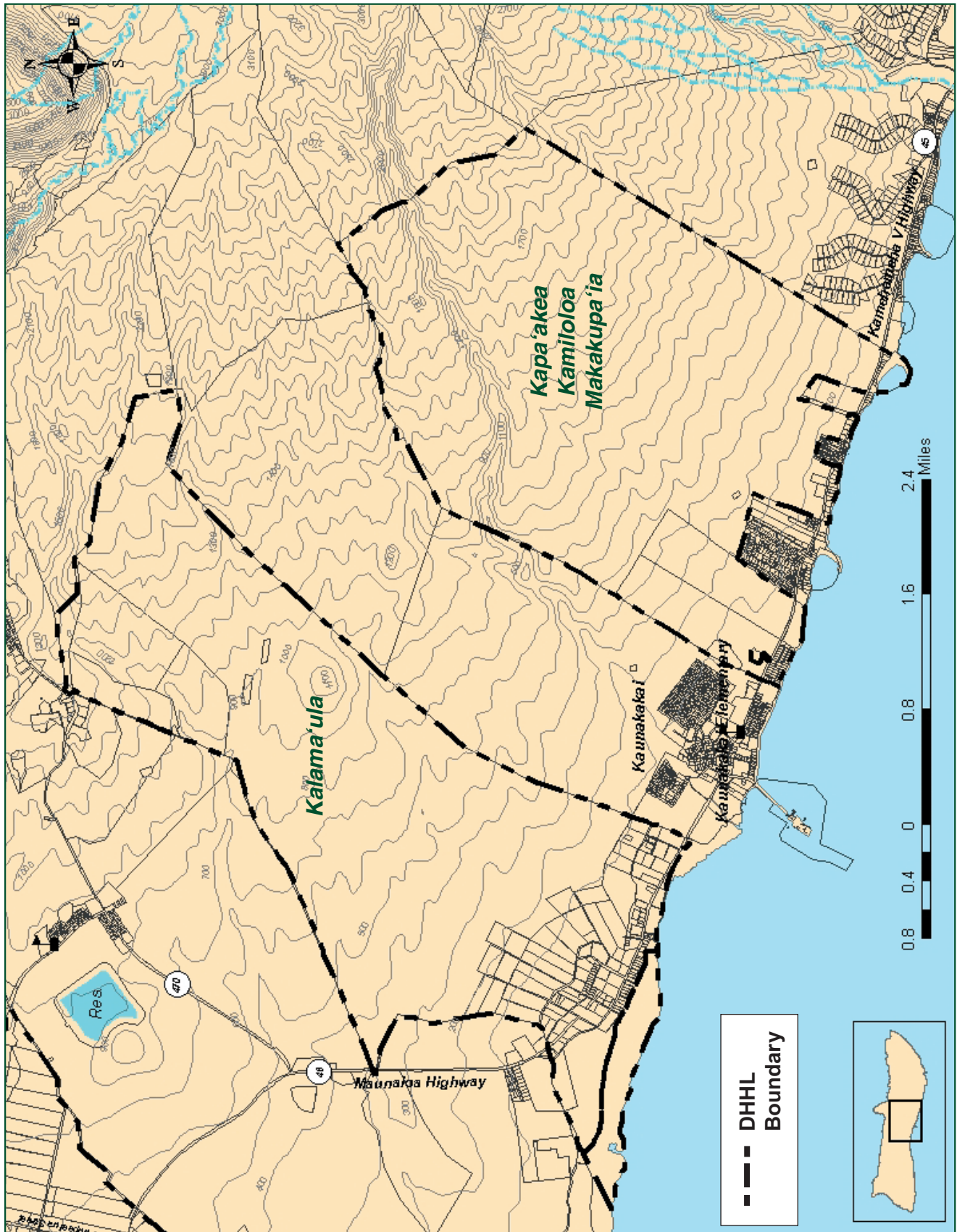


Figure 5.1 - DHHL Parcel in Kalama'ula



*Road Access* – Maunaloa Highway provides the primary access to Kalama'ula. The local neighborhood access consists of both paved and unpaved light-duty paved roads and unimproved roads. Any future development of the area will require roadway improvements.

*Water* – Kalama'ula receives water from the DHHL owned and operated Ho'olehua Water System (HWS) which provides water to Ho'olehua homestead, the airport, Moloka'i High School and Kualapu'u Elementary School, Moloka'i Ranch, and the Meyer Estate. The Kalama'ula homestead area currently uses .08 mgd. The existing HWS source has a safe source capacity .58 mgd and can not meet the existing maximum daily demand of .63 mgd required by all existing user groups. The HWS draws its potable source from the Kualapu'u Central Aquifer (KCA). According to the CWRM, the KCA has a developable yield of 5 mgd. Estimates of existing water demand indicate that approximately 2 mgd to 2.6 mgd are withdrawn from the aquifer. Further, DHHL is legally guaranteed a 2.9 mgd reservation of water from the Kualapu'u aquifer.

*Wastewater* – Although the area is in close proximity to the County wastewater system situated in Kaunakakai Town, it is cost prohibitive to connect area to the existing system.

*Cultural Resources* – Cultural sites within the area such as Kapuāiwa Grove, 'Ōhi'apili Fishpond, 'Ōpae'ula heiau, Pu'upāpa'i heiau, Kalama'ula heiau, and Pu'uomo'o heiau should be protected and preserved for cultural learning and perpetuation.

### 5.3 COMMUNITY CONCERNS

Some of the key concerns expressed at the meetings held in Kalama'ula and Ho'olehua regarding the proposed alternatives included the following:

- Any proposed commercial use must be compatible to the needs of the community and have its support.
- Preserve access to mauka lands for subsistence hunting and cultural practices.
- Lands designated for Community Use land should be used for: Kūpuna housing or a long-term health care facility; parks and recreation spaces; and a middle school.
- A priority should be made to resolve existing flooding conditions.
- Provision of water to support existing and future homestead development and use needs to be in-place. Should consider viable alternative options for water source including mauka reforestation.

## Planning Considerations

### OPPORTUNITIES

- Strong and growing rural community with existing social services
- Suitable land for limited residential development
- Important cultural and natural resource sites
- Established community identity

### CONSTRAINTS

- Variable slopes
- Need new potable water source
- Flooding and drainage issues
- IWS development for wastewater



*Southern view of Pu'u Luahine, an area discussed for possible future reforestation in Kalama'ula*





## 5.4 LAND USE PLAN

A Development Plan was prepared for Kalama'ula in 1983 which considered this tract as a potential growth area of mixed uses. However, the plan was primarily focused on the makai area in and around the Kalaniana'ole Colony where development was viewed as an integration of residential, agricultural, and economic development designed to maintain the rural lifestyle that is characteristic of the area. Although many of the proposed phases for development have been implemented, the MIP recognizes the conceptual framework of the residential plan developed in 1983. In the Development Plan, there was a recognition that subsistence-based activities were integral to the lifestyle and the sense of place within Kalama'ula and that a designed residential community should be reflective of this concept.

For the MIP, the unawarded and undeveloped parcels were re-evaluated based upon present concerns and issues that were presented by DHHL staff and the community. *Figure 5.2* illustrates the proposed uses for this expansive property.

The MIP identifies the mauka portion of the site above Pu'u Luahine as Special District and will serve as a Nature Resource Management and Subsistence Area (NRM-SB) to ensure the protection of endangered and threatened plant species in the Moloka'i Forest Reserve and maintain access for subsistence-based hunting and gathering of forest resources. The existing Pastoral uses will be maintained.

Lands situated in the central corridor of the parcel that were previously considered as having potential for agricultural use but currently do not have the necessary infrastructure have been designated as General Agriculture to make them available for cooperative beneficiary farming or development groups rather than being given out as individual agricultural or pastoral homestead lots.

The main departure that the current MIP makes from the 1983 Development Plan is a reduction in the amount of commercial space allotted and an increase in community use. Throughout the community and DHHL staff meetings, a key consideration was ensuring that proposed land use activities matched the needs and character of the community these activities would occur in. In review of the existing commercial space and anticipated future island population growth for the next 20 years, an evaluation was made as to what level of commercial service was appropriate for all DHHL lands on Moloka'i and the space requirements necessary to support the level of service. Concurrently, it was highlighted that Kalama'ula is currently lacking stronger centers for community use, such as park space for existing and future residential development. Further, the

### **LAND USE PLAN**

#### **Existing Residential**

- (123) 1 acre lots on 210 acres

#### **Future Residential**

- (57) 1 acres lots on 88 acres

#### **Subsistence Agriculture**

- (63) 2-4 acre lots on 212 acres

#### **Pastoral**

- 539 acres

#### **Community Use**

- Existing Church Row, Kapuaiwa Grove; Homelani cemetery
- Proposed community parks and support services for Kūpuna housing
- 76 acres

#### **Special District Areas**

- Natural Resource Management and Subsistence Access Area (1,344 acres)
- Wetland (363 acres)
- Flood control (12 acres)

#### **General Agriculture**

- 2,353 acres

#### **Commercial**

- 12 acres includes Kulana 'Ōiwi





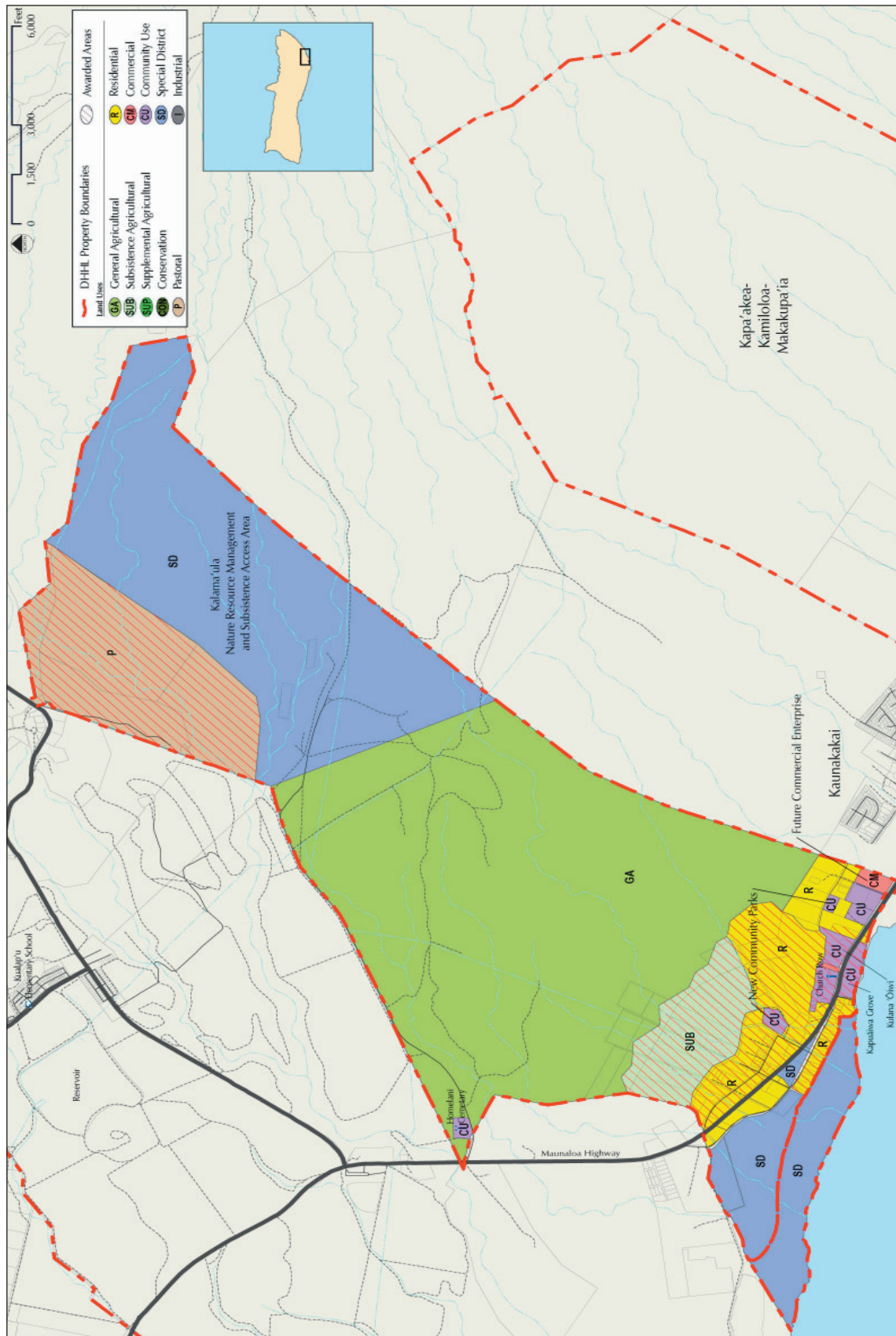


Figure 5.2 - Kalama'ula Preferred Land Use Plan



community strongly expressed a need for Kūpuna Housing and the sensibility of siting such a use near existing social support services as those provided at Kulana 'Ōiwi.

#### 5.4.1 RESIDENTIAL

Kalama'ula will continue to be a growing residential community on Moloka'i. A summary of the proposed number of lots and costs is provided in the table on the right.

Currently, Kalama'ula has 160 existing or awarded and undeveloped lots on 210 acres. The MIP proposes a limited growth of new residential development that would entail 49 1-acre lots on 70 acres in the eastern portion of the parcel and 8 1-acre lots on 11 acres in the section of the parcel adjacent and makai to Maunaloa Highway for a total of 57 new units.

Table 5.1 and Table 5.2 summarize the development costs. Large initial investments in off-site water infrastructure will be required. Individual Wastewater Systems (IWS) will provide wastewater treatment. Road development costs are reduced by providing some access to the residential homesteads along Maunaloa Highway and local collector streets.

#### 5.4.2 SUBSISTENCE AGRICULTURE

The residential subsistence concept was introduced in the 1983 Development Plan to encourage homesteader self-sufficiency. As the Kalama'ula area was noted for agricultural productivity, the Development Plan recommended a phased development of subsistence-based residences.

In Kalama'ula, 72 lots on approximately 212 acres have been leased for agricultural homesteads and are designated in the MIP as Subsistence Agriculture. These lots vary in size from 2-4 acres and are considered large enough for small-scale agriculture and keeps beneficiaries eligible for certain types of U.S. Department of Agriculture (USDA) loans.

	Cost (Millions)
On-Site	\$7.3
Off-Site	\$4.2
<b>TOTAL</b>	<b>\$11.5 M</b>

Table 5.1 - Kalama'ula Total Infrastructure Costs

#### **RESIDENTIAL**

##### **East End**

- (49) 1-acre residential lots
- 70 acres total

##### **Makai End**

- (8) 1-acre residential lots
- 11 acres total

##### **Costs**

- \$201,754 per lot



Undeveloped Subsistence Agriculture lands in Kalama'ula

	POTABLE WATER	WASTE-WATER	SITE PREP & ROADS	DRAINAGE	ELECTRICITY	TOTAL
<b>Major Factors</b>	Transmission lines, cxn to existing source	IWS	Enhance and construct additional	Assume 5' depth	Transmission lines	
<b>On-Site</b>	\$1.4 M	--	\$3.8 M	\$1.0 M	\$1.1 M	\$7.3 M
<b>Off-Site</b>	\$1.6 M	--	\$0.9 M	\$1.4 M	\$0.3 M	\$4.2 M
<b>TOTAL</b>	<b>\$3.0 M</b>	<b>--</b>	<b>\$4.7 M</b>	<b>\$2.4 M</b>	<b>\$1.4 M</b>	<b>\$11.5 M</b>

Table 5.2 - Kalama'ula Infrastructure Costs







### 5.4.3 GENERAL AGRICULTURE

Approximately 2,353 acres of central interior of Kalama'ula is designated General Agriculture. This will preserve the land for future uses while making it available to individuals and groups for short-term leases.

Much of this land is very rugged and unsuitable for most types of activities and development. Care must be taken to ensure that permitted uses are compatible to the lifestyle and values of existing pastoral and agricultural activities on Moloka'i and do not lead to further erosion of the land.

Proposed uses for this area could include limited opportunities for diversified agricultural or pastoral use; establishing portions of the mauka regions as an extension of the proposed subsistence access for hunting and gathering purposes; expanding the proposed cultural resource management area for potential programmatic needs. These uses could continue within the General Agriculture designation. Other possible activities include tropical forestry or hiking tours focusing on eco-education or adventuring touring.

No infrastructure improvements are proposed for this area. The roads should be maintained in their current condition.

### 5.4.3 SPECIAL DISTRICT AREAS

The Kalama'ula tract has three Special District Areas totalling 1,719 acres. The first area consists of 363 acres within the existing coastal wetlands near the Pālā'au district. In the past, a variety of waterfowl have been observed at the wetlands, utilizing parts of the area as a breeding ground; these species have included Alae ke'oke'o (Hawaiian Coots), Ae'o (Hawaiian Stilts), Ruddy Turnstones, Wandering Tattlers, Black-crowned Night Herons, and wild turkeys. It is feasible to consider the potential use for subsistence and limited community economic aquaculture options, usable only for brackish or salt water species. Any proposed development of aquaculture ponds would require a substantial amount of earthwork to control existing runoff.

The second Special District Area is comprised of 12 acres and is located within the southwestern corridor just makai of Maunaloa Highway. Given that the general area has been identified under the Federal Emergency Management Agency Flood Insurance Rate Maps system as highly vulnerable to flood conditions, a Special District designation was assigned to limit future expansion of the area in unsuitable land uses. Currently a Revocable Permit has been awarded for one acre in this area that is currently used as an automotive repair shop. The Department will need to evaluate the terms of the existing permit to determine if the existing activity is appropriate for the area and what options would be available to the permittee if relocation is required.



*Northern mauka view of Subsistence Agriculture lands, Kalama'ula*



*East view of Pu'u Luahine, General Agricultural and Special District lands, Kalama'ula*



*Existing flood prone area (Special District) in Kalama'ula*





healthy forest and water system and investigate the efficacy of threat abatement projects and the impact on the health of forest habitats and water resource quality.

#### 5.4.4 COMMUNITY USE

Approximately 83 acres have been designated for Community Use within Kalama'ula. These areas include the existing "church row," the Kulana 'Ōiwi Multi-Services Center, Homelani Cemetery, Kapuāiwa Grove, and future plans for community park space and kūpuna housing or service center.

Church Row consists of nine churches that have 30-year license agreements with the Department for land use that range from 1 to 4 acres. Churches form a background of Moloka'i community. New churches should be encouraged to locate in the area to heighten the identity of this strip.

Kapuāiwa Grove is said to have been planted in the 1860s by Lot Kapuāiwa (Kamehameha V), grandson of Kamehameha I, as Moloka'i was a favorite retreat of this ali'i. The grove was originally planted with 1,000 coconut trees covering an area approximately 10 acres, representing each warrior that served under his rule and provided shelter for a royal bathing spring that once existed near the shore. Today, there are a few hundred descendants of trees remaining from the original planting. Kapuāiwa Grove has great value historically and is located conveniently to be a great community resource. It should be planned for community events and cultural activities.

Located along Maunaloa Highway, the Kulana 'Ōiwi center serves as the central hub of social services for Native Hawaiians. Housed in the center are the Department, Kamehameha Schools, Alu Like, the Office of Hawaiian Affairs, the Queen Emma Foundation, and Nā Pu'uwai, part of the Native Hawaiian Health Care system and the Queen Lili'uokalani Children's Center. The unique feature of the center was that the participating agencies shared in the cost for land, building design, and construction and is considered to be a model that should be copied on all the island, offering convenience and accessibility for all users and beneficiaries of these government and private programs and services.

Approximately 50 acres of lands within Kalama'ula designated as Community Use will be reserved to support the expanding community that will result with future residential development. Neighborhood park space would be dedicated within the new residential area. Further, it was discussed that since Kulana 'Ōiwi center is the central hub of social services for Native Hawaiians, the future development of a kauhale kūpuna (elderly care center) would be situated near the center. It is envisioned that the proposed kūpuna housing project in Kalama'ula would emulate other existing facilities built and supported



*Kapuāiwa Coconut Grove (Community Use) in Kalama'ula*



*Entry to Homelani Cemetery (Community Use) in Kalama'ula*



*One of several churches that form "Church Row" (Community Use) in Kalama'ula*





by the Department, such as Kauhale Kūpuna o Waimānalo on O'ahu, an affordable housing project for native Hawaiians over the age of 62 with no blood quantum restrictions.

#### 5.4.5 COMMERCIAL

Approximately 13 acres, most of which is designated along the eastern boundary of Kalama'ula area and adjacent to 'Olo'olo Street are designated as Commercial use in Kalama'ula. During the planning process, the community expressed several different ideas as to what types of commercial and/or community-based economic development projects could be created and supported in this area. These ideas included additional support for research and development of diversified organic and non-Genetically Modified Organisms agricultural products; multi-cropping species for aquaculture; conservation operations for watershed planning and reforestation; a media production facility for community and educational programs; long-term health care services; commercial kitchen to support a native Hawaiian health diet program; a center for recycling goods; and landscaping production area.

#### 5.4.6 PASTORAL

Three pastoral homestead leases are awarded within Kalama'ula and consist of 539 acres. Further some of the land currently designated as General Agriculture under the MIP is leased under a revocable permit to the Moloka'i Homestead Livestock Association for pastoral use.



*DHHL community meeting at Kulana 'Ōiwi center in Kalama'ula*



*Pastoral homestead in upper Kalama'ula*







As with 'Ualapu'e and Kapa'akea, Makakupa'ia and Kamiloloa, one of the three main Special District areas is a Nature Resource Management and Subsistence Access (NRM-SB) area in the northeastern corridor to the northern boundary of the parcel. For all of these areas, a site-specific management plan will need to be developed. Other natural resource management methods employed within the Moloka'i Forest Reserve have included a holistic approach to watershed management, which is similar to the traditional concepts of ahupua'a-based management. One approach to identify and assess a watershed management area and develop site-specific projects is the Site Conservation Planning Process, which has been utilized by The Nature Conservancy. This process uses the 5-S approach, which identifies Systems, Stresses, Source, Strategies, and Success measures through a scientific process. For DHHL management areas, provisions of ensuring access for subsistence-related activities and maintaining the integrity of wildlife habitat for flora and fauna resource that are relied upon in these subsistence activities needs to be integrated into any proposed management process.

For all of these areas, the management efforts will need to address several objectives including:

- a) threat and game management of invasive non-native plant species, feral ungulates, other non-native animals, human activities, environmental contaminants, and wildfires;
- b) water resources and watershed management to maintain quality and integrity of groundwater, surface water, and aquatic resources, as applicable;
- c) biodiversity protection, which includes endangered and threatened species protection, the rehabilitation of degraded habitats, and reforestation and plantings;
- d) cultural resource management to ensure that current-day traditional Hawaiian gathering practices are maintained, supported, and perpetuated;
- e) education awareness and public outreach to establish the necessary community partnerships that will be the pool for any labor-intensive projects such as fence construction, weed control, or trail maintenance;
- f) administrative coordination and communication to ensure adequate Department staffing is provided to coordinate overall tasks, maintain communication links with community and adjacent landowners, and implement, and ensure the planning process is effective and consistent; and
- g) monitoring and indicators to address management objectives and seek to monitor the relationship between a



*Ae'o (Hawaiian Stilt) found in wetland areas of Kalama'ula (Photo by National Park Service)*



*Common native habitat threat of feral ungulates (wild boar) on Moloka'i that provides a limited resource for subsistence hunting*



Section 6.0

---

Kalaupapa-Pālā'au (Apana 3)







## 6.0 KALAUPAPA-PĀLĀ'AU (Apana 3)

### 6.1 EXISTING CONDITIONS

The DHHL lands in Kalaupapa and Pālā'au (Apana 3) consist of 1,474 acres, which are located on the northern plateau and peninsula of Moloka'i (Figure 6.1). The area of Pālā'au is comprised mostly of an ironwood forest and is currently under license to the State Department of Natural Resource, Division of State Parks that expires in 2011.

On the coastal peninsula fronting Awahua Bay lies Kalaupapa, which is a part of Kalawao County and historically noted as the settlement area for Hansen's Disease patients established in 1866. Less well known is that the area had a sizable population of Native Hawaiians that were residing on the peninsula prior to 1866 and were required to relocate to areas such as Kainalu. In 1975, the State Legislature passed several resolutions for the preservation of Kalaupapa. In December 1980, Congress accepted the recommendations to establish the Kalaupapa National Historical Park.

As early as 1978 in a series of studies, one of the special management concerns that were identified was the ownership and use of Hawaiian Home Lands at Kalaupapa, which comprise one quarter of the National Park Service (NPS) use in the western section of the peninsula. The NPS currently has 37 years remaining on its 50 year lease.

The peninsula is separated from the rest of the island by a 1,600 foot cliff. On the central portion of peninsula lies Kauhako Crater at a 300 foot elevation. The rainfall varies from 25 inches near the shore to 45 inches up in the cliff regions and the park. The historical settlement area within the peninsula lies in the State Urban district. All of the remaining DHHL lands on the peninsula lie in the Agriculture district. The cliffs and park lie in the Conservation district.

### 6.2 OPPORTUNITIES AND CONSTRAINTS

The discussion below summarizes the major factors influencing possible land uses in Kalaupapa.

*Preserving and perpetuating the Living Legacy of Hansen Disease Residents* – One of the most common themes that emerged out of the community meetings was that the MIP must ensure the legacy of some 8,000 Hansen Disease residents that made Kalaupapa their home. Statewide there are approximately 40 patients (average age 76) who contracted the disease prior to the introduction of drug treatments. The majority of these patients still reside full or part time at Kalaupapa. There are more than 400 built structures within the settlement, of which 183 have

#### EXISTING USES

- General lease of 1,247 acres to National Park Service - Kalaupapa
- License of 233 acres to DLNR for Pālā'au State Park which provides scenic overview to Kalaupapa
- 189 NPS-prioritized structures either currently used or designated for historic preservation



View of Kalaupapa settlement area from Pālā'au lookout

#### COMMUNITY VOICE

*"The legacy of Kalaupapa and its people need to be respected and always remembered.."*



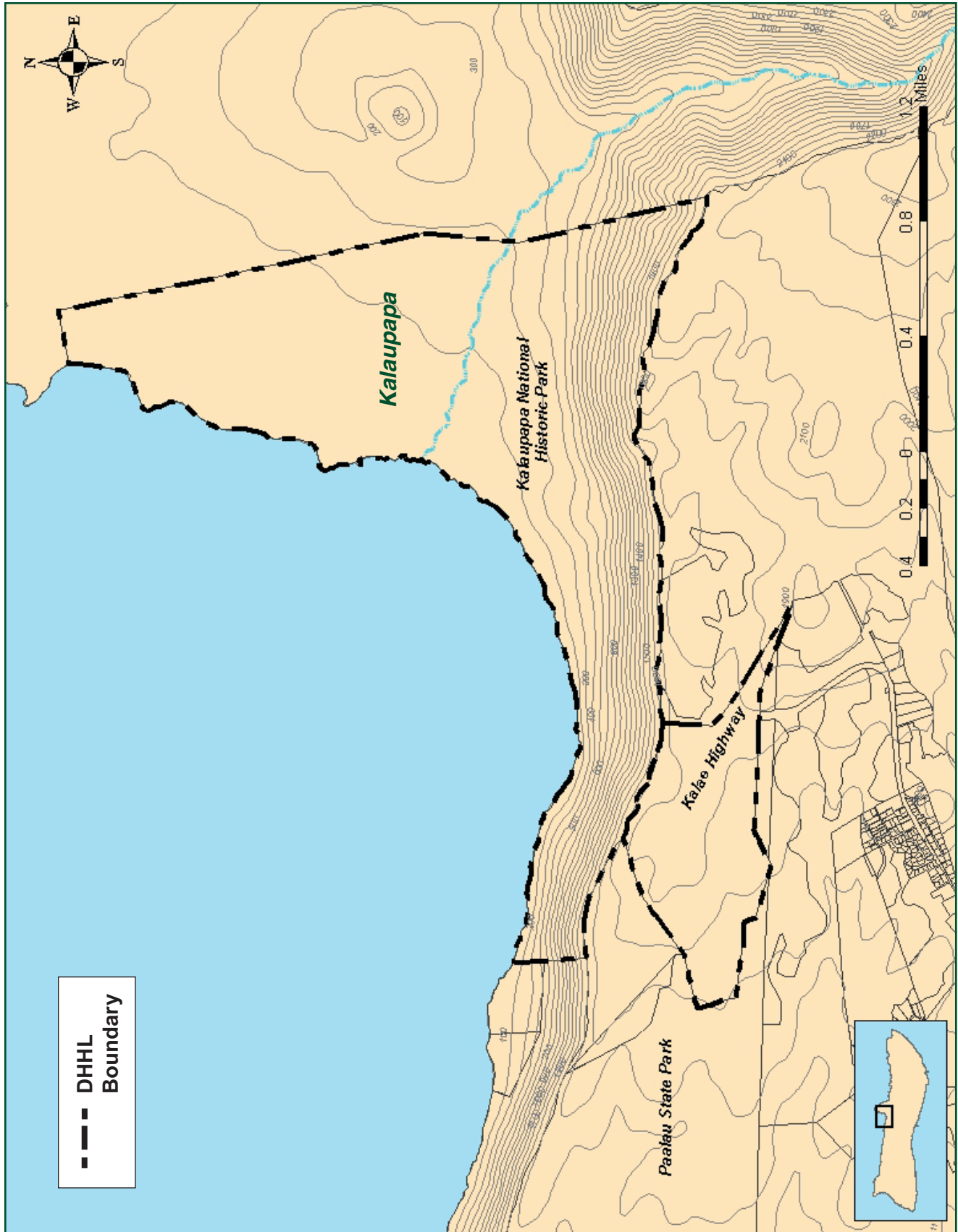


Figure 6.1 - DHHL Parcel in Kalaupapa-Pāla'au (Apana 3)



been assessed and evaluated as priorities for preservation by the NPS. It was suggested by beneficiary and agency interests that a legacy program could take several forms: preservation of the area as a historical district; reintroduction of native Hawaiian beneficiaries to the homestead; a balanced integration and partnership between DHHL and NPS.

There are two prominent opinions among the community and the Kalaupapa residents themselves, one being that no planning should be considered while the remaining residents are still alive. Other community members equally feel that in order to preserve the legacy, planning must involve the mana'o of those whose memories are to be preserved and perpetuated for subsequent generations. Further, community members with genealogical ties to the families that were required to relocate upon the establishment of the Hansen Disease settlement have also expressed an interest in reasserting familial relationships to the 'āina of Kalaupapa.

*Interest of National Park Service to retain long-term involvement with Kalaupapa*– The NPS has expressed a strong desire to acquire the DHHL portion of the park for its long-term use. Although DHHL is not interested in any land exchange for NPS to acquire the land, the Department is open to developing a cooperative strategy with NPS and establish a working group comprised of the primary stakeholder interests to develop a long-term plan that seeks to provide a balance of interests and activities that are compatible to the overall interest of preserving the legacy of Kalaupapa. According to NPS sources, the park operating base for FY 2004 was \$ 2.4 M. Not included in this operating expense is an additional \$3.9 M from a line item construction funding source for preserving historic buildings within the Kalaupapa settlement area and correct existing safety concerns.

*Improvements to Infrastructure*–Existing infrastructure are in need of repairs and or replacement, including well pumps and storage tanks for potable water and improvements to the telephone system.

*Limited Access* – There are approximately 6 miles of paved roads and 8 miles of unpaved roads in the settlement area. Additionally there are 3.7 miles of trail systems, including the path that extends from Pālā'au State Park to the peninsula. There is a small airport and harbor that are utilized on a limited basis.

*Beatification of Mother Marianne Cope and Canonization of Father Damien* – Two of the most influential historical figures that dedicated themselves to serving those afflicted with Hansen's Disease at Kalaupapa. The beatification ceremony for Mother Marianne Cope was held for May 2005 while the Vatican is verifying attributed miracles that would confirm the

## Planning Considerations

### OPPORTUNITIES

- Perpetuating the legacy of Kalaupapa
- Important cultural and natural resource sites
- Impact of canonization of Father Damien and beautification of Mother Marianne Cope
- National Park Service interest long term perpetuation of area

### CONSTRAINTS

- Limited access by trail, small plane or barge
- Expensive to maintain, improve, or provide new



View of sea cliffs that form Conservation area in Kalaupapa







canonization of Father Damien. Both events will increase a global interest in the legacy at Kalaupapa and may encourage an increased number of visitors to the area that view Kalaupapa as a healing center.

### 6.3 COMMUNITY CONCERNS

In addition to meetings held in Kalama'ula and Ho'olehua, DHHL staff also traveled to Kalaupapa in December 2004 to meet with the Patient's Advisory Council and the National Park Service to identify the immediate needs and concerns of the patients. Comments regarding the proposed alternatives included the following:

- Preserving the legacy is paramount
- Patients/residents wishes must be respected
- Maintain "closed" community - only use for education
- Ensure that educational programs teach the old ways
- Any topside development could bring more interest to peninsula
- Any Palā'au development should benefit native Hawaiians
- Hawaiian interests should be reflected in future plans
- NPS needs to work with native Hawaiians
- DHHL should retain the lands of Pālā'au

### 6.4 LAND USE PLAN

The character of Kalaupapa will be retained as a unique community whose legacy is to be defined by its wide range of historical use. Given the significant historical context of the area and that the existing residential population is comprised of both native Hawaiians and non-Hawaiians, the boundaries of the historical settlement area will be designated as Special District. Two distinct areas on the peninsula have been designated as Community Use, creating the nodes to maintain a cultural presence and linkage of those 'ohana that once reside there prior to the establishment of the settlement and those that plan to commit themselves as stewards to this area. Figure 3.2 illustrates the proposed uses for the Kalaupapa and Pālā'au (Apana 3) parcels.

Major improvements to infrastructure were only considered for the Pālā'au (Apana 3) parcel and include site preparation, provision of water and utilities for the proposed commercial area.

#### **LAND USE PLAN**

##### **Existing Residential**

##### **Community Use**

- (2) 3.5 acres on the Kalaupapa parcel; one area near the airport and the other fronting the Awahua Bay access

##### **Special District Areas**

- Existing Kalaupapa Patient Residence (621 acres)
- Pālā'au Forest Lands (226 acres)

##### **Commercial**

- 5 acres

##### **Conservation**

- 609 acres



*Community Use area near the Kalaupapa Airport*



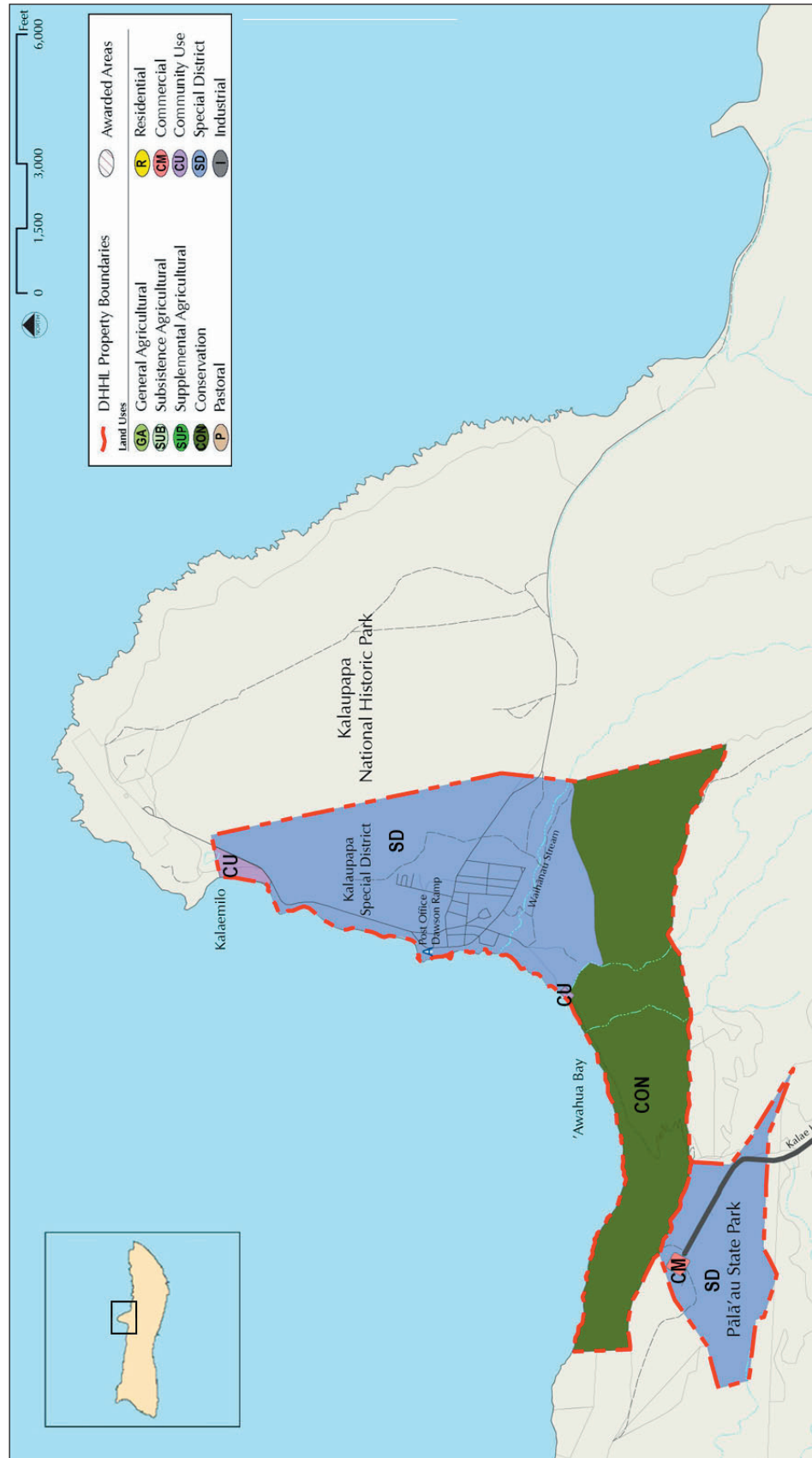


Figure 6.2 - Kalaupapa-Pālā'au Preferred Land Use Plan





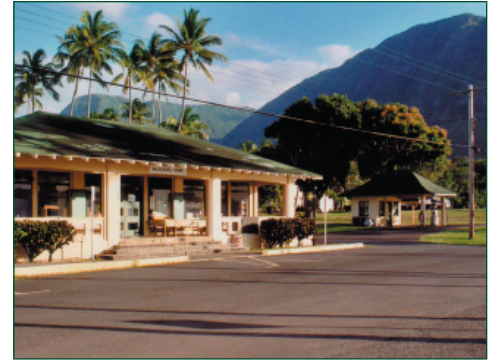
#### 6.4.1 SPECIAL DISTRICT AREAS

Approximately 226 acres in the Pālā'au (Apana 3) tract will remain as a forested reserve area that could continue to be used as for recreational purposes. There are no plans for development in this area.

The 621 acres designated as Special District in the Kalaupapa Peninsula encompasses the existing historical settlement area. This designation would allow for the current lease agreement with NPS to continue. However, guidelines will need to be established with the Patient's Advisory Council, Department of Health (DOH), NPS, and DHHL as to further considerations to the long-term uses of this designated area. It was expressed in several community meetings, including those held in Kalaupapa, that the area could serve as a pu'uhonua (traditional concept of a refuge) that could be envisioned as a native Hawaiian healing and wellness center. This consideration of a wellness center may be a viable option that accomplishes several things: it maintains the historical integrity of the area which NPS will continue to oversee; promotes the sense of how this area was engaged by its residents for purposes of finding inner healing and resolve to address the circumstances that evolved in their isolation and how the land does heal and continues to do so if maintained properly; establishes a native Hawaiian presence with cultural practitioners of lā'au lapa'au and lomilomi providing therapy and treatments that could be interwoven with the educational curriculum of traditional hālau and other academic institutions such as the Maui Community College-Moloka'i Campus and other community organizations dedicated to physical and spiritual wellness as well as staffing to assist with the operations and maintenance of the center; allows for those families of non-Hawaiians Hansen Disease residents to maintain presence and access to the area; and finally it advocates that the DOH as the health care providers and DHHL as the land stewards have a kuleana to those remaining patients as long as they continue to live and dwell in Kalaupapa.

#### 6.4.2 COMMUNITY USE

Approximately 7 acres in two areas on the peninsula have been designated as Community Use. The first area is situated along the northern coastal border of the parcel that is out of the historical settlement area. A few structures currently exist and it is envisioned that this could be an area for housing future staff of the wellness center or the expansion of the historical park. As DHHL advocates on behalf of its beneficiaries, it would be that the Department's preference that any such staffing needs would be primarily filled by qualified Moloka'i island residents and homesteaders. Further, the Department does maintain its commitment to support the authority of the Patient's Council.



*Kalaupapa Store in Special District settlement area*



*Coastal area near Awahua Bay, Kalaupapa*



*Gravesite of Father Damien, Kalaupapa*







Therefore, any proposed use of the area would be licensed to and placed under the management and control of native Hawaiian patients. The second Community Use area near the pier landing fronting Awahua Bay and the trailhead leading to the cliff trail would serve a similar future purpose but would require funds for infrastructure. No structures exist within this area but could be utilized for culturally-related activities and access.

### 6.4.3 COMMERCIAL

The MIP emphasizes the creation of cultural community center in Pālā'au that is culturally appropriate to the perpetuation of the traditional cultural practices of Hawai'i but is specific to the historical legacy of Moloka'i and Kalaupapa specifically. This center would assist hālau on Moloka'i and other community educational initiatives in building a cultural community center that reflects the values and principles that are invoked through their respective traditional cultural practices. The focus of creating an interactive learning center would be to nurture cultural and economic ties of Kanaka 'Ōiwi to other indigenous groups across the Pacific and internationally based upon the guidance of values, practices, and beliefs of the Moloka'i people. This would set this center apart from other Hawaiian institutions. A working group would be formed to develop this project and would involve researching traditional hālau building practices and looking at contemporary cultural community centers development projects as models. Programmatic development, building design, and landscaping will be based upon the traditional knowledge pertinent to the area and to the knowledge base desired to be perpetuated. Community beneficiaries will be directly involved in the visioning and planning of this center. DHHL envisions the creation of this cultural community center to be a full service center whereby charter schools or immersion schools could utilize the school in the day time and other hālau could utilize the center in the evenings and weekends can be shared with the community. Further, the project could potentially integrate



*Kauleonanahoa cultural site, Pālā'au*



*Pālā'au State Park, potential future site of cultural center*

	POTABLE WATER	WASTE-WATER	SITE PREP & ROADS	DRAINAGE	ELECTRICITY	TOTAL
<b>Major Factors</b>	Transmission lines, cxn to existing source	IWS	Enhance and construct additional	Assume 5' depth	Transmission lines	
<b>On-Site</b>	\$1.4 M	--	\$1.7 M	\$0.9 M	\$1.8 M	\$5.8 M
<b>Off-Site</b>	--	--	--	--	--	--
<b>TOTAL</b>	<b>\$1.4 M</b>	<b>--</b>	<b>\$1.7 M</b>	<b>\$0.9 M</b>	<b>\$1.8 M</b>	<b>\$5.8 M</b>

Table 6.1 - Kalaupapa-Pālā'au Infrastructure Costs







on-going efforts of NPS to possibly create an on-site visitor's center that could be modeled after other traditional centers that provide opportunities for learning about an area without the necessity to tract into and have a direct impact on the peninsula. For example, the Native Alaskan Heritage Center provides learning opportunities with native groups through various media forms, on-hand learning experiences, thereby providing sufficient opportunity for some visitors to "experience" the historical context without to the necessity to physically visit the site. Further, local community organizations have created meaningful centers of learning such as the Hana Cultural Center, which celebrates the area of as the birthplace of Queen Ka'ahumanu with a traditional hale and native gardens. DHHL will seek to develop a wide range of partners in the development of the center's master plan. It is envisioned that this center could be a hub of community economic opportunity that through the creation of programs that stem from the people of Moloka'i could be used to reach fellow kamaaina and local residents as well as scholars and visitors from around the world. The community center and educational facility could be a welcoming house that blends with the area's features and landscape. Potential facilities within the center would include exhibit and demonstration areas, a theater, café, gift shop, and a large gathering place for live performances of songs, stories, and dance as well as hosting forums, banquets, and other special events. Cultural representatives from the island would share cultural information and lead many of the interactive activities. Further, the center would have a media component that could be utilized by the community for the purposes of recording and preserving the legacy and stories of those kūpuna that are still alive. Media tools could be integrated into self-guided tours of either designed exhibits or that would highlight the beautiful setting of natural or cultural landscapes within the Pālā'au region. Educational programs could be created to fit the unique curriculum needs of various age groups from elementary through college. Such activities could be geared on native games for elementary school students, conducting oral histories for middle through high school. The key emphasis would be to create experiences of the unique culture of Moloka'i that links keiki, kamali'i, and 'ōpio with mākua and kūpuna.

#### 6.4.4 CONSERVATION

The 609-acres of Conservation District along the cliffs of are also designated as such under the State Land Use District..



*Model of traditional hale at Hana Cultural Center (Photo by Hana Cultural Center)*



Section 7.0

---

Ho'olehua-Pālā'au (Apana 1 & 2)





## 7.0 HO'OLEHUA-PĀLĀ'AU (Apana 1 & 2)

### 7.1 EXISTING CONDITIONS

The DHHL properties in Ho'olehua and Pālā'au (Apana 1 & 2) consist of 13,478 acres within the northern central plateau and southern coastal corridor of Moloka'i, respectively. The two parcels comprise approximately 8% of the island's total land acreage (Figure 7.1).

Fronted by Maunaloa Highway, Ho'olehua is a rural agricultural community whose most notable anecdote is that it was the first area to receive Hawaiian homesteads following the passage of the Hawaiian Homes Commission Act of 1920. In February 1923, the first 13 homesteaders settled in Ho'olehua. Some of the first crop cultivations included tomatoes, corn, watermelons, sweet potato, and cucumbers.

The lands of Ho'olehua are varied in topography, ranging from level plains to rolling hills and sea cliffs at the northern coastal boundary. The elevation in the region varies from 10 ft. along the Pālā'au coast and southern tip of Ho'olehua and extend to hills at 1300 ft. to the west. Kalaupē'elua and Mane'opapa Gulch bisect the northeastern section of Ho'olehua and Anahaki Gulch in the northwest. The seacliffs to the north rise 600 ft. in the eastern portion and to the west the lands transforms from cliffs to gentle sloping fields to protected beach access at Mo'omomi.

The lands in Ho'olehua and Pālā'au (Apana 1 & 2) are designated as Agriculture, Conservation, and Urban under the State Land Use Commission system.

### 7.2 OPPORTUNITIES AND CONSTRAINTS

The table to the right summarizes and discussion below summarizes the major factors influencing possible land uses in Ho'olehua-Pālā'au.

*Agricultural Lands* –Given the large lot size, superior soil conditions, fairly level topography, dry weather, minimal exposure and contact to introduced crop pests and disease, and access to affordable irrigation water, Ho'olehua is characterized as some of the best agricultural lands within the State.

*Established Homestead* – Ho'olehua is a rural agricultural and residential community with the majority of awards ranging from 1 to 40 acres. The smaller lots are situated in the northeastern corridor of Ho'olehua, near Moloka'i High School and the Lanikeha Community Center.

*Desire for Subdivision* – As the oldest homestead community, the 'ohana that reside within these areas are comprised of at least 3-4 generations that have resided on these lands since the

#### **EXISTING USES**

- **521 homestead leases: 153 residential, 347 agricultural, 21 pastoral in Ho'olehua**
- **Various General Leases, Revocable Permits, and Licenses for agricultural and/or pastoral uses, church and community organizations, a credit union, and the U.S. post office**
- **Subsistence fishing zone at Mo'omomi Preserve**

#### **COMMUNITY VOICE**

*"Ho'olehua is a safe and quiet Hawaiian community where the values of aloha 'āina and kokua are shared and embraced among families and neighbors..."*





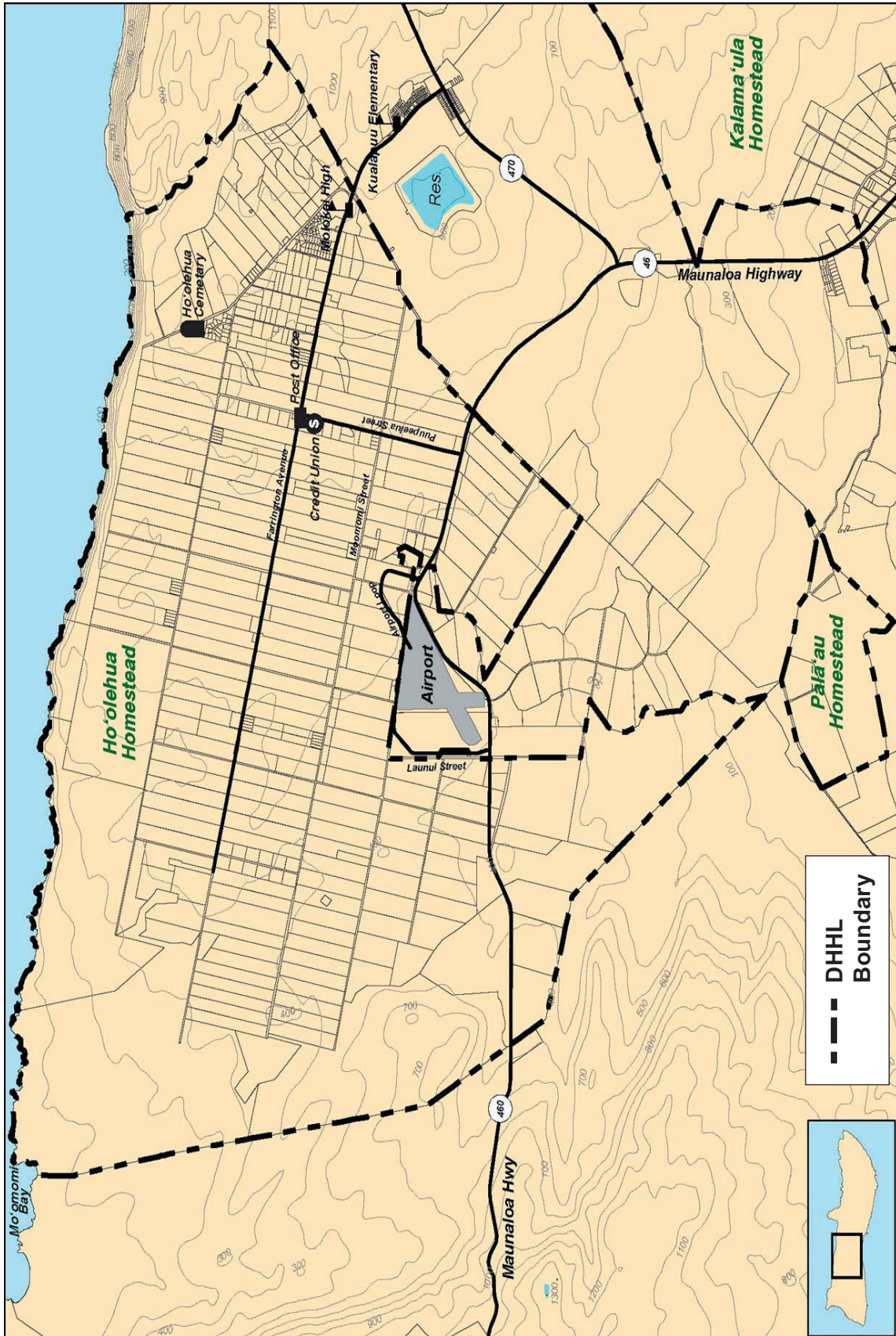


Figure 7.1 - DHHL Parcel in Ho'olehua-Pālā'au (Apana 1 & 2)



inception of the homestead program. A group of Ho'olehua families have indicated a strong desire for the Department to allow for the subdivision of existing leased lands to provide housing opportunities for children and grandchildren.

*Access and proximity to airport* – Pu'upe'elua Avenue and the Airport Loop are both important roads within DHHL's Ho'olehua tract, while Maunaloa Highway provides access from Ho'olehua to either the northeast or southwest areas of the island. The Moloka'i Airport abuts the property and its close proximity serves as a potential to develop some level of commercial-based activity linked to the predominant area use of agriculture that could more efficiently utilize airport services for the export of goods.

*Water* – Ho'olehua receives potable water from the DHHL owned and operated Ho'olehua Water System (HWS), which is serviced by the Kualapu'u Aquifer. The existing HWS source has a safe source capacity .58 mgd and can not meet the existing maximum daily demand of .63 mgd required by all existing user groups. The HWS draws its potable source from the Kualapu'u Central Aquifer (KCA). According to the CWRM, the KCA has a developable yield of 5 mgd. Estimates of present draws from the aquifer range from approximately 2 mgd to 2.6 mgd. Further, DHHL is guaranteed a 2.9 mgd reservation of water from the Kualapu'u aquifer, which has been upheld in two court cases.

Further, Ho'olehua is the only homestead with a dedicated irrigation water system, the Moloka'i Irrigation System, in which homesteaders have prior rights to two-thirds of this water as mandated in the Hawaiian Homes Act. The Moloka'i Irrigation System (MIS) is owned and operated by the State of Hawai'i, Department of Agriculture and is regulated under Chapter 4-152 of the Hawai'i Administrative Rules (HAR). Current use estimates of the MIS range from 3.35 to 4.46 mgd. An October 2001 Assessment Report estimated that there is 5.8 to 7.4 mgd of source available presently based on flow from Waikolu, which is the source of the MIS. Although information is sparse, various reports estimate that future demand uses range from 7.28 mgd to 42.9 mgd. The wide range of numbers makes it challenging to draw any conclusions about the source capacity and future demand of the MIS, however there are some common themes throughout all of the reports. All reports agree that the system has been plagued by drought in recent years and needs to develop some alternative water sources; the system is old and has maintenance problems. Ho'olehua may be able to receive more irrigation water, however, this would require significant upgrades and improvements to the MIS. Expansion of diversified agriculture is limited by the problems with the MIS.

## Planning Considerations

### OPPORTUNITIES

- Best agricultural lands on the island and within the State
- Established rural homestead with a strong community identity
- Expressed desire by existing families for subdivision allowance to provide housing opportunities for multiple generations to live
- Close proximity to airport provides potential marketing linkage for agricultural production on Moloka'i
- Coastal resources at Mo'omomi Preserve
- Provisions for limited growth in designated areas allows for more beneficiaries to be placed on homesteads

### CONSTRAINTS

- Issues of sufficient supply of potable and irrigation water sources for future growth
- No existing wastewater infrastructure for future development
- Utilization of Pālā'au (Apana 1 & 2) lands severely limited due to flooding and drainage conditions







*Wastewater* – It is not feasible to connect to the closest wastewater system situated in Kaunakakai Town.

*Flooding & Wetlands in Pālā'au* – The lands of Pālā'au (Apana 1 & 2) are subject to periodic flooding and as a wetland habitat is a natural drainage collector of stream and channel runoff.

*Coastal Cultural Resources* – Mo'omomi Preserve (921 acres), created in 1988, is an intact beach and sand dune system where communities of native grasses and shrubs grow more rare coastal species than in any other single place in the main Hawaiian Islands. The preserve harbors more than 22 native Hawaiian plant species (four of which are globally rare or endangered), as well as an important nesting site for the endangered green sea turtle. The pueo (Hawaiian owl) is one of the few native land birds that can still be observed regularly at Mo'omomi. Native shorebirds, like sanderlings and plovers, and seabirds, like the 'iwa (great frigate) can also be seen along the shoreline. Mo'omomi Preserve is managed in partnership with the State DLNR through the Natural Area Partnership Program.

### 7.3 COMMUNITY CONCERNS

Some of the key concerns expressed at the meetings held in Kalama'ula and Ho'olehua regarding the proposed alternatives for Ho'olehua and the Pālā'au (Apana 1 & 2) tracts included the following:

- Create a community use area near the high school for park and other recreational activities.
- Provide opportunities for subdividing existing agricultural lots for families to provide housing opportunities for keiki and mo'opuna
- Subdivision means accommodating an increased density in a rural community. Does this "urbanization" mean that agricultural land goes away?
- Provide areas of commercial activity near airport
- Homesteaders need financial and training assistance with farming activities
- Is there enough potable and irrigation water to support future growth in Ho'olehua?

### 7.4 LAND USE PLAN

A Development Plan was prepared for the Ho'olehua-Pālā'au area in 1986. The land use concept plan addressed three major land use components: a) creating a focal point for the community; b) assessing and supporting the agricultural potential of these lands; c) generating economic opportunities for the homestead community within Ho'olehua. The MIP focuses on the same



*Pālā'au (Apana 1 & 2) wetland area*



*Mo'omomi Preserve and Subsistence Fishing Area in Ho'olehua*



*Entry Sign into Moloka'i High and Intermediate School, Ho'olehua*





three components with additional consideration given to the feasibility of subdividing existing agricultural lots and to preserve the area's cultural and natural resources that support the subsistence lifestyle of homesteaders. *Figure 7.2* illustrates the proposed uses for Ho'olehua.

The general approach for Ho'olehua is to maintain the integrity of large parcels of agricultural land for existing and future agricultural use while assessing where future homestead growth can be directed to minimize impacts to agriculture activities. The plan evaluated necessary infrastructure development or improvements to provide the means for multiple generations of families to live and work together. A major limiting factor currently is providing potable and irrigation water from existing sources with anticipated demand.

The overall cost to develop Ho'olehua is estimated to be \$13.0 million. The off-site and on-site costs are summarized in *Table 7.1* and *7.2*. Major infrastructure improvements include developing a new source, storage, and transmission of potable water; individual wastewater systems, and road improvements. Most of the land in Ho'olehua are a low priority except for the previously awarded Nā'iwa lots. Priorities are discussed further in Section 8.0.

#### 7.4.1 RESIDENTIAL

There are two distinct areas that comprise approximately 55 acres in Ho'olehua that are designated as residential. The first area is bounded by Farrington Avenue, Pu'u Kape'elua Avenue, and Pu'u Kapele Avenue and consists of half-acre to 5 acre lots that are serviced by paved roads, potable and irrigation water. These lots are considered to be the central emphasis for a rural residential core area. Many of the homesteaders that reside on these lots do have an unattached 40 acre agricultural lots in lands south of Keonelele Avenue.

#### 7.4.2 AGRICULTURE

Ho'olehua is viewed by DHHL as a valuable asset for both economic and subsistence-based agriculture activities for its beneficiaries. As such, a modified Land Evaluation and Site Assessment (LESA) was utilized by the planning team to preliminarily assess the relative value of agricultural land in Ho'olehua. The LESA is comprised of two parts: a land evaluation that assesses the soils on the site suitable for crop production and a site assessment that considers three factors: agriculture land use, compatibility and impact of uses, and existing infrastructure. The agricultural suitability is normally scaled from 0 to 300 points. For purposes of evaluation, an area that receives a score greater than 175 points is considered suitable for agriculture use only; 150 to 175 points shall be

### **LAND USE PLAN**

#### **Existing Residential**

- (44) .5 to 5 acre lots on 55 acres
- General Agriculture
- 3,681 acres

#### **Supplemental Agriculture**

- (135) 35 acre lots on 5,811 acres

#### **Subsistence Agriculture**

- (135) 5 acre lots on 1,572 acres
- (65) 2 acre lots on 185 acres in "South Core"
- (29) 2 acre lots on 83 acres in "North Core"
- (58) previously awarded Nā'iwa lots on 298 acres

#### **Pastoral**

- (24) lots on 923 acres

#### **Community Use**

- 73 acres for existing Lanikeha Community Center, Ho'olehua Fire Station, Moloka'i High School and Ho'olehua Cemetery and church leases and proposed expansion of center to include park
- 50 acres for Mo'omomi Preserve

#### **Special District Areas**

- 660 acres for CRM and Nature Reserve areas

#### **Commercial**

- 40 acres as part of Town Center focus
- 13 acres as a consideration to acquisition from DOT, Airports Division

#### **Conservation**

- 46 acres









considered marginal for non-agricultural development and mitigating factors would need to be evaluated; less than 150 points deems the area suitable for non-agricultural development. For Ho'olehua, a general evaluation of soil was conducted based upon soil classification maps provided by the U.S. Department of Agriculture Soil Conservation Service (SCS). The lands in Ho'olehua were rated with a modified value of 205, thus affirming that agriculture should be the primary focus of this area's ongoing and future growth. In addition to the LESA conducted by the planning team, input was also provided by interested farmers that are currently utilizing lands in Ho'olehua as well as the Moloka'i Farmer's Association for various agriculture uses to assess some of the major concerns and issues facing the existing and future market in this

For purposes of the MIP, agricultural lands in Ho'olehua were further classified as subsistence, supplemental, and general. Definitions for the three land use types are provided in Section 2.0. The purpose of these designations for Ho'olehua was to provide a mechanism that preserves the integrity of valuable large parcel agricultural lands that would be designated supplemental agricultural lands. These lands would be maintained as is with no additional structures added to the land. However, lands designated as subsistence agriculture would be considered under the MIP as potential lands suitable for subdivision based upon several policy provisions and infrastructure limitations.

### 7.4.3 GENERAL AGRICULTURE

Most of the 3,681 acres designated as General Agriculture consists of rugged or difficult terrain without existing infrastructure for irrigation water and limited road access via unimproved dirt roads. General Agriculture lands will be available for cooperatives or a hui to develop, farm, and or ranch. However, necessary improvements to the land may be cost prohibitive for partnerships that are financially limited.

	Cost (Millions)
<b>On-Site</b>	\$19.4
<b>Off-Site</b>	\$6.8
<b>TOTAL</b>	<b>\$25.8M</b>

**Table 7.1- Ho'olehua-Pālā'au Total Infrastructure Costs**



*Supplemental and Subsistence Agricultural parcel in Ho'olehua*

	POTABLE WATER	WASTE-WATER	SITE PREP & ROADS	DRAINAGE	ELECTRICITY	TOTAL
<b>Major Factors</b>	New source, storage, transmission	IWS	Enhance and construct additional	Assume 5' depth and 10% road length	Transmission lines	
<b>On-Site</b>	\$1.7 M	--	\$13.1 M	\$2.1 M	\$2.1 M	\$19.0 M
<b>Off-Site</b>	\$4.2 M	--	\$ 2.0 M	\$0.0 M	\$ .6 M	\$ 6.8 M
<b>TOTAL</b>	<b>\$5.9 M</b>	<b>--</b>	<b>\$15.1M</b>	<b>\$2.1 M</b>	<b>\$2.7 M</b>	<b>\$25.8M</b>

**Table 7.2 - Ho'olehua-Pālā'au Infrastructure Costs**







#### 7.4.4 SUPPLEMENTAL AGRICULTURE

Over 5,861 acres have been designated as supplemental agriculture. These lands are comprised of the existing 40 acre parcels that within the MIP have been split into two parcels, one consisting of 35 acres designated as supplemental agriculture. The remaining five acres within these parcels are designated as subsistence agriculture and are further discussed in section 7.4.5. No structures would be allowed to be built on these parcels.

#### 7.4.5 SUBSISTENCE AGRICULTURE

The MIP designates 287 lots on 2,138 acres as Subsistence Agriculture. These lots vary in size from 2-4 acres and are considered large enough for small-scale agriculture and keep beneficiaries eligible for certain types of U.S. Department of Agriculture (USDA) loans. Further, according to HAR, Chapter 4-152-3(f), irrigation water from the MIS is only available for lots at least two acres.

The designated area for the previously awarded lots of the Nā'iwa Agricultural Subdivision has road infrastructure currently in-place. Phase IV development of the Ho'olehua Water System has been funded through a Rural Development Loan & Grant to rehabilitate approximately 1.5 miles of water mains within Farrington Avenue. It is anticipated that upon completion of this phase of work, potable water will be made available to the Nā'iwa subdivision. These awarded parcels average about 5 acres but vary from 4 to 9 acres per lot. The awarded lots are considered a priority in the MIP.

There are three areas designated as "new" subdivision area of Subsistence Agriculture lots. Two areas are located in the central core just north and south of the central Community Use areas. These areas are comprised of 94 two-acre lots on 278 acres.

The remaining 135 five-acre lots on 1,572 acres are situated along the main local collector streets within Ho'olehua and include 19 lots on Pu'u Kapele, 10 lots on Cemetery Road, 38 lots on Farrington Avenue (north), 48 lots on Farrington Avenue (south), and 21 lots on Mo'omomi Avenue. Subsistence Agricultural lots less than 4 acres are not allowed to subdivide. Several alternative lotting schemes were developed and discussed among interested community members which included 'ohana members and the Moloka'i Homestead Farmers Alliance. The preferred option is to split the 5-acre Subsistence Agricultural lot into one 2-acre and 3-acre parcel. A main house and workman's quarters would be allowed on each of the subdivided 2 and 3 acre parcels for a total of 4 per 5 acre area.



*Aerial photo of Ho'olehua agricultural lands, March 2005*



*Eastern view of Ho'olehua agricultural lands, March 2005*

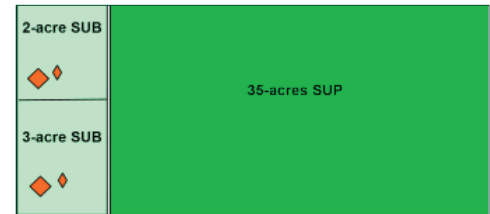




Of the several key issues that arise with this recommendation of subdividing lots, the provision of potable and irrigation water source is the primary concern as the subdivision of lots will encourage a shift in increased population density, thereby creating a greater demand on existing infrastructure.

It is the endeavor of the MIP to retain the agricultural integrity of the central plain within Ho'olehua. As such, these lands were purposefully not designated as residential lots. As Subsistence Agricultural lots that are attached to 35-acres of Supplemental Agricultural lots, it is recommended that guidelines and criteria be established and enforced to complement the existing lifestyle and character of Ho'olehua. Some of these guidelines already exist in the approved Addendum to Agricultural Leases which includes:

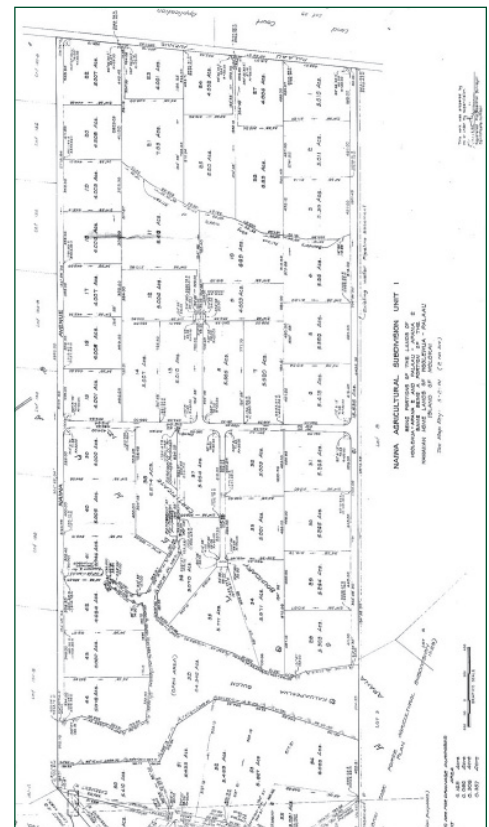
- A requirement for active cultivation of two-thirds of a lot of the portion of lot that is feasible to cultivate. Active cultivation is to occur by one year from execution of the farm lot lease. Non-compliance with the active cultivation requirement, even with justified time extensions, will constitute a default on the lease and re-award to another qualified applicant.
- A farm plan would need to be submitted to and accepted by the Department to implement any plans for building structures on the 5-acre Subsistence Agriculture lot. For lessor loan-funded lessees, any significant changes within the implementation of the farm plan including types of crops or acreages cultivation, which can have an impact on projected production value, will require a submittal of a revised plan to the Department. For independently financed lessees, a revised farm plan is not required but the active cultivation requirement still applies.
- The lessee may be allowed to construct a residence on the lot provided that the lessee has satisfied the active cultivation requirement. Although the addendum states that the lessee may construct a residence anywhere on the lot, additional restrictions would apply for the Ho'olehua Subsistence Agriculture lots. Within the approved lot areas, residence structures will be individually sited based upon proximity from local collector street fronting the lot and a designated buffer zone designed to limit the potential for associated nuisances such as dust or odors for adjacent farm lots.
- It is the policy recommendation of the MIP that lease transactions for the subdivided 5-acre Subsistence Agriculture lots be only available to immediate family members of the existing lessee. In unique circumstances whereupon the existing lessee has no immediate heir, consideration should be given to those highest on the



Model of subdivision scheme for existing 40-acre agricultural parcel



Supplemental and Subsistence Agricultural parcel in Ho'olehua



Parcel scheme for Na'iwa Agricultural lots, Ho'olehua







waiting list. If the existing lessee seeks to sell their lease, verification restrictions will be imposed by the Department to ensure that the lease is transferred to an individual that meets the minimum blood quantum requirements of the Department.

Further, a Rights-of-Agreement should be executed between adjacent lessees of these Supplemental/Subsistence Agricultural lots so that the rights of farmers are protected from nuisance complaints from other residences due to farming operations.

Additionally, measures should be provided to ensure that adequate DHHL staffing is provided to administer and direct existing programs and anticipated future programs to meet the needs of farmers such as cooperative opportunities for equipment, marketing, financing, operations and maintenance.

The subdivided Subsistence and Supplemental lots are a low priority in the MIP. To allow for the build-out of all possible designated lots, new infrastructure, including domestic and irrigation water, would need to be in place prior to development of any subdivided lot. It should be noted that for the MIS, the consumer under HAR Chapter 4-152-17(a) is responsible for furnishing, installing, and keeping in good and safe condition all equipment for receiving, controlling, applying, or using irrigation water from this source. Further, it will be the responsibility of the existing lessee to secure financial resources for the subdivision of these lots; including costs for surveying, land clearing, and installing improvements from the point of existing connection to the residence. It is the recommendation of the MIP that for those lessees with agricultural lots that are not in active cultivation and that exceed any warranted time extensions to submit a farm plan, the Department provide a notice to either discontinue lease, increase lease rent, or require a mandatory return of unutilized land that would be placed into the pool of available lands for those on the waiting list.

Table 7.1 below summarizes the development costs, which would be necessary to support the maximum build-out allowed under the proposed subdivision of subsistence agricultural lots.

#### **7.4.6 PASTORAL**

Over 697 acres of the 923 acres of pastoral land are situated in the northwest section of the Ho'olehua tract. The remaining 224 acres are situated along the northern coastline. Fifteen of the existing 24 lots have been awarded.

#### **7.4.7 COMMUNITY USE**

The majority of 73 acres of land designated as Community Use are located near the central core of Ho'olehua. Approximately

#### **CONDITIONS FOR SUBDIVIDING AGRICULTURAL LOTS IN HO'OLEHUA**

- Active cultivation of two-thirds of the existing lot
- Submittal of a farm plan
- Development of additional homes within designated area
- Lease transactions for subdivided lot available only to immediate family members with consideration given for unique circumstances of no immediate heir
- Execution of rights-of-agreement between adjacent lessees
- Provision of adequate DHHL staffing to provide necessary administrative support





23 acres of these lands consist of existing facilities that include the Lanikeha Community Center, the Ho'olehua Fire Station, the Ho'olehua Cemetery, the Moloka'i High School, several churches and other educational and social service organizations that have revocable licenses to utilize DHHL lands. Future proposed community uses include an expansion of recreation facilities at the Lanikeha Community Center. The purpose of these lands is to complement the existing rural residential community.

An additional 50 acres at Mo'omomi have been designated as Community Use. This area represents part of a community resource conservation/stewardship agreement with the Department of Land and Natural Resources (DLNR) for coastal and marine resources at Mo'omomi. This use is a quintessential representative of the traditional Hawaiian value of *malama aina*. The land is managed by a community group under these principles.

Mo'omomi Reserve preserves the best intact coastal dune system in the State of Hawai'i. It was organized by Moloka'i residents to protect coastal and marine resources from over use by fishermen from other islands and is an excellent example of community empowerment, indigenous stewardship and the preservation of subsistence lifestyles. During the course of community meetings there was a consensus among those beneficiaries and community members present that the coastal resource area be extended all the way to Kalaupapa.

#### 7.4.8 SPECIAL DISTRICT AREAS

There are two designated Special District areas within Ho'olehua. The first is Pu'ukapele Rock Wall Complex, a 372 acre parcel in the northwest section of the tract which is currently leased to the U.S. Air Force until 2013 as a radio receiver site. Community members and historical documents verify that this area has significant cultural sites that warrant future preservation. Prior to the end of terms of the lease, DHHL will need to develop a cultural resource management plan. It is recommended that measures are formulated to ensure that the historical context and integrity of these tangible cultural features are maintained. Determinations as to the historical significance of these features should be defined and evaluated by a working group that is comprised of recognized cultural practitioners from the community and invited academic interests.

The second Special District Area is comprised of 288 acres and is situated along the northeastern tract that lead to the Conservation Area above the Kalaupapa Peninsula. The area includes Pu'u 'Eleuweuwe (1,145 ft). No development is proposed in this area as this area has been designated as a Nature Reserve with a medium density of endangered or threatened plant life.



*Homestead Association Center in Ho'olehua*



*Mo'omomi Beach - Ho'olehua*



*Pastoral lands in Ho'olehua*





#### 7.4.9 COMMERCIAL

Within Ho'olehua, approximately 40 acres have been designated for Commercial use. Existing commercial use areas include the U.S. Post Office and First Hawaiian Homes Credit Union that are located on the southeast corner of Farrington Avenue and Pu'u Pe'elua Avenue. As a focal node, the northeastern corner of the same intersection has been designated as Commercial for other necessary facilities that would need to accommodate the potential needs of a growing community in Ho'olehua.

The development of these areas will largely rely on market trends (particularly those based on agricultural activity), community initiatives, and entrepreneurship. The community has expressed a desire to provide for a development of mixed use of commercial and community support near the Moloka'i Airport. Approximately 14 acres have been designated along the Moloka'i Loop Road for potential commercial development. Depending on marketing potential, it is essential that agriculture activities within DHHL lands are provided the necessary support services to make the economic component of these efforts competitive in markets outside of Moloka'i.

Currently there are other commercial cooperative activities that are in operation in close proximity to the Ho'olehua tract. Specifically, the Hikiola Cooperative, the Maui County Agricultural Park, and the USDA Plant Materials Center are all potential partners for commercial growth within Ho'olehua. Any potential use of this area will require negotiations with the existing lessee.

Along Maunaloa Highway, approximately 5 acres have been designated for Commercial in consideration of a possible venture for a food service and/or community kitchen facility that is visible and accessible to commuters that travel along the primary thoroughfare on the island. Design of any facility and its operation would have to be to a scale that is complementary to the existing rural character of Ho'olehua.

#### 7.4.10 CONSERVATION

The 46-acres of Conservation District along the northeastern section of the Ho'olehua tract are also designated under the State Land Use District Commission.



*DHHL Community Meeting at Lanikeha Community Center*



*Historical habitation site at Pu'ukapele*



*First Hawaiian Homes Credit Union in Ho'olehua*



*Entry tunnel of Moloka'i Irrigation System  
(Photo by State DLNR-CWRM)*



Section 8.0

---

## Development Priorities and Phasing Schemes







## 8.0 DEVELOPMENT PRIORITIES

The MIP provides development priorities and phasing recommendations consistent with the DHHL General Plan. The overall priority of the different land uses is summarized in the table on the right.

*Residential* uses are the development priority of the MIP. The MIP exceeds its allocation of the DHHL General Plan goal for housing of 400 lots over 20 years with an estimated 417 new residential lots. The MIP designates two priority residential areas: in 'Ualapu'e and Kapa'akea, Kamiloloa, and Makakupa'ia areas. However, given the cost constraints, Kalama'ula is a low priority.

*Agricultural* and *Pastoral* lots are lower priorities than *Residential*. However, the previously awarded Nā'iwa lots in Ho'olehua are a priority of the MIP. These awards are important but they are more costly and serve fewer beneficiaries than *Residential*. Further, outside of the Nā'iwa lots, most of the remaining lots are part of the proposed subdivision in Ho'olehua, which is a low priority of the Department in terms of provisions for infrastructure and improvements to support increased density in an existing area.

Land can be designated as *General Agriculture* immediately but some areas may not be leased out immediately due to low demand for land for farming and ranching.

*Special District* should be set aside now but the development of these areas will be driven by the Department developing working partnerships with community stakeholders in establishing both natural resource and subsistence management programs and cultural resource management programs. Other *Special District* areas such as the Flood Control, Wetlands, and Kalaupapa Historical Settlement will also require capacity building of resources and partnerships.

Different types of *Community Use* areas are distinguished in the plan: include neighborhood and regional uses. Neighborhood uses such as parks and schools should be developed with residential areas. However, regional *Community Uses* will require community input and initiative and should be implemented when there is community interest including cemeteries and support services for kūpuna housing and health care.

*Conservation* lands are a high priority to reflect the importance of protecting Hawai'i's natural environment.

*Commercial* and *Industrial* should be developed based upon anticipated market demand and upon availability of infrastructure.

### PHASING CRITERIA

LAND USE	PRIORITY
<b>Residential (Homestead)</b>	High, Medium & Low
<b>Agriculture (Homestead)</b>	High Low
<b>Pastoral (Homestead)</b>	Low
<b>General Agriculture</b>	Market Driven
<b>Special District</b>	DHHL, Community & Market Driven
<b>Community Use</b>	High & Community Driven
<b>Conservation</b>	High
<b>Commercial</b>	Market Driven
<b>Industrial</b>	Market Driven

### PRIORITY DEFINITIONS

<b>High</b>	1-6 years
<b>Medium</b>	7-10 years
<b>Low</b>	10 + years
<b>Market Driven</b>	Depends on market
<b>Community Driven</b>	Depends on community initiative





## 8.1 PRIORITY AREAS

One agricultural homestead community in Ho'olehua and two residential communities of 'Ualapu'e and Kapa'akea, Kamiloloa, and Makakupa'ia were identified as priority areas of the MIP. The residential areas are undeveloped lands with provisions of road access and an available supply of potable water. The non-prioritized residential area of Kalama'ula is also on undeveloped land but part of an established residential community.

These priority areas were determined by an assessment of beneficiary preferences, the location of the parcels, the physical conditions of the land, and development costs. In the ranking of this priorities, it was determined that the awarded but unbuilt Nā'iwa Agricultural homestead development would be the first priority for completion.

At full build-out, the 361 residential lots provided in the two areas address 90% of the housing goals of the DHHL General Plan. Although not a priority due to high development costs, the additional provision of residential lots in Kalama'ula would exceed the goals of the General Plan. Further, the addition of homes in the proposed subdivision of agriculture lots in Ho'olehua, which is currently restricted by an inadequate potable water source for a full build-out of subdivided lots, would further add to the housing total and contribute to reducing the waiting list.

The priorities for the residential homesteads include not only the residential units in these areas but also the community use areas that will provide the amenities to make these healthy communities.

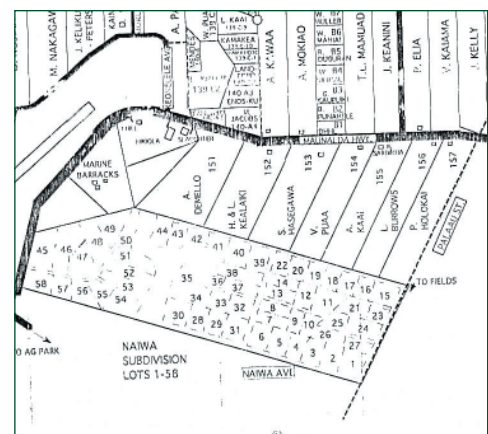
### 8.1.1 PRIORITY 1: NĀ'IWA AGRICULTURE SUBDIVISION

An already planned and awarded but non-built community is the main priority of the MIP. The area is comprised of 58 lots on 298 acres that were part of an accelerated award program in 1986.

Phase III of the Ho'olehua Water System improvements have been completed. Phase IV of the Ho'olehua Water System is current under a bidding process. This phase of work includes construction of approximately 595 lineal feet of 6-inch and 17,385 lineal feet of 8-inch water main along Farrington Highway in Ho'olehua which will then feed into an existing pipeline easement that aligns with Pālā'au Avenue. Upon completion of this water main project and other infrastructure needs including site preparation, roadways, and drainage, the Department will be submit a request for subdivision approval to the County of

### MIP RESIDENTIAL PRIORITY AREAS

	Lots
'Ualapu'e	74
Kapa'kea	286
<b>TOTAL</b>	<b>361</b>



Nā'iwa Agricultural Subdivision area in Ho'olehua





Maui, which will designate Tax Map Key parcel numbers and process building permits for these lots. A preliminary estimate for infrastructure costs is \$8.6 M, or \$157,636 per lot.

### 8.1.2 PRIORITY 2: 'UALAPU'E RESIDENTIAL

The residential community in 'Ualapu'e is the first priority of the MIP. Two major phases of the residential area are recommended (Figure 8.1). This community includes 74 residential homesteads and approximately 3 acres of community use that includes a park and cemetery.

'Ualapu'e was selected as the first priority for several reasons. The area was ranked high by beneficiaries in the survey conducted at the beginning of the planning process. Comments at the community meetings reinforced the interest of the 'Ualapu'e area. The area is nestled along the southeastern shores of Moloka'i island. The scenic views, access to potable water and reasonable infrastructure costs also make it practical to develop an appropriately scaled community in this area.

The west end phase is composed of 47 house lots on 16 acres. Road access will be provide from Kamehameha V Highway and along an existing unimproved road that will be modified to County standards for rural areas as outlined in the Moloka'i Community Plan. This west end area is phased first because it is in closest proximity to existing infrastructure including water storage and pump as well as in close proximity to existing community uses such as Kilohana School and the cemetery. Also with this development, it is anticipated that a cultural resource management plan will be in place for Kalauonākukui Heiau that may include some buffer and physical landscaping elements to protect the site.

The second phase is situated on the east end and includes 27 lots on 9 acres. This phase is considered a medium priority.

Infrastructure costs are summarized in Table 8.1. Both phases require connection to off-site water wells and storage facilities and on-site roads and water. Under the requirements of Hawai'i Administrative Rules 11-2-31.1, the two areas qualify for the use of Individual Wastewater Treatment systems. A drainage and storm water management systems will also be in place. The two phases will require minimal intersection improvements

### 8.1.3 PRIORITY 3: KAPA'AKEA, KAMILOLOA, AND MAKAKUPA'IA RESIDENTIAL

The third priority area of the MIP is Kapa'akea, Kamiloloa, and Makakupa'ia homestead which is currently comprised of 72 lots on 40 acres (Figure 8.2). The area has a rich cultural resources and community area such as One Ali'i Fishpond but is currently in need of a neighborhood residential coastal park.

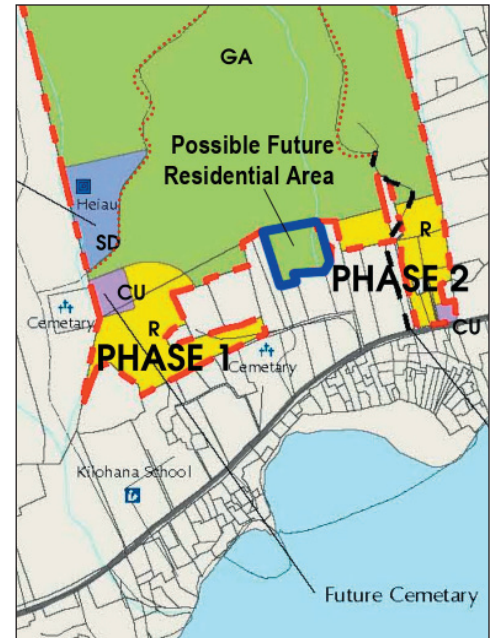


Figure 8.1 - 'Ualapu'e Residential Phasing Scheme

#### 'UALAPU'E PHASING

##### Phase 1 - High

- 47 house lots

##### Phase 2 - Medium

- 27 house lots
- 2.9 acres for Community Use







Tentative plans which will require future negotiations with the existing lessee are to acquire approximately 2 acres adjacent to the existing residential community and provide a coastal park.

Kapa'akea, Kamiloloa, and Makakupa'ia was selected as the second residential priority due to its gently sloping topography, access to available potable water source with sufficient supply, and reasonable infrastructure costs. Also, Kapa'akea, Kamiloloa, and Makakupa'ia is a desirable residential location because of its proximity to Kaunakakai town.

A single phase of development for the middle portion of the tract is proposed. This phase will yield 286 half-acre lots on 204 acres. To support this build out, an onsite wastewater treatment facility will be required.

Infrastructure costs are summarized in Table 10.2. The new wastewater treatment facility is estimated at \$12.5 M which would be constructed on the onset of this phase. Drainage swales and detention basin would also be installed to provide adequate capacity to handle runoff due to incidences of high rainfall.



Figure 8.2 - Kapa'akea - Kamiloloa - Makakupa'ia Residential Area

	POTABLE WATER	WASTE-WATER	SITE PREP & ROADS	DRAINAGE	ELECTRICITY	TOTAL	PER LOT
<b>Major Factors</b>	New Tanks, Wells & Transmission Lines	IWS	Roads & Intersection Improvements	Assume 5' Depth	Transmission Lines		
<b>On-Site</b>	\$0.3 M	--	\$1.4 M	\$0.4 M	\$0.3 M	\$3.3 M	\$63,829
<b>Off-Site</b>	\$0.1 M	--	\$0.5 M				
<b>On-Site</b>	\$0.1 M	--	\$0.5 M	\$0.3 M	\$0.1 M	\$0.7 M	\$37,037
<b>Off-Site</b>	--	--	--				
<b>TOTAL</b>	<b>\$0.5 M</b>	<b>--</b>	<b>\$2.4 M</b>	<b>\$0.7 M</b>	<b>\$0.4 M</b>	<b>\$4.0 M</b>	<b>\$54,054</b>

Table 8.1 - 'Ualapu'e Residential Phases Infrastructure Costs

	POTABLE WATER	WASTE-WATER	SITE PREP & ROADS	DRAINAGE	ELECTRICITY	TOTAL	PER LOT
<b>Major Factors</b>	Connection to Existing Source	Construct New Treatment Facility	Enhance Road Access	Assume 5' Depth and ¼ of the Roadway	Transmission lines		
<b>On-Site</b>	\$3.1 M	\$12.5 M	\$9.6 M	\$01.4 M	\$2.6 M	\$29.2 M	\$102,097
<b>Off-Site</b>	--	--	--	--	--	--	--
<b>TOTAL</b>	<b>\$3.1 M</b>	<b>\$12.5 M</b>	<b>\$9.6 M</b>	<b>\$1.4 M</b>	<b>\$2.6 M</b>	<b>\$29.2 M</b>	<b>\$102,097</b>

Table 8.2 - Kapa'akea-Kamiloloa-Makakupa'ia Residential Phases Infrastructure Costs



---

## Section 9.0

### Conclusion





## 9.2 PRIORITY ON BUILDING COMMUNITIES

An emphasis in the MIP is maintaining or enhancing the character of existing communities and remaining focused on the ideal and values of the island plan in creating new communities through the future development and awarding of residential homesteads. The priority areas of future development are the residential homesteads in the 'Ualapu'e and Kapa'akea, Kamiloloa, and Makakupai'a tracts. The MIP proposes a limited allowance for agricultural parcel subdivision in Ho'olehua based upon the conditions set forth in the Hawai'i Administrative Rules §10-3-26(f). The allowance for subdivision in Ho'olehua could be one way to promote homestead families to return to Moloka'i to reinvest efforts in both subsistence-based and supplemental agricultural production while concomitantly decreasing the existing demand for new homesteads as evidenced by the current wait list.

## 9.3 POINTS FOR FUTURE PLANNING STUDIES

Several points emerged during the planning process that should be incorporated by the Department as needs for future planning studies for DHHL lands on Moloka'i, including:

- The completion of a parcel-by-parcel analysis and evaluation of agricultural lands in Ho'olehua to assess the true potential of agricultural development and constraints.
- The formation of a working group to discuss long-range feasibility, planning and development of a community cultural center in Pālā'au (Apana 3).
- The development of an integrated natural resource management and subsistence access plan and partnership with existing entities such as the East Moloka'i Watershed Partnership for the areas of 'Ualapu'e, Kapa'akea, Kamiloloa, Makakupai'a, and Ho'olehua.
- The creation of a mākua ("parent") advisory council comprised of representatives of the Kalaupapa Patient's Advisory Council, the National Park Service, the State Department of Health, family interests with ties to Kalaupapa, and the Department to discuss the long-term legacy of this wahi pana.
- The existing community interests need to be involved in the creation and implementation of design guidelines for proposed new developments to ensure that the vision and legacy of an area are maintained and sustained in the continuation of vibrant communities.
- The Development Plans for each of the areas need to address the unique natural, socioeconomic, and cultural features within each parcel that provide for subsistence needs and entrepreneurial activities; and
- There must be a balance between the development of proposed residential areas and the community services and amenities that are important for creating livable communities rather than classical housing subdivisions that lack character and a sense of place.

	POTENTIAL NEW LOTS	TYPE OF LOT	ESTIMATED WATER DEMAND (mgd)	ESTIMATED AVAILABLE WATER SUPPLY (mgd)	(+/-) SUPPLY TO DEMAND	ON-SITE COSTS (\$ millions)	OFF-SITE COSTS (\$ millions)	TOTAL INFRASTRUCTURE COSTS (\$ millions)	COST PER LOT
'UALAPU'E	74	Residential	0.049	0.200	0.151	\$3.3	\$0.8	\$4.1	\$55,405
KAPA'AKEA, MAKAKUPAI'A, KAMILOLOA	286	Residential	0.174	0.930	0.756	\$29.2	\$0.0	\$29.2	\$102,098
KALAMA'ULA, PĀLĀ'AU	57	Residential	0.323	1.200	0.877	\$7.3	\$4.2	\$11.5	\$201,754
KALAUPAPA, PĀLĀ'AU	0	n/a	0.029	n/a	n/a	\$5.8	\$0.0	\$5.8	n/a
HO'OLEHUA	544	Agricultural	1.530	1.200	(0.330)	\$19.0	\$6.8	\$25.8	\$47,353
	961					\$64.6	\$11.8	\$76.4	

Table 9.2 - Summary of Lot Development & Infrastructure Costs







## 9.0 CONCLUSION

The MIP is a guidance document for managing approximately 25,899 acres of DHHL land on the island of Moloka'i over the next 20 years. The plan designates appropriate land uses which ensure DHHL land will be developed to its highest potential to meet the needs of native Hawaiian beneficiaries while protecting, maintaining, and developing appropriate levels of activities that utilize and interact with the natural and cultural resources that are unique to each area. The proposed homestead land uses and acreages are summarized in *Table 9.1*. The estimated potable water demand compared to area supply and the associated infrastructure costs for new lot development in each of the DHHL tracts is provided in *Table 9.2*.

### 9.1 ISLAND PLAN GOALS AND OBJECTIVES

The MIP fulfills the policy requirements of the DHHL General Plan as it identifies the following:

- Land Designations for all 25,899 acres of DHHL land on Moloka'i;
- Priority areas for new Residential homestead development;
- Appropriate areas for Community Use and Special District;
- Areas for existing and potential growth for Agriculture and Pastoral uses; and
- Limited but adequate areas for income-generating Commercial uses.

The plan was prepared using a comprehensive planning process that incorporated substantial beneficiary and community participation from the initial identification and evaluation of assets to the determination of preferred land uses for each DHHL tract.

Land Use Designation	'UALAPU'E (Acres)	KAPA'AKEA, MAKAKUPAI'A, KAMILOLOA (Acres)	KALAMA'ULA, PĀLĀ'AU (Acres)	KALAUPAPA, PĀLĀ'AU (Acres)	HO'OLEHUA (Acres)	TOTAL (Acres)
Residential	25	264	398	0	55	742
Subsistence Agriculture	0	0	213	0	2,138	2,350
Supplemental Agriculture	0	0	0	0	5,862	5,862
Pastoral	0	465	539	0	923	1,927
General Agriculture	299	2,165	2,353	0	3,681	8,498
Special District	85	2,247	1,719	847	660	5,558
Community Use	3	61	83	14	73	234
Conservation	0	0	0	609	46	655
Commercial	0	0	13	4	40	58
Industrial	0	16	0	0	0	16
<b>TOTALS</b>	<b>412</b>	<b>5,218</b>	<b>5,318</b>	<b>1,474</b>	<b>13,478</b>	<b>25,899</b>

Table 9.1 - Acreage Summary by Land Designation Under the MIP



---

## Section 10.0

### References





## 10.0 REFERENCES

Carter and Burgess, Inc.

2002 *Planning for Sustainable Tourism in Hawai'i. Part 1: Infrastructure and Environmental Overview Study. Volume V: County of Maui.* Prepared for the State of Hawai'i Department of Business, Economic Development, and Tourism.

County of Maui, Department of Planning

2003 *County of Maui Infrastructure Assessment Update.* Prepared by Wilson Okamoto & Associates, Inc.

2001 *Moloka'i Community Plan.*

County of Maui, Department of Water Supply

2003 *Fiscal Year 2003 Operating Budget.*

2003 *Fiscal Year 2003 Capital Improvement Budget.*

2002 *Annual Report Fiscal Year Ended June 30, 2002.*

County of Maui, Office of Economic Development

2004 *Maui County Data Book 2003.* Hawai'i Small Business Development Center Network Business Research Library: Hilo.

Federal Communications Commission

2004 *Public Notice for Actions Taken Under Cable Land License Act. DA No. 04-1602 for SCL-LIC-20040310-00007 Sandwich Isles Communications, Inc.* Washington D.C.

Land Study Bureau

1967. *Detailed Land Classification- Island of Moloka'i.* Honolulu: University of Hawai'i

Maui Economic Development Board

2003 High-Tech Maui Community Profile. Website:  
<http://www.hightechmaui.com/CProfile/mayor.html>

Pacific Business News

2004 "Housing Prices are way above median in some parts of state." Howard Dicus, May 12, 2004

2004 "Maui's Median Home Price reaches 500,000." Latest News, May 10, 2004.

Phillips, Brandt, Reddick & Assoc. (Hawai'i), Inc.

1993 *Hawaiian Home Lands: Land Inventory. Phase 5-Planning Assessment: Total Land Inventory.* Prepared for the Department of Hawaiian Home Lands.

1986 *Ho'olehua-Pāla'au Development Plan.* Prepared for the Department of Hawaiian Home Lands. State of Hawai'i. Contract No. 17984.







1983 *Kalama'ula Development Plan*. Prepared for the Land Management Division, Department of Hawaiian Home Lands. State of Hawai'i. Contract No. 13978.

1982 *Kapa'akea-Kamiloloa-Makakupa'ia: Moloka'i Inventory and Preliminary Analysis*. Prepared for Department of Hawaiian Home Lands.

Santo, Lance T.

2001 *Assessment and Improvement Recommendations for the Moloka'i Irrigation System*. Prepared for the Hawai'i Agricultural Research Center. 'Aiea.

State of Hawai'i, Commission on Water Resource Management

— *Findings of Fact, Conclusions of Law, and Decision and Order in the Matter of Contested Case Hearing on the Water Use Permit Application Filed by Kukui (Moloka'i), Inc. Case No. CCH-MO97-1. Honolulu*

2004 *Appeal from the Commission on Water Resource Management (Case No. CCH-MO96-1). In the Matter of the Contested Case Hearing on Water Use, Well Construction, and Pump Installation Permit Applications, Filed by Wai'ola o Moloka'i and Moloka'i Ranch, Ltd. No. 22250.*

2003 *State Water Projects Plan, Hawai'i Water Plan, Volume 4, SWPP for Islands of Lāna'i, Maui, and Moloka'i*. Prepared by Fukunaga and Associates. Honolulu.

1996 *Report of the Moloka'i Water Working Group*. Revised April 1996, originally presented in July 1993.

State of Hawai'i, Department of Agriculture

2003 *Agricultural Water Use and Development Plan*.

State of Hawai'i, Department of Hawaiian Home Lands

2004 *Internal Beneficiary Mailing List, August 2004*.

2003 *Annual Report FY 2002-03, January 7, 2004*.

2002 *Informational Pamphlet, July 2002*

2002 *General Plan, February 26, 2002*

2000 *Hawaiian Homes Agricultural Task Force Recommendations*.

1995 *Statewide Strategic Water Resources Study, Island of Moloka'i Inventory*.

State of Hawai'i, Department of Transportation, Airports Division

1999 *Moloka'i Airport Master Plan Final Report*. Prepared by Engineering Concepts, Inc., Aries Consultants Ltd.





Sterns, H.T.; MacDonald, G.A.

1947 *Geology and Groundwater Resources of the Island of Moloka'i, Hawai'i*. Bulletin 11. Hawai'i Division of Hydrography.

U.S. Army Corps of Engineers, Honolulu District

2004 Civil Works Projects and Studies. Website:  
<http://www.poh.usace.army.mil/cw/civilworks.html>

U.S. Census Bureau North American Industry Classification System (NAICS)

2001 *County Business Patterns for Maui, HI*, 2001.

U.S. Department of Agriculture

2003 *Annual Report of the Moloka'i Enterprise Community*. USDA Rural Development <http://www.ezec.gov/Communit/Moloka'i.html>

1972 *Soil Survey of the Islands of Kaua'i, O'ahu, Maui, Moloka'i, Lāna'i, State of Hawai'i*, Soil Conservation Service in cooperation with the University of Hawai'i Agricultural Experiment Station. Washington D.C.: U.S. Government Printing Office, August 1972

U.S. Fish and Wildlife Service

2002 *Critical Habitat for 46 Plant Species from Moloka'i*, Fact Sheet. March 2002

U.S. Geological Survey

2003 *National Mapping Program Technical Instructions: Part 3 Transportation: Standards for USGS and USDA Forest Service Single Edition Quadrangle Maps*. U.S. Department of the Interior.

2002 *Atlas of Natural Hazards in the Hawaiian Coastal Zone*. By Charles H. Fletcher III, Eric E. Grossman, Bruce M. Richmond, and Ann E. Gibbs. Prepared in cooperation with University of Hawai'i, State of Hawai'i Office of Planning, and National Oceanic and Atmospheric Administration Geologic Investigations

1997 *Water Budget for the Island of Moloka'i, Hawai'i*. Water-Resource Investigations Report 97-4155. Prepared in Cooperation with the State of Hawai'i Department of Hawaiian Home Lands.

Wyban, Carol Araki

1990 *Master Plan for 'Ualapu'e Ahupua'a: Blending Tradition and Technology*. Prepared for the State of Hawai'i, Department of Business and Economic Development, Moloka'i Office.





## GIS DATA

**DATA SOURCE:** Hawai'i Statewide GIS Program, Office of Planning <http://www.state.hi.us/dbedt/gis/download.htm>

GIS LAYER NAME	SOURCE	DATE
Agricultural Lands of Importance to the State of Hawai'i (ALISH)	State Department of Agriculture 1:24,000 hand drafted blueline maps. Prepared with the assistance of the Soil Conservation Service, U.S. Department of Agriculture, and the College of Tropical Agriculture, University of Hawai'i.	1977

**Continued- DATA SOURCE:** Hawai'i Statewide GIS Program, Office of Planning <http://www.state.hi.us/dbedt/gis/download.htm>

Coastline	USGS Digital Line Graphs	1983
Elevation Ranges	USGS Digital Elevation Models	2000
Flood Data	Federal Emergency Management Agency (FEMA); Scanned and compiled by FEMA from 1:24,000 Digital Flood Insurance Rate Maps (DFIRMs).	1996
Hawai'i Public Schools	USGS Geographic Names Information System (GNIS) DAGS Planning C&C of Honolulu	1992, 2000 & 2001
Hydrography Lines	USGS Digital Line Graphs	1983
Hydrography Polygons	USGS Digital Line Graphs	1983
LANDSAT images	Pacific Disaster Center	--
Land Study Bureau (LSB) Detailed Land Classification	Land Study Bureau's Detailed Land Classification Aerial Photos were hand drafted onto paper overlays of the U.S.G.S., 1:24,000 topographic and orthophoto quads. Ratings were developed for both over-all productivity, and for specific crops. This layer represents only the over-all productivity ratings.	1967
Major Roads	USGS Digital Line Graphs	1983
Minor Roads	USGS Digital Line Graphs	1983
National Wetlands Inventory Polygons	U.S. Department of the Interior, Fish and Wildlife Service	1978
Parks	GDSI parcel data	1998
Perennial Stream Arcs	USGS Digital Line Graphs, & CWRM Hawai'i Stream Assessment database	1983 & 1993





GIS LAYER NAME	SOURCE	DATE
Rainfall	Giambelluca, T.W., Nullet, M.A., and Schroeder, T.A. 1986. Hawai'i Rainfall Atlas, Report R76, Hawai'i Division of Water and Land Development, Department of Land and Natural Resources, Honolulu. vi + 267	1990
Special Management Areas	County Planning Department blueline maps; compiled and drafted on USGS quadrangle base	1998
State Land Use Districts, 2000	State Land Use Commission 1:24,000 Mylar Maps	2000
Threatened and Endangered Plants	Division of Forestry and Wildlife	1992
200 Ft. Contours	USGS Digital Elevation Models	2000











DEPARTMENT OF HAWAIIAN HOME LANDS  
**MOLOKA'I ISLAND PLAN**



**APPENDICES**

June 2005



THE DEPARTMENT OF  
HAWAIIAN HOME LANDS



STATE OF HAWAII

**GROUP 70**  
INTERNATIONAL





# Moloka'i Island Plan

## APPENDICES

June 2005

Department of Hawaiian Home Lands



State of Hawai'i





## A. Cost Estimates





**PROJECT: DHHL Molokai Island Plan**  
**Ualapue Area**

Prepared by: LCA Date: 04-Apr-05  
Checked by:

**ESTIMATE OF PROBABLE COST OF CONSTRUCTION (Budgetary - Civil Infrastructure)**

Est. Qty.	Unit	Description	Unit Price	Subtotal	Total	Assumptions
RESIDENTIAL WEST (47 Lots - 10,000 sq. ft. min.)						
ONSITE						
Site Preparation & Roadways						
3	A.C.	Clearing and Grubbing	\$ 6,000	\$ 18,000		47 lots  16 acres  Road length x 40' width Road length x 40' width x 1' depth \$75.00/sy + gravel shoulders; length from Group 70 \$2000/acre
3900	CY	Excavation and Embankment	\$ 100	\$ 390,000		
2600	LF	Roadway (22' wide, 2 1/2" A.C., 8" Basecourse)	\$ 205	\$ 533,000		
	LS	Temporary Erosion Control Measures	\$ 6,000	\$ 6,000		
		Roadway Subtotal		\$ 947,000		
		Mobilization (6%)		\$ 56,820		Assume 5' depth
		Contingency (20%)		\$ 200,764		
		Off-Island/Remote Factor (20%)		\$ 189,400	\$ 1,393,984	
Drainage System						
600	CY	Excavation and Backfill	\$ 100	\$ 60,000		Assume 5' depth
800	LF	24" Drainline	\$ 100	\$ 80,000		
2	EA	Drain Manhole	\$ 5,000	\$ 10,000		
8	EA	Drain Swales and Inlet	\$ 10,000	\$ 80,000		
16	EA	Headwalls	\$ 4,000	\$ 64,000		
		Drainage System Subtotal		\$ 294,000		5' depth, 2' wide for main; 2' deep, 1' wide for lateral 2' bedding x trench width Qty based on road length 20' per fh 20' for each lot
		Mobilization (6%)		\$ 17,640		
		Contingency (20%)		\$ 62,328		
		Off-Island/Remote Factor (20%)		\$ 58,800	\$ 432,768	
Water System						
1100	CY	Excavation and Backfill	\$ 100	\$ 110,000		5' depth, 2' wide for main; 2' deep, 1' wide for lateral 2' bedding x trench width Qty based on road length 20' per fh 20' for each lot
550	CY	Crushed Rock	\$ 60	\$ 33,000		
2600	LF	8" PVC Waterline and Fittings	\$ 40	\$ 104,000		
120	LF	6" PVC Waterline and Fittings	\$ 35	\$ 4,200		
940	LF	1 1/2" Copper Laterals	\$ 20	\$ 18,800		

**PROJECT:** DHHL Molokai Island Plan  
Ualapue Area

Prepared by: LCA  
Checked by: Date: 04-Apr-05

**ESTIMATE OF PROBABLE COST OF CONSTRUCTION (Budgetary - Civil Infrastructure)**

Est. Qty.	Unit	Description	Unit Price	Subtotal	Total	Assumptions
6	EA	8" Gate Valve	\$ 1,200	\$ 7,200		assumed
6	EA	6" Gate Valve	\$ 900	\$ 5,400		1 per fh
12	EA	Gate Valve Valve Box	\$ 400	\$ 4,800		
47	EA	Type "X" Meter Box w/ Conc Collar	\$ 150	\$ 7,050		1 per lot
47	EA	Type "A" Valve Box	\$ 100	\$ 4,700		1 per lot
6	EA	Fire Hydrants w/ Curb Guards	\$ 3,500	\$ 21,000		Qty based on the water length divided by 500' fh spacing
LS		Chlorination & Testing	\$ 5,000	\$ 5,000		
		Water System Subtotal		\$ 37,750		
		Mobilization (6%)		\$ 2,265		
		Contingency (20%)		\$ 8,003		
		Off-Island Factor (20%)		\$ 7,550	\$ 55,568	
		Sewer System (No Cost - Use Individual Wastewater Treatment Plant)			\$ 1,882,320	
		<b>RESIDENTIAL WEST ON-SITE TOTAL</b>				
		<b>OFF-SITE</b>				
		Site Preparation & Roadways				
1	A.C.	Clearing and Grubbing	\$ 6,000	\$ 6,000		Road length x 40' width
1400	CY	Excavation and Embankment	\$ 100	\$ 140,000		Road length x 40' width x 1' depth
900	LF	Roadway (22' wide, 2 1/2" A.C., 8" Basecourse)	\$ 205	\$ 184,500		\$75.00/sy + gravel shoulders; length from Group 70
	LS	Temporary Erosion Control Measures	\$ 2,000	\$ 2,000		\$2000/acre
		Roadway Subtotal		\$ 332,500		
		Mobilization (6%)		\$ 19,950		
		Contingency (20%)		\$ 70,490		
		Off-Island/Remote Factor (20%)		\$ 66,500	\$ 489,440	
		Water System				
	LS	Connection to Existing Water	\$ 5,000	\$ 5,000		Connect to exist 12" wtr
400	CY	Excavation and Backfill	\$ 100	\$ 40,000		5' depth, 2' wide for main

**PROJECT:** DHHL Molokai Island Plan  
Ualapue Area

Prepared by: LCA  
Checked by: Date: 04-Apr-05

**ESTIMATE OF PROBABLE COST OF CONSTRUCTION (Budgetary - Civil Infrastructure)**

Est. Qty.	Unit	Description	Unit Price	Subtotal	Total	Assumptions
140	CY	Crushed Rock	\$ 60	\$ 8,400		2' bedding x trench width Qty based on road length assumed
900	LF	8" PVC Waterline and Fittings	\$ 40	\$ 36,000		
6	EA	8" Gate Valve	\$ 1,200	\$ 7,200		
	LS	Chlorination & Testing	\$ 1,000	\$ 1,000		
		Water System Subtotal		\$ 97,600		
		Mobilization (6%)		\$ 5,856		
		Contingency (20%)		\$ 20,691		
		Off-Island Factor (20%)		\$ 19,520	\$ 143,667	
		<b>RESIDENTIAL WEST OFF-SITE TOTAL</b>			<b>\$ 633,107</b>	
<b>RESIDENTIAL EAST (27 Lots)</b>						
<b>ONSITE</b>						27 lots
Site Preparation & Roadways						
1	A.C.	Clearing and Grubbing	\$ 6,000	\$ 6,000		Road length x 40' width Road length x 40' width x 1' depth \$75.00/sy + gravel shoulders \$2000/acre
1400	CY	Excavation and Embankment	\$ 100	\$ 140,000		
900	LF	Roadway (22' wide, 2 1/2" A.C., 8" Basecourse)	\$ 205	\$ 184,500		
	LS	Temporary Erosion Control Measures	\$ 2,000	\$ 2,000		
		Roadway Subtotal		\$ 332,500		
		Mobilization (6%)		\$ 19,950		
		Contingency (20%)		\$ 70,490		
		Off-Island/Remote Factor (20%)		\$ 66,500	\$ 489,440	
Drainage System/Storm Water Management						
300	CY	Excavation and Backfill	\$ 100	\$ 30,000		Assume 5' depth
400	LF	24" Drainline	\$ 100	\$ 40,000		Assumed
2	EA	Drain Manhole	\$ 5,000	\$ 10,000		Assumed
4	EA	Drain Inlet	\$ 10,000	\$ 40,000		Assumed
8	EA	Headwalls	\$ 4,000	\$ 32,000		Assumed

**PROJECT: DHHL Molokai Island Plan**  
**Ualapue Area**

Prepared by: LCA Date: 04-Apr-05

Checked by:

**ESTIMATE OF PROBABLE COST OF CONSTRUCTION (Budgetary - Civil Infrastructure)**

Est. Qty.	Unit	Description	Unit Price	Subtotal	Total	Assumptions
<b>Water System</b>						
	LS	Connection to Existing Water	\$ 5,000	\$ 5,000		Qty based on road length 20' per fh 20' for each lot assumed 1 per fh  1 per lot 1 per lot Qty based on the water length divided by 500' fh spacing
260	CY	Crushed Rock	\$ 60	\$ 15,600		
900	LF	8" PVC Waterline and Fittings	\$ 40	\$ 36,000		
300	LF	6" PVC Waterline and Fittings	\$ 35	\$ 10,500		
540	LF	1 1/2" Copper Laterals	\$ 20	\$ 10,800		
2	EA	8" Gate Valve	\$ 1,200	\$ 2,400		
2	EA	6" Gate Valve	\$ 900	\$ 1,800		
4	EA	Gate Valve Valve Box	\$ 400	\$ 1,600		
27	EA	Type "X" Meter Box w/ Conc Collar	\$ 150	\$ 4,050		
27	EA	Type "A" Valve Box	\$ 100	\$ 2,700		
2	EA	Fire Hydrants w/ Curb Guards	\$ 3,500	\$ 7,000		
	LS	Chlorination & Testing	\$ 2,000	\$ 2,000		
		Water System Subtotal		\$ 99,450		
		Mobilization (6%)		\$ 5,967		
		Contingency (20%)		\$ 21,083		
		Off-Island Factor (20%)		\$ 19,890	\$ 146,390	
<b>Sewer System (No Cost - Use Individual Wastewater Treatment Plant)</b>					<b>\$ 859,574</b>	
<b>RESIDENTIAL EAST ON-SITE TOTAL</b>					<b>\$ 3,375,002</b>	
<b>TOTAL SAY</b>					<b>\$3,375,000</b>	



**PROJECT:** DHHL Molokai Island Plan  
Kapaakea Area

Prepared by: LCA  
Checked by: Date: 04-Apr-05

**ESTIMATE OF PROBABLE COST OF CONSTRUCTION (Budgetary - Civil Infrastructure)**

Est. Qty	Unit	Description	Unit Price	Subtotal	Total	Assumptions
<b>RESIDENTIAL MIDDLE (less than 1 acre lots - 286 Lots)</b>						
<b>ON-SITE</b>						
Site Preparation & Roadways						
17	A.C.	Clearing and Grubbing	\$ 6,000	\$ 102,000		286 lots
26700	CY	Excavation and Embankment	\$ 100	\$ 2,670,000		Road length x 40' width
18000	LF	Roadway (22' wide, 2 1/2" A.C., 8" Basecourse)	\$ 205	\$ 3,690,000		Road length x 40' width x 1' depth
	LS	Temporary Erosion Control Measures	\$ 34,000	\$ 34,000		\$75.00/sy + gravel shoulders
		Roadway Subtotal		\$ 6,496,000		\$2000/acre
		Mobilization (6%)		\$ 389,760		
		Contingency (20%)		\$ 1,377,152		
		Off-Island Factor (20%)		\$ 1,299,200	\$ 9,562,112	
Drainage System/Storm Water Management						
3340	CY	Excavation and Backfill	\$ 100	\$ 334,000		Assume 5' depth
4500	LF	24" Drainline	\$ 100	\$ 450,000		Assumed 1/4 of rdwy length
5	EA	Drain Manhole	\$ 5,000	\$ 25,000		Assumed
9	EA	Drain Swales & Inlets	\$ 10,000	\$ 90,000		500' spacing
8	EA	Headwalls	\$ 4,000	\$ 32,000		Assumed
		Drainage System Subtotal		\$ 931,000		
		Mobilization (6%)		\$ 55,860		
		Contingency (20%)		\$ 197,372		
		Off-Island Factor (20%)		\$ 186,200	\$ 1,370,432	
Water System						
	LS	Connection to Existing Water	\$ 5,000	\$ 5,000		Connect to exist 12" wtr
7400	CY	Excavation and Backfill	\$ 100	\$ 740,000		5' depth, 2' wide for main; 2' depth, 1' wide for lateral
3630	CY	Crushed Rock	\$ 60	\$ 217,800		
18000	LF	8" PVC Waterline and Fittings	\$ 40	\$ 720,000		Qty based on road length

**PROJECT:** DHHL Molokai Island Plan  
Kapaakea Area

Prepared by: LCA  
Checked by: LCA  
Date: 04-Apr-05

**ESTIMATE OF PROBABLE COST OF CONSTRUCTION (Budgetary - Civil Infrastructure)**

Est. Qty	Unit	Description	Unit Price	Subtotal	Total	Assumptions
720	LF	6" PVC Waterline and Fittings	\$ 35	\$ 25,200		20' per fh
5720	LF	1 1/2" Copper Laterals	\$ 20	\$ 114,400		20' for each lot
10	EA	8" Gate Valve	\$ 1,200	\$ 12,000		assumed
36	EA	6" Gate Valve	\$ 900	\$ 32,400		1 per fh
46	EA	Gate Valve Valve Box	\$ 400	\$ 18,400		
286	EA	Type "X" Meter Box w/ Conc Collar	\$ 150	\$ 42,900		1 per lot
286	EA	Type "A" Valve Box	\$ 100	\$ 28,600		1 per lot
36	EA	Fire Hydrants w/ Curb Guards	\$ 3,500	\$ 126,000		Qty based on the water length divided by 500' fh
	LS	Chlorination & Testing	\$ 7,000	\$ 7,000		
		Water System Subtotal		\$ 2,089,700		
		Mobilization (6%)		\$ 125,382		
		Contingency (20%)		\$ 443,016		
		Off-Island Factor (20%)		\$ 417,940	\$ 3,076,038	
Sewer System						
8100	CY	Excavation and Backfill	\$ 100	\$ 810,000		Ave. 6' depth, 2' wide for main; 4' deep, 1' wide for lateral
3520	CY	Crushed Rock	\$ 60	\$ 211,200		2' bedding
18000	LF	8" PVC Sewer Pipe	\$ 20	\$ 360,000		Qty based on road length
5720	LF	6" PVC Sewer Lateral	\$ 17	\$ 97,240		20' for each lot
72	EA	Sewer Manhole	\$ 5,000	\$ 360,000		Qty based on length divided by 250 ft
286	EA	Cleanout to Grade	\$ 500	\$ 143,000		1 per lot
	LS	Package Wastewater Treatment Plant	\$6,500,000	\$ 6,500,000		
		Sewer System Subtotal		\$ 8,481,440		
		Mobilization (6%)		\$ 508,886		
		Contingency (20%)		\$ 1,798,065		
		Off-Island/Remote Factor (20%)		\$ 1,696,288	\$ 12,484,680	
		<b>RESIDENTIAL MIDDLE ON-SITE TOTAL</b>			<b>\$ 26,493,262</b>	

**PROJECT:** DHHL Molokai Island Plan  
Kapaakea Area

Prepared by: LCA  
Checked by: LCA  
Date: 04-Apr-05

**ESTIMATE OF PROBABLE COST OF CONSTRUCTION (Budgetary - Civil Infrastructure)**

Est. Qty	Unit	Description	Unit Price	Subtotal	Total	Assumptions
<b>RESIDENTIAL MOWAT MAKAI (1/2 acre lots - 5 lots)</b>						
<b>ON-SITE</b>						
Site Preparation & Roadways (No Cost - Existing roadways)						
Water System						
100	LS	Connection to Existing Water	\$ 1,500	\$ 1,500		5 lots  4 acres  5' depth, 2' wide for main; 2' deep, 1' wide for lateral  2' bedding 20' for each lot 1 per lot 1 per lot
	CY	Excavation and Backfill	\$ 100	\$ 10,000		
10	CY	Crushed Rock	\$ 60	\$ 600		
100	LF	1 1/2" Copper Laterals	\$ 20	\$ 2,000		
5	EA	Type "X" Meter Box w/ Conc Collar	\$ 150	\$ 750		
5	EA	Type "A" Valve Box	\$ 100	\$ 500		
LS		Chlorination & Testing	\$ 1,500	\$ 1,500		
				Water System Subtotal	\$ 16,850	
				Mobilization (6%)	\$ 1,011	
				Contingency (20%)	\$ 3,572	
				Off-Island Factor (20%)	\$ 3,370	
Sewer System (No Cost - Use Individual Wastewater System)					\$ 24,803	
<b>RESIDENTIAL MOWAT MAUKA ON-SITE TOTAL</b>					<b>\$ 24,803</b>	
				<b>TOTAL</b>	<b>\$ 26,518,065</b>	
				<b>SAY</b>	<b>\$26,518,000</b>	

**PROJECT:** DHHL Molokai Island Plan  
Kalamaula Area

Prepared by: LCA  
Checked by:

Date: 18-Apr-05

**ESTIMATE OF PROBABLE COST OF CONSTRUCTION (Budgetary - Civil Infrastructure)**

Est. Qty.	Unit	Description	Unit Price	Subtotal	Total	Assumptions
<b>RESIDENTIAL (1 acre)</b>						
<b>ON-SITE</b>						
Site Preparation & Roadways						
6	A.C.	Clearing and Grubbing	\$ 6,000	\$ 36,000		49 lots
9100	CY	Excavation and Embankment	\$ 100	\$ 910,000		70 acres
6100	LF	Roadway (22' wide, 2 1/2" A.C., 8" Basecourse)	\$ 205	\$ 1,250,500		Road length x 40' width
	LS	Temporary Erosion Control Measures	\$ 12,000	\$ 12,000		Road length x 40' width x 1' depth
		Roadway Subtotal		\$ 2,208,500		\$75.00/sy + gravel shoulders
		Mobilization (6%)		\$ 132,510		\$2000/acre
		Contingency (20%)		\$ 468,202		
		Off-Island Factor (20%)		\$ 441,700	\$ 3,250,912	
Drainage System						
1520	CY	Excavation and Backfill	\$ 100	\$ 152,000		assumed 6' deep, trench width (C&C Std)
240	LF	18" RCP Drainline	\$ 80	\$ 19,200		Est. from conceptual plan
200	LF	24" RCP Drainline	\$ 100	\$ 20,000		Est. from conceptual plan
1130	LF	30" RCP Drainline	\$ 160	\$ 180,800		Est. from conceptual plan
1650	LF	Diversion Ditch (Earth)	\$ 5	\$ 8,250		Est. from conceptual plan; 3' wide x 1' deep
5	EA	Drain Manhole	\$ 5,000	\$ 25,000		
7	EA	Drain Swales & Inlet	\$ 10,000	\$ 70,000		
4	EA	Headwalls	\$ 4,000	\$ 16,000		
		Drainage System Subtotal		\$ 491,250		
		Mobilization (6%)		\$ 29,475		
		Contingency (20%)		\$ 104,145		
		Off-Island Factor (20%)		\$ 98,250	\$ 723,120	
Water System						
	LS	Connection to Existing Water	\$ 15,000	\$ 15,000		3 connections @ \$5,000/each

**PROJECT:** DHHL Molokai Island Plan  
Kalamaula Area

Prepared by: LCA  
Checked by:

Date: 18-Apr-05

**ESTIMATE OF PROBABLE COST OF CONSTRUCTION (Budgetary - Civil Infrastructure)**

Est. Qty.	Unit	Description	Unit Price	Subtotal	Total	Assumptions
2700	CY	Excavation and Backfill	\$ 100	\$ 270,000		5' depth, 2' wide for main; 2' deep, 1' wide for lateral
1030	CY	Crushed Rock	\$ 60	\$ 61,800		
5200	LF	8" PVC Waterline and Fittings	\$ 40	\$ 208,000		Est. from conceptual plan
400	LF	6" PVC Waterline and Fittings	\$ 35	\$ 14,000		20' per fh
1300	LF	4" PVC Waterline and Fittings	\$ 25	\$ 32,500		20' per fh
980	LF	1 1/2" Copper Laterals	\$ 20	\$ 19,600		20' for each lot
6	EA	12" Gate Valve	\$ 1,000	\$ 6,000		assumed
5	EA	8" Gate Valve	\$ 900	\$ 4,500		assumed
20	EA	6" Gate Valve	\$ 800	\$ 16,000		1 per fh
2	EA	4" Gate Valve	\$ 700	\$ 1,400		1 per fh
33	EA	Gate Valve Valve Box	\$ 400	\$ 13,200		
49	EA	Type "X" Meter Box w/ Conc Collar	\$ 150	\$ 7,350		1 per lot
49	EA	Type "A" Valve Box	\$ 100	\$ 4,900		1 per lot
20	EA	Fire Hydrants w/ Curb Guards	\$ 3,500	\$ 70,000		Qty based on the water length divided by 500' fh spacing
LS		Chlorination & Testing	\$ 7,000	\$ 7,000		
		Water System Subtotal		\$ 751,250		
		Mobilization (6%)		\$ 45,075		
		Contingency (20%)		\$ 159,265		
		Off-Island Factor (20%)		\$ 150,250	\$ 1,105,840	
Sewer System (No Cost - Use Individual Wastewater Treatment Plant)						
<b>RESIDENTIAL (1 acre) ON-SITE TOTAL</b>					<b>\$ 5,079,872</b>	
<b>OFF-SITE</b>						
Site Preparation & Roadways						
2	A.C.	Clearing and Grubbing	\$ 6,000	\$ 12,000		Road length x 40' width



**PROJECT:** DHHL Molokai Island Plan  
Kalamaula Area

Prepared by: LCA  
Checked by:

Date: 18-Apr-05

**ESTIMATE OF PROBABLE COST OF CONSTRUCTION (Budgetary - Civil Infrastructure)**

Est. Qty.	Unit	Description	Unit Price	Subtotal	Total	Assumptions
2700	CY	Excavation and Embankment	\$ 100	\$ 270,000		
1800	LF	Roadway (22' wide, 2 1/2" A.C., 8" Basecourse)	\$ 205	\$ 369,000		
	LS	Temporary Erosion Control Measures	\$ 4,000	\$ 4,000		Road length x 40' width x 1' depth \$75.00/sy + gravel shoulders \$2000/acre
		Roadway Subtotal		\$ 655,000		
		Mobilization (6%)		\$ 39,300		
		Contingency (20%)		\$ 138,860		
		Off-Island Factor (20%)		\$ 131,000	\$ 964,160	
<b>Drainage System</b>						
3190	CY	Excavation and Backfill	\$ 100	\$ 319,000		assumed 6' deep, trench width (C&C Std)
300	LF	30" RCP Drainline	\$ 160	\$ 48,000		Est. from conceptual plan
100	LF	48" RCP Drainline	\$ 235	\$ 23,500		Est. from conceptual plan
730	LF	54" RCP Drainline	\$ 280	\$ 204,400		Est. from conceptual plan
870	LF	60" RCP Drainline	\$ 330	\$ 287,100		Est. from conceptual plan
2	EA	Drain Manhole	\$ 5,000	\$ 10,000		
5	EA	Drain Swales & Inlet	\$ 10,000	\$ 50,000		
3	EA	Headwalls	\$ 4,000	\$ 12,000		
		Drainage System Subtotal		\$ 954,000		
		Mobilization (6%)		\$ 57,240		
		Contingency (20%)		\$ 202,248		
		Off-Island Factor (20%)		\$ 190,800	\$ 1,404,288	
<b>Water System</b>						
	LS	Connection to Existing Water	\$ 10,000	\$ 10,000		2 connections @ \$5000
1000	CY	Excavation and Backfill	\$ 100	\$ 100,000		5' depth, 2' wide for main; 2' deep, 1' wide for lateral
2710	CY	Crushed Rock	\$ 60	\$ 162,600		
2700	LF	12" PVC Waterline and Fittings	\$ 60	\$ 162,000		Est. from conceptual plan

**PROJECT:** DHHL Molokai Island Plan  
Kalamaula Area

Prepared by: LCA  
Checked by:

Date: 18-Apr-05

**ESTIMATE OF PROBABLE COST OF CONSTRUCTION (Budgetary - Civil Infrastructure)**

Est. Qty.	Unit	Description	Unit Price	Subtotal	Total	Assumptions
4	EA	12" Gate Valve	\$ 1,000	\$ 4,000		assumed
10	EA	6" Gate Valve	\$ 800	\$ 8,000		1 per fh
14	EA	Gate Valve Valve Box	\$ 400	\$ 5,600		
10	EA	Fire Hydrants w/ Curb Guards	\$ 3,500	\$ 35,000		Qty based on the water length divided by 500' fh spacing
	LS	Chlorination & Testing	\$ 5,000	\$ 5,000		
	LS	New Source Well	\$ 2,000,000	\$ 2,000,000		
	LS	Storage	\$ 147,000	\$ 147,000		\$5 gall for 29,400 gpd
		Water System Subtotal		\$ 2,639,200		
		Mobilization (6%)		\$ 158,352		
		Contingency (20%)		\$ 559,510		
		Off-Island Factor (20%)		\$ 527,840	\$ 3,884,902	
		<b>RESIDENTIAL (1 acre) OFF-SITE TOTAL</b>			<b>\$ 6,253,350</b>	
<b>RESIDENTIAL MAKAI (8 - 1 acre LOTS)</b>						
<b>ON-SITE</b>						
Site Preparation & Roadways						
1	A.C.	Clearing and Grubbing	\$ 6,000	\$ 6,000		8 lots
1500	CY	Excavation and Embankment	\$ 100	\$ 150,000		11 acres
1000	LF	Roadway (22' wide, 2 1/2" A.C., 8" Basecourse)	\$ 205	\$ 205,000		Road length x 40' width
	LS	Temporary Erosion Control Measures	\$ 2,000	\$ 2,000		Road length x 40' width x 1' depth
		Roadway Subtotal		\$ 363,000		\$75.00/sy + gravel shoulders, length assumed
		Mobilization (6%)		\$ 21,780		\$2000/acre
		Contingency (20%)		\$ 76,956		
		Off-Island Factor (20%)		\$ 72,600	\$ 534,336	
Drainage System						

**PROJECT: DHHL Molokai Island Plan**  
**Kalamaula Area**

Prepared by: LCA  
 Checked by:

Date: 18-Apr-05

**ESTIMATE OF PROBABLE COST OF CONSTRUCTION (Budgetary - Civil Infrastructure)**

Est. Qty.	Unit	Description	Unit Price	Subtotal	Total	Assumptions
160	CY	Excavation and Backfill	\$ 100	\$ 16,000		
240	LF	18" RCP Drainline	\$ 80	\$ 19,200		
5	EA	Drain Manhole	\$ 5,000	\$ 25,000		
8	EA	Drain Swales & Inlet	\$ 10,000	\$ 80,000		
4	EA	Headwalls	\$ 4,000	\$ 16,000		
		Drainage System Subtotal		\$ 156,200		
		Mobilization (6%)		\$ 9,372		
		Contingency (20%)		\$ 33,114		
		Off-Island Factor (20%)		\$ 31,240	\$ 229,926	
<b>Water System</b>						
	LS	Connection to Existing Water	\$ 15,000	\$ 15,000		3 connections @ \$5,000/each
500	CY	Excavation and Backfill	\$ 100	\$ 50,000		5' depth, 2' wide for main; 2' deep, 1' wide for lateral
180	CY	Crushed Rock	\$ 60	\$ 10,800		Qty based on road length
1000	LF	8" PVC Waterline and Fittings	\$ 40	\$ 40,000		20' per fh
200	LF	6" PVC Waterline and Fittings	\$ 35	\$ 7,000		20' for each lot
160	LF	1 1/2" Copper Laterals	\$ 20	\$ 3,200		assumed
3	EA	8" Gate Valve	\$ 900	\$ 2,700		1 per fh
10	EA	6" Gate Valve	\$ 800	\$ 8,000		
13	EA	Gate Valve Valve Box	\$ 400	\$ 5,200		
8	EA	Type "X" Meter Box w/ Conc Collar	\$ 150	\$ 1,200		1 per lot
8	EA	Type "A" Valve Box	\$ 100	\$ 800		1 per lot
10	EA	Fire Hydrants w/ Curb Guards	\$ 3,500	\$ 35,000		Qty based on the water length divided by 500' fh spacing
	LS	Chlorination & Testing	\$ 2,000	\$ 2,000		

**PROJECT:** DHHL Molokai Island Plan  
Kalamaula Area

Prepared by: LCA  
Checked by: Date: 18-Apr-05

**ESTIMATE OF PROBABLE COST OF CONSTRUCTION (Budgetary - Civil Infrastructure)**

Est. Qty.	Unit	Description	Unit Price	Subtotal	Total	Assumptions
		Water System Subtotal		\$ 180,900		
		Mobilization (6%)		\$ 10,854		
		Contingency (20%)		\$ 38,351		
		Off-Island Factor (20%)		\$ 36,180	\$ 266,285	
Sewer System (No Cost - Use Individual Wastewater Treatment Plant)						
		<b>RESIDENTIAL MAKAI (1 acre) ON-SITE TOTAL</b>			<b>\$ 1,030,547</b>	
		<b>TOTAL SAY</b>			<b>\$ 12,363,770</b>	
					<b>\$ 12,364,000</b>	

**PROJECT: DHHL Molokai Island Plan****Kalaupapa**

Prepared by: LCA

Date: 13-Mar-05

Checked by:

**ESTIMATE OF PROBABLE COST OF CONSTRUCTION (Budgetary - Civil Infrastructure)**

Est. Qty.	Unit	Description	Unit Price	Subtotal	Total	Assumptions
<b>SUBSISTENCE AGRICULTURE - PALAAU 2 ACRE</b>						
Site Preparation & Roadways						
4.5	A.C.	Clearing and Grubbing	\$ 6,000	\$ 27,000		28 lots
7200	CY	Excavation and Embankment	\$ 100	\$ 720,000		Road length and width
12000	LF	Stabilized Roadway (20' wide, 6" gravel)	\$ 35	\$ 420,000		Roadway at 1' depth
	LS	Temporary Erosion Control Measures	\$ 9,000	\$ 9,000		20' wide road
		Roadway Subtotal		\$ 1,176,000		\$2000/acre
		Mobilization (6%)		\$ 70,560		
		Contingency (20%)		\$ 249,312		
		Off-Island Factor (20%)		\$ 235,200	\$ 1,731,072	
Drainage System						
2230	CY	Excavation and Backfill	\$ 100	\$ 223,000		Assume 5' depth
3000	LF	24" Drainline	\$ 100	\$ 300,000		Assumed 1/4 of rdwy length
5	EA	Drain Manhole	\$ 5,000	\$ 25,000		Assumed
6	EA	Drain Swales & Inlets	\$ 10,000	\$ 60,000		500' spacing
4	EA	Headwalls	\$ 4,000	\$ 16,000		Assumed
		Drainage Subtotal		\$ 624,000	\$ 918,528	
		Mobilization (6%)		\$ 37,440	\$ -	
		Contingency (20%)		\$ 132,288	\$ -	
		Off-Island Factor (20%)		\$ 124,800	\$ 918,528	
Water System (No cost - Waterline cannot service this area)						
Sewer System (No cost - Use Individual Wastewater Treatment)						
		<b>SUBSISTENCE AG TOTAL</b>			\$ 2,649,600	
		<b>SAY</b>			\$ 2,650,000	



**PROJECT: DHHL Molokai Island Plan**  
**Hoolehua Area**

Prepared by: LCA  
Checked by: Date: 04-Apr-05

**ESTIMATE OF PROBABLE COST OF CONSTRUCTION (Budgetary - Civil Infrastructure)**

Est. Qty.	Unit	Description	Unit Price	Subtotal	Total	Assumptions
<b>SUBSISTENCE AGRICULTURE - "Urban" Core Residential (South)</b>						
Site Preparation & Roadways						
3.4	A.C.	Clearing and Grubbing	\$ 6,000	\$ 20,400		65 lots
5400	CY	Excavation and Embankment	\$ 100	\$ 540,000		Road length and width
9000	LF	Roadway (22' wide, 2 1/2" A.C., 8" Basecourse)	\$ 205	\$ 1,845,000		Roadway at 1' depth
1	LS	Temporary Erosion Control Measures	\$ 6,800	\$ 6,800		\$75.00/sy + gravel shoulders
		Roadway Subtotal		\$ 2,412,200		\$2000/acre
		Mobilization (6%)		\$ 144,732		
		Contingency (20%)		\$ 511,386		
		Off-Island Factor (20%)		\$ 482,440	\$ 3,550,758	
Drainage System						
670	CY	Excavation and Backfill	\$ 100	\$ 67,000		Assume 5' depth
900	LF	24" Drainline	\$ 100	\$ 90,000		Assumed 10% of rdwy length
5	EA	Drain Manhole	\$ 5,000	\$ 25,000		Assumed
2	EA	Drain Swales & Inlets	\$ 10,000	\$ 20,000		500' spacing
6	EA	Headwalls	\$ 4,000	\$ 24,000		Assumed
		Drainage System Subtotal		\$ 226,000		
		Mobilization (6%)		\$ 13,560		
		Contingency (20%)		\$ 47,912		
		Off-Island Factor (20%)		\$ 45,200	\$ 332,672	
Water System						
5	LS	Connection to Existing Water	\$ 2,500	\$ 12,500		5' depth, 2' wide for main; 2' deep, 1' wide for laterals
700	CY	Excavation and Backfill	\$ 100	\$ 70,000		Qty based on road length
9000	LF	8" PVC Waterline and Fittings	\$ 40	\$ 360,000		20' per fh
360	LF	6" PVC Waterline and Fittings	\$ 35	\$ 12,600		20' for each lot
1300	LF	1 1/2" Copper Laterals	\$ 20	\$ 26,000		

**PROJECT:** DHHL Molokai Island Plan  
Hoolehua Area

Prepared by: LCA  
Checked by: Date: 04-Apr-05

**ESTIMATE OF PROBABLE COST OF CONSTRUCTION (Budgetary - Civil Infrastructure)**

Est. Qty.	Unit	Description	Unit Price	Subtotal	Total	Assumptions
10	EA	8" Gate Valve	\$ 900	\$ 9,000		assumed
18	EA	6" Gate Valve	\$ 800	\$ 14,400		1 per fh
28	EA	Gate Valve Valve Box	\$ 400	\$ 11,200		1 per lot
65	EA	Type "X" Meter Box w/ Conc Collar	\$ 150	\$ 9,750		1 per lot
65	EA	Type "A" Valve Box	\$ 100	\$ 6,500		Qty based on the water length divided by 500' fh
18	EA	Fire Hydrants w/ Curb Guards	\$ 3,500	\$ 63,000		spacing
	LS	Chlorination & Testing	\$ 5,000	\$ 5,000		
		Water System Subtotal		\$ 594,950		
		Mobilization (6%)		\$ 35,697		
		Contingency (20%)		\$ 126,129		
		Off-Island Factor (20%)		\$ 118,990	\$ 875,766	
		Sewer System (No Cost - Use Individual Wastewater Treatment Plant)			\$ 4,759,197	
		<b>SUBSISTENCE AGRICULTURE (South) TOTAL</b>				
		<b>SUBSISTENCE AGRICULTURE - "Urban" Core Residential (North)</b>				
		Site Preparation & Roadways				29 lots 83 acres
2.6	A.C.	Clearing and Grubbing	\$ 6,000	\$ 15,600		Road length and width
4200	CY	Excavation and Embankment	\$ 100	\$ 420,000		Roadway at 1' depth
7000	LF	Roadway (22' wide, 2 1/2" A.C., 8" Basecourse)	\$ 205	\$ 1,435,000		\$75.00/sy + gravel shoulders
1	LS	Temporary Erosion Control Measures	\$ 5,200	\$ 5,200		\$2000/acre
		Roadway Subtotal		\$ 1,875,800		
		Mobilization (6%)		\$ 112,548		
		Contingency (20%)		\$ 397,670		
		Off-Island Factor (20%)		\$ 375,160	\$ 2,761,178	
		Drainage System				

**PROJECT: DHHL Molokai Island Plan**  
**Hoolehua Area**

Date: 04-Apr-05

Prepared by: LCA

Checked by:

**ESTIMATE OF PROBABLE COST OF CONSTRUCTION (Budgetary - Civil Infrastructure)**

Est. Qty.	Unit	Description	Unit Price	Subtotal	Total	Assumptions
520	CY	Excavation and Backfill	\$ 100	\$ 52,000		Assume 5' depth
700	LF	24" Drainline	\$ 100	\$ 70,000		Assumed 10% of rdwy length
5	EA	Drain Manhole	\$ 5,000	\$ 25,000		Assumed
2	EA	Drain Swales & Inlets	\$ 10,000	\$ 20,000		500' spacing
3	EA	Headwalls	\$ 4,000	\$ 12,000		Assumed
		Drainage System Subtotal		\$ 179,000		
		Mobilization (6%)		\$ 10,740		
		Contingency (20%)		\$ 37,948		
		Off-Island Factor (20%)		\$ 35,800	\$ 263,488	
Water System						
5	LS	Connection to Existing Water	\$ 2,500	\$ 12,500		5' depth, 2' wide for main; 2' deep, 1' wide for laterals
400	CY	Excavation and Backfill	\$ 100	\$ 40,000		Qty based on road length
7000	LF	8" PVC Waterline and Fittings	\$ 40	\$ 280,000		20' per fh
280	LF	6" PVC Waterline and Fittings	\$ 35	\$ 9,800		20' for each lot
580	LF	1 1/2" Copper Laterals	\$ 20	\$ 11,600		assumed
40	EA	8" Gate Valve	\$ 1,200	\$ 48,000		1 per fh
14	EA	6" Gate Valve	\$ 900	\$ 12,600		
54	EA	Gate Valve Valve Box	\$ 400	\$ 21,600		1 per lot
29	EA	Type "X" Meter Box w/ Conc Collar	\$ 150	\$ 4,350		1 per lot
29	EA	Type "A" Valve Box	\$ 100	\$ 2,900		Qty based on the water length divided by 500' fh
14	EA	Fire Hydrants w/ Curb Guards	\$ 3,500	\$ 49,000		spacing

**PROJECT:** DHHL Molokai Island Plan  
Hoolehua Area

Prepared by: LCA  
Checked by: Date: 04-Apr-05

**ESTIMATE OF PROBABLE COST OF CONSTRUCTION (Budgetary - Civil Infrastructure)**

Est. Qty.	Unit	Description	Unit Price	Subtotal	Total	Assumptions
LS	Chlorination & Testing	Water System Subtotal	\$ 5,000	\$ 5,000		
		Mobilization (6%)		\$ 492,350		
		Contingency (20%)		\$ 29,541		
		Off-Island Factor (20%)		\$ 104,378		
				\$ 98,470	\$ 724,739	
		Sewer System (No Cost - Use Individual Wastewater Treatment Plant)				
		<b>SUBSISTENCE AGRICULTURE (North) TOTAL</b>			<b>\$ 3,749,405</b>	
		<b>TOTAL SAY</b>			<b>\$ 8,508,602</b>	
					<b>\$8,509,000</b>	

**PROJECT:** DHHL Molokai Island Plan  
Naiwa

Prepared by: LCA  
Checked by: Date: 09-Jun-05

**ESTIMATE OF PROBABLE COST OF CONSTRUCTION (Budgetary - Civil Infrastructure)**

Est. Qty.	Unit	Description	Unit Price	Subtotal	Total	Assumptions
<b>RESIDENTIAL</b>						
<b>ONSITE</b>						
Site Preparation & Roadways						
13	A.C.	Clearing and Grubbing	\$ 6,000	\$ 78,000		58 lots  Road length x 40' width Road length x 40' width x 1' depth \$75.00/sy + gravel shoulders; length from Group 70 \$2000/acre
19500	CY	Excavation and Embankment	\$ 100	\$ 1,950,000		
13100	LF	Roadway (22' wide, 2 1/2" A.C., 8" Basecourse)	\$ 205	\$ 2,685,500		
	LS	Temporary Erosion Control Measures	\$ 26,000	\$ 26,000		
		Roadway Subtotal		\$ 4,739,500		
		Mobilization (6%)		\$ 284,370		
		Contingency (20%)		\$ 1,004,774		
		Off-Island/Remote Factor (20%)		\$ 947,900	\$ 6,976,544	
Drainage System						
2450	CY	Excavation and Backfill	\$ 100	\$ 245,000		Assume 5' depth
3300	LF	24" Drainline	\$ 100	\$ 330,000		
1400	LF	30" RCP Drainline	\$ 160	\$ 224,000		
10	EA	Drain Manhole	\$ 5,000	\$ 50,000		
20	EA	Drain Swales and Inlet	\$ 10,000	\$ 200,000		
10	EA	Headwalls	\$ 4,000	\$ 40,000		
		Drainage System Subtotal		\$ 1,089,000		
		Mobilization (6%)		\$ 65,340		
		Contingency (20%)		\$ 230,868		
		Off-Island/Remote Factor (20%)		\$ 217,800	\$ 1,603,008	
Water System						
100	CY	Excavation and Backfill	\$ 100	\$ 10,000		5' depth, 2' wide for main; 2' deep, 1' wide for lateral 2' bedding x trench width 20' for each lot 1 per lot
180	CY	Crushed Rock	\$ 60	\$ 10,800		
1160	LF	1 1/2" Copper Laterals	\$ 20	\$ 23,200		
58	EA	Type "X" Meter Box w/ Conc Collar	\$ 150	\$ 8,700		



**PROJECT:** DHHL Molokai Island Plan  
Naiwa

Prepared by: LCA  
Checked by: Date: 09-Jun-05

**ESTIMATE OF PROBABLE COST OF CONSTRUCTION (Budgetary - Civil Infrastructure)**

Est. Qty.	Unit	Description	Unit Price	Subtotal	Total	Assumptions
58	EA	Type "A" Valve Box	\$ 100	\$ 5,800		
	LS	Chlorination & Testing	\$ 5,000	\$ 5,000		
		Water System Subtotal		\$ 63,500		
		Mobilization (6%)		\$ 3,810		
		Contingency (20%)		\$ 13,462		
		Off-Island Factor (20%)		\$ 12,700	\$ 93,472	
Sewer System (No Cost - Use Individual Wastewater Treatment Plant)					\$ 8,673,024	
<b>RESIDENTIAL ON-SITE TOTAL</b>					\$ 8,670,000	
				<b>SAY</b>		

## B. Comments on Plan



Public Comments Received  
May 24 - June 10, 2005  
Molokai Island Plan

DHHL STAFF COMMENTS

FROM BARBARA J. (MOWAT) ANGELO  
DATED JUNE 9, 2005  
RE: KAPAAKEA HOMESTEAD LANDS

STATEMENT	DHHL STAFF COMMENT
Support flood control.	Concur. Plan sets aside flood control area.
Extend Kapaakea Cemetery to benefit Hawaiians, not County.	Plan notes community support for expanded cemetery. Currently, County is responsible under ROE 32.
Retain Mowat makai land in perpetuity for heirs.	Mowat's rights are subject to HHCA, rules, and homestead lease terms.
Retain Mowat makai land for inland pond restoration.	Mowat's rights are subject to HHCA, rules, and homestead lease terms.
Cinder Pit mining to benefit Hawaiians, not for commercial uses.	Noted. HHC has authority to decide, subject to HHCA and rules.
Protect areas of cultural interest.	Noted. Plan sets aside cultural and natural resource management areas.
Remove development plans of public areas in Mowat makai.	Plan notes community support for recreational area. No specific location identified.

FROM GLENN I. TEVES  
DATED JUNE 6, 2005  
RE: HOOLEHUA

STATEMENT	DHHL STAFF COMMENT
DHHL should adopt Chapter 205, HRS, in setting conditions for disposition of agricultural lands.	Chapter 205, HRS, relates to the State Land Use Commission, land use districts, and uses permitted. The DHHL Planning System is the structure to assert the HHC's land use authority over Hawaiian home lands in carrying out the HHCA.
Hoolehua rated as prime lands by LESA and ALISH	Noted in the plan. The availability of irrigation water is a key factor.
Subdivision of lots supported by homesteaders not farming and in violation of their leases. Could lead to potential of 540 houses on 135 farm lots. By	DHHL received many comments in support of subdividing farm lots to benefit long-time Hoolehua families where the next generations are returning home, want to live near each other, and are

increasing the population in Hoolehua and urbanizing its farm lands, you will drive out farmers.	in need of land and affordable housing. The larger farm lots with infrastructure offer the potential to address these native Hawaiian needs at low cost, compared to developing new land for homesteads. Further subdivisions will be constrained by adjacent farming, DHHL potable water system limits, and land use policy.
GOAL: To assure continued farming, any subdivision of farm land must add to farming activity in Hoolehua, not detract from it.	GOAL: The goal of the HHCA is to restore the native Hawaiian people through a homestead settlement program. Homestead farming is one part of that program. Farming in Hoolehua is a priority as evidenced by farm leases, major potable and irrigation water improvements, and related support services such as the technical assistance, farming cooperatives, and processing facilities.
POLICY: The following conditions should be imposed on lessees subdividing their land: 1 - Lessee should bear all subdivision costs, such as utilities, roads, etc, not DHHL 2 - Allow a <u>one-time</u> only subdivision of 4-5 acre residential lots into two 2-3 acre residential lots. 3 - Lessee must have updated farm plan to use 35 acres, or surrender land to DHHL to subdivide 5 acre house lot into two 2-3 acre lots. 4 - Approve farm dwellings if justified by labor demands for farm production.	The Molokai Island Plan seeks to designate future land uses for all Hawaiian home lands. In this case, subsistence (lot under 5 acres) and supplemental agriculture (lot under 40 acres) are the designated land uses in Hoolehua. The intent is to separate residential and farm uses to reduce conflict, support farming, and allow compatible uses/benefits of the land. Evaluating the impacts of imposing other conditions on subdividing farm lots goes beyond the scope of this plan.
MOLOKAI IRRIGATION SYSTEM: DHHL must take active role in protecting homestead farmers right to irrigation water by enforcing Chapter 168, HRS. Either assume management of the MIS or advocate for changes to the management of the MIS.	Noted in the plan. Evaluating the impacts of assuming management of the MIS goes beyond the scope of this plan.



FROM LYNN DECOITE, PRESIDENT  
 MOLOKAI HOMESTEAD FARMERS ALLIANCE  
 DATED JUNE 8, 2005  
 RE: AGRICULTURAL LANDS BEING SUBDIVIDED

STATEMENT	DHHL STAFF COMMENT
If AG Opinion 61-65 holds that a homesteader cannot subdivide their land, then we cannot support any subdivision of land.	As a matter of policy, the Hawaiian Homes Commission has determined that a farm or ranch homestead lessee may subdivide and transfer a portion of an agricultural or pastoral lot for the remaining term of a homestead lease under certain terms and conditions. See Section 10-3-26(f), Hawaii Administrative Rules, adopted by the Commission pursuant to the Hawaii Administrative Procedures Act (Chapter 91, HRS), effective November 14, 1984.
Allow one more house under ohana zoning within the five acre portion to minimize the impact on adjacent farming.	Whether you allow one more house under ohana zoning or allow a five-acre lot to be subdivided into two 2-3 acre lots, the impacts are the same. You are containing residential uses to one portion of the lease.
Support an audit of the Molokai Irrigation System to quantify and protect our water rights.	Evaluating the benefits and costs of an audit of the MIS goes beyond the scope of this plan.
Five proposed conditions to allow additional houses in Hoolehua: 1 - Agriculture must be primary use, other uses ancillary. 2 - No subdivision of agricultural land, only ohana zoning on residential portion. Occupancy by next of kin only. 3 - New occupants and lessee must submit farm plan. Impose DHHL addendum. 4 - Only one house for now due to water restrictions. Revisit in five years. 5 - DHHL must put new well in next three years.	The Molokai Island Plan seeks to designate future land uses for all Hawaiian home lands. In this case, subsistence (lot under 5 acres) and supplemental agriculture (lot under 40 acres) are the designated land uses in Hoolehua. The intent is to separate residential and farm uses to reduce conflict, support farming, and allow compatible uses/benefits of the land. Evaluating the impacts of imposing other conditions on subdividing farm lots goes beyond the scope of this plan.

June 9, 2005

Micah A. Kane, Chairman  
Hawaiian Homes Commission  
State Department of Hawaiian Homes Lands  
1099 Alakea Street, Suite 2000      **Fax: 808 586-3899**  
Honolulu HI 96813

Subj: Moloka'i Island Plan, Kapa'akea

Aloha Chairman Kane,

Mahalo Nui Loa for the opportunity to meet with you and your staff at the quarterly meeting held on Moloka'i on May 23, 2005.

My sister, Gayla Mowat and I were able to witness, first hand, the professionalism, openness and knowledge displayed by your staff, island Commissioners and resource personnel. Your sit down, talk story session with the homesteaders was especially rewarding.

Also, Mahalo for asking for our mana'o regarding our Kapa'akea area.

Re: Kapa'akea Homestead Lands, Mowat Mauka & Makai

1. Support Flood Control to benefit House-lots and ocean egress.
2. Support Extension of the Kapa'akea Cemetery to benefit Hawaiians, not the County.
3. Support Retention of Mowat Makai land in Perpetuity to heirs of Dorothy Lewis Mowat.
4. Support Retention of Mowat Makai land for our family to participate in the Inland Pond Restoration.
5. Support continuance of mining the Cinder Pit to benefit Hawaiians and not for commercial private enterprise.
6. Support Protection of areas of cultural interest as detailed in the "Cultural Resources Survey, Kapa'akea Flood Control Project of September 1977".
7. Mahalo for removing the development plans of Public Areas in Mowat Makai.

Sincerely,

Barbara J. (Mowat) Angelo

cc: D. Yagodich, K. McKeague, G. Atta, W. Mowat, G. Mowat, B. Mowat, D. Mowat, G. Maioho

Glenn I. Teves  
Molokai Island Plan  
Hoolehua Subdivisions

**Glenn I. Teves**  
P.O. Box 261  
Kualapuu, HI 96757  
Ph. 567-6932 (b), 567 6688 (h); 658-0794 (c)

June 6, 2005

TO: Hawaiian Homes Commission  
FAX # 586-3899 *5 pages total*

FROM: Glenn I. Teves, Ho'olehua Homestead Farmer

RE: Response to Molokai Island Plan Hoolehua

Aloha. I regret that I will not be present at the next commission meeting in Honolulu. Six Hoolehua homestead farmers, including myself, and our County Councilman Danny Mateo will be visiting progressive farms in Eastern Oregon from June 17 - 23. I have also attached an addendum that was attached to my DHHL agricultural lease. It's important that all recommendations by DHHL staff be fair and based on the purpose and intent of the Act, and that you have a clear understanding of the precedence and impacts that you may be setting by your decisions in regard to subdividing land. I agree with the recommendation that **"no houses be constructed on agricultural lands"**; this must be established and enforced in the final report.

I feel strongly that DHHL should adopt HRS Chapter 205 (Agriculture Land Use) in setting the conditions for the disposition of agriculture lands, and allowable activities on these lands. By doing so, you have a legal basis for your decisions, and will also be protecting yourself from legal challenges down the road regarding agricultural land use. By having a genealogy of agricultural land use to fall back on, all decisions can be sound and based on precedence. More importantly, this was the intent of these lands. There will be growing pressure to urbanize these lands similar to other areas of the state, but with a sound treatise to make decisions, problems can be minimized and disputes mitigated.

Agriculture has been identified as the major economic direction for Molokai's future due to our competitive advantages and widespread community support for this direction. This competitive edge can be destroyed through careless and superficial planning on the part of DHHL. All of Hoolehua HHL are among the best farming lands of all the HHL inventory, rated as prime lands by two of the recognized land rating systems utilized in Hawaii, LESEA (Land Evaluation and Site Assessment) and ALISH (Agricultural Lands of Importance in the State of Hawaii).

*Hoolehua homestead farmers represent the largest concentration of native Hawaiian farmers in the state, cultivating an area of over 300 acres. They produce more agricultural production, in pounds, than all other Hawaiian homestead farm areas combined!*

The present staff recommendations to allow subdivision of lots are based on outeries by homesteaders who are not utilizing their lands for its intended purpose. In other words, they are in violation of their leases. The recommendation lacks equality in that only those with 35-acre lots (135 lessees) will be allowed to subdivide their 5-acre house lots. This will cause contention

*Glenn I. Teyes  
Molokai Island Plan  
Hoolahua Subdivisions*

and dissension now and in the future, and will lead to more accommodations to subdivide additional lands. By allowing too many houses in this rural farming area, you will urbanize these lands and subsequently drive out farmers. New homeowners will complain about dust from land cultivation activities and noise from tractors, and this is already occurring.

To better understand the impact of the present staff recommendations on the population, I have created a scenario based on what has been proposed. The present proposal will allow for the subdivision of a total of 135 five-acre lots into two 2-3 acre lots. These lots are part of an attached or detach 35-acre agricultural lot. In addition, the proposed lots will be allowed to build a workers quarters on each lot.

Under the present recommendation, each 5-acre residential lot can be cut into two lots. This would create two 2+ acre lots. These lots can then build a workers quarters one each lot for a total of 4 structures on this previous 5-acre lot. You need to look at the possible population dynamics, which include the following:

Number of lots/houses	X2*	X3**	X4***
135	270	405	540
Population+: 675	1350	2025	2700

\* Original house lot cut into two lots.

\*\* One workers quarters built on one of the house lots.

\*\*\* One workers quarters built on each of the two house lots.

† Assumes a family of five individuals

Analyzing these numbers, if everyone subdivided their lot, this would create 135 additional houses bring the total to 270 lots. If each of these lots built workers quarters, this would bring the total to 540 houses. If we look at the average number of persons per household at 5 individuals, this could increase the number of people living in Hoolahua by 2025 individuals if these individuals are not living in Hoolahua now. In other words, where you now have 675 individuals residing, you have the potential of having 2700 individuals. What is not known is how many families will opt to subdivide their lands, and also how many families will opt to build workers quarters. In planning, you always have to look at the greatest potential of your proposal.

In order to assure that we can continue to farm these areas without threat of urbanism and increase population pressures, any subdivision of agricultural lands must add to the present farm activities in Hoolahua, and not detract and adversely impact on its activities. In order to assure the expansion of agriculture through this subdivision, the following conditions must be imposed on lessees subdividing their lands:

1. All cost for subdivision must be borne by the lessee or next of kin receiving the new lot. DHHL will bear no responsibility for the cost of utilities, road improvements, etc.
2. Only a one-time subdivision of each 4-5 acre residential lot, attached to a 35-acre lot, into two 2-3 acre residential lots will be allowed. Each lessee subdividing their land must agree to sign a document affirming a one-time subdivision and agree not to subdivide their agricultural lot now or in the future. This must be a condition to the subdivision.

*Glenn L. Teves  
Molokai Island Plan  
Hoolahua Subdivisions*

3. *As a precondition to the subdivision, the present lessee must submit an updated farm plan that lays out an in-depth strategy to utilize their 35-acre agricultural lot. If they have no plans to farm their lot, they must surrender their 35-acre lot as a condition to subdividing their 5-acre house lot into two 2-3 acre residential lots.*
4. *In order to secure approval to construct a farm dwelling on each house lot, the lessee must be farming on their land and must justify the farm dwelling based on labor demands of their farm production. (Present County of Maui Agricultural Ordinance requires that you gross \$30,000 from your farm before being allowed to build a workers quarters)*

The recommendation to submit a farm plan was taken from the HIL Agricultural Task Force Report completed in 2000. These conditions will ensure that agricultural lands are utilized for their intended purpose, and are consistent with provisions of the Hawaiian Homes Act to "occupy your lands, and cultivate your lands on your own behalf".

**Molokai Irrigation System:** In order to assure that adequate irrigation water is available for present and future agriculture production, DHHIL must take an active role in protecting the Hawaiian Homestead farmers right to irrigation water by enforcing HRS §168-4 which states that "the Hawaiian homes commission and lessees of the Hawaiian homes commission shall at all times, upon actual need being shown to the board, have a prior right to two-thirds of the water developed for the Molokai irrigation and water utilization project." DHHIL's role must be in either assuming the management of the Molokai Irrigation System or advocating for changes to the management of the Molokai Irrigation System that protects the homesteader's rights to water, and their active voice in decision making regarding the management and operation of the MIS.

In closing, I have also included an addendum that was attached to my DHHIL agricultural lease for your consideration. I hope the Commission can continue to support the utilization of agricultural leases for its intended purpose. This is part of the long-range economic strategy for Molokai in which Hoolahua HIL plays a prominent role in this plan. This was the dream of Prince Jonah Kūhiō Kalanianaʻole in Aina Hoʻopulapula, and we who labor diligently on our homestead farms will continue to embrace this dream. Mahalo nui.

*Appendix 1 - Addendum to Agricultural Lease*



ADDENDUM

This Agricultural lease is subject to the following conditions:

1. Active cultivation requirement.

(a) Active cultivation is defined as land cleared, planted and cared for according to the standards of good husbandry. Where, due to terrain, a portion of an agricultural lot is not feasible to cultivate, the requirement for active cultivation of two-thirds (2/3) of a lot shall apply to only that acreage which is feasible to cultivate.

(b) Lessees of agricultural lots are required to have a minimum of two-thirds (2/3) of the total lot acreage under active cultivation by one (1) year from execution of the farm lot lease.

(c) The lessee may request time extensions in order to comply with the active cultivation requirement and justified time extensions will be granted by the Hawaiian Homes Commission. However, submittal and acceptance of a revised farm plan may be required prior to approval of the time extension. Noncompliance with the active cultivation requirement occurring despite the opportunity for justified time extensions will constitute default on the lease and will result in cancellation of the lease and reward to another qualified applicant.

2. Farm plan compliance.

(a) Lessor loan-funded lessees. For lessees whose farm development is financed in whole or in part with Lessor loan funds, compliance with the farm plan attached hereto and incorporated herein is also a condition of maintaining this lease. Substantial changes in implementation of the farm plan, such as changes in types of crops or acreages planted, which significantly affect production, projections and loan repayment ability will require submittal of a revised farm plan for acceptance and Hawaiian Homes Commission approval. Noncompliance with the farm plan incorporated herein may constitute default on the lease.

(b) Independently financed lessees. Lessees whose farm development is completely financed by non-lessor funds need not comply with their original farm plans, however, they must comply with the active cultivation requirement.

3. Location of a residence on an agricultural lot.

(a) The lessee may construct a residence on the lessee's agricultural lot provided that the lessee complies with the conditions imposed by Administrative Rules Section 10-3-26, 10-3-34 and 10-3-39(b). Construction of a residence on the agricultural lot will be permitted only after the lessee has satisfied the active cultivation requirement.

(b) The lessee may construct a residence anywhere on the agricultural lot. However, where water/utility connection is provided, the lessee must assume the cost of extending water and utility lines from the point of connection to the residence.

4. Agricultural lots with unimproved infrastructure.

Where, according to planned development, improvements/amenities for certain agricultural lots have not been provided and are not expected to be provided, a lessee desiring such improvements/amenities prior to their provision and completion, shall incur the cost of providing these improvements/amenities for the agricultural lot.

***Molokai Homestead Farmers Alliance***  
***(MHFA)***  
***P.O. Box 176, Hoolehua, HI 96729***

June 8, 2005

Mr. Micah A. Kane, Chairman  
Department of Hawaiian Homelands  
Po box 1879  
Honolulu, HI 96805

Dear Mr. Kane:  
RE: MOLOKAI ISLAND PLAN

In reference to agricultural lands being subdivided, please note that we have expressed our concerns to Darrell Yagodich and the Department. Our position has not changed. Our organization is not in favor of any subdividing on agricultural lands.

We have attached copies of our letter and concerns that we addressed with Darrell Yagodich, to date, we have not received any response from anybody.

Sincerely,

MHFA, Board of Directors

Cc: Darrell Yagodich  
Milton Pa, Commissioner, DHHL  
George Maioho, DHHL

/attachments

**"A nation that destroys its soil, destroys itself"**  
President Franklin Delano Roosevelt (1933-1945)

**Molokai Homestead Farmers Alliance**

*"Protecting the Resources of the Molokai Homestead Farmer"*

P.O. Box 176, Kualapuu, Molokai, HI 96757

April 29, 2005

Darrell Yagodich  
Department of Hawaiian Home Lands  
P.O. Box 1879  
Honolulu, HI 96805

Aloha Darrell,

Mahalo for taking time out from your busy schedule to meet with the Molokai Homestead Farmers Alliance. We appreciate the interchange of ideas and the mutual agreement in preserving agricultural homesteads for its intended purpose. We hope that we can find some common ground that protects agriculture yet also allows more homestead families to live on the land. We also feel very strongly in the Hawaiian Homes Act, and that the letter of the law must be enforced because it protects our right to exist as a farming community.

In regard to the issue of subdividing land as it relates to AG Opinion No. 61-65 of June 9, 1961, if the interpretation is contrary to what we believe to be true, we would appreciate receiving a document that spells out how the subdivision is allowed. If this opinion holds that a homesteader cannot subdivide their land, then we cannot support any subdivision that is contrary to the law.

We still believe that allowing the addition of one more house under ohana zoning in the five-acre portion of these agricultural lots will accommodate many families. Keeping the houses in the one area is also a major concern for us since it will minimize the impact on adjacent farming activities. It's important to protect the purpose and intent of the agricultural lots at a time when much of the agricultural lands on the neighbor islands are being converted to housing.

In regard to protection of our water rights, we hope that DHHL will support an audit of the Molokai Irrigation System. This will help to make our case in setting in place rules that will quantify our rights and put implementing actions to protect our water rights for us and our posterity. In closing, we look forward to attending the upcoming Hawaiian Homes Commission meeting on Molokai and participating in these discussions.

Sincerely,

Lynn DeCoite  
President  
Molokai Homestead Farmers Alliance

## Proposed conditions to allowing additional houses in Hoolehua

1) No subdivision of agricultural lots; only ohana zoning on residential piece. Additional house must be occupied by next of kin; not rented out or used as bed and breakfast. New house must be located on the existing house lot and not on ag lot. No building on ag lots

4) Only one additional house should be allowed for now, due to water restrictions. In 5 years, this can be revisited after evaluating number of houses in Hoolchua and all impacts on ag.

**Too many Hawaiians have said in effect: 'Give us the best land you've got, give us all the money you can, feed us on poi and fish, and we'll be happy.' I want to tell you that you never will succeed unless you get out and hustle.**

**President Franklin Delano Roosevelt (1933-1945)**



State of Hawaii  
Department of Hawaiian Home Lands

June 21, 2005

To: Chairman and Members, Hawaiian Homes Commission

From: Darrell Yagodich, Planning Program Manager *Darrell Yagodich*

Subject: Molokai Island Plan

RECOMMENDED MOTION/ACTION

---

That the Hawaiian Homes Commission:

1. Adopt the Land Use Designation (LUD) recommendations prepared as part of the Molokai Island Plan reports, and attached as Exhibits C through H;
2. Authorize dissemination of the Molokai Island Plan.

DISCUSSION

**Background**

In July 2004, the Department of Hawaiian Home Lands (DHHL) hired professional planning consultant, Group 70 International, to evaluate existing conditions, analyze opportunities and constraints, and recommend preferred uses for DHHL lands on Molokai over the next 20 years. Group 70 has submitted its Molokai Island Plan (MIP) Final Report after a comprehensive 10-month planning process that included extensive beneficiary and community participation.

On May 24, 2005, the Hawaiian Homes Commission directed the DHHL to extend the MIP public comment period to June 10. By way of a letter sent on May 27, DHHL notified participants of past MIP community meeting of the extended public comment period.

DHHL received three public comments by the deadline. Refer to Exhibit I.

## Planning Team

The DHHL Planning Office (Darrell Yagodich and Daniel Ornellas) oversaw preparation of the Molokai Island Plan. The consultant team was led by Group 70 International (George Atta, Kawika McKeague & Tanya Iden), with SMS Research (Jim Dannemiller) doing work on the beneficiary surveys, and Engineering Solutions, Inc. (Labrina Apuya) providing infrastructure analyses and development cost estimates. Coordination on Molokai was provided by George Maioho, DHHL Molokai District Office Manager, and his staff.

## DHHL Goals & Objectives

Island plans are a key component of the 2<sup>nd</sup> tier of the DHHL Planning System framework which establishes levels of plans and their relationships for decision-making. (See Exhibit-A) The Molokai Island Plan assesses and recommends future uses for Hawaiian home lands on an islandwide basis. It addresses the following goals and objectives of the DHHL General Plan which were adopted by the Hawaiian Homes Commission on February 26, 2002.

- Designate all Hawaiian home lands within one of the ten land use categories specified under the Planning System framework.
- Identify areas for new housing opportunities in proportion to the number of applicants on the residential waiting list for the island of Molokai, relative to the statewide demand; the target being an average of at least 20 per year or a minimum of 400 over 20 years.
- Provide areas for increasing the number of agricultural and pastoral leases awarded each year.
- Provide areas for income-generating uses (commercial and industrial) while using less than 1% of the lands (266 acres).
- Provide space for and designate a mixture of appropriate land uses, economic opportunities and community services.
- Direct urban growth to priority development areas based on infrastructure availability, feasible site conditions, beneficiary preferences, and job opportunities.

- Identify and establish a clear understanding of existing water resources available to the Hawaiian home lands trust.
- Preserve and protect significant natural, historic, and community resources on trust lands.
- Follow a comprehensive planning process which takes into account a wide variety of factors as described below.

### **Planning Process**

The planning process for determining the future land uses of available lands over the next 20 years involved the following steps:

- (1) Examination of beneficiary needs and preferences through surveys of existing homesteaders and applicants;
- (2) Description and analyses of socio-economic conditions on the island;
- (3) Assessment of conditions on and surrounding Hawaiian home lands;
- (4) Assessment of environmental opportunities and constraints, infrastructure and water resources;
- (5) Community and small group input on land use alternatives;
- (6) Order-of- magnitude development cost estimates;
- (7) HHC and DHHL staff reviews of preliminary recommendations;
- (8) Community meetings and site visits for comments on proposals;
- (9) DHHL/HHC workshop briefing on Pre-Final Report; and
- (10) Final Report recommendations contained in this submittal.

### **Beneficiary & Community Participation**

The planning process incorporated many opportunities for beneficiary and community input.

*Background Research:* A mail out survey to Molokai island homestead lessees and applicants conducted by SMS Research in September 2004 provided timely information on beneficiary demographics and preferences for land locations, land uses, lot sizes, and community amenities. Two series of small group meetings were held to discuss initial findings with representatives from homestead associations, Hui Kako'o 'Aina Ho'opulapula (applicant advocates), Native Hawaiian service organizations, and county, state, and federal agencies, and

~~private~~ landowners. A series of local community meetings were held in Ualapue, Kalamaula, Hoolehua, and Kalaupapa.

*Alternative Development Scenarios:* Two community meetings were held to discuss alternative development scenarios. Beneficiaries were given the opportunity to tour DHHL properties and encouraged to make suggestions and critique the alternatives.

*Preferred Development Scenarios:* The preferred development alternatives were chosen based on prior community input, DHHL policies, and a series of planning factors. The results were presented in smaller working groups and to the community on Molokai.

*Final Plan:* A summary report was mailed to those who attended the final meeting in April 2005 and the community was informed that the MIP would be up for Hawaiian Homes Commission adoption on May 24, 2005, on Molokai. The community was informed of the extended MIP public comment period to June 10, 2005.

### **Molokai Island Profile**

Molokai is the fifth largest island in the Hawaiian chain, comprised of a land area of 170,000 acres. Molokai is 38 miles long and 10 miles wide with 88 miles of beautiful coastline dotted by many historic Hawaiian fishponds. DHHL's 25,868 acres equate to 15% of the total land area.

The total island population of Molokai is almost 7,400 people of which 62% are Native Hawaiian. Their link to the land and ocean is apparent and essential on this small island. A 1994 State study found that subsistence fishing, hunting, and gathering supplied 38% of the food to Native Hawaiians on Molokai.

According to the 2000 U.S. Census, the unemployment rate for the State as a whole was 4.5%, but was 11.2% on Molokai. Statistics are similar for the proportion below the poverty level: at a statewide level of 10.7% of the population, whereas on Molokai it is 14.4% under the poverty level. Median income is much lower on Molokai as well. Molokai's median income is \$33,398 compared to \$49,820 for the State.

## Molokai Homestead Lessees and Applicants

835 homestead leases have been awarded on Molokai. Agricultural and residential leases, the majority of all awards, are concentrated in Hoolehua and Kalamaula, west of Kaunakakai.

### **Existing Homestead Leases, Molokai**

	<u>Res</u>	<u>Agr</u>	<u>Pas</u>	<u>All</u>	<u>Percent</u>
Kalamaula	160	74	3	237	28
Hoolehua	153	347	21	521	62
Kapaakea	45	0	3	48	6
One Alii	29	0	0	29	4
Total	387	421	27	835	100
Percent	46	50	3	100	

## Beneficiary Preferences

A beneficiary survey was conducted in September 2004 to gather information on beneficiary preferences. Key findings are:

*Residential is the preferred award type* - While agriculture applications make up the largest type of applications, when queried for their first choice of award, 68% of beneficiaries expressed a residential award preference.

*Agricultural and pastoral applicants want to live on their homesteads* - Agricultural and pastoral applicants overwhelmingly reported that they wanted to live on their homesteads.

*Preference is for small agricultural lots* - Most agriculture applicants, whether they plan to farm at a subsistence or supplemental level, prefer a lot that is 3 to 5 acres.

*No award location preference* - Most applicants have no preference regarding location of award.

*Finances are a barrier for Applicants* - Common barriers are households with no adults employed, low combined household incomes, and existing low rent/shelter payments.

*Lessees are happy with their communities* - When asked to describe what they like about their homestead community, lessees appreciate the spacious setting of their homestead lots and they enjoy their neighbors' friendliness and 'ohana spirit.

*Homestead communities need infrastructure improvements* - Lessees cited infrastructure issues. There is a desire to clean out

~~abandoned vehicles, clear vacant lots, improve and maintain~~  
roads, and develop more recreational activities.

### **Land Use Designations**

Land Use Designations (LUDs) identify the land use category for Hawaiian home land areas covered under a DHHL Island Plan. LUDs separate the lands into discrete use districts, each having its own set of general permitted uses and development standards. Taken together, LUDs provide the general pattern for the location and distribution of future land uses, thereby fostering the orderly use and development of Hawaiian home lands. LUDs are prescribed by the DHHL General Plan. The ten Land Use Designation categories are summarized in Exhibit-B.

### **Tract Assessments and Land Use Recommendations**

#### **1. Ualapue (411 acres)**

*Description* - The parcel lies mauka of Kamehameha V Highway, highlighted by its sloped terrain (11-20%), interspersed by deep ravines, which makes development challenging. Soil is poorly drained over soft weathered rock. Elevations range from 25 to 1,000 feet above sea level. The lower elevations receive 45 inches per year. The Ualapue lands are primarily located within the Agricultural State Land Use designation, except for the upper mauka boundary which abuts the Conservation district. Views are impressive from high cool elevations.

*Opportunities & Constraints* - Future development will require roadway improvements. Ualapue is within the region serviced by the Maui County DWS water system. It is not feasible to connect to wastewater systems in Kaunakakai. Cultural sites such as the Kalauonakukui heiau should be protected, as with Ualapue fishpond.

*Land Use Plan* - See Exhibit C. (74) 10,000 sq. ft. residential lots on 25 acres. 2.9 acres for Community use. Special District areas for natural resource management (78 acres) and Kalauonakukui Heiau (7 acres). 299 acres for General Agriculture.

*Estimated Cost* - \$4.1 million. 74 10,000 sq. ft. residential lots at \$54,527 per lot.



## **2. ~~Kapaakea~~ ~~Makakupaia~~ ~~Kamiloloa~~ (5,729 acres)**

*Description* - The parcel is located along the southern portion of Molokai, about one mile east of Kaunakakai town. Situated mauka of Kamehameha V Highway, highlighted by variable slope (10-35%) and major drainage channels that form the wetlands near the shoreline. Slopes are mild and severed with steep rocky areas. Lower elevations receive 15 inches of rain per year while upper elevations receive 40 inches per year.

*Opportunities & Constraints* - The area has no parks and schools, but has one cemetery. The nearest school is Kaunakakai Elementary School about five miles away. Surface runoff and flooding is a major issue here. The area is serviced by the Maui County DWS water system, but new water source will be required. It is not feasible to connect to the Kaunakakai town wastewater system. Cultural sites include the fishpond and Kamiloloa Habitation and Agricultural Complex.

*Land Use Plan* - See Exhibit D. 286 1/2 acre new residential lots on 204 acres, 5 1/4 acre makai lots on 4 acres. Proposed Community Uses for community park, cultural center, and fishpond on 55 acres. Special District areas for natural resources management (2,040 acres), cultural resources (207 acres), and flood control (29 acres). General Agricultural on 2,165 acres.

*Estimated Cost* - \$29.2 million.

## **3. Kalamaula (6,476 acres)**

*Description* - DHHL's Kalamaula lands are located mauka of Kamehameha Highway with gentle slope (0-10%) upland. There are 161 residential, 76 agricultural, and three pastoral homestead here, along with Church Row, Kapuaiwa Grove, and Kulana Oihi Hawaiian agency services center.

Elevations range from sea level to 1,800 feet above sea level. Lower makai elevations receive 20 inches of rain per year, while the upper forested elevations receive 40 inches per year.

*Opportunities & Constraints* - There are multiple soil types ranging from salty marsh land to rocky and stony outcrops in the uplands. There is some agricultural potential with adequate irrigation water. Most of Kalamaula makai of Maunaloa Highway is subject to flooding. Future development will require roadway improvements. Kalamaula receives its water from the DHHL owned and operated Hoolehua Water System (HSWS). The area currently

~~uses 0.08 gpd. The HWS is nearing its capacity and a new water source will be needed. It is cost prohibitive to connect to the Kaunakakai wastewater system. Cultural sites include Kapuaiwa Grove, Ohiapili Fishpond, Opaaula heiau, Puupapai heiau, Kalamaula heiau, and Puuomoo heiau.~~

*Land Use Plan* - See Exhibit E. 57 new one acre residential lots, proposed community parks and kupuna housing, Special District areas for natural resource management (1,344 acres), wetland (363 acres), and flood control (12 acres). General Agriculture on 2,353 acres. Commercial on 12 acres, including Kulana Oihi.

*Estimated Cost* - \$13.8 million.

#### **4. Kalaupapa and Palaau (Apana 3) (1,474 acres)**

*Description* - Palaau and Kalaupapa are located on the northern plateau and peninsula of Molokai. Palaau is mostly an ironwood forest under license for a State Park. Kalaupapa, part of Kalawao County, is historically noted as a settlement area for Hansen's Disease patients established in 1866. Prior to that, the area was well established as a Native Hawaiian settlement until required to relocate. In 1980, the U.S. Congress established the Kalaupapa National Historic Park. The National Park Service currently has 37 years remaining on its 50 lease.

The peninsula is separated from the rest of the island by a 1,600 foot cliff. Rainfall varies from 25 inches near the shore to 45 inches up in the cliff regions. Kauhako Crater lies in the center of the peninsula at a 300 foot elevation.

*Opportunities & Constraints* - The most common theme emerging from planning community meetings was to ensure the legacy of some 8,000 Hansen Disease residents that made Kalaupapa their home. Preserving and perpetuating their legacy could take several forms, such as preservation of the area as a historic district, reintroduction of native Hawaiian homesteading, or a partnership between both uses. The Molokai community made clear their position against any land exchanges with National Park Service and do not want any general lease extensions. They want DHHL to take back control of Kalaupapa as soon as possible.

There is agreement that commitments to respect the wishes of current residents must be kept. At the same time, there is a need to develop a long-term plan to balance the interests and

~~activities that are compatible to the overall interest of preserving the legacy of Kalaupapa.~~

*Land Use Plan* - See Exhibit F. Designate existing Kalaupapa patients' residential area (621 acres) and Palaau forest land (224 acres) as Special District. Designate a 5-acre area in Palaau as Commercial. 609 acres of forest and pali areas to be designated as Conservation. Two areas on the peninsula will be designated for Community Use (3.5 acres) to be controlled and managed by the native Hawaiian patients.

*Estimated Cost* - \$5.8 million.

## **5. Hoolehua and Palaau (Apana 1) (13,750 acres)**

### Description

Hoolehua and Palaau (Apana 1) consist of 13,750 acres within the northern central plateau and southern coastal corridor of Molokai. Fronted by Maunaloa Highway, Hoolehua is rural agricultural community, the first homestead settlement under the Hawaiian Homes Commission Act of 1921.

Hoolehua lands are varied in topography, from level plains to rolling hills and sea cliffs. The elevation varies from 10 feet along the coast and extend to hills at 1,300 feet to the west.

### Opportunities and Constraints

*Best Agricultural Lands* - Given large lot sizes, superior soil conditions, level topography, dry weather, minimum exposure to introduced crop pests and disease, access to irrigation water.

*Established Homestead* - Rural and agricultural and residential community with most awards ranging from 1 to 40 acres. Smaller lots are located in the northeast corridor near the high school.

*Desire to Subdivide* - As an older homestead community, the ohana that reside here are comprised of 3-4 generations. Hoolehua families have a strong desire to subdivide existing leased lands to provide housing for their children and grandchildren.

*Access to Airport* - Molokai Airport abuts the property and serves as a potential to develop related commercial activity.

*Potable Water* - Hoolehua receives potable water from the DHHL Hoolehua Water System (HWS) which is serviced by the Kualapuu

~~Aquifer. The HWS has a safe source capacity of 0.58 mgd and~~  
cannot meet the existing daily demand. There is a need to  
develop another source. The Kualapuu Aquifer has a yield of 5.0  
mgd and current use is 2.0 to 2.6 mgd. DHHL is guaranteed a 2.9  
mgd water reservation from this aquifer.

*Irrigation Water* - Homesteaders have prior right to 2/3 of  
water from the Molokai Irrigation System (MIS), operated by the  
State Department of Agriculture. Current use estimates range  
from 3.35 to 4.46 mgd. The estimated source available is 5.8 to  
7.4 mgd. The MIS has been plagued by drought and needs an  
alternative water source, has maintenance problems and requires  
significant improvements.

*Flooding* - The lands of Palaaau are subject to flooding and  
serves as a natural drainage collector of stream and channel  
runoff.

*Cultural Resources* - Moomomi Preserve (921 acres) is an intact  
beach and sand dune habitat with communities of native grasses  
and shrubs.

Land Use Plan See Exhibit G

*Residential* - Two areas comprise 55 acres designated for  
residential. The first area bounded by Farrington Avenue and  
Puukapele Avenue consists of half-acre to 5 acre lots with paved  
roads, potable and irrigation water. This is the rural  
residential core area. Many who reside here do not have  
unattached 40 acre agriculture lots.

*General Agriculture* - Most of the 3,681 acres designated as  
General Agriculture consist of rugged or difficult terrain  
without infrastructure, irrigation water, and dirt roads.

*Supplemental Agriculture* - Over 5,700 acres have been designated  
as Supplemental Agriculture. These lands are comprised of the  
existing 40 acre lots that have been split into two parcels - -  
one consisting of 35 acres, the other of 5 acres (Subsistence  
Agriculture).

*Subsistence Agriculture* - 287 lots with 2,462 acres are  
designated as Subsistence Agriculture. Lots vary in size from  
2-4 acres, large enough for small-scale agriculture.

Three areas are designated as "new" subdivision areas of  
Subsistence Agriculture lots. Two are located in the central

~~core, north and south of the central Community Use areas.~~ These are comprised of 94 two-acre lots on 278 acres.

The remaining 135 five-acre lots on 5,861 acres are situated along the main local collector streets in Hoolehua including 19 lots on Puukapele, 10 lots on Cemetary Road, 38 lots on Farrington Avenue (north), 48 on Farrington Avenue (south), and 21 lots on Moomoomi Avenue. The subdivision of farm lots would be allowed on five acre Subsistence Agricultural lots being split into one 2 acre and one 3 acre parcel. A small house and worker's quarters would be allowed on each of the subdivided 2 and 3 acre parcels (4 per five acre area).

*Pastoral* - Over 697 acres of the 922 acres of pastoral land are situated in the northwest section of Hoolehua. The remaining 225 acres are situated along the northern coastline. 15 of the existing 24 lots have been awarded.

*Community Use* - 73 acres designated as Community Use are located near the central core of Hoolehua. The land use applies to existing facilities such as Lanikeha Center, Hoolehua Fire Station, Hoolehua Cemetary, Molokai High School, several churches and other educational and social services groups.

*Special District* - A 366 acre parcel in the northwest section of Hoolehua is leased to the U.S. Air Force for a radio receiver site. This area has significant cultural sites that need to be preserved.

The second Special District area of 288 acres is located along the northeastern tract leading to the Conservation area above Kalaupapa. This area has a medium density of endangered plants.

*Commercial* - 35 acres have been designated Commercial. Existing commercial areas include the U.S. Post Office and Credit Union. About 14 acres have been designated on the Molokai Loop Road for commercial development.

*Conservation* - 46 acres on the northeastern section of Hoolehua is also designated conservation under the Land Use Commission.

### **Development Standards**

DHHL can develop projects to usual County standards or may negotiate other standards acceptable to the County, that will enable transfers of ongoing facility maintenance responsibility to the County. DHHL may also develop to lesser standards, and

~~retain responsibility for maintenance and repairs, directly or by others (e.g., private utility company, community association or coops).~~

Order-of-magnitude cost estimates show that development to County standards will be very expensive for some residential projects. Costs for larger-lot projects, such as for agricultural and pastoral awards, would be prohibitive if developed to County standards with all utility services. In order to reduce development costs and allow timely and practical homestead awards, staff applied different scenarios:

- Residential homesteads were assumed to be developed to full County standards with dedicable utilities.
- Subsistence Agriculture homesteads were assumed to be developed to a Rural dedicable County standard: Roads with 50' right-of-way, 16'-18' paved a/c surface, 16'-17' shoulder widths. Drainage via grass swales and drywells at strategic points. Projects to be where water systems are already available, or located where average annual rainfall is at least 60 inches for water by catchment. Sewage disposal by individual septic systems. If provided, electricity will be overhead.
- Supplemental Agriculture and Pastoral homesteads were assumed to be developed below County (therefore non-dedicable) standards: Roads with 50' right-of-way, 20' gravel road surface, 15' shoulder widths. Drainage by natural contours. No electrical provided (unless existing). Water systems available, or located where annual rainfall is at least 45 inches for irrigation and livestock water by catchment. No sewer system.

Proposed Rural homestead projects will require cost/benefit analyses on a case-by-case basis to determine the specific development standards DHHL should exercise.

### **Findings and Recommendations**

A summary table of Land Use Designations and individual LUD maps of each Area/Tract are provided in attached Exhibit-H.

Explanations for recommended Land Use Designations are discussed in detail in the Molokai Island Plan (June 2005) Final Report.



Following is a summary of proposed Homestead Development Projects for Molokai:

Residential:	417 lots	310 acres
Agricultural:	229 lots	2,164 acres
	629 lots	2,474 acres

### RESIDENTIAL (Homestead)

(Infrastructure to County standards, including water. Lot sizes and costs indicated for analytical purposes only)

Area/Tract	Type	Acres	Lot Size	#Lots	\$Cost/Lot	Cost \$Mil
Ualapue East	RES	25	10,000sf	74	\$ 55,000	\$ 4.1
Kamiloloa	RES	204	1/2 acre	286	102,000	29.2
Kalamaula	RES	81	10,000sf	57	202,000	11.5
Sub-total		310		417	\$107,400	\$44.8
				400 Target		

### AGRICULTURAL (Homestead)

(Water is available from existing potable or potable/irrigation systems. Potable system requires new well source. Lot sizes and costs indicated for analytical purposes only)

Note: All Projects Are Located in Hoolehua

Project	Type	Acres	Lot Size	#Lots	\$Cost/Lot	Cost \$Mil
Scattered	Supplemental	1,896	5 ac.	135		
South Core	Subsistence	185	2 ac.	65		
North Core	Subsistence	83	2 ac.	29		
Sub-Total		2,164		229	\$47,500	\$12.8

Note: Target is to increase the availability of agriculture lots.

<b>NEW HOMESTEADS</b>	<b>ACRES</b>	<b>LOTS</b>	<b>DEVT COST</b>
<b>GRAND TOTALS</b>	<b>2,474</b>	<b>646</b>	<b>\$57.6 million</b>

### CONCLUSION

The Molokai Island Plan report fulfills the DHHL's Island Plan requirements.

- It identifies Land Use Designations for all 25,868 acres of Hawaiian home lands on Molokai;

- 
- It identifies priority homestead growth areas for new Residential developments;
  - It identifies appropriate areas for Community Use;
  - It identifies areas for more Agricultural leases;
  - It identifies limited but adequate areas for income-generating Commercial and Industrial uses;
  - It was prepared using a comprehensive planning process with extensive beneficiary and community participation.

Adoption of the recommended Land Use Designations and dissemination of information in the Final Report will set the ~~stage~~ for implementation of the key recommendations and priority projects in the Molokai Island Plan.

The DHHL has enough lands of suitable quality, and in good locations, to proceed toward its program goals. The major obstacle will be securing sufficient funds the development projects. Implementation will be subject to priorities and the availability of funds, and should proceed only after verification of beneficiary and market demands.

## **RECOMMENDATION**

### **1st ACTION: Land Use Designations**

The first action under the recommended motion is to adopt the Land Use Designations indicated on area/tract maps attached as Exhibits C through H.

### **2<sup>ND</sup> ACTION: Plan Dissemination**

The second action authorizes the preparation and dissemination of the Molokai Island Plan reports to facilitate implementation of its land use designations and recommendations.

Staff respectfully requests approval of the recommended motion as stated.

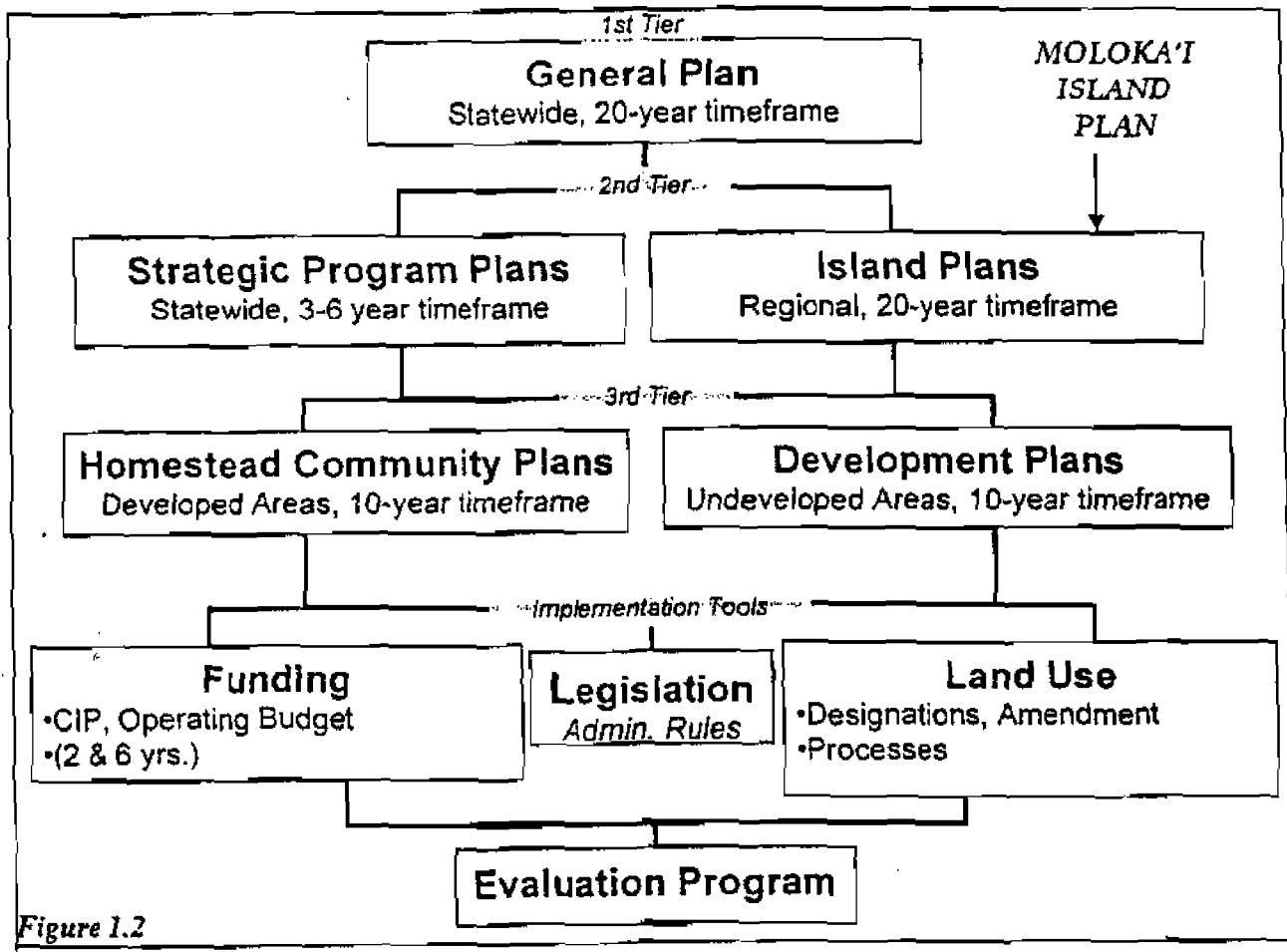


Figure 1.2

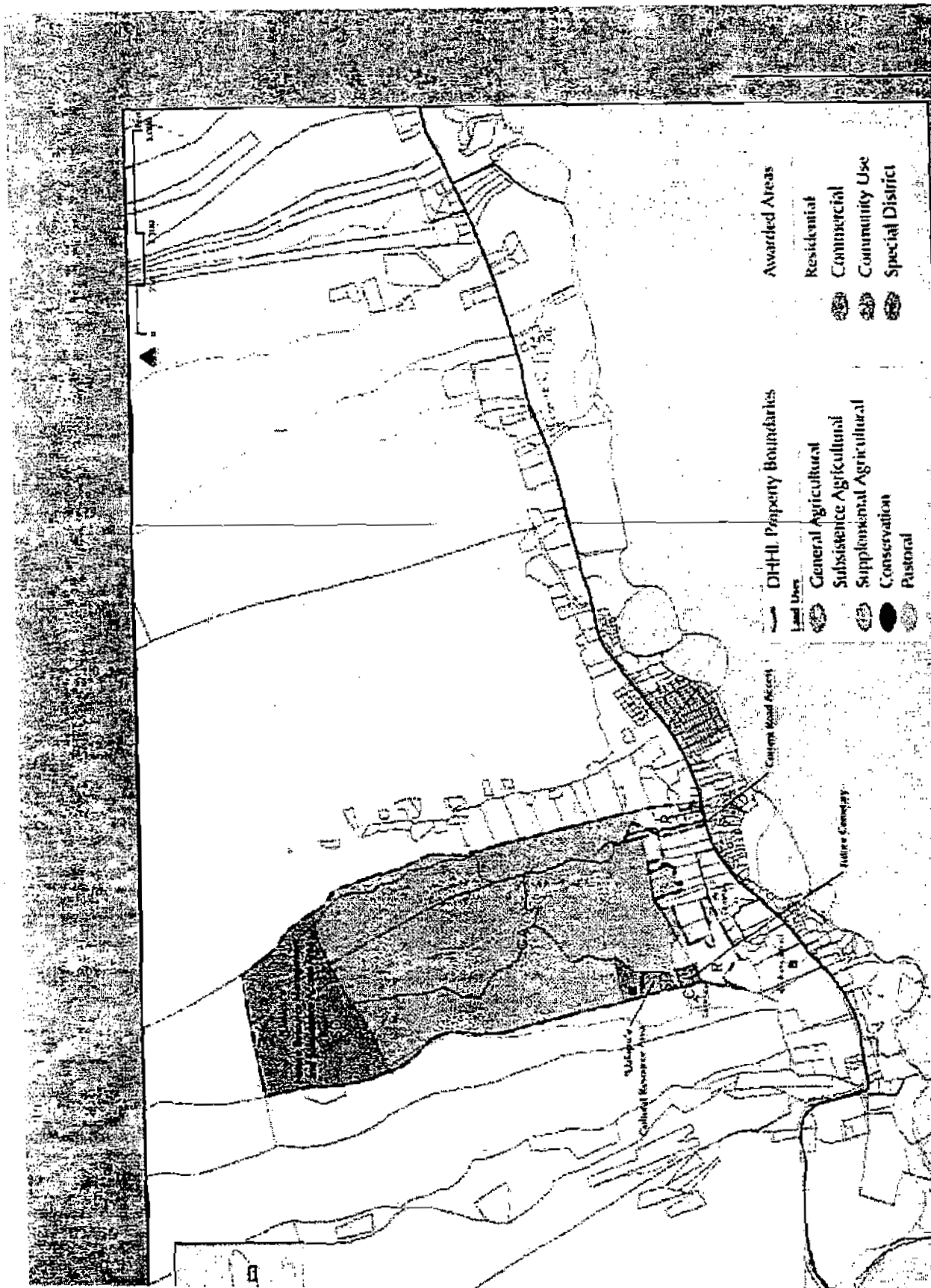
DHHL Planning System

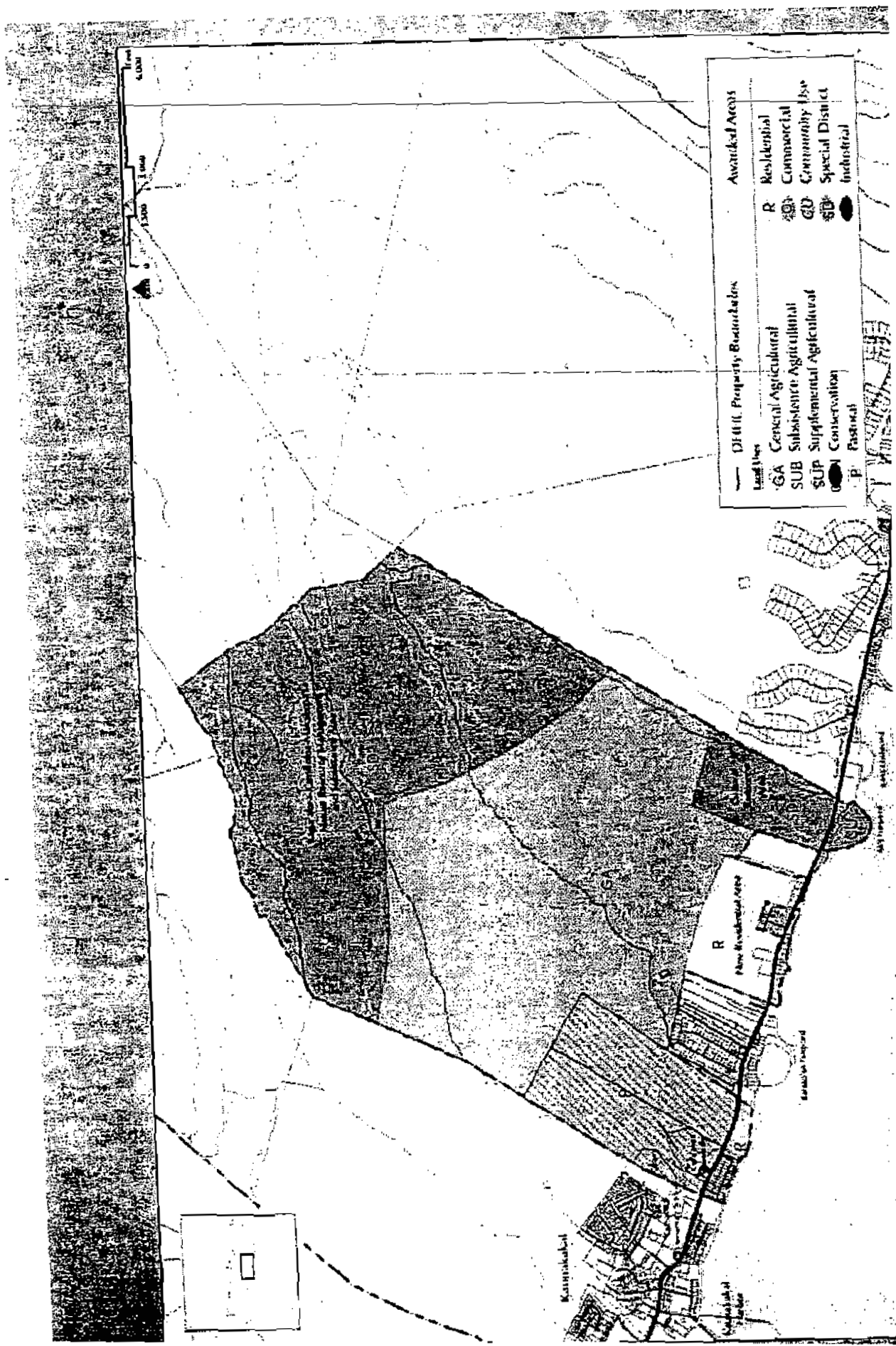


	Setting / Intent / Purpose	Lot Size	Minimum Infrastructure
<b>Residential (Homestead)</b>	Residential subdivisions built to County standards in areas close to existing infrastructure.	≤ 1 acre	County standards
<b>Subsistence Agriculture (Homestead)</b>	Small lot agriculture. Lifestyle areas intended to allow for home consumption of agricultural products. Occupancy optional.	≤ 5 acres	Water (catchment or surface) Road access
<b>Supplemental Agriculture (Homestead)</b>	Large lot agriculture. Intended to provide opportunities for agricultural production for supplemental income & home use. Occupancy optional. Farm plan & 2/3 cultivation required.	≤ 40 acres	Water (catchment or surface) & Road access
<b>Pastoral (Homestead)</b>	Large lot agriculture specifically for pastoral uses. Occupancy optional. Ranch plan & fencing required.	≤ 1,000 acres	Road access & livestock drinking water
<b>General Agriculture</b>	Intensive or extensive farming or ranching allowed. Uses subject to HRS Chapter 205. May serve as an interim use until opportunities for higher & better uses become available.	To be determined	N/A
<b>Special District</b>	Areas requiring special attention because of unusual opportunities & / or constraints. E.g. natural hazard areas, open spaces, raw lands far from infrastructure (difficult to improve), mixed use areas, green-ways	To be determined	To be determined
<b>Community Use</b>	Common areas for community uses. Includes space for parks & recreation, cultural activities, CBED, & other public amenities.	To be determined (see standards)	County standards
<b>Conservation</b>	e.g. water sheds, endangered species, sensitive historic & cultural sites	To be determined	N/A
<b>Commercial</b>	e.g. Retail, business & commercial activities	To be determined (see standards)	County Standards
<b>Industrial</b>	e.g. processing, construction, manufacturing, transportation, whole sale & warehousing	To be determined	County Standards

Table 2.1

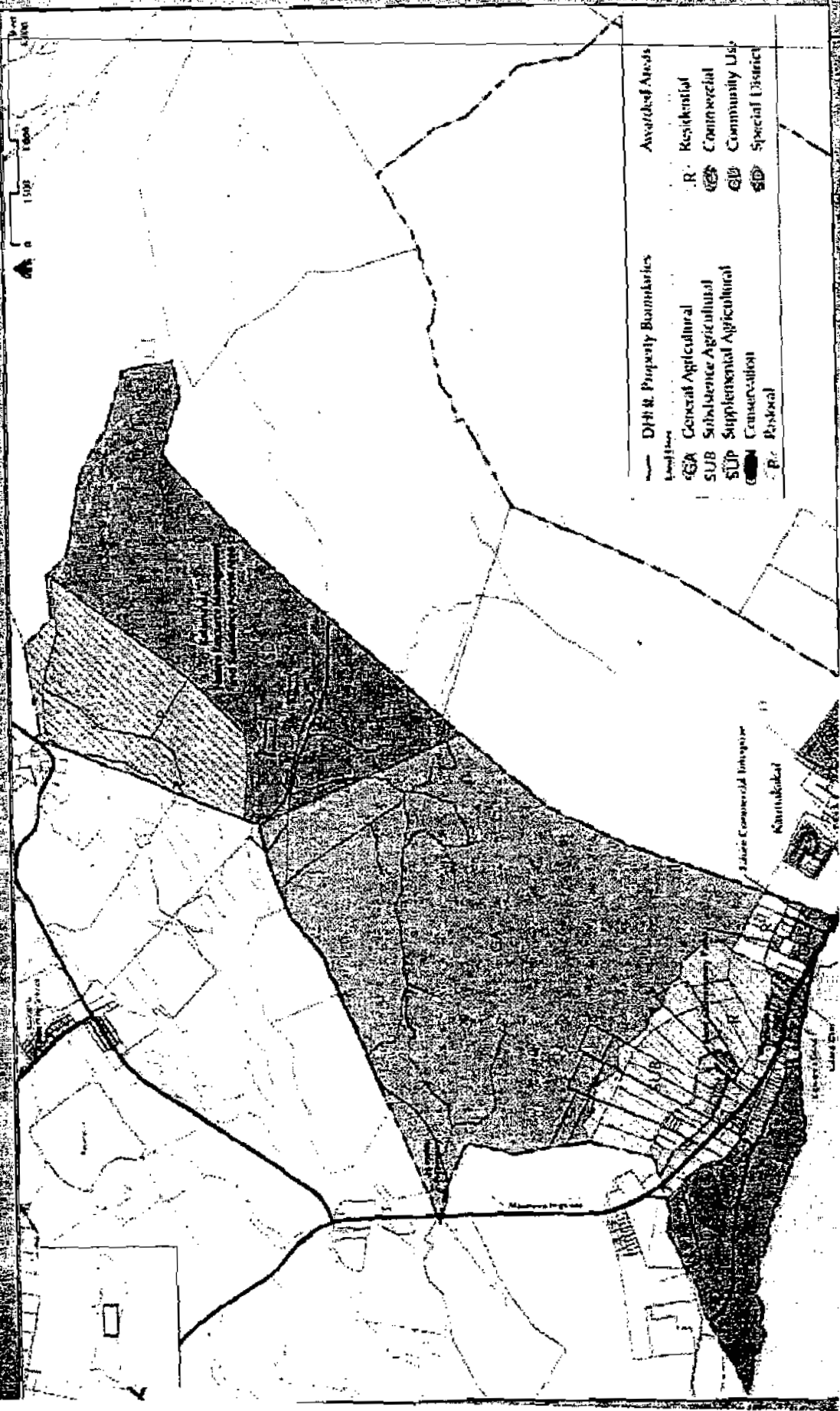
DHHL Land Use Designations





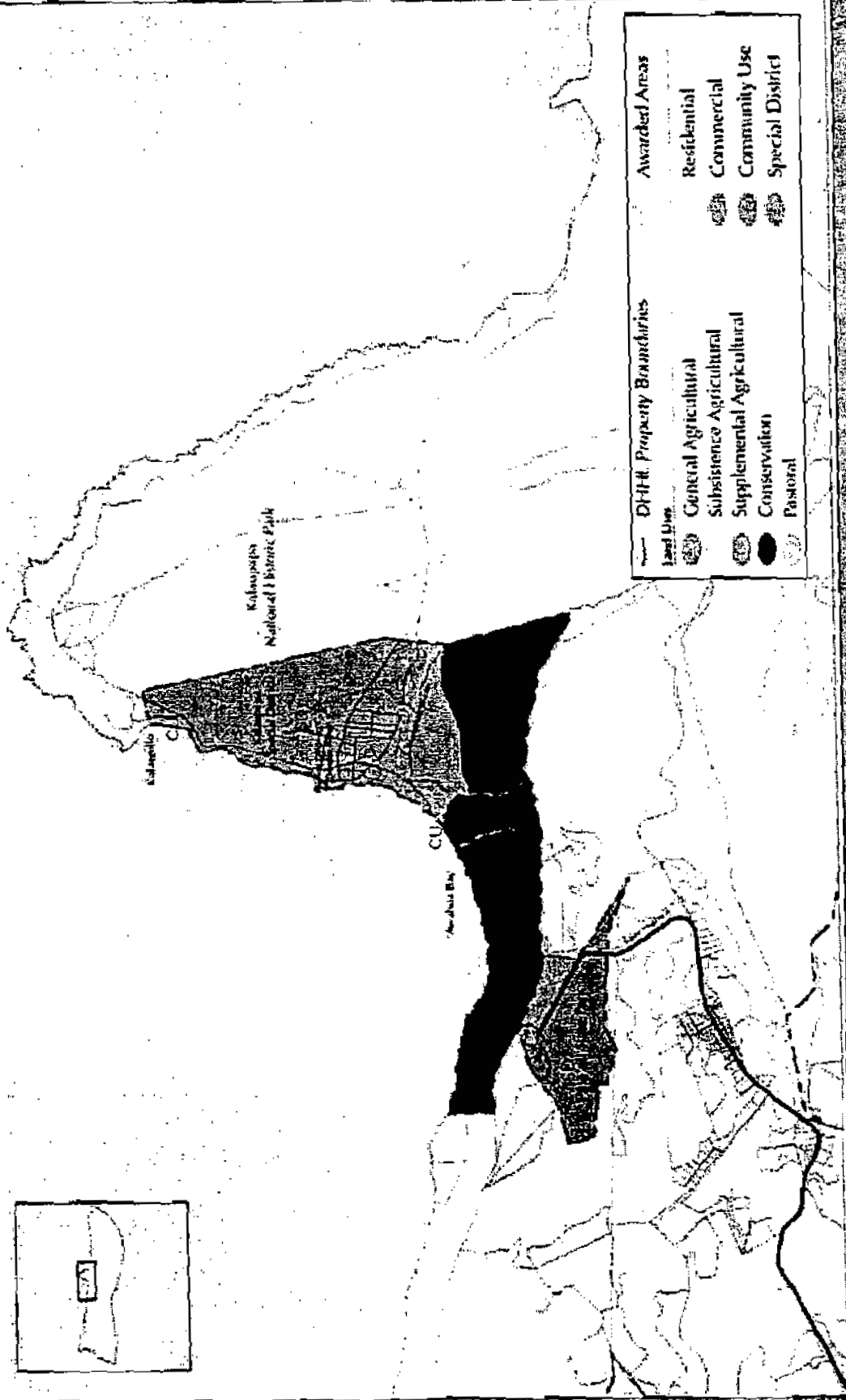
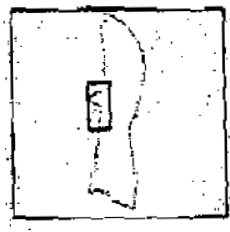
KAPAAKEA-MAKAKUPAIA-KAMILOLOA  
EXHIBIT D





DHR Property Boundaries		Awarded Areas	
GA	General Agricultural	R	Residential
SUB	Subsistence Agricultural	CO	Commercial
SUP	Supplemental Agricultural	CU	Community Use
CON	Conservation	SD	Special District
P	Pastoral		

KALAMAZOO



- | DHH Property Boundaries   |                           | Awarded Areas    |  |
|---------------------------|---------------------------|------------------|--|
| Land Use                  | General Agricultural      | Residential      |  |
| General Agricultural      | Subsistence Agricultural  | Commercial       |  |
| Subsistence Agricultural  | Supplemental Agricultural | Community Use    |  |
| Supplemental Agricultural | Conservation              | Special District |  |
| Conservation              | Pastoral                  |                  |  |
| Pastoral                  |                           |                  |  |



Land Use Designation	YUALAPUŪ E (Acres)	KAPAŪAKEA, MAKAKUPAIŪA, KAMILOLOA (Acres)	KALAMAŪULA, PALĀŪAU (Acres)	KALAUAPA, PALĀŪAU (Acres)	HOŪOLEHUA (Acres)	TOTAL (Acres)
Residential	25	264	398	0	55	742
Subsistence Agriculture	0	0	213	0	2,138	2,350
Supplemental Agriculture	0	0	0	0	5,862	5,862
Pastoral	0	465	539	0	923	1,927
General Agriculture	299	2,165	2,353	0	3,681	8,498
Special District	85	2,246	1,717	847	660	5,555
Community Use	3	33	83	14	73	206
Conservation	0	0	0	609	46	655
Commercial	0	0	13	4	40	58
Industrial	0	16	0	0	0	16
<b>TOTALS</b>	<b>412</b>	<b>5,189</b>	<b>5,316</b>	<b>1,474</b>	<b>13,478</b>	<b>25,868</b>

# LAND USE DESIGNATIONS FOR LAND TRACTS

EXHIBIT L

## Dept of Hawaiian Home Lands

### Twenty Year Plan

Thursday, 12 August 2004

### **"Dream Big . . . Think Outside of the Box"**

#### **I. Place as many Hawaiians as possible, on the land**

1. Improve and Refine the qualifying (blood quantum) system
  - a. Lobby local and, more especially, Congress for a lower or "NO" blood quantum
  - b. Refine the application process, especially establishing genealogical documentation
2. 2 - 5 acres; more realistic and manageable for farming and other ventures
3. Lift moratorium and subdivide land (especially for children of lessees)
4. Separate Ag and Residential Lots (to avoid illnesses from chemicals, etc.).
5. Plan and erect an Education Center (Molokai Intermediate, Immersion, and other charter schools)
6. Build and operate a health clinic
7. Build and operate an auditorium, gymnasium, w/a park (activities, classes, meetings, etc.)
8. Build a storage facility for equipment to be utilized by all homesteaders with the appropriate personnel to be accountable of and for its use.
9. Build a business complex (for homesteading entrepreneurs)
10. Explore and plan for a time when Molokai acquire a sustainable industry; perhaps the lands can be utilized for a manufacturing plant, whether it be for contractors, corporations, or small business.

#### **II. Rehabilitate the Hawaiian Community via the land**

1. Refocus or remphasize on the objective of the Hawaiian Homes Act: to Rehabilitate the Hawaiians; land is basis of and for it
2. Allot 2-5 acres per family
  - a. Subdivide land for children, or
  - b. Utilize land for farm or other economic measures within 5 years;  
If land not utilized within 5 years, reallocate a portion of the 5 acres to others
3. Have a funding program and allot homesteaders an amount for housing, education, and business and give complete assistance/counseling in "What and How To do."
4. Acquire the appropriate equipment and tools for farming, etc.
5. Provide and conduct "hands on" classes, workshops, etc., for farming and other business ventures
6. Work with the homestead entrepreneurs to be successful
7. Evaluate the entire HHL Programs; do strategic planning; and build future leaders (individuals, parents, community); "not just the same-o."

### DHHL Future Plans for Moloka'i

The following issues have been discussed by the Moloka'i homestead associations:

- o The same domestic water fees for all DHHL lessee
- o The preservation of the allocated 2/3<sup>rd</sup> MTS water for DHHL lessee with agriculture lands
- o Cancel the subdivision moratorium on DHHL agriculture land
- o Plan and implement the Ohana Zone concept for agriculture lands
- o Develop a park for each homestead community
- o Safe and thoroughly constructed streets and roadways
- o Safe and debris free streams and waterways to prevent flooding
- o Funding to renovate old homes
- o Funding for affordable homes
- o Commercial lots and structures for lessee in Kalamaula and Ho'olehua
- o Encourage and empower Homestead Associations to help manage their communities

We all agree that these issues are our primary concern, please include in the DHHL survey for the Moloka'i Future Plans.

Ho'olehua Homestead Association

Ho'olehua Homestead Agriculture Association

One Ali'i/Kamiloloa Homestead Association

Kapa'akea Homestead Association

Kalamaula Mauka Homestead Association

Kalamaula Homestead Association

Mahalo!





## Prayer for the Children

May Your Profound Love be given to the Children at all times through people inside and outside their home. We Pray that the children be protected from all that may bring harm to them keep them safe, may they understand

Fatherly love & Motherly love and Family love manifested in diverse forms and that the Children grow up to be Truthful Adults who have Capacity to love others. May Adults be able to deepen their love for Humanity through those Children. God Bless, Our Children and Community and May you give them Strength to fulfill their Missions. With Love from the higher power. AMEN

# KAPA'AKEA COMMUNITY FOUNDATION

---

P.O.Box 110  
Hoplehua, Hawaii 96729  
(808)553-3018

kapaakeacommunityfoundation@earthlink.net

May 20, 2005

TO: Kawika McKeague, Project Manager/Group 70

We the committee of Na Keiki O Kapa'akea, write on behalf of our community in regards to the new community park.

Since 1945 Kapa'akea was a designated area for homestead. In 1950 homes were built to establish Kapa'akea as a Hawaiian homestead community on Moloka'I. At that time Lot 43 was allocated as the community park. In 1964 lot 43 was awarded as a residential homestead, in doing so Lots 28, 29 and 30 were then allocated by residents of Kapa'akea as the community park. History repeated itself and our community park is again put aside.

In 2002 a near accident took place, and a concerned resident then voiced a vision, and put in a request for a community park. At that time this resident was given \$10,000 towards that vision.

The committee Na Keiki O Kapa'akea was established in 2003, in support of a new community park. Through out the year Na Keiki O Kapa'akea has been busy in seeking a new lot for a community park. At that time we the committee asked for Lot 4 as a new location for a park.

As history once again repeats itself us the committee was denied Lot 4 as it was also awarded for a residential lot. Throughout the year of 2004, the concerned resident joined Kapa'akea Homestead Association, with doing so asked for support for Na Keiki O Kapa'akea from the Association, support was granted.

Resident at Lot 25 had requested for Lot 26 as a mini-playground, the request was denied. Na Keiki O Kapa'akea was in agreement with DHHL decision. We the committee felt that Lot 26 was an inadequate space for our future plans for Kapa'akea.

It is now 2005 and the Department of Hawaiian Home Lands has a Moloka'I Island Plan of Land Use Options, within these plans Na Keiki O Kapa'akea has been allocated a new community park. It is now located on what is known as the "Mowat's Family Property" it sits directly behind Lot 43, 44 and 45 of Kapa'akea Loop. This property is owned by DHHL and is leased to the Mowat family.

We the committee is in full agreement of the planning (including the 204 future home's in the Ahupua'a of Kapa'akea) that has been laid out for approval, by the chairman and commissioners of The Department of Hawaiian Home Lands and their Task Force.

Attached are signatures in support of this plan which include our new community park as well as a 10 (ten) year vision plan for our future park.

Na Keiki O Kapa'akea Committee would like to thank you for your time in this matter.

Mahalo Nui Loa!



Kakai

GOVERNMENT

MAIN

ROAD

To Halawa



S E A

Note: All lots owned by Hawaiian Homes Land unless otherwise noted.

SUBJECT TO CHANGE

PLAT 03

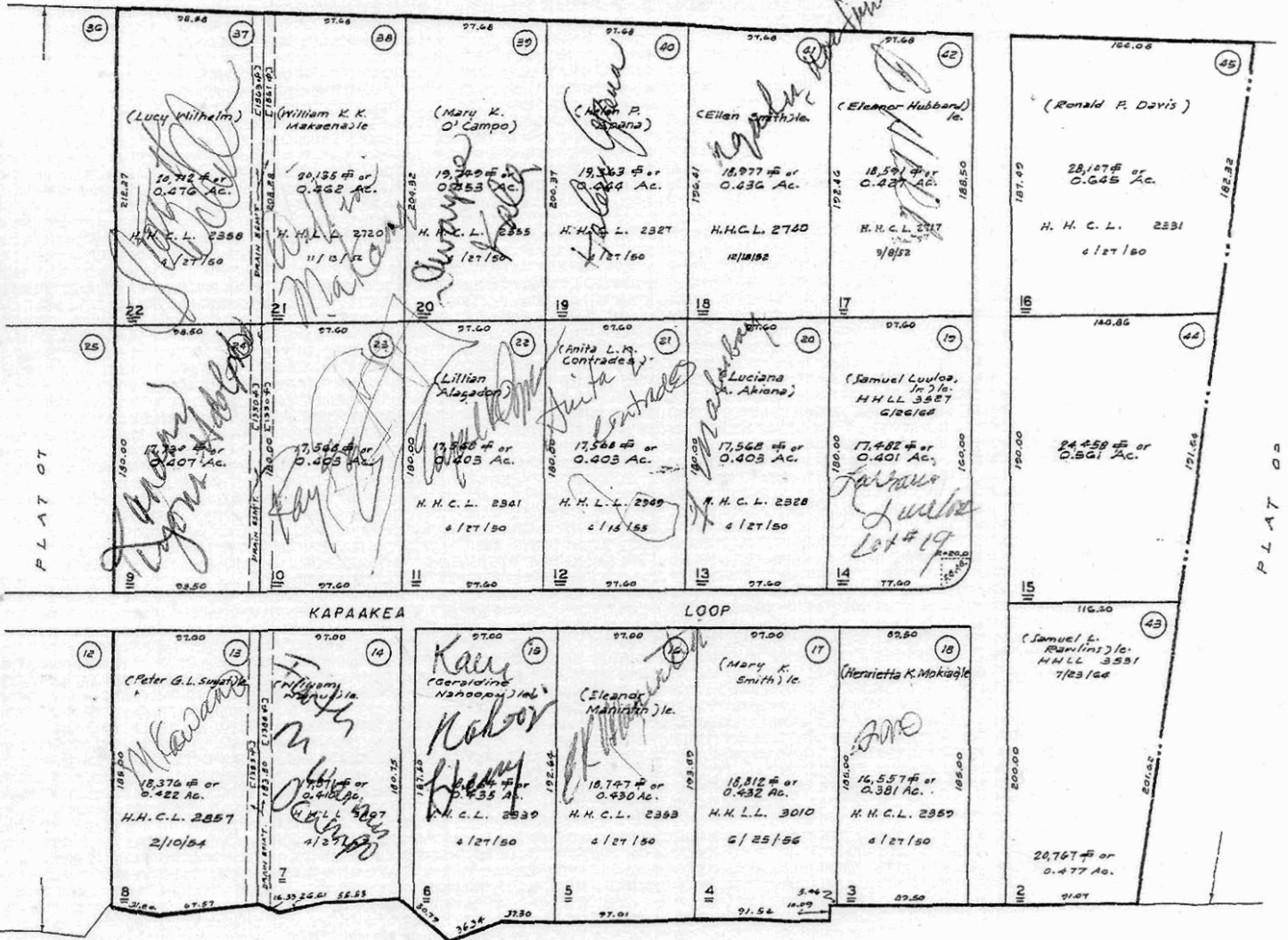
To Kaunakakai

GOVERNMENT

MAIN

ROAD

70



IOLOKAI





# KAPA'AKEA COMMUNITY FOUNDATION

---

P.O. Box 110  
Hogehua, Hawaii 96729  
(808) 553-3018

kapaakea@earthlink.net

## This is Our Vision

This is a 10 year plan of constructions of a 3-part Community Center

### 1#. Culture Park with Laau lapaau

Medicines plant

Natives use what it for

Care

Land

People

\*looking at the ANA Grant to obtain this vision with the guides and help from our Kupuna's

### 2# Playground Area -All Product will be Recycle Material

1-Large Play set w/slides

3-Toddle riders

1-handicap play set

Rest-room Boys/Girls-Small Pavilion

Drinking faucet

Bike path

Basketball Court

Fenced Around -Whole Play Area

Septic Tanks

\* We have a Donation of \$10,000

More Donations

Grants

Matching Funds-Grants

### 3# Community Center Hall

350/500 Persons Hall

Restrooms

Showers

2-Offices

1-Meeting Room

2-Classrooms

Certified Kitchen

Security Station

Parking Lot

Fenced Area

Stone Wall

Insurance

Solar System

# KAPA'AKEA COMMUNITY FOUNDATION

---

P.O.Box 110  
Hogelehua, Hawaii 96729  
(808)553-3018

kapaakeacommunityfoundation@earthlink.net

## Board Of Kapa'akea Community Foundation

### Contact Information

Doreen Gaspar Execution Director	Ph.(808)553-4497	sunnyhi@earthlink.net
-------------------------------------	------------------	-----------------------

Buster Hubbard Director	Ph.(808)553-4217
----------------------------	------------------

Georgette Kaneakua Chairman/President	Ph.(808)553-3784	laakea10@yahoo.com
--	------------------	--------------------

April Pelekane Vice President /Treasure	Ph.(808)553-3243
--	------------------

Brenda Aea 2-Vice President / Secretary	Ph.(808)553-5754
--	------------------

## A CHILD'S PRAYER

writing by : A Child Of Kapa'akea

God, make my life a little light,  
Within the world to glow  
A little flame that burneth bright  
Wherever I may go

God, make my life a little flower  
That giveth joy to all,  
Content to bloom in native bower  
Although the place be small

God, make my life a little song  
That comforted the sad  
That helpeth others to be strong  
And makes the singer glad

God, make my life a little staff  
Whereon the weak may rest  
And so what health and strength I have  
May serve my neighbors best

God, make my life a little hymn  
Of tenderness and praise  
Of faith, that never waxeth dim  
In all his wondrous ways



Francis S. Oda, AIA, AICP  
Norman G. Y. Hong, AIA  
Sheryl B. Seaman, AIA, ASID  
Hitoshi Hida, AIA  
Roy H. Nihei, AIA, CSI  
James I. Nishimoto, AIA  
Ralph E. Portmore, AICP  
Stephen H. Yuen, AIA  
Linda C. Miki, AIA

# CONFERENCE REPORT

Group 70 International, Inc. • Architecture • Planning • Interior Design • Environmental Services  
925 Bethel Street. Fifth Floor • Honolulu. Hawaii 96813-4307 • PH: (808) 523-5866 • FAX: (808) 523-5874

TO	File	FROM	Tanya Iden
DATE	August 12, 2004	PLACE	Kulana'Oiwi, Moloka'i
PROJECT	DHHL Moloka'i Island Plan		
PRESENT	Daniel Ornellas (DHHL)	George Atta (G70)	
	George Maioho (DHHL)	Kawika McKeague (G70)	
	Milton Pa (DHHL Commissioner)	Tanya Iden (G70)	
SUBJECT	SV-1 1 <sup>st</sup> Meeting		

The meeting served as an overview/information session with DHHL's Molokai District Supervisor and Commissioner.

The following general talk story points are of interest:

- Commissioner Pa was recently re-elected to another term w/ the HHC until 2008
- George Maioho is from a long time Moloka'i family. He has worked for DHHL for 5 years.
- Commissioner Pa inquired whether the Molokai Island Plan was an update to an existing plan. *Daniel Ornellas explained the new planning process developed by DHHL. He mentioned that outdated development plans do exist for some Molokai DHHL properties and they will be assessed and updated by the Island Plan.*

The following specific issue areas were discussed:

## *Subdividing - lifting the moratorium - a big issue*

- Would subdividing bypass/circumvent the waitlist? (Beneficiary's children may not be on the waitlist but they receive a subdivided lot. Is this fair?)
- If you sign on to subdivide maybe a stipulation should be no selling or conveying of your lot- the intent of allowing subdividing being to provide for your family. Should administrative rules be changed to limit transfer only to family members?
- Contingent on infrastructure capability
- Residential and farming in close proximity could create an issue- dust drift, etc.
- However it is obvious that there are 40 acre lots where no farming is taking place and thus could be better used with housing, cultivation, etc?
- Subdividing Criteria could be based on:
  - Infrastructure availability
  - Fairness (re: waitlist)
  - Plan Designations (does the subject area for subdivision fit w/ proposed land use in the plan?)

### *Agriculture*

- Molokai is coming out of a 5 year drought
- UH study says it takes 7 acres of Molokai land to sustain 1 animal (cow/horse?) without any supplemental feeding, just grazing the land.
- MAC program paid for cross fencing to rotate grazing areas but then perimeter fencing needed to be put in. George M. thought it was good, put the land in use, kept brush controlled.

### *Extending 99 Year Leases*

- Lands on Molokai were given out first in Kalamaula (approx 1924), second – Hoolehua, third- Kapaakea.
- Some of the leases only have 20 years left
- Extension of leases on a case by case situation. Beneficiaries can extend for another 99 years.
- Lease extension may be an opportunity to do some bargaining. For instance people who are not cultivating their Ag land could extend lease only if they return 30 acres to DHHL which they are not using.

### *Infrastructure*

- DHHL water system recently upgraded?
- DHHL just went in for a water rate increase.
- Some DHHL Beneficiaries are on the County water system which charges a higher rate.
- Fire code issues exist- no fire hydrants- request for permit declined?

### *Historic Preservation*

- Milton/George mentioned that the EC folks are working to figure out what land needs to be conserved.
- Moomomi Lands are DHHL and used by all as conservation area.

### *DHHL Authority and Structure*

- DHHL derives its authority from the Feds, yet is administered by the State
- Therefore, DHHL need not follow county regulations, however beneficiaries are required to follow county building codes (due to fire protection, etc.)
- The Island Plans will become ever more important because they give DHHL the “teeth” or validation to designate their own land and provide evidence that DHHL is attempting to make sound, reasonable, land use decisions.



Francis S. Oda, AIA, AICP  
Norman G. Y. Hong, AIA  
Sheryl B. Seaman, AIA, ASID  
Hitoshi Hida, AIA  
Roy H. Nihei, AIA, CSI  
James I. Nishimoto, AIA  
Ralph E. Portmore, AICP  
Stephen H. Yuen, AIA  
Linda C. Miki, AIA

# CONFERENCE REPORT

Group 70 International, Inc. • Architecture • Planning • Interior Design • Environmental Services  
925 Bethel Street, Fifth Floor • Honolulu, Hawaii 96813-4307 • PH: (808) 523-5866 • FAX: (808) 523-5874

TO	File	FROM	Tanya Iden
DATE	August 12, 2004	PLACE	Kulana‘Oiwī, Moloka‘i
PROJECT	DHHL Moloka‘i Island Plan		
PRESENT	Daniel Ornellas (DHHL)	George Atta (G70)	
	George Maioho (DHHL)	Kawika McKeague (G70)	
	Milton Pa (DHHL Commissioner)	Tanya Iden (G70)	
	Wayde Lee (Alu Like)		
SUBJECT	SV-1 2 <sup>nd</sup> Meeting		

The meeting served as an opportunity to introduce the Molokai Island Plan and the project team to Wayde Lee.

Daniel described DHHL’s department wide planning system, the objective of the Molokai Island Plan, the schedule and process for the Molokai Island Plan and his desire to change the Administrative Rules to make the DHHL Island Plans a regulatory document. He then opened the discussion up for talk story.

The following specific issue areas were discussed:

## *Solid Waste*

- Dumping takes place on Homestead lands but is a “non-homestead” use.
- Recycling business activities would be good to have with in homestead communities
- No incentive for recycling on Molokai at the moment but some contracts are starting up with green waste included too.
- It is very expensive to get a crusher/shredder to the Island, cost prohibitive.
- Landfill is currently on Molokai Ranch land. It is slowly becoming a mound but more cells are supposedly being added.

## *Water*

- Hard to determine how much water is available on Molokai
- USGS monitoring well went in 2002- not enough longitudinal data to determine water quantity. Preliminary study only says so much?
- Speculation that there may only be one aquifer- nothing concrete.
- Discussion of Kulana‘oiwi building and whether it is “illegal” because Board of Water Supply didn’t allocate water for building?
- Water source, transmission, etc underlies all Molokai development.
- Some discussion about the water suit, DHHL won water rights, DHHL had a lot of parties on their side. Alan Morikami of the Native Legal Fund would be good to talk to.
- Daniel mentioned that one chapter of the Background Study will be about water- documenting all cases, decisions, testimony.



### *DHHL on Molokai*

- Wayde Lee suggested that DHHL broaden its Molokai staff.
- George M. discussed how Molokai has the highest delinquency rate of any Island. Over 50% of households delinquent. Need one staff person just to follow up on delinquencies.
- Current Molokai staff consists of: George Maioho, office clerk, homestead assistant, 3 staff for water system, 1 equipment operator, and 2 parks? (can't read my own writing.)
- Wayde Lee discussed how important it is that any project on Homestead land hire Hawaiians. Homesteaders need to work on homestead land. Build the Pride! Helps to rehabilitate the people.

### *Historic Preservation/Conservation*

- Brief conversation about what has been done to identify cultural resources – both tangible/intangible
- Wayde mentioned a professor who comes with students every year from New Zealand... something like Weizer is his name?

### *Kalaupapa*

- Kuulei Bell- Post Mistress could sponsor us on a trip down to Kalaupapa
- George M. mentions that the NPS does everything first class, their renovation is awesome, good job.
- 22 patients are left at Kalaupapa
- DOH maintains patients yards and houses
- Richard Marx is a good tour guide in Kalaupapa
- After patients pass away preservation of their items and house is carried out. Some of land may be given to patient's family
- George Atta suggested that Hawaiians could run a tour program in Kalaupapa eventually and maybe work to renovate the houses. Could be small scale, tourism and income generation for Hawaiian Home Lands.
- Wayde Lee thinks that a for profit food wagon or some such thing at the top (on the way to the look-out) would be good. Money generated could go to Hawaiian non-profit that "gives back" to native Hawaiians.

### *Wayde's Program*

- Stemmed from the fact that there is ZERO tolerance in schools for drug use. If kid is caught it is an automatic 90 day suspension. This is not good. There is no rehabilitation.
- Molokai has no outpatient facilities for drug problems and not big enough numbers for residential. Wayde's program bridges the gap and is new for rural areas.
- A lot of homestead kids are impacted by drugs.
- The program has County support, DOH has not given any monetary support, they would like DHHL support.
- They have a grant to support a Native practitioner using plants, etc. for medicine
- Also have worked on a reforestation initiative to plant 500 Wiliwili trees with the Nature Conservancy. It has taken 6 years – called Pu'uluwahine. They worked w/ Eddie Misaki at the Nature Conservancy.

### *Park/Recreation Area*

- Some folks desire a new ball field across from the site where new Community Center went in near old park/ball field
- Ball field fence along road could be too ugly.
- Open park may be better with some pavilions, bbq grill, park benches/tables, play ground equipment, plant some trees.

### *Maui County Electrical Inspeccion*

- Maui County has a new ordinance which outlines that DHHL exempt from electrical requirements therefore county electrical inspector need not inspect DHHL homes/buildings.
- This is not something DHHL lobbied for and Wayne was concerned because he wants to be "legal."
- He mentioned that electrical inspector reviewed his building out of courtesy.



Francis S. Oda, AIA, AICP  
Norman G. Y. Hong, AIA  
Sheryl B. Seaman, AIA, ASID  
Hitoshi Hida, AIA  
Roy H. Nihei, AIA, CSI  
James I. Nishimoto, AIA  
Ralph E. Portmore, AICP  
Stephen H. Yuen, AIA  
Linda C. Miki, AIA

# CONFERENCE REPORT

Group 70 International, Inc. • Architecture • Planning • Interior Design • Environmental Services  
925 Bethel Street. Fifth Floor • Honolulu. Hawaii 96813-4307 • PH: (808) 523-5866 • FAX: (808) 523-5874

TO	File	FROM	Tanya Iden
DATE	August 12, 2004	PLACE	Kulana‘Oiwī, Moloka‘i
PROJECT	DHHL Moloka‘i Island Plan		
PRESENT	Daniel Ornellas (DHHL)	George Atta (G70)	
	George Maioho (DHHL)	Kawika McKeague (G70)	
	Milton Pa (DHHL Commissioner)	Tanya Iden (G70)	
	William Akutagawa (Na Pu‘uwai)		
SUBJECT	SV-1 3 <sup>rd</sup> Meeting		

The meeting served as an opportunity to introduce the Molokai Island Plan and the project team to William Akutagawa.

Daniel described DHHL’s department wide planning system, the objective of the Molokai Island Plan, and the schedule and process for the Molokai Island Plan. He then inquired about the work Na Pu‘uwai is doing.

## *Na Pu‘uwai*

- Federally funded program dealing with health issues. Budget is from \$800,000 to 1.2 mill.
- Cost sharing allows agency to get more federal funding. (Kulana‘oiwi is an example of cost sharing opportunity.)
- Na Pu‘uwai also responsible for Lanai & Kaluapapa.
- Following areas/issues have been studied:
  - Cardiovascular disease
  - Diet study found that if native Hawaiians went back to their original diet they would not have so many health issues.
  - Fitness
  - Hearing loss
  - Kupuna issues- depression
- Based on findings in Diet Study they started a Diet Program
  - Bought Native Food- Fish, Taro, Sweet Potato, etc.
  - Packed lunches but ran into permitting issue because not commercial kitchen, etc. Gave up the program.
- Kupuna Program hired a local clinical psychologist who is paying back federal grant by working in underserved communities.
- Ag. Extension worked with Na Pu‘uwai to do gardening workshops with cancer patients.
- Hawaiian’s health is an issue because of lifestyle change.

The following general talk story points are of interest:

- Kulana‘Oiwī is an experiment in what could and should exist in all homestead communities.
- Economics forces families to live together- they support one another but it also creates stress. Kau Hale was discussed as a solution – cluster of houses.

The meeting was rather short. Many appointments consecutively did not allow for much time. Perhaps we should talk w/ Mr. Akutagawa again.



Francis S. Oda, AIA, AICP  
Norman G. Y. Hong, AIA  
Sheryl B. Seaman, AIA, ASID  
Hitoshi Hida, AIA  
Roy H. Nihei, AIA, CSI  
James I. Nishimoto, AIA  
Ralph E. Portmore, AICP  
Stephen H. Yuen, AIA  
Linda C. Miki, AIA

# CONFERENCE REPORT

Group 70 International, Inc. • Architecture • Planning • Interior Design • Environmental Services  
925 Bethel Street. Fifth Floor • Honolulu. Hawaii 96813-4307 • PH: (808) 523-5866 • FAX: (808) 523-5874

TO	File	FROM	Tanya Iden
DATE	August 12, 2004	PLACE	Kulana‘Oiwī, Moloka‘i
PROJECT	DHHL Moloka‘i Island Plan		
PRESENT	Daniel Ornellas (DHHL)	George Atta (G70)	
	George Maioho (DHHL)	Kawika McKeague (G70)	
	Milton Pa (DHHL Commissioner)	Tanya Iden (G70)	
	Glenn Teves (Ag. Extension)	Kali Arce (Ag. Extension)	
	Alton Arakaki (Ag. Extension)		
SUBJECT	SV-1 4 <sup>th</sup> Meeting		

The meeting served as an opportunity to introduce the Molokai Island Plan and the project team to the folks from UH’s Agricultural Extension Program.

Daniel described DHHL’s department wide planning system, the objective of the Molokai Island Plan, and the schedule and process for the Molokai Island Plan. Talk story commenced.

The following general talk story points are of interest:

- Most Hoolehua lots are 5 acre residential with 35 acre agricultural attached.
- Some Hoolehua lots are considered “detached” lots because 35 acre agricultural lot not connected to residential lot down in Kalamaula.
- MIS = Multi-Irrigation System
- 2000 agricultural acres are presently served by MIS water.

The following specific issue areas were discussed:

## *Ahupua‘a*

- Link between mountains and ocean not there anymore.
- Fish Pond vs. Cattle rather than complementary resources.
- Division between Hoolehua and “town folks” near Kaunakakai. Perception exists that Hoolehua more independent whereas Kalamaula more “city type” homesteads.

## *Subdivision of Homestead Awards*

- When denser housing is mixed in with Ag lands it creates problems.
- Area by the high school would be better place to consolidate smaller, more urban lots. This would relieve the pressure of chopping up land in Prime agricultural area.
- Li‘i Pali (?) area was suggested as site that could be “densified” by subdivision.
- Glenn Teves thinks subdivision of lots should serve:
  - 1) Those homesteaders who were awarded accelerated lots in 85 and have been unable to use award.
  - 2) The waiting list

- 3) Resource allocation- is resources/infrastructure available to chop up the lot?
- Glenn also thinks 35 acre agricultural lots should be left in tact. The 5 acre residential lots could be divided – maybe only into 3 lots and Glen also suggests they add a provision that one of the lots must go back to DHHL into the pool of available residential lots.
- Glen suggests tying DHHL’s Farm Plan requirement to subdivision. Specifically, homesteaders should not be able to subdivide their 5 acre lot unless they have a farm plan for their 35 acre lot.
- Concern that subdivision and giving of lots to family members is a way to circumvent the very large applicant waiting list.
- Equitability is very important.
- Any subdividing should be phased in.
- Desire to subdivide is motivated/driven by residential needs but what about the AG land. Agricultural land is so important.

#### *Agriculture/Farming on Molokai*

- Glenn mentions that in Hoolehua less than 5% of land is being farmed.
- DHHL land is the best ag land
- Glenn suggests and Ag Resource Division be created in DHHL to assist with equipment subsidy, grants and loans, and farming education.
- Alton Arakaki contends that agriculture can sustain Island community and further points out that:
  - Private land owners turn land into a commodity
  - Hawaiian Homes plays a key role by preserving the integrity of large acres of agricultural land.
  - Cost of production on DHHL’s large agricultural acres could be reduced by “building scale” into farms.
- Agriculture Task Force suggested:
  - Take back unused homestead agricultural land and place it in a land pool.
  - Allow homesteaders to use the land in the pool as collateral to borrow money to farm.
  - Land in the pool could be farmed under general lease agreement.

#### *UH Agricultural Extension*

- Alton discussed that UH is a land grant institution which requires that it have research, instruction, and extension components. Ag. Extension based on land grant status of UH.
- Extension agents have been working w/ DHHL for a long time.
- 75% of Ag. Extension clientele are Hawaiian
- Ag. Extension received a \$300,000 grant from USDA to set up model farms.
- There is talk of linking Molokai’s Community College to UH

The meeting was rather short. Many appointments consecutively did not allow for much time. Perhaps we should talk w/ Ag. Extension again.

Additionally, Glenn Teves provided the group with a draft of his “*White Paper on Sub-dividing Land for Housing in Hoolehua.*” It is attached.





Francis S. Oda, AIA, AICP  
Norman G. Y. Hong, AIA  
Sheryl B. Seaman, AIA, ASID  
Hitoshi Hida, AIA  
Roy H. Nihei, AIA, CSI  
James I. Nishimoto, AIA  
Ralph E. Portmore, AICP  
Stephen H. Yuen, AIA  
Linda C. Miki, AIA

# CONFERENCE REPORT

Group 70 International, Inc. • Architecture • Planning • Interior Design • Environmental Services  
925 Bethel Street. Fifth Floor • Honolulu. Hawaii 96813-4307 • PH: (808) 523-5866 • FAX: (808) 523-5874

TO	File	FROM	Tanya Iden
DATE	August 12, 2004	PLACE	Kulana‘Oiwi, Moloka‘i
PROJECT	DHHL Moloka‘i Island Plan		
PRESENT	Daniel Ornellas (DHHL)	George Atta (G70)	
	George Maioho (DHHL)	Kawika McKeague (G70)	
	Milton Pa (DHHL Commissioner)	Tanya Iden (G70)	
	Winona Kaawa	Kaawa Friend (name)	
	Kaawa Daughter (name)	Kaawa Friend (name)	
SUBJECT	SV-1 5 <sup>th</sup> Meeting		

Winona Kaawa brought in an ONO lunch for all to share: Salad, chicken casserole, rice, drinks, and jello dessert. Delicious. After eating...

The meeting served as an opportunity to introduce the Molokai Island Plan and the project team to the folks interested in subdividing their lots and to hear concerns of those who want to subdivide.

Daniel described DHHL's department wide planning system, the objective of the Molokai Island Plan, and the schedule and process for the Molokai Island Plan. Talk story commenced.

The following specific issue areas were discussed:

## *Ohana Subdivision*

- Winona's group would like to be treated separately regarding the moratorium on subdividing. Specifically, they want to be considered the "*Ohana Subdivision*."
- They want to subdivide only so that they can give to their kids.
- They are amenable to keeping agricultural land in tact and just dividing a portion. For instance keeping 2/3 in agriculture.
- They feel that selling subdivided land off is not good.
- They are not farming because of: Age, financing, equipment
- Winona provided a map highlighting the lots where people are interested in subdividing
- Group was formed because Winona put an ad in the newspaper for many months and people responded to her ad.

## *Subdividing Options*

- Undivided interest- where lot isn't actually pieced apart but rather family member can be listed on the lease as having an undivided interest.
  - Joint Tenants in common- again name family member on lease
  - Name all children as successors
- (not sure I really understand the difference between all of these.)

### *Infrastructure*

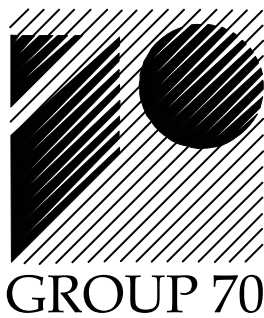
- Infrastructure is an issue when subdivided lots are scattered all around.
- In general, members of the group do not want to move into another lot to create a cluster of smaller lots.

### *Commercial Use*

- Area should be designated for commercial use
- 10 acre parcel at Oloolo St. would be good for industrial (but near wetlands/conservation)
- Kalamaula Motors is an example of a commercial business on homestead land – is this allowed?

The following general talk story points are of interest:

- A park would be ideal at Rec Ctr. Location
- Winona would like to set up another separate meeting during our next site visit.
- The project team would still like assistance in understanding what size of lots and how many lots are desired - basically what format?
- George Maioho mention something about 124 new lots and 54 new lots being built?



INTERNATIONAL

Francis S. Oda, AIA, AICP  
Norman G. Y. Hong, AIA  
Sheryl B. Seaman, AIA, ASID  
Hitoshi Hida, AIA  
Roy H. Nihei, AIA, CSI  
James I. Nishimoto, AIA  
Ralph E. Portmore, AICP  
Stephen H. Yuen, AIA  
Linda C. Miki, AIA

# CONFERENCE REPORT

Group 70 International, Inc. • Architecture • Planning • Interior Design • Environmental Services  
925 Bethel Street. Fifth Floor • Honolulu. Hawaii 96813-4307 • PH: (808) 523-5866 • FAX: (808) 523-5874

TO	File	FROM	Tanya Iden
DATE	August 12, 2004	PLACE	Molokai Community Service Council Office Building
PROJECT	DHHL Moloka'i Island Plan		
PRESENT	Daniel Ornellas (DHHL)	George Atta (G70)	
	George Maioho (DHHL)	Kawika McKeague (G70)	
	Milton Pa (DHHL Commissioner)	Tanya Iden (G70)	
	Karen Holt (Molokai Community Service Council )		
SUBJECT	SV-1 6 <sup>th</sup> Meeting		

The meeting served as an opportunity to introduce the Molokai Island Plan and the project team to Former DHHL Molokai Commissioner Karen Holt.

Daniel described DHHL's department wide planning system, the objective of the Molokai Island Plan, and the schedule and process for the Molokai Island Plan. Talk story commenced.

The following specific issue areas were discussed:

## *Waitlist*

- Folks already on the land have different interests than those on the waitlist - 10,000 on the land vs. 20,000 not on the land.
- DHHL can only easily access 1/3 of their constituency Subdividing doesn't necessarily address the dept's challenge of how do we find lots for 20,000 people on the waitlist
- How do you serve and communicate with those other 20,000 people who await awards?
- Still – no one has really figured out how to address that waiting list.

## *Agriculture/Farming on Molokai*

- Be mindful – if you urbanize the ag land goes away.
- Ag Task Force came up with a good map of where to go, but nothing has been done in the 4 years since task force. Ag Supervisor was to be hired. Ag Task Force looked at:
  - Can Farming Work?
  - What are the constraints?
- Ag land is currently not well-used. 60-70 % of the produce we eat comes from the mainland. Ag land could be better used with:
  - Value added products to compete in the Global marketplace
  - Improved shipment
  - Better facilities
- DHHL Ag land is productive – look to the Larry Jeffs Watermelon story (he also had the business acumen.)

- Karen shares the story about how homestead farmers used to be the “rich guys” but then forced off the land by the big pineapple growers. Karen contends that big Ag has controlled DHHL since the beginning.
- Karen shares another story about how Molokai saved the DHHL program in the 1920s. Prince Kuhio wanted to show that Hawaiians could make the land productive if it was given to them. Molokai farming failed at first then tough Maui farmers came over, practicing old traditions, rain came and farms flourished. Federal Government came out to check on success of the program and Molokai’s efforts saved the entire program from federal government shut down.

The following general talk story points are of interest:

- DHHL and the notion of leasehold. Karen contends that because land is leasehold homesteaders can’t really do what they want, but it also means that the land is then more like a trust or ahupua’a.
- Urged project team to think the whole picture- what will happen 20 miles down the road because of our decisions today. Think way long term.
- Discussed water and the short easement that crosses DHHL lands – Karen thinks that if Molokai Ranch wants to put 30,000 people out on the west end and they need the water easement- Hawaiian Homes should broker/bargain. Molokai Ranch owes Hawaiians for the water.
- Waiwai = water in Hawaiian but also wealth.



Francis S. Oda, AIA, AICP  
Norman G. Y. Hong, AIA  
Sheryl B. Seaman, AIA, ASID  
Hitoshi Hida, AIA  
Roy H. Nihei, AIA, CSI  
James I. Nishimoto, AIA  
Ralph E. Portmore, AICP  
Stephen H. Yuen, AIA  
Linda C. Miki, AIA

# CONFERENCE REPORT

Group 70 International, Inc. • Architecture • Planning • Interior Design • Environmental Services  
925 Bethel Street. Fifth Floor • Honolulu. Hawaii 96813-4307 • PH: (808) 523-5866 • FAX: (808) 523-5874

TO	File	FROM	Tanya Iden
DATE	August 12, 2004	PLACE	USDA Office
PROJECT	DHHL Moloka'i Island Plan		
PRESENT	Daniel Ornellas (DHHL)	Darrell Yagodich (DHHL)	
	George Maioho (DHHL)	Kawika McKeague (G70)	
	Milton Pa (DHHL Commissioner)	Tanya Iden (G70)	
	Irene Lam (USDA )	George Atta (G70)	
SUBJECT	SV-1 7 <sup>th</sup> Meeting		

The meeting served as an opportunity to introduce the Molokai Island Plan and the project team to Community Development Manager for the USDA, Irene Lam.

Daniel described DHHL's department wide planning system, the objective of the Molokai Island Plan, and the schedule and process for the Molokai Island Plan. Talk story commenced.

The following specific issue areas were discussed:

## *USDA Grants/Funds/Etc.*

- USDA manages 40 different types of lending grants
- In Molokai "community development" dollars are the bulk of what is given because of the EC/EZ (Enterprise Community/Zone) which is a USDA program.
- USDA will try to sustain the Enterprise Community after the 10 year grant is over. Looking at ways for the EC to generate revenue. May look to Conservation Fund.
- Some barriers for USDA- they have plenty funding but often not enough qualified applicants for the funding. Specifically, there is a "lack of repayment ability."
- DHHL could help beneficiaries to "qualify" for USDA home loans. Credit/Business counseling
- USDA has loans for home maintenance. Many houses on Molokai in bad shape and need help.
- USDA cannot finance anything on Ag lot over 3 acres because then the Ag lot seen as "income generating."
- USDA can finance condominium development
- USDA supports approximately 300 loans on the Island. This is a decrease from previous years.
- They can provide funding to Habitat for Humanity/Self-Help homes.
- USDA has a "community facilities program" as well as a "business enterprise program" which makes funds available to commercial ventures to make sites ready for commerce.

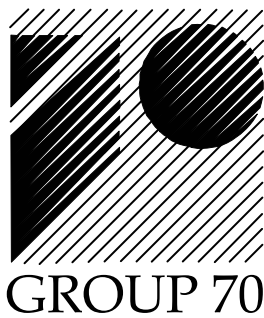
### *Molokai Ranch Planning Process*

- Molokai Ranch's use of the land affects all of Molokai
- Conservation Fund is working with the community to develop resolution over land use.
- Irene describes the process as being "tremendous" and "historic"
- Irene credits Peter Nicholas from the ranch with a lot. He has worked hard to build the trust.
- A product of the planning process is that Molokai Ranch is looking at creating a Public Land Trust that would 1) preserve access, 2) give the land up for community purposes, 3) respect Native Hawaiian gathering rights.

### *Water*

- Current water system needs repair. Need funding to fix it
- Can't truly determine current capacity
- Molokai ranch would like to put a 14" pipe through the easement which would change out the existing 6" pipe. People are suspicious.
- Ranch would have a schematic/drawing of the water system
- ~~Waialeale site the best for water? Not sure what I meant here?~~





INTERNATIONAL

Francis S. Oda, AIA, AICP  
Norman G. Y. Hong, AIA  
Sheryl B. Seaman, AIA, ASID  
Hitoshi Hida, AIA  
Roy H. Nihei, AIA, CSI  
James I. Nishimoto, AIA  
Ralph E. Portmore, AICP  
Stephen H. Yuen, AIA  
Linda C. Miki, AIA

# CONFERENCE REPORT

Group 70 International, Inc. • Architecture • Planning • Interior Design • Environmental Services  
925 Bethel Street. Fifth Floor • Honolulu. Hawaii 96813-4307 • PH: (808) 523-5866 • FAX: (808) 523-5874

TO	File	FROM	Tanya Iden
DATE	August 12, 2004	PLACE	Molokai Chamber of Commerce
PROJECT	DHHL Moloka'i Island Plan		
PRESENT	Daniel Ornellas (DHHL)	George Atta (G70)	
	George Maioho (DHHL)	Kawika McKeague (G70)	
	Milton Pa (DHHL Commissioner)	Tanya Iden (G70)	
	Darrell Yagodich (DHHL)	Barbara Haliniak (Chamber)	
		Barbara Nakamura (Chamber)	
SUBJECT	SV-1 8 <sup>th</sup> Meeting		

The meeting served as an opportunity to introduce the Molokai Island Plan and the project team to the Molokai Chamber of Commerce. Former Commissioner Nani Brandt suggested to Darrell that we meet with the Chamber..

Daniel described DHHL's department wide planning system, the objective of the Molokai Island Plan, and the schedule and process for the Molokai Island Plan. Talk story commenced.

The following specific issue areas were discussed:

## *Chamber's Activities*

- Host events such as the 2<sup>nd</sup> Annual Food and Business Expo which featured Molokai products and was supported with funding from the Maui County Office of Economic Development and corporate sponsors.
- August 31, 2004 Senator Inouye will be in town working with the Chamber and Col. Taurus to market Molokai goods to the military. Sell Molokai goods at Hickam.
- Want to work to create opportunities for people to start businesses but there are many barriers. Such as:
  - People need technical assistance on how to apply for loans, walk them through the paperwork, explain the process, etc.
  - Commercial space is unavailable or too expensive.

## *Other ideas/recommendations:*

- There is more to farming than farming- need to have a Business Assistance Center.
- SCOR = retirees mentoring – good program
- Ryan Lau is a person to talk to about small business networking?
- Maui Tech Park – Women in technology w/ a focus on youth
- Prime commercial location would be next to Kulana'oiwi

- Culture and Arts Center should be built on Hawaiian Home Lands – multi-use facility for conventions and performing arts.
- Tourism- We'd like our fair share but mostly want to keep economy based on agriculture. Tourism must be friendly to the environment.
- DHHL should build on what they already have- Agricultural land- Help homesteaders to be successful.
- Farm Bureau of a long time ago used to give start up assistance to farmers – this was a good program.
- Storage Facility/ warehouse needed on the island

Barbara Nakamura provided written comments, as well. They are attached.



Francis S. Oda, AIA, AICP  
Norman G. Y. Hong, AIA  
Sheryl B. Seaman, AIA, ASID  
Hitoshi Hida, AIA  
Roy H. Nihei, AIA, CSI  
James I. Nishimoto, AIA  
Ralph E. Portmore, AICP  
Stephen H. Yuen, AIA  
Linda C. Miki, AIA

# CONFERENCE REPORT

Group 70 International, Inc. • Architecture • Planning • Interior Design • Environmental Services  
925 Bethel Street. Fifth Floor • Honolulu. Hawaii 96813-4307 • PH: (808) 523-5866 • FAX: (808) 523-5874

TO	File	FROM	Tanya Iden
DATE	August 13, 2004	PLACE	Kulana'oiwi
PROJECT	DHHL Moloka'i Island Plan		
PRESENT	Daniel Ornellas (DHHL)	George Atta (G70)	
	George Maioho (DHHL)	Kawika McKeague (G70)	
	Milton Pa (DHHL Commissioner)	Tanya Iden (G70)	
	Darrell Yagodich (DHHL)		
	Colette Machado (OHA)	Stacy Crivello (EC)	
	Davianna McGregor (UH)	Peter Nicholas (Molokai Ranch)	
SUBJECT	SV-1 (Day 2) 10 <sup>th</sup> Meeting		

The meeting served as an opportunity to introduce the Molokai Island Plan and the project team to the folks who have been active with Molokai Ranch's Planning Process. OHA Trustee Colette Machado helped pull together the meeting.

Daniel described DHHL's department wide planning system, the objective of the Molokai Island Plan, and the schedule and process for the Molokai Island Plan. Talk story commenced.

Colette briefly described the intensive planning effort taking place on the island with Molokai Ranch and the Conservation Fund. Colette expressed her dismay that DHHL has been absent from that planning process. She mentioned how Molokai is a small island and there have been rumors that those working with the ranch to plan the ranch's land have been "bought off." Lastly, Colette informed the group that she has 4 more years as an OHA trustee and would like to work with DHHL to get things done. After 22 years on the wait list she is a homesteader. She always has Native Hawaiian interests in mind.

Davianna expressed her opinion that DHHL has historically had a very narrow interpretation of the Hawaiian Homes Commission Act, which has simply been to "get people on the land." She wondered if the Dept. is willing to take a broader approach. Daniel discussed the DHHL General Plan as an effort to outline a broader approach.

Peter discussed how impressed he is by the Molokai community. They work so hard! He thinks that the DHHL planning process does not have enough community meetings- DHHL not coming to the Island enough. He shared that he has learned how critical it is to listen to the last moment. You can't listen enough. Surveys are good but you need to talk to everyone.

Stacy Crivello briefly outlined the EC. Enterprise community works as an economic engine by attempting to develop economic opportunities on the island. She also discussed specific issues that DHHL could help to address, such as irrigation water and housing.

The following specific issue areas were discussed:

*Subsistence:*

- August 26, 2004 will be the first community meeting hosted by Molokai Ranch to specifically address the issue of Subsistence Hunting, Gathering, and Fishing. The subsistence working group will present their findings to the community at large.
- Molokai Ranch may give 26,000 acres of land to the community in trust. This land would be adjacent to DHHL Hoolehua land. Subsistence hunting and gathering should be managed together.

*Water:*

- Stacy Crivello mentioned that the MIS has problems serving all homesteaders.
- DHHL needs to address disrepair of MIS
- Stacy suggested we talk to Micah Kane to release approx. \$2mill to fix the MIS reservoir
- Stacy expressed concern about the fact that no one is certain how much water Molokai has- she also mentioned something about how meters don't work

*Agriculture:*

- Stacy expressed concern that Ag land will disappear if farmers are not supported and irrigation system is not improved.
- Davianna suggested that DHHL work with homesteaders to help them farm.
- Master Ag Plan was mentioned, aka- Agricultural Task Force Report

*Cultural Resources:*

- Colette discussed how the working group she has been chairing for the Molokai Ranch Planning effort has been assessing/ cataloguing cultural features on Molokai. She mentioned that there are many sites in **Naiwa (sp?)** which have not be "GPS'd" or identified.

*Ualapue Lands:*

- Colette mentioned that this land is a real opportunity for the Department. It is essentially an intact ahupua'a. Property in Ualapue is getting very expensive. It is a high rainfall, desirable area
- Colette suggested that no more than 200-300 houses be put on the land.
- Colette mentioned a gentleman Raymond **Nakee (sp?)** who has an active group in Ualapue
- Any Ualapue development must take into account a variety of factors, such as:
  - lifestyle,
  - roads,
  - schools (speculated to be the biggest issue.0

*Housing:*

- Peter thought there may be an opportunity to partner w/ DHHL to provide affordable housing for Native Hawaiians.
- Stacy mentioned how Hawaiians are not prepared well for home ownership; she cited that there were 8 self help homesteads offered recently and only 4 people qualified.
- She suggested creating a community based development group in partnership that could provide home ownership/financial counseling education.
- Stacy suggested using homestead land to offer "our people" other options, rather than just housing. Need to develop some sort of plan to work towards helping Native Hawaiians

*Kalaupapa*

- Shannon Crivello is a good contact as well as Kuulei Bell
- Kalaupapa Ohana is a more vibrant/active group vice the Patients Council
- Gloria Marx is head of Patients Council
- Do not go through DOH to Kalaupapa.

*Other:*

- Meet with young people and Kupuna.
- Engage Homestead Presidents to lead
- Resource Protection crucial
- Random sample is better for Survey



Francis S. Oda, AIA, AICP  
 Norman G. Y. Hong, AIA  
 Sheryl B. Seaman, AIA, ASID  
 Hitoshi Hida, AIA  
 Roy H. Nihei, AIA, CSI  
 James I. Nishimoto, AIA  
 Ralph E. Portmore, AICP  
 Stephen H. Yuen, AIA  
 Linda C. Miki, AIA

# CONFERENCE REPORT

Group 70 International, Inc. • Architecture • Planning • Interior Design • Environmental Services  
 925 Bethel Street. Fifth Floor • Honolulu. Hawaii 96813-4307 • PH: (808) 523-5866 • FAX: (808) 523-5874

TO	File	FROM	Tanya Iden
DATE	August 12, 2004	PLACE	Kulana‘Oiwī
PROJECT	DHHL Moloka‘i Island Plan		
PRESENT	Daniel Ornellas (DHHL)	George Atta (G70)	
	George Maioho (DHHL)	Kawika McKeague (G70)	
	Milton Pa (DHHL Commissioner)	Tanya Iden (G70)	
	Darrell Yagodich (DHHL)		
	Kammy Purdy	Leilani Wallace	
	Molokai Ahupua‘a President	Kapaakea Hmstd Assoc.	
	Kanani Regrick	Lorraine Luuloa	
	Kalamaula Mauka Hmstd Assoc.	Kapaakea Hmstd Assoc.	
	Zachary Helm	Kyno Ravelo	
	Kalamuala Hmstd Assoc.	Kalamaula Mauka Hmstd Assoc.	
	Vivian "Vannie" Ainoa	Kaimikaua Puaoi-Dawson	
	Kamiloloa-One Alii Hmstd Assn	Student	
	Coreen Gaspar	Loraine Puaoi-Dawson	
	Kapaakea Hmstd Assoc.	Student	
Dwayne Kala	Bill Kapuni		
Kapaakea Hmstd Assoc.	Kalamaula Mauka Hmstd Assoc		
Ochie Bush	Duane Mikaele Dawson		
Hoolehua Homestead Assoc.	Hoolehua Homestead Assoc		
SUBJECT	SV-1 9 <sup>th</sup> Meeting		

The meeting served as an opportunity to introduce the Molokai Island Plan and the project team to the various Homestead Associations and to learn from them what are the concerns and issues they have as DHHL beneficiaries.

Daniel described DHHL's department wide planning system, the objective of the Molokai Island Plan, and the schedule and process for the Molokai Island Plan. Talk story commenced. The following specific areas were discussed:

## Water

- Two different systems service the homesteaders. Homesteaders should be put under one domestic system or at least get charged the same low price. County charges more.
- Residential Homesteaders understand MIS is for agricultural use. They are concerned however, that private companies are getting a break on water.
- DHHL would like to raise water prices to have similar pricing to the County water system.
- Homesteaders want DHHL to negotiate with the County for cheaper water rates.
- It costs DHHL \$3.40/1000 gallons to deliver the water yet they only charge \$.50/1000 gallons to users. OTH (other than homesteaders) users also get a reduced rate, therefore DHHL loses money on the water they sell to non-homestead consumers too.



### *Subdividing Lots*

- Homesteaders thought if subdividing occurs the lots created should be no less than 5 acres, therefore MIS could still irrigate. 35 acre lot would become seven 5-acre lots
- 5 acres give enough space for- farming, horse, etc. The group conveyed that most homesteaders to a bit of farming to sustain/supplement the family food. Discussion of fruit trees being easiest to raise, farming is hard labor. Vannie suggested that DHHL doesn't need to "push" farming – eventually it will happen.
- There are already some issues between those who farm/raise animals in Hoolehua and those who have residential lots. Complaints of the pig stink.
- With the opening of the slaughter house people may obtain even more animals – so the conflict could increase.
- Ohana Zoning or Undivided interest could be another way to deal w/ subdividing. Either way would be workable.
- However, county rules may create issue for Ohana Zoning – they don't allow it.
- Question arose whether people could get their own mortgage w/ Ohana Zoning?
- Kapaakea residential folks want to build Ohana units on their ½acre lots too.
- New residential lots in Hoolehua are only about 10,000 sf therefore not good for Ohana/dividing.

### *Commercial/Industrial Space*

- Homesteaders want DHHL to develop commercial land
- Many mentioned a specific need for industrial park or warehouse space to store equipment, etc.
- Backyard Carnation grower who wants to sell flowers out of his garage and he was told by DHHL that he cannot. *Daniel clarified that DHHL beneficiaries are cannot partake in commercial activities that "constitute a nuisance" on their homestead property. There is room for interpretation.*
- The group listed some areas that would be good commercial locations:
  - OloOlo St.
  - Near post office in Hoolehua
  - Near new slaughter house

Each Homestead Association listed their specific concerns:

### *Kapaakea*

- There is a problem with Kapaakea Loop Rd- a new water line went in and only half of the road was repaved. Everyone is blaming everyone else...county fault, contractor fault, etc. It just needs to be fixed.
- Stream rehabilitation is important to Homesteaders in this area because the stream is flooding. Flooding is exacerbated when the water reaches the ocean and waves/tide push it back up the overflowing canal. There is some speculation that the flooding could be because of upstream landowners (Bird Sanctuary) who diverted/ worked on the drainage channel.
- Park/Playground for kids is desperately needed. Currently children play in the road and homesteaders feel it is very unsafe. The Kaunakakai school or the cemetery is the closest place for kids to play. Homesteaders want one of the vacant lots dedicated as a park. The neighborhood used to have a park but it was not maintained so DHHL took it away.
- Kapaakea also thinks community centers for each homestead community are a good idea.
- "Create communities not ghettos" was one person's comment.

### *Kalamaula Mauka & Makai*

- Flooding is an issue. 3 flood recently. 4 streams get backed up when they go under the road. County needs to maintain regularly.
- Old timers homes are deteriorating and they need funds to repair.
- Bus shelter for kids need on both sides of highway – could be a project for the association
- Association would like to adopt and maintain Kiowe Park
- Want to keep drugs away from our homes- set up a neighborhood watch to make certain there is no drug dealing in our community
- More funding for education both vocational and college- help our kids
- Learn from our homestead Kupuna
- Keep our water rates low. DHHL should make sure that beneficiaries don't have to pay more.
- Small business education needed for homesteaders
- We can work as a community- previously applied for a grant to remove junk cars and it was very successful.
- Want to see the OloOlo St. commercial site happen

### *Hoolehua*

- Heptachloroform left over from pineapple days is still a concern. Some say land is ruined for farming because of this chemical. Many of the 35 acre beneficiary lots are junk.
- Seniors need assistance with repairs to their homes. (NAHASDA grants may be available.)

### *All communities want:*

- Commercial/ Industrial
- Water rates low
- Park & Recreation areas

### *Kalaupapa*

- It is it's own county- Kammy Purdy suggested that all DHHL homestead communities on Molokai join Kalaupapa's county- run their own Hawaiian government
- Kalaupapa would be a good source of revenue for Hawaiian people. Cultural/Historical tourism
- Some thought it would be a good place for an elder care facility or a medical facility for Hawaiians

### *General Comments*

- What is happening w/ Ualapue?
- Naeva (sp?) are new houses going in up there?
- Homestead presidents want to review our survey and provide input
- Health care, hospice, long term care needed
- Obesity in kids is a problem
- Is an elderly home being opened up behind Kulana'oiwi?
- What is the latest plan with the airport?



Francis S. Oda, AIA, AICP  
Norman G. Y. Hong, AIA  
Sheryl B. Seaman, AIA, ASID  
Hitoshi Hida, AIA  
Roy H. Nihei, AIA, CSI  
James I. Nishimoto, AIA  
Ralph E. Portmore, AICP  
Stephen H. Yuen, AIA  
Linda C. Miki, AIA

# CONFERENCE REPORT

Group 70 International, Inc. • Architecture • Planning • Interior Design • Environmental Services  
925 Bethel Street. Fifth Floor • Honolulu. Hawaii 96813-4307 • PH: (808) 523-5866 • FAX: (808) 523-5874

TO	File	FROM	Tanya Iden
DATE	August 13, 2004	PLACE	Kanemitsu Bakery
PROJECT	DHHL Moloka'i Island Plan		
PRESENT	Daniel Ornellas (DHHL)	George Atta (G70)	
	Dr. Aluli	Kawika McKeague (G70)	
		Tanya Iden (G70)	
SUBJECT	SV-1 (Day 3) 11 <sup>th</sup> Meeting		

The meeting served as an opportunity to introduce the Molokai Island Plan and the project team to Dr. Emmet Aluli, a long time activist for native Hawaiian issues and health care provider to native Hawaiians.

The following general ideas were discussed:

- The critical mass needed for Senior Care facility is 60 people.
- If Father Damien becomes canonized it will have a huge impact on Molokai and Kalaupapa because of all the Catholic tourists.
- Kalaupapa could become a model telemedicine project- but need grant.
- Senior care should be prioritized by long-term, assisted living, home health care
- DHHL should link with Sandwich Isle communication and Verizon
- Homesteads/homes should be linked to hospital w/ call button
- Create a training program for in-home health care
- Homesteaders were traditionally the keepers of cultural knowledge, practice, values
- Hospital received 7.5 million but needs 4.5 million more.
- Homesteaders today don't understand the history/motivation of homestead program. Native Hawaiians were dying in the cities- alcohol/drugs
- Charter School concept should be implemented on Molokai
- Build up fishponds
- Don't let go of the water- needed for ag/taro production

People/Groups mentioned:

- American Pacific Foundation (Kenny Brown, Mike Chun, Retired Generals) gave a grant to Walter Ritte.
- Momi Kazimero
- Kalani Brady & Martina Kaunaka are two doctors who go to Kalaupapa



Francis S. Oda, AIA, AICP  
Norman G. Y. Hong, AIA  
Sheryl B. Seaman, AIA, ASID  
Hitoshi Hida, AIA  
Roy H. Nihei, AIA, CSI  
James I. Nishimoto, AIA  
Ralph E. Portmore, AICP  
Stephen H. Yuen, AIA  
Linda C. Miki, AIA

# CONFERENCE REPORT

Group 70 International, Inc. • Architecture • Planning • Interior Design • Environmental Services  
925 Bethel Street, Fifth Floor • Honolulu, Hawaii 96813-4307 • PH: (808) 523-5866 • FAX: (808) 523-5874

TO	File	FROM	Tanya Iden
DATE	August 13, 2004	PLACE	Various
PROJECT	DHHL Moloka'i Island Plan		
PRESENT	Daniel Ornellas (DHHL)	George Atta (G70)	
	Milton Pa (DHHL)	Kawika McKeague (G70)	
	George Maioho (DHHL)	Tanya Iden (G70)	
	Darrell Yagodich (DHHL)	Labrina (Eng. Solutions)	
SUBJECT	SV-1 Touring around notes		

## Water Systems

Is Molokai one aquifer? USGS thinks it may be. Is there data to support this? What data does Molokai Ranch use?

- *Potable Water:*
  - 1 million gallon tank Kalai Water Tank feeds Hoolehua (photos of this near pasture homestead)
  - 7 million gallon reservoir (behind high school)
  - 2 deep water pumps/wells
  - Well #17 feeds Kalamaula
  - Pipes to all of Hoolehua (on one side of road- ag on the other)
  - Need about 2.5 miles of AC (asbestos-cement) pipe upgrades along Farrington Hwy.
  - Hydrants and dry lines allow DHHL to meet fire code regulation (we have pictures)
  - County tank and DHHL tank are connected. DHHL can pump easily to County tank if they run out of water. Not so easy for County to pump to DHHL tank.
  - DHHL pumps 750,000gallons/day of potable water
  - \$250,000/year is budgeted for pumping cost
  - Monitoring well is just below Kalamaula Pastoral homestead
- *Agricultural Water:*
  - Also called the MIS system
  - DHHL contributed money to build this system
  - Rubber lining stays in place because of pressure from the water
  - Tunnel from Waikolu Valley on the Eastside of Island
  - Gravity carries water through the mountain to fill the reservoir (along w/ rainwater)
  - Reservoir is 300,000 million gallons (we have photos)
  - Pipes to Hoolehua Ag lots (on opposite side of the road from potable system.)
  - Reservoir is only ½full. Not designed well for Molokai climate. A lot of evaporation
  - MIS system generates more money than any of DHHL's other systems statewide. It subsidizes Waimanalo, etc.

#### Other Various Items

- 40 acre lots have a 540 foot frontage
- Most pasture lands started up in the 1930's
- George Maioho contends that community pasture works better than individual pasture lots. Individual harder to finance. Strength in numbers
- Molokai Homestead Livestock Association is community pasture group
- Electrical lines in Kalamaulu mark the divide between DHHL and Molokai Ranch
- Roads can remain unpaved if you build only 1 house per 6 acres.
- 200 acres of Bishop Estate land bordering DHHL Kalamaulu parcels was offered to the Dept. to purchase but they declined.



Francis S. Oda, AIA, AICP  
Norman G. Y. Hong, AIA  
Sheryl B. Seaman, AIA, ASID  
Hitoshi Hida, AIA  
Roy H. Nihei, AIA, CSI  
James I. Nishimoto, AIA  
Ralph E. Portmore, AICP  
Stephen H. Yuen, AIA  
Linda C. Miki, AIA

# CONFERENCE REPORT

Group 70 International, Inc. • Architecture • Planning • Interior Design • Environmental Services  
925 Bethel Street. Fifth Floor • Honolulu. Hawaii 96813-4307 • PH: (808) 523-5866 • FAX: (808) 523-5874

TO	File	FROM	Tanya Iden
DATE	October 25, 2004	PLACE	Kulana‘Oiwī, Moloka‘i
PROJECT	DHHL Moloka‘i Island Plan		
PRESENT	See attached sign in sheet (16 people) Daniel Ornellas (DHHL) George Maioho (DHHL) Kawika McKeague (G70) Tanya Iden (G70)		
SUBJECT	SV-2 1 <sup>st</sup> Meeting – Ohana Subdivision		

At the last site visit in August it was requested that DHHL and the Consultants meet again with Winona Kaawa and the Ohana Subdivision group. This meeting was another opportunity to discuss the lifting of the moratorium on subdividing homesteads.

Kawika opened with a general discussion of the planning process and progress.

The Ohana Subdivision group presented the following points/issues:

- Simply put- they just want DHHL to lift the moratorium
- They want to give land to their children
- Subdivision is about getting Hawaiians back on the land
- No one knows what the word moratorium means- DHHL does not work with the homesteaders
- Homesteaders do not know what DHHL is up to because they do not inform community of their decisions
- Ohana Subdivision group does not expect DHHL to pay for their new lots to be hooked up to water, electric, etc. They will pay to bring infrastructure to their new lots

George Maioho explained the history of the moratorium.

- State wide ban on subdividing (not just Moloka‘i)
- Came from the recommendation of the Agriculture Task Force
- Stemmed from concern that all DHHL good agriculture land would be sectioned up and parceled out.
- Moratorium was more an effort to retain agriculture land and plan for how to preserve and protect agricultural land



Some brief comments about farming:

- The group questioned how DHHL can say they want to encourage farming when in actuality they have to ask Agricultural homesteaders to cut back on water use. Hard to farm when you do not have access to water. There was also a complaint that homesteaders have to cut back on water but DHHL gives agriculture water to commercial non-Hawaiian farmers
- It was mentioned that many years ago DHHL used to have a tractor and would use it to assist Homestead farmers. There was a general sense that DHHL used to do more to help out farmers
- Meeting attendees were curious what uses more water- farming a 40 acre lot or having subdivided housing on a 40 acre lot?
- The Ohana group seemed amenable to keeping large portions of their land in agriculture and just subdividing small portions near road access.



Francis S. Oda, AIA, AICP  
Norman G. Y. Hong, AIA  
Sheryl B. Seaman, AIA, ASID  
Hitoshi Hida, AIA  
Roy H. Nihei, AIA, CSI  
James I. Nishimoto, AIA  
Ralph E. Portmore, AICP  
Stephen H. Yuen, AIA  
Linda C. Miki, AIA

# CONFERENCE REPORT

Group 70 International, Inc. • Architecture • Planning • Interior Design • Environmental Services  
925 Bethel Street, Fifth Floor • Honolulu, Hawaii 96813-4307 • PH: (808) 523-5866 • FAX: (808) 523-5874

TO	File	FROM	Tanya Iden
DATE	October 25, 2004	PLACE	Kulana'Oiwi, Moloka'i
PROJECT	DHHL Moloka'i Island Plan		
PRESENT	Milton Pa (Commissioner DHHL) See attached sign in sheet Daniel Ornellas (DHHL) George Maioho (DHHL) Kawika McKeague (G70) Tanya Iden (G70) George Atta (G70)		
SUBJECT	SV-2 Community Meeting: 'Ualapu'e, Kapa'akea, Kamiloloa, Makakupa'ia, and Kalama'ula		

Daniel Ornellas of DHHL introduced the project and G70 discussed the baseline information.

The following general topics were discussed.

## Kalama'ula

Daniel Ornellas described the existing Development Plan from 1986. He mentioned that the plan called for economic development in the makai portions of the property.

### Economic Development

- Attendee requested that Economic Development be defined. *DO responded that there are two kinds of economic development. 1) Income generation for DHHL to eventually develop more homesteads 2) Mercantile licensing for more community economic development*
- Mercantile License tends to geared more towards community members; i.e. give to native Hawaiians for small, light use of parcel
- General leases are offered at competitive market prices to anyone
- Inquiry was made whether mercantile licenses allow for third party lease. *Answer uncertain.*
- Attendee expressed a need for commercial space which could be rented to Native Hawaiians at a subsidized rate.

### Water

- When the group was asked if there are concerns about further development in Kalama'ula, Wayde Lee raised the question: Is there reserve water allocated for on-going development? *DO responded that there is a reservation of 2.9 mgd –however the real question remains: Is the aquifer able to sustain future demand? There has been no determination about how much water is left in the aquifer.*
- Water is a big concern
- CWRM still waiting on DHHL determination
- Need to look at entire ahupua'a and the surface water allocation, how much surface water is running away.

- How do we recharge aquifer
- Reforestation was suggested as a way to encourage more water in the area.
  - Re-forestation encourages “water growth”
  - Re-forestation should be part of the plan
  - There are existing groups working for re-forestation. Watershed/Reforestation group is planting trees which yield lower temperature & more water
  - Wayde Lee suggests developing dry land forest to attract more water.
  - Wayde mentioned the water problem as “bigger than us” and more partners needed. Work with Molokai Ranch, Nature Conservancy, State, etc.

#### Mauka and Makai

- Attendee expressed concern that Kalama‘ula is one parcel. Why is there “uka” designation? To separate out is not pono.
- Bill Kapuni clarified that the Mauka association was created to address a specific region of Kalama‘ula, the newer residence lots, and they are doing a lot of activities with some grant money such as planting trees. It’s open to the community and there is no intent to segregate

#### Other Important issues in Kalama‘ula

- Flooding/drainage – need help cleaning out the swales
- Concerns with merchant residential lots
- Need for park / recreational spaces, schools – put something out there for our kids

#### **Kapa‘akea – Kamiloloa – Makakupa‘ia**

##### Water

- If further development is allowed - pump station / reservoirs would be needed for water provision
- Existing leases have to pay County water prices- people are not happy with this.
- DO presented that DHHL Commission has approved a water rate increase for homesteaders on the DHHL system

##### Flooding

- During last major rainfall flooding / drainage issues arose
- Option of giant siltation basins was presented as method to deal w/ drainage issues
- USACE diversion
- Attendees felt that DHHL needs to allocate funds for improvements to the culvert / channel. It is a boxed culvert which gets choked under the roadway. Bridge needs to be fixed.
- Army Corp of Engineers looking at roadways near community college and assessing their flooding/drainage problems
- Graveyard is impacted by the flooding- channel runs next to the graves

##### Wildlife Preserve/Hunting

- Strong community sentiment was expressed to use upland area to manage wildlife (deer hunting). Sustainable hunting is desired. Currently no access to the area -private lands closed, must get permission to allow for subsistence hunting
- Daniel inquired whether there is an existing hunting group / club? Responses included: Kawela Plantation opens up property for hunting. Another group is working with Nature Conservancy. Ex homestead hunters partnership was mentioned.
- Discussion occurred around whether there is a need for a Safe zone? Suggestion that there could be safety classes.
- Hunters working group should form to count deer, understand amount of resource, offer classes on hunting, determine safety zone.

##### Park/ Recreation Space

- Community space / recreational space needed

- Playgrounds needed, currently kids play in loop road
- Number of houses warrants recreational space within area

#### Other Important Issues in Kapa‘akea/Kam/Maka

- Graveyard/Cemetery needs to be tended to

#### ‘Ualapu‘e

DO offered a general description of the parcels

- 4 – 5 TMK parcels
- Upper land – not heavy concentration of rocks
- 13-acre rather rocky; 2 acres not rocky

DO mentioned that planning will need to take into account the following issues:

- Traffic conditions / slope & terrain
- Limitations of the water line
- Smaller agriculture / less dense residential
- Hard to maintain gravel-type road w/ steep elevation
- Would need to be paved road

Some ideas for the area could be:

- Off-grid possibility? Need to investigate
  - More than 60” of rainfall > can do catchment
  - Is there sufficient rainfall?
- Approx. 13 – 15 residential lots could fit on 2 acre parcel

The community had the following questions and suggestions:

- DHHL needs to talk story with adjacent neighbors in ‘Ualapu‘e
- Mānai Community Association – Kathy Davis, Debbie Maples, Leimana Aki are people to meet with
- Attendees wanted to know if there is area preference for existing island residents? *Daniel responded that DHHL bound by wait list and cannot give first preference to ‘Ualapu‘e residents. No area – specific list > award would go to island list*
- When asked how long it would take for lots to be built in ‘Ualapu‘e, Daniel responded: *Within a year of plan acceptance*
- Attendees were curious if the lot size is determined. *Daniel responded that lot size not determined > use will determine size*



Francis S. Oda, AIA, AICP  
Norman G. Y. Hong, AIA  
Sheryl B. Seaman, AIA, ASID  
Hitoshi Hida, AIA  
Roy H. Nihei, AIA, CSI  
James I. Nishimoto, AIA  
Ralph E. Portmore, AICP  
Stephen H. Yuen, AIA  
Linda C. Miki, AIA

# CONFERENCE REPORT

Group 70 International, Inc. • Architecture • Planning • Interior Design • Environmental Services  
925 Bethel Street. Fifth Floor • Honolulu. Hawaii 96813-4307 • PH: (808) 523-5866 • FAX: (808) 523-5874

---

TO	File	FROM	Tanya Iden
DATE	October 26, 2004	PLACE	Kulana‘Oiwī, Moloka‘i
PROJECT	DHHL Moloka‘i Island Plan		

---

## PRESENT

Daniel Ornellas (DHHL)	Stacey Crivell
George Maioho (DHHL)	Peter Nicholas (Molokai Ranch)
Kawika McKeague (G70)	
Tanya Iden (G70)	
George Atta (G70)	

---

SUBJECT SV-2  
Moloka‘i Ranch Planning Efforts

---

At the last site visit in August the DHHL/G70 team met with folks involved in Moloka‘i Ranch (MR) planning efforts. As a follow up to the first meeting, this meeting served as an opportunity for both planning efforts to apprise one another of their progress.

The following topics were addressed in the meeting:

- Davianna McGregor is the best person to contact regarding Subsistence on Moloka‘i. She is abreast of the current Moloka‘i Ranch subsistence planning committee’s work.
- Stacey Crivello updated that the MR Planning Group will soon be taking all their information and thoughts out to the individual communities.
- Water: The big issue. Will there be enough for future development?
  - General sense in the community- How can Molokai Ranch develop when Hawaiian Homes cannot?
  - Molokai Ranch well has capacity to pump 1 million more gallons, however they are not authorized to do so...they would like to pump the 1 million gallons and give it to DHHL.
  - Domestic water use is not as great as agricultural water use. Agriculture takes more water.
  - Peter Nicholas thought it odd that homesteaders pay the same rates for agriculture water as the commercial users
  - Molokai Ranch no longer uses DHHL water
  - Molokai Ranch does use the MIS system for transmitting their water, however they restock the main reservoir w/ water from their well. They treat the MIS transmitted water for drinking.
  - MIS system has problems tilapia fish. They muck up the pipes.
  - Meyer family buys water from DHHL. Need to talk w/ them about water issue. Their cattle contaminate surface water so they have to use ground water.

- Peter Nicholas asked if DHHL would support the extension of the subsistence fishing zone along the coastline North of Hoolehua. This would mean access across DHHL land. Subsistence fishing zone extends ¼mile offshore.
- Idea was posed that resource management could become a community college degree on Molokai.
- DHHL, EC, Molokai Ranch, Nature Conservancy, Soil Conservation folks are all working on a plan together regarding soil erosion.
- When subdividing of Homestead land was mentioned Stacy and Peter thought that it should be limited to ohana and the acreage allowable for subdividing should also be limited..
- Subdividing – what would happen with all the septic tanks so close together?
- Ualapue families DHHL should talk with are: Duduaf, Place, and the Manai Group (sp?)





Francis S. Oda, AIA, AICP  
Norman G. Y. Hong, AIA  
Sheryl B. Seaman, AIA, ASID  
Hitoshi Hida, AIA  
Roy H. Nihei, AIA, CSI  
James I. Nishimoto, AIA  
Ralph E. Portmore, AICP  
Stephen H. Yuen, AIA  
Linda C. Miki, AIA

# CONFERENCE REPORT

Group 70 International, Inc. • Architecture • Planning • Interior Design • Environmental Services  
925 Bethel Street. Fifth Floor • Honolulu. Hawaii 96813-4307 • PH: (808) 523-5866 • FAX: (808) 523-5874

TO	File	FROM	Tanya Iden
DATE	October 26, 2004	PLACE	Lanikeha Ho'olehua Center
PROJECT	DHHL Moloka'i Island Plan		
PRESENT	Milton Pa (DHHL Commissioner) See attached sign in sheet Darrell Yagodich (DHHL) Daniel Ornellas (DHHL) George Maioho (DHHL) Kawika McKeague (G70) Tanya Iden (G70) George Atta (G70)		
SUBJECT	Community Meeting: Ho'olehua-Pālā'au, Kalama'ula Mauka, Kalaupapa		

Daniel Ornellas (DO) of DHHL introduced the project and G70 discussed the baseline information.

The attendees had many thoughts, questions and concerns which were recorded on large tablets and posted on the wall. Following is a summary of the key points and issues presented by the attendees. The original notes have been transcribed and reorganized under subject groupings.

## General Questions/Comments about the MOLOKA'I ISLAND PLAN (MIP) and the Planning process:

- Attendee wanted to know what proposals have been developed for the MIP. *DO clarified that no proposals have been developed; the purpose of the meeting is to gather ideas from the community and then formulate proposals. The next set of meetings will be in January and that is the time when land development proposals will be presented.*
- People asked what's going to happen to "all these ideas written down." How will they be implemented? When will HHC come through? Otherwise this is a waste of time.
- Tell all Moloka'i homesteaders about meetings coming up. Communicate with us and be fair. We are persistent about these ideas and want results.
- One attendee suggested working through NAHSDA (Native American Housing & Self-determination Act.) She thinks the Plan will help homesteaders work w/ NAHSDA. The Moloka'i Island Plan will present our case to NAHSDA.
- Regarding planning, one homesteader felt that DHHL needs to be consistent-i.e.-Big Island has pilot project awarding raw land to homesteaders; other islands are allowed to just move onto the land. This should also be allowed on Moloka'i if allowed on other Islands.
- Sentiment was expressed that homesteaders need to organize; talk to others.
- Request was made to send meeting notes to all Association Presidents.
- An attendee mentioned that this is the third time there has been strategic planning; what happened with the previous plans?
- An attendee felt that this process is not OUR process. Colonialism to the MAX!
- One attendee told the crowd to, "Take it easy...you're firing big guns at these guys. It takes time...we are all frustrated"
- Request was made for DHHL to "spend money on our island-too much waste in the department."

- Moloka'i people need to make our own decisions. Home Rule.
- Go back to the first plan-The Original Act.
- Let us do what we want-we know, don't need rules.

#### General Questions/Comments about DHHL and its PROGRAMS:

- What will the department do when 99 year leases begin to expire? *DHHL responded that there will be an automatic renewal for 100 years.*
- Do we need to take out a loan to get 100-year extension? *DHHL has request in to extend your mortgages another 100 years*
- Can homesteaders begin extension process before 99-year lease is up? *DHHL will stagger extensions.*
- One attendee expressed frustration that homesteaders experience the same issues over and over; it takes DHHL too many years to figure things out. She has had enough! 34 years of meeting after meeting etc.
- Another attendee suggested that the Department deed the land after 99 years, NO MORE LEASE – this is our land.
- Attendee expressed that DHHL needs to clean house, everything takes too long
- Homesteaders don't like to have to go through the County of Maui, it requires too many permits. It was suggested that DHHL "stamp" homesteader permits with DHHL engineers
- DHHL should have full power over its land-why defer to other government agencies? *DHHL points out that they don't have the manpower to take over enforcement. There is no DHHL building code*
- Attendee asked the rhetorical question, "Who makes the decisions?" In order to express the point that HHC Act super cedes the State. HHC has heavy responsibility.
- Attendee pointed out that Hawaiian Homes can make any administrative rule they desire
- Regarding the Owner-builder home program one homesteader expressed that if they have questions for DHHL often DHHL cannot answer their questions because they do not have a building codebook.
- Attendees feel that someone from DHHL should walk them through the building permit process. "We need assistance, but be helpful; we are proud."
- Not everyone wants a 150,000 home. DHHL needs programs that respond to various homestead income levels.
- How can we stop people from selling their lease? *DHHL is working on dealing with lease sales*
- Attendee quote: "I know this chairman stands behind us."
- Leases to non-Hawaiian should be fair market value, even if lease is to another State agency. Make money for Hawaiians. Up General Lease/RP/License rents to fair market value. Don't constrain us.
- One homesteader told her story: Land given to me (via husband). I do a lot of my own work. Land is hilly. We wanted to exchange the land. We farm. Rain is all it needs. Still want to work the land. I'm by myself. Children have own farms. I do whatever I can do with my land.
- DHHL should get out of the State Government framework.
- DHHL does not use the same formula as Maui County for allocating funds-this is good because otherwise Moloka'i would get very little funding or new homestead development.
- DHHL needs more staff to do community projects with homesteaders and to support the Applicants trying to get on the land
- "HAWAIIANS ARE HURTING!"

#### The DHHL TRACTS:

##### >KALAMA'ULA

- Daniel briefly described the existing plan; he mentioned that it calls for additional ½ acre residential and some economic development specifically 10-acres mauka and 20-acre makai of which only about 5-acres are useable.
- The meeting attendees had the following ideas/thoughts about Kalama'ula:
  - Re-forestation (Mauka) and allow for hunting. Another attendee mentioned that with reforestation there is a water issue to consider.
  - Trade schools would be useful- specifically: Electric, Aviation, Construction
  - Park for recreation / community center

- Long-term care for elderly is needed. Presently people have to send their family members off island. Would like an assisted living facility –perhaps behind Kulana ‘Oiwī. Make certain this is included in plan
- Kalama‘ula and Kapa‘akea are the next logical areas of expansion for Kaunakakai urbanization – please plan for this – keep new developments along road
- Flooding is a problem; water can’t get through to ocean. Take a sincere look at flooding on all DHHL lands, work with other agencies (SCS, USACE). Currently people suffer!
- Preserve the precious, mauka cultural resources
- Economic development needed
- The meeting attendees had the following questions about Kalama‘ula:
  - Will future lots be serviced with water? *Presently water is not available to the sites for expansion but it will be made available.*

#### >KAPA‘AKEA, KAMILOLOA, MAKAKUPA‘IA

- What’s planned for the One ‘Ali‘i fishpond area? *No plans at present.*
- Community would like a cultural building/resource center at fishpond
- Community attendees suggested talking to Zachary Helm (and all of the Association presidents)
- Water constraints in this area; both transmission and storage

#### >KALAUPAPA & Pālā‘au MAUKA

- Take advantage of views / location over looking Kalaupapa
- Take Pālā‘au State Park back from State management, DHHL should have more of a benefit from the park. It is a possible economic engine.
- One attendee inquired how much DHHL charges for Pālā‘au rent? *Daniel responded \$979 per annum*
- Will DHHL give Kalaupapa to NPS? *DHHL does not intend to.*
- Hawaiian should be director of Kalaupapa Park.
- There was discussion of the Kalaupapa legacy. One gentleman suggested that DHHL keep wellness center alive after the patients are gone, develop cottages, offer treatment; rehabilitate
- Work with DOH to make Kalaupapa better
- Strong sentiment that lands should come back to DHHL not used as a State Park or National Park
- IT’S A GEM!
- Hawaiians should control Kalaupapa
- Tours should be led by Hawaiians and Molokai people
- One attendee was concerned that NPS has plans in the making; meetings are already happening. For instance there are air tours already. Attendee offered that Hawaiians need to be able to access Kalaupapa freely

#### >HO‘OLEHUA

- A homesteader mentioned that getting water to new homes is an issue. They wondered whether DHHL is capable to serve all new lots w/ H<sub>2</sub>O. *DHHL acknowledged that water is an issue that needs further analysis.*
- Attendees inquired whether there were plans to upgrade potable system. *DHHL responded that the HHC has approved upgrades to the rest of the domestic system.*
- One homesteader pointed out that many lots presently are not used so it seems it would be difficult to obtain an accurate measure of water pressure.
- Inquiry as to whether the asbestos pipes in the Ho‘olehua H<sub>2</sub>O System will be replaced? *Commissioner Pa indicated that money has been appropriated*
- One attendee was concerned with how pipes are being maintained? They thought that there was a broken pipe. *George Maioho responded that pipe breakage needs to be reported. DHHL cannot be everywhere and presently is unaware of any broken pipes.*
- Attendee mentioned that DHHL always refers to “complying with County codes.” This attendee was curious what standards should DHHL Beneficiaries follow? DHHL? County? County compliance is an issue

- Homesteaders expressed that Ho‘olehua could use a park, “put in the plan”
- Commercial in Ho‘olehua is needed, this would be economically good. Homesteader suggested that commercial area be located down by the airport, by the highway but don’t take away DHHL land, rather, use DLNR parcel by Hikiloa.
- Lots that were awarded in 1985 in Ho‘olehua are still not developed. DHHL should focus on making these awards a priority.
- Ho‘olehua needs the following in order to support its farmers:
  - Farming Business education center,
  - Facility w/ farming equipment to rent,
  - DHHL to pool resources to help us farm!
  - Education, equipment, financial services. Provide resources to farmers. Moloka‘i can be self-sufficient
  - DHHL used to own a tractor and assisted farmers. DHHL should re-invest in farm equipment to help farmers. (*Homesteaders had to pay fees; but didn’t and it closed*)
  - Today, need to provide resources for farmers to succeed. Help them. Our people know how to operate equipment

#### Major theme areas of discussion:

##### >SUBDIVISION and FARMING (linked)

- Daniel briefly summarized the issues in Ho‘olehua and one of the main concerns is whether to subdivide, where to subdivide, how much of the land should be subdivided, when the moratorium should be lifted.
- Moratorium not appropriate for today. Kids want to come back-but no place for them to stay-they are capable. Want land for our children and for the parents
- Will DHHL be sending people to check out homestead lots to determine whether land could be subdivided or to tell homesteader if land is good for agriculture? *No, DHHL does not intend to go house by house, they do not have the staff for this. The Plan will recommend policy statement; Yes/No moratorium lifted; will not work on individual basis*
- The moratorium was an effort to preserve large lot agriculture, BUT when will it end?
- What is a moratorium? Was not taken to the people who were amazed and shocked to learn about it. We never get our due process we want to our children on the land
- Real estate on Moloka‘i is becoming astoundingly expensive-which makes it even more important to lift moratorium and get the families onto the land. Hope tonight’s meeting can be a beginning of something POSITIVE
- It is important that the lifting of the moratorium is done on case-by-case basis, not all farm lots are good and therefore could be subdivided. Folks want to be able to pass down to 25% kids. Just want OHANA subdivision-we help the list by giving to our kids, your projections unrealistic. No one should be allowed to subdivide and sell the land-this is not the intent of subdividing.
- Darrell Yagodich of DHHL asked a question to the audience: “Should DHHL allow subdivision into smaller lots near the High School and allow bigger lots farther away from HS? *Audience responded with a resounding NO*
- A lot of concern was expressed about issue of subleasing.
- Sad no Hawaiians are farming, DHHL needs to be there for the farmers. We want to connect with the land and be close to our ancestors.
- Homesteaders/Native Hawaiians a “dying breed”-becoming the minority on Moloka‘i-Please support us by lifting the moratorium!
- Agricultural Task Force recommendation for the moratorium was that we need to be careful how we cut up the land. Also-waiting list, is subdividing an effort to circumvent to the list. There is a danger of urbanizing the farmlands. Neighbors already gripe about the farming activities.
- Show hands for lifting moratorium. *More than 2/3<sup>rd</sup> of the room.*
- Point of clarification: We all signed an agreement to farm 2/3 of our land. How many people are doing this?
- Heptachlor/DDT makes land unusable or unacceptable. Can not eat/sell product. 3rd party sell out to BIG agriculture companies was bad for Ho‘olehua farm land.

- Wondering about GMO's-genetically modified crops. Is it allowed-does DHHL address it in their requests? *Not presently but it is an issue to watch and be mindful of.*

#### >ECONOMIC DEVELOPMENT

- Not enough JOBS. Moloka'i people need the land but it seems in order to get land, the native Hawaiian has to qualify for Home loan. People getting denied the land! - DENIAL HURTS
- Who makes \$100,000 on Moloka'i? Getting home loans are hard! TRAGIC that Hawaiians are turned away-NOT allowed property.
- Suggestion: Habitat for humanity can help. Self help or turn key. Not the best for everyone.
- Awards given out in 1985 – people still not on the land. This should be a priority! Get these lots ready!
- Only Hawaiians with money are getting on the lots – find loans to help people who don't have enough cash.
- Suggestion: Work with NAHSDA – loans for people below 80% median poverty level
- Community based! Work with us on economic projects. Moloka'i is capable!
- Jobs are necessary for us to be able to farm, build homes, be stable, etc Farmers need support
- Moloka'i may be able to access money for rural development through NAHSDA because the land has too many restraints-water, money, etc.

#### >WATER

- In the Original Act water is discussed because Prince Kuhio knew DHHL was dry land
- All water should go to DHHL
- 2/3 rights for MIS-on Moloka'i not being enforced. DHHL needs to control the MIS. Gain control of MIS system, get the 2/3 water rights. Can't even water our own lawns, we always have to cut back during drought and we always comply.
- All drinking water comes from ONE place, we need to monitor this all the time. Be vigilant and alert. If no water, no life.
- DHHL should develop a new well close to Kaunakakai so all Kualapu'u water goes to Ho'olehua
- People with money get to use water and we're told to stop. Always money.
- DHHL Cannot raise water rates
- Daniel mentioned to the group that Moloka'i ranch said (in a meeting w/ DHHL) that they do not need any additional water beyond what they already use
- Daniel informed the group that the Moloka'i Island Plan will project what we need for water through the next 20 years
- Attendee asked whether Moloka'i Ranch has requested any access through DHHL lands. *DHHL responded that there have been no closed easement request*
- Water for subdivided ohana lots will need to be understood if subdivision is allowed.
- Need DHHL representative on the water commission; 2/3rds of commission should be 'Oiwi
- DHHL was poor representative at the contested case for water
- The MIS system has problems with sludge and tilapia.
- One attendee theorized that DHHL wells have dropped 4-5 feet in the past 10 years.

#### >SUBSISTENCE

- Moloka'i is different – subsistence is practiced
- Moloka'i is connected to the land and our ancestors
- We need to manage!
- Hunting only for Hawaiians on DHHL land
- Native Hawaiian subsistence lifestyle is about improvising, substituting, supplementing. Need housing and building options that support Moloka'i style subsistence living



Francis S. Oda, AIA, AICP  
Norman G. Y. Hong, AIA  
Sheryl B. Seaman, AIA, ASID  
Hitoshi Hida, AIA  
Roy H. Nihei, AIA, CSI  
James I. Nishimoto, AIA  
Ralph E. Portmore, AICP  
Stephen H. Yuen, AIA  
Linda C. Miki, AIA

# CONFERENCE REPORT

Group 70 International, Inc. • Architecture • Planning • Interior Design • Environmental Services  
925 Bethel Street. Fifth Floor • Honolulu. Hawaii 96813-4307 • PH: (808) 523-5866 • FAX: (808) 523-5874

---

TO	File	FROM	Tanya Iden
DATE	November 4, 2004	PLACE	Kilohana Community Center
PROJECT	DHHL Moloka'i Island Plan		

---

PRESENT	Milton Pa (DHHL Commissioner)	See attached sign in sheet
	Daniel Ornellas (DHHL)	(16 people)
	George Maioho (DHHL)	
	Tanya Iden (G70)	

---

SUBJECT SV-3  
'Ualapu'e Meeting

---

At the site visit in October it was suggested that the DHHL/G70 team talk directly with folks living in 'Ualapu'e regarding what should happen with DHHL's East end land. The meeting at the Kilohana Community Center was organized based on the suggestion.

The meeting opened with a group of local residents partaking in a protocol Hawaiian welcome and greeting which consisted of conch shell, beautiful singing, and pule. Leis were given to DHHL/G70 folks.

Daniel opened up by introducing the Moloka'i Island Plan and the planning process. G70 continued, presenting the baseline data, survey results, and issues to address. Daniel led the group discussion.

The following talk story points ensued:

- Questions arose about when DHHL acquired the 'Ualapu'e parcel. *Daniel Ornellas clarified that statewide a 16,500 acre transfer took place in 1994 as part of a settlement with DHHL. The 'Ualapu'e land was not actually deeded over to the department until 1999. It took 5 years to process.*
- 'Ualapu'e residents are in favor of getting more people on the land. *Daniel mentioned that when the department looks at Moloka'i on an island-wide level it is more likely that development would concentrate in the Kalamaula area.*
- 'Ualapu'e land is thought of by residents as too steep.
- The woman who opened the meeting w/ the Hawaiian protocol (her name is?) made the following points:
  - The Mānai-'Ualapu'e Homesteaders Association was formed many years ago to speak on behalf of the people living on the East side.
  - It has been 10 years since the land exchange – do we have to wait another 10 years for a solution?
  - People should join the Mānai-'Ualapu'e Association so the Association can work for you.



- In 1996 Winona Kaawa wrote a proposal which became “Act 17” – she wanted her 25% Hawaiian daughter to have part of her property. She took her proposal before the Ho‘olehua Association and they voted in favor of it- she took it to the Island Council, the State Council, and then Dennis Arakaki had it added to the 1920 Homestead Act. The irony is that Winona Kaawa, despite having done everything she was “supposed” to do, is still asking for the same thing. This was the right proposal and we did it the right way.
- DHHL needs to back-up, lift the moratorium, and then do planning
- She encouraged the group to talk to political representatives and let them know what you think.
- The Heiau on the ‘Ualapu‘e land is sacred. Important to follow protocols. Aunti Lani Kapuni has been consulted about the Heiau. She says we need to “tread lightly.” She went to the Heiau in 1994 and gave it her blessing. The mana‘o came and told us that Kapi‘oho the famous chief lived there and used it as a puuhonua. It needs to be left in tact because descendents will call all the people to come to the land. All the heiau on the ‘Ualapu‘e property need to be taken care of.
- Questions arose about the small parcel that is surrounded by DHHL land close to the access road. It was identified as the Schnackenberg property.
- One attendee asked if there was a database of East Moloka‘i applicants or could the information be extrapolated because it was strongly felt by the group that East Moloka‘i applicants should have first choice to the East end land. *Daniel Ornellas responded that it is highly unlikely that the Commission would give preference to ‘Ualapu‘e residents however there is the option of an “undivided interest lease.” If the department offers undivided interests leases for all parcels at the same time it is likely that ‘Ualapu‘e people would chose ‘Ualapu‘e and West end people would chose the west end. Daniel also mentioned that self help lots would give ‘Ualapu‘e people the advantage.*
- The group generally agreed on the following points:
  - Work incrementally to get people on the land. Develop what you can now (10-14 lots.)
  - Smaller lots are o.k. as long as our people are getting onto the land.
  - Develop western side of ‘Ualapu‘e parcel first; the areas near the Cemetery, which is behind Kilohana School, are more flat, better. Use west side access.
  - Cemetery marked on G70 map as Kilohana Cemetery is really the Chinese Cemetery. Need to relocate map icon.
  - Upper slopes should be subsistence agriculture and pasture lots
- People were wondering how long it would take to have a subdivision formed. *Daniel suggested that the group work together to get grants for community development. DHHL gives implementation grants and grants for leadership training.*
- An inquiry was made how many lots DHHL builds each year. *Daniel answered on average 200 statewide.*
- One attendee mentioned that DHHL requirements to pre-qualify are too stringent. They should revisit/reconsider their guidelines.
- There was a lot of anguish and opinion about people selling their leases to non-Hawaiians. People felt this was wrong. If possible to regulate, DHHL should allow only a transfer to family members.
- One attendee mentioned that the cemetery needs fixing
- The Pedro family pointed out that 20 acre pasture lots are not big enough. More is needed for effective grazing. They rent approximately 1,500 acres for their cattle.
- RECAP
  - DHHL should move as fast as possible
  - East enders want first choice at ‘Ualapu‘e development
  - Access to neighborhood should be behind Kilohana School
  - Uplands should be for subsistence agriculture lots



Francis S. Oda, AIA, AICP  
Norman G. Y. Hong, AIA  
Sheryl B. Seaman, AIA, ASID  
Hitoshi Hida, AIA  
Roy H. Nihei, AIA, CSI  
James I. Nishimoto, AIA  
Ralph E. Portmore, AICP  
Stephen H. Yuen, AIA  
Linda C. Miki, AIA

# CONFERENCE REPORT

Group 70 International, Inc. • Architecture • Planning • Interior Design • Environmental Services  
925 Bethel Street, Fifth Floor • Honolulu, Hawaii 96813-4307 • PH: (808) 523-5866 • FAX: (808) 523-5874

TO	File	FROM	Tanya Iden
DATE	February 1, 2005	PLACE	Kulana'Oiwi, Moloka'i
PROJECT	DHHL Moloka'i Island Plan		

PRESENT	Milton Pa (Commissioner DHHL) Daniel Ornellas (DHHL) George Maioho (DHHL) Darrell Yagodich (DHHL) Tanya Iden (G70) George Atta (G70)	See attached sign in sheet
---------	---	----------------------------

SUBJECT SV-5  
Community Meeting: 'Ualapu'e, Kapa'akea, Kamiloloa,  
Makakupa'ia, and Kalama'ula

Commissioner Pa – Pule

George presented background information, planning context and moved on to describe each land use scenario.

## KALAMAULA

Collette Machado brought up the following points about the proposed commercial area near Ooloo St.:

- Linkies(sp?) – The existing residents near the proposed commercial area would not be happy w/ this plan.
- DHHL should be up-front how it handles commercial leases? Make it clear to people that commercial leases are not only limited to native Hawaiians.
- Whenever you say 'commercial' hair will stand on our back

Other comments and questions:

- Concern was expressed that in Kalamaula new lots are being sold to outsiders – but these lots were given to Hawaiian people

## KAPAAKEA

Mrs. Mowat – whose family has a large pastoral and residential lease on which the department would like to build/re-designate - had the following comments:

- Didn't get the notices for the survey – don't get any updates. DHHL needs to send notice to me about things.
- Drainage: it has been a major concern for our family. Will specialists come in and deal with the drainage issue since a Special District drainage gulch is indicated on the plan?

Other comments and questions regarding Kapaakea:

- Will drainage be paid for since it's in the plan? *George Atta responded that the Plan acknowledges the problem, however it is up to the DHHL Commission to determine funding for projects.*
- Concern was expressed about the Kapaakea Cemetery. Are there plans for expansion? The cemetery will be running out of room very soon – talk to county, maybe DHHL wants to trade land /give to County for cemetery expansion?

### UALAPUE

General concern was expressed that the East End is desirable land and homesteaders awarded land in Ualapue may sell their leases. Strong feeling that land should go to East End people who believe in the area/want to live in the area. The following specific comments were made:

- Will the plan address the fact that you are able to sell the lease you are awarded? *George Atta explained that the Plan is not a policy setting document. The Department is working to deal with the sale of leases legislatively; specifically, there is a resolution going through the legislature to only give/sell leases to family*
- This could become a high-end development area...East end lucky!
- Need a pioneering community; People need to believe in area – aloha the area.
- This would be the first brand new homesteading community on Molokai – DHHL needs to ensure it is made up of people committed to make it work.
- It is a dilemma because people do want to create new homesteads.
- Ualapue – needs cemetery area within the 400 acres. Cemetery = community use

### KALAUPAPA

The group felt strongly that DHHL needs to make sure the wishes of the Patient's are respected. Something should be left for their families. The following comments and suggestions were offered:

- "Floating residential" for Native Hawaiians living in Kalaupapa to ensure they have something to call their own and pass down to their children. There are approximately 12– 15 Native Hawaiian patients
- Hansen's Disease patient – they just want to have a home in their twilight years - Department should help secure a home for them. Don't evict them again! The idea of a Life estate was offered.
- Priority first Native Hawaiian Patients / Non-Hawaiian patients
- DHHL should be an advocate / pro-active. Work to represent the Patient's rights to the NPS and DOH.

The meeting wrapped up with the following people speaking:

- **Kaipo Kincaid** invited people to join Hui Kakoo on their tour of DHHL lands over the weekend (Feb. 5<sup>th</sup>). Work in focus groups to talk about the plan - provide insight and comments to the planners..
- **Commissioner Pa** made the following points:
  1. We (the HHC) don't necessarily pass all things that come before us.
  2. Plans not set in stone
  3. Hands tied re: sale of homesteaders. HHC doesn't have authority – legislative process.
  4. Comments like: "I never got the survey," upsets me. We try hard to get it out
  5. Kalaupapa – Collette / Stacy very ACTIVE

- **Daniel Ornellas** discussed the resolution to stop the sale of leases to non-Hawaiians which would:
- Allow the department to deal with the issue using administrative rules
  - Transfer only to family
  - Put language in to prohibit money transfer
  - If a person has no house on the land then they could only transfer w/out cash exchange.
  - If the land has a house & equity they would be allowed to exchange money if they transfer lease to recover equity



Francis S. Oda, AIA, AICP  
Norman G. Y. Hong, AIA  
Sheryl B. Seaman, AIA, ASID  
Hitoshi Hida, AIA  
Roy H. Nihei, AIA, CSI  
James I. Nishimoto, AIA  
Ralph E. Portmore, AICP  
Stephen H. Yuen, AIA  
Linda C. Miki, AIA

# CONFERENCE REPORT

Group 70 International, Inc. • Architecture • Planning • Interior Design • Environmental Services  
925 Bethel Street. Fifth Floor • Honolulu. Hawaii 96813-4307 • PH: (808) 523-5866 • FAX: (808) 523-5874

TO	File	FROM	Tanya Iden
DATE	February 2, 2005	PLACE	Kulana‘Oiwī, Moloka‘i
PROJECT	DHHL Moloka‘i Island Plan		
PRESENT	Milton Pa (Commissioner DHHL) Daniel Ornellas (DHHL) George Maioho (DHHL) Darrell Yagodich (DHHL) Tanya Iden (G70) George Atta (G70)	NAME of STAFF Persons	
SUBJECT	SV-5 Meeting w/ DHHL on Island Staff		

Daniel Ornellas opened up the meeting by introducing the Molokai Island Plan and discussing the goal of developing 400 houses within the next 20 years on Molokai.

The following general comments were offered by DHHL Molokai Island staff.

## UALAPUE

- Ualapue was acquired by the department in 1997
- Drainage issues could arise in the area because the water drains off the mountain and impacts the lower-lying area.
- DHHL Staff person mentioned that the existing 4WD roads are very bad because of rain. They suggested we try to take a trip up mauka in Ualapue. The mentioned that whatever we think, it will be worse.
- There are a lot of archaeological sites in Ualapue
- The feeling of the group was that this area is of highest desirability.

## KAPA‘AKEA

- Park in neighborhood – put it on!
- It was mentioned that a “Quad track” might be a good recreational/community use activity. At present people ride at One Ali‘i- which isn’t a good place for this activity. Special attention would need to be paid to – Insurance and Liability
- The staff members mentioned that when there are drainage problems in Kapaakea they clean out the drainage channel. They think the issues stems from the area in the back of the graveyard
- One gentleman suggested that DHHL focus on existing problems before building new – get the job done

## **HOOLEHUA**

- There is a lot of complaining about the dirt
- Water – reduce our MIS water rate
- There was discussion about the fact that homesteaders need to get better connected. For instance there is a lot of agriculture related activities going on but there needs to be more awareness about what AG stuff is working. It was mentioned that Kammy Purdy and a more business savvy person (Annette Pauole) are working to help people market produce, use the commercial kitchen, etc.

## **KALAUPAPA**

- Patients call themselves “residents”

## **GENERAL**

- For 3<sup>rd</sup> party leases – Hawaiian Blood o.k.
- Plan needs to identify recreational areas.
- Milton Pa summarized the priority areas for homesteads 1)Ualapue, 2)Pala’au



Francis S. Oda, AIA, AICP  
Norman G. Y. Hong, AIA  
Sheryl B. Seaman, AIA, ASID  
Hitoshi Hida, AIA  
Roy H. Nihei, AIA, CSI  
James I. Nishimoto, AIA  
Ralph E. Portmore, AICP  
Stephen H. Yuen, AIA  
Linda C. Miki, AIA

# CONFERENCE REPORT

Group 70 International, Inc. • Architecture • Planning • Interior Design • Environmental Services  
925 Bethel Street. Fifth Floor • Honolulu. Hawaii 96813-4307 • PH: (808) 523-5866 • FAX: (808) 523-5874

TO	File	FROM	Tanya Iden
DATE	October 26, 2004	PLACE	Lanikeha Ho'olehua Cente
PROJECT	DHHL Moloka'i Island Plan		
PRESENT	Milton Pa (DHHL Commissioner) See attached sign in sheet Darrell Yagodich (DHHL) Daniel Ornellas (DHHL) George Maioho (DHHL) Tanya Iden (G70) George Atta (G70)		
SUBJECT	Community Meeting: Ho'olehua-Pālā'au, Kalama'ula Mauka, Kalaupapa		

Commisioner Pa began the meeting w/ a Pule; then George presented the background information, planning context, and moved into describing the scenarios.

The community provided the following questions, comments, and feedback:

## HOOLEHUA

- Along Puukapele St there are many Heiau! All along the cliffs, stones big deal – different type stones, therefore the receiver site should be preserved, too much historical stuff. A neighborhood should not be developed out there. We have to save all this stuff!
- Regarding subdivision, one community member thought that along Farrington Ave. there would not be enough fire hydrants
- A suggestion was made to think about paving the roads in the already subdivided area close to the High School. Presently vehicles bring all mud from bad side roads onto good paved roads
- Pave the roads – everybody would agree that the roads NEED to be paved, put road issue into the island plan. Dirt from unpaved roads gets into houses – bad roads have a number of impacts
- Winona Kaawa asked the planners decided subsistence vs. supplemental agriculture. *George responded that DHHL definition are mostly based on size of the agriculture lot.*
- One gentleman was very concerned about asbestos in the water pipes. Need to deal with the pipes!
- Another meeting attendee suggested that in Hoolehua > show community use
- Rather than use DHHL land for commercial use, take back portion of the airport for commercial
- Middle School is needed in Hoolehua



- Harry Purdy – 3<sup>rd</sup> generation Ho‘olehua, VP Agriculture Assoc. read from a formal statement on behalf of the Agricultural Association the following recommendations:
  - Subdivide down to no less than 2-acre lots
  - Guarantee that Hawaiian Homesteaders get 2/3 usage of MIS system for Ho‘olehua
  - He pointed out that his concern stemmed from the fact that if lots are under 2-acre, MIS H2O cannot be used which opens the door for other (non-hawaiians/non-homesteaders- for instance the State AG. Park) to take over the agriculture water because DHHL has been wasting its time building only 1-acre lots
  - He pointed out that for Molokai a lot of the issues are simply economics. But mentioned that the new slaughter house will be a good thing.
  - In summary, More lots ok – but keep them Ag.!

### KALAUPAPA

- Walter Ritte expressed his opinion that DHHL should take back certain lands from NPS, actually take back ALL land.
- Many people had questions about how long the land is leased to the NPS. *DHHL responded that they have a lease for approximately another 40 years.*
- The General opinion was expressed that 40 years is way too long for NPS to have an interest at Kalaupapa. The community wondered how did it get to be 40 years? DHHL mentioned that the lease “opens” up every 5 years and there is the possibility to renegotiate.
- The community acknowledged that originally it was thought that it would be good for the NPS to be at Kalaupapa, now many suggest that DHHL terminate OR withdraw land from the lease.
- A community member pointed out that before leprosy there were Native Hawaiians living in Kalaupapa. The native Hawaiians were displaced
- Strong opinions expressed that the patient should speak for themselves.

### UALAPUE

- Don’t allow cattle grazing there there are too many heiau / cultural sights – DO NOT DEVELOP. *DHHL mentioned that on other islands homesteads have been developed where there are cultural sites and the homesteaders have taken care of the sites. Sites have been allowed to stay within homestead – homesteaders have maintained the sites / training sessions on how to maintain / historical easement – no right to destroy*
- Keep the mauka area untouched - for our future - for education - for our kids
- One person suggested that DHHL trade some Ualapue land for nearby Bishop Estate land which is much more easily developed. Ualapue land should be preserved.
- One gentleman who lives in Manai on the east end would like to have a place there (Ualapue). Why can’t I go there? Ualapue very important – this year I hope to be up there planting taro
- It was suggested that the Kilohana side of the parcel is better for development.

### GENERAL

- One gentleman made an announcement that slaughter house will soon be open. Start organizing with the slaughter house to have your animals killed & butchered
- Walter Ritte: I would like to make a policy statement! PROHIBIT GMO’s ON HAWAIIAN HOMELANDS

- Kammy Purdy announced that she would organize a group of Hoolehua folks to discuss Ohana zoning and the moratorium.
- Designate in the text of the Plan – Kupuna housing, long-term care are needed
- Hunting parcels needed
- Community pasture needed
- Transitional housing needed to deal w/ homelessness



## C. Sign -in Sheets



16  
total

## 1st worksheet



DEPARTMENT OF HAWAIIAN HOME LANDS  
MOLOKA'I ISLAND PLAN



Meeting Location:

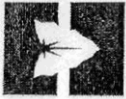
Kulana'Oiwi → (SUBDIVISION)

Meeting Date:

October 24, 2004 10 a.m.

PLEASE SIGN IN:

NAME	ORGANIZATION	ADDRESS	E-MAIL	PHONE
RUFINO AGUIAR	OHANA SUBDIVISION	P.O. Box 477 Hooilehua 96729		336-0013
Jeanne Holman		P.O. Box 27 Kula, HI		567-6133
Winona Kaawa		P.O. Box 227 Hooilehua 96729		567-6442
Faith Horner		P.O. Box 371 Hooilehua 96729	vcom@aloha.net	567-6400
William & Wallace		P.O. Box 216 Hooilehua 96729		567-6727
Kitty Cepo		P.O. Box 187 Hooilehua		567-6060
Reynolds L. Ayau		P.O. Box 183 "	rlayau@aloha.net	567-6208
Cissy Ellertsen		P.O. Box 12 Hooilehua 96729		567-6568
Pearl M. Punahele		P.O. Box 88 Hooilehua 96729		567-9258
Josephine K. Crowell		P.O. Box 88 Hooilehua 96729		567-9258
Sarah M. Steensen		P.O. Box 1854 Kaimakakai, HI 96748		567-6856
Ray Wallace		P.O. Box 216 Hooilehua, HI 96729		567-6727
Hauoli Nawahine		Box 227 Hooilehua, HI 96729	olinawahine@msn.com	567-6818



DEPARTMENT OF HAWAIIAN HOME LANDS  
MOLOKA'I ISLAND PLAN



Meeting Location: Kulana'Oiwi - subdivision folks

Meeting Date: October 24, 2004 10 a.m.

PLEASE SIGN IN:

NAME	ORGANIZATION	ADDRESS	E-MAIL	PHONE
Juanita Lailani Namahana	Self	P.O. Box 467 - # 96729 37 Malu Kukui Place		808-567-6530
Harry Hanakahi	Okuna	190 Keonelele		808-560-6203
Vanda Hanakahi	" Subdivision	"		507-1442
Paul Hama		Box 511 Hanalei 96729	vcam@aloha.net	567-5400
Wanda Hama		Box 216 Hanalei 96729		567-2721
Kitty Hama		P.O. Box 112 Hanalei		567-6000
Raymond Hama		P.O. Box 183	rlacina@aloha.net	567-6000
Perry Hama		P.O. Box 3 Hanalei 96729		567-6000
Paul Hama		P.O. Box 112 Hanalei 96729		567-6000
Joseph Hama		P.O. Box 112 Hanalei 96729		567-6000
Wanda Hama		P.O. Box 112 Hanalei 96729		567-6000
Paul Hama		P.O. Box 216 Hanalei 96729		567-6000
Paul Hama		P.O. Box 216 Hanalei 96729		567-6000



40 total

## 2nd worksheet

(13)



DEPARTMENT OF HAWAIIAN HOME LANDS  
MOLOKA'I ISLAND PLAN

GROUP 70  
INTERNATIONAL

Meeting Location:

Kulana O'iwi Comm. Mtg.

Meeting Date:

10/25/04

PLEASE SIGN IN:

NAME	ORGANIZATION	ADDRESS	E-MAIL	PHONE
Milton Pa	HHC	P.O. Box 105 Hhwa 96744	mkkpapa@aloha.net	567-6428
Vivian Awoa	Kamulalea/mekua	Bx 1249 Pkua 96748	Vam@aloha.net	553-5186
Buster Hubbard	Kapaakea	P.O. Box 157 K'Kai 96748		553-4217
Glynnis Hubbard				
Richard Negrello	Kalamaula	P.O. Box 172 K'Kai Hi 96748 Lot 75 KALAMAU LA		553-5232
Elizabeth Negrello	Kalamaula	P.O. Box 172 K'Kai Hi 96748 Lot 75 Kalamaula		553-5232
Ocui Bush	Hookuhua/Hmsb	P.O. Box 134, Hookuhua Hi 96748		542-4047
Carolyn Bustt	Hookuhua/Hmsb	Box 487 Hookuhua		336-1343
Torre Ritte	Kalamaula	Box 2036 K'Kai		560-8234
Edwui Kaawa	Hookuhua	207 Hhwa		5676442
Urauna Kaawa	Hookuhua			
Paula Olsen	Hookuhua	P.O. Box 333 K'Kai 96748	hiwailani@yahoo.com	336-1030
Drone Pinede	New Applicant	HC 01 BOX 810 K'Kai 96748		558-8445



DEPARTMENT OF HAWAIIAN HOME LANDS  
MOLOKA'I ISLAND PLAN

Meeting Location: Kulana O'ini Comm. Mtg.  
Meeting Date: 10/29/04

PLEASE SIGN IN:

NAME	ORGANIZATION	ADDRESS	E-MAIL	PHONE
Vanessa Gonzales		P.O. Box 1841, Kaunakakai		5588552
Cookie Robins-	Kamiloa Oke Nihi H. Ass.	PO Box 954 K'Kai	keemcab@yahoo.com	553-3335
James Kaopuki	" "	" " "		"
Carol M. Bush	Honolulu Homestead Assn	PO Box 121 Honolulu HI 96721	hotmail.com kinamalakana @	507-6678
Bill Kepuni	Kalamauka Assn	P.O. 1962 K'Kai 96748	billkepuni@hotmail.com	553 9867
Tepo Bavelo	Kalamauka Assn	" "	" "	" "
Andrea N Kamaka		P.O. Box 322 M'loa 96720		658 0474
DeGray Vanderbilt	Molokai Water Working Group Molokai Planning Commission	Box 1348 K'Kai HI 96748	pauhanamolokai@yahoo.com	283-8171
Kaellia Reep	Kalamauka Assn	P.O. Box 193 96748		553-5139
Chun Kwok		HCO1 BOX 601 K'Kai		558 8224
HARVEY K. PUA		P.O. Box 1224 K'Kai		558-1450
Brent Davis	H'una Homestead	P.O. Box 442 H'una		553-9819



DEPARTMENT OF HAWAIIAN HOME LANDS  
MOLOKA'I ISLAND PLAN



Meeting Location: Kukana - O'iwai

Meeting Date: 10/25/04

PLEASE SIGN IN:

NAME	ORGANIZATION	ADDRESS	E-MAIL	PHONE
Pearl M Punahele		P.O. Box 88 Hoohehewa 96729		567-9258
Josephine K Crowell		P.O. Box 88 Hoohehewa 96729		567-9258
Stacy Crivello		P.O. Box 1097, Kaimakahi #8		5588215
Louise Paleka		P.O. Box 86 Hoohehewa, 96729		658-0217
Kaipo Kuinai		967 Kailua Rd #212, Kailua 96734		262-5299
David K Kamakahi		P.O. Box 31 M'ua 96770		443-1952
Alex Biskree		P.O. Box 200 H'ua 96729		567-6484
Anna Biskree		"		"
Dwayne Katz		P.O. Box 61 Kilauea, HI 96740		535321
Wayde Lee		P.O. Box 1032 Kilauea		" "
Rebecca Lee		" " " "		11111





DEPARTMENT OF HAWAIIAN HOME LANDS  
MOLOKA'I ISLAND PLAN



Meeting Location: Kulana O'iwi

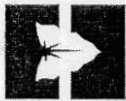
Meeting Date: 10/25/04

PLEASE SIGN IN:

NAME	ORGANIZATION	ADDRESS	E-MAIL	PHONE
Penny Martin	Kalamaula	P.O. Box 341 96748	N/A	5535130
Mulray Allen	Kalamaula	PO Box 1290 96748	balen@aloha.net	553-3443
Kaui Kapuni	Ualapue	PO 1718 K'kai "	Kkapuni@alulike.org	553-5323
<sup>Royal Zuyt</sup> Summer Santiago	Kalamaula	P.O. Box 701 K'Kai 96748	leitkuumai@hotmail.com	553-5264

*Molokai*

# 3RD WORKSHEET



DEPARTMENT OF HAWAIIAN HOME LANDS  
MOLOKA'I ISLAND PLAN



Meeting Location: LANIKEHA HO'OLEHUA

Meeting Date: 10/26/04 COMMUNITY MTG.

PLEASE SIGN IN:

	NAME	ORGANIZATION	ADDRESS	E-MAIL	PHONE
1	HAKIA YASSO	HOOLEHUA AG	P.O. BOX 115 HOOLEHUA		
2	Sweetheart & Ku	Hoolehua Homestead	P.O. Box 367 Hoolehua		
3	Colette Puaoli	Hoolehua Ag. Assn	P.O. Box 50 Hoolehua		
4	Ernest Puaoli	Hoolehua Ag Assn	P.O. Box 50 Hoolehua		
5	Theopiste Purdy	Hoolehua	P.O. Box 94 Kualapuu		
6	Anner L. Arakaki	"	" 116 2nd Floor		
7	Glenn Teves	Homesteader	P.O. Box 261 Kualapuu HI 96757		
8	Faith Horner	Homesteader	P.O. Box 371 Hoolehua HI 96757		
9	Noaham Horner	Homesteader	Box 1954 Kika HI 96748		
10	Donna Howard	Homesteader	P.O. Box 273, Waunianalo, HI 96795		
11	Moana Wampler	Homesteader	P.O. Box 1821, K'Kai HI 96748		
12	Waiphe Lee	"	Box 103 K'Kai		
13	Adrian Lee	"	" "		



DEPARTMENT OF HAWAIIAN HOME LANDS  
MOLOKA'I ISLAND PLAN



Meeting Location: LANIKEHA HO'OLEHUA  
Meeting Date: 10/26/04 Com. MTG.

PLEASE SIGN IN:

NAME	ORGANIZATION	ADDRESS	E-MAIL	PHONE
Thilly P. Salathia	Kalamaula	P.O. Box 863 K'Kai 96748		553-5882
Luana Hamakua				
Pearl M. Punahale		P.O. Box 88 H'Hua 96729		567-7258
Kekana Feli	Kalamaula	P.O. Box 698 96748 K'Kai	khelma@cc	567-6580
John Kadowalo		P.O. Box 1410 K'Kai 96748	iwalani@aloha.net	553-5438
Iwalani Kadowalo		"	"	"
Loretta Ritte		P.O. Box 486 K'Kai		567-9415
Irene Kadowalo		P.O. Box 275, K'Pua	IreneK@aloha.org	560-3963
Valma Makua		Hokulua		567-6010
Sherry Sasada	cop of power point	Ho'olehua Box 185 K'Kai	grise@aloha.net	560-3653
Nancy K. Kadowalo		Hokulua Box 451		567-6273
Ronald Fua		P.O. Box 116 Hokulua 96757		567-9009
J. Kahalehoe		P.O. Box 543, Kalanikakui HI		553-5825



DEPARTMENT OF HAWAIIAN HOME LANDS  
MOLOKA'I ISLAND PLAN



Meeting Location: LANIKEHA HO'OLEHUA

Meeting Date: 10/26/04 COMMUNITY MTG.

PLEASE SIGN IN:

NAME	ORGANIZATION	ADDRESS	E-MAIL	PHONE
Rolanda Mauale	Homesteader	Bx 183 Hoolehua, HI 96729	(DENIED APP AWARD UNABLE TO QUALIFY)	
Josephine Starkey	Homesteader	Box 483 Hoolehua HI 96729		
Kitty Apo	Hoolehua	Box 187 Hoolehua		
Barbara Kalipi	homesteader	Box 368 Hoolehua		
Annette Pauole-Ahakuolo	homsteader	P.O. Box 1972 K'Kai 96748	anapaule@yahoo.com	
Bev. Pauole-More	"	Box 88 " "	mrie@aloha.net	
Patricia Mimis	Homesteader	P.O. Box 96 K'Kai	pmimis@hawaii.edu	
LAURENCE JOHNSON KALILIKANE	"	P.O. Box 335 Hoolehua HI 96729		567-6828 478-5393
John Borden Sr	Homesteader	P.O. Box 364 Hoolehua HI 96729		567-9291
PILANI HORNER	HOMESTEADER	PO BOX 1614 KKA1 96748		
KAWEEHI HORNER	"	PO BOX 830 KKA1 96748		
NATHAN HORNER	"	PO BOX 204 HUNA 96729		
WALTER MCNEDES	"	PO Box 144 Hoolehua		567-6483





DEPARTMENT OF HAWAIIAN HOME LANDS  
MOLOKA'I ISLAND PLAN

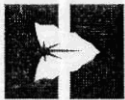


Meeting Location: Lanikena Ho'olehua

Meeting Date: 10/26/04 community mtg

PLEASE SIGN IN:

NAME	ORGANIZATION	ADDRESS	E-MAIL	PHONE
Lucy WHITING		P.O. Box 104 KALAUPAPA HI 96742	Lucy-WHITING@NPS.GOV	5676392
Shirley ALAPA		P.O. Box 177, Kipuna HI 96757	Salapnealaha.net	5676383
Bill Buchanan		P.O. Box 2008 K'Kai, HI 96748		553-8255
Viola Muenchbe		PO BOX 215 Hoolehewa HI 96729	TIPAY@AOL.HI.NET	560-6215
Keoni Linds		Box 527 Hana		
Loisella Albano		P.O. Box 16	opuniani_@notes.ki2.us/5676193	
Carmy Ellenben		PO Box 18	H/Hua	567-6128
Lynn De Corte		Box 125	ldrd@aloha.net	567-9239
Wakaagwa		Box 287	H hua	
Lane Kanaoaka		P.O. Box 1574 KOKAI 96748		5533807
Makana Kamatanga Jearco		POB 278 Kipuna 96757	ekamatana@yahoo.com	
Walter Butte		Box 484 K'Kai 96748		
Darlene D. Motodini		Box 354 Hoolehewa, 96729		6560891



DEPARTMENT OF HAWAIIAN HOME LANDS  
MOLOKA'I ISLAND PLAN

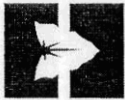


Meeting Location: Lanikeha Ho'olehua

Meeting Date: 10/26/04 community mtg.

PLEASE SIGN IN:

NAME	ORGANIZATION	ADDRESS	E-MAIL	PHONE
Louise H. Paleka		P.O. Box 86 Hoolehua, Molokai		658-0817
Anna Bushaw		P.O. Box 200, H'ua, HI		562-6484
Oelue Bush		P.O. Box 134, Hoolehua, HI 96729		567-6027
Sherilyne Pali		P.O. Box 154 Kipuu 96757		567-6769
Kainoa Pali		PBX 154 Kipuu 96757		567-6788
Henry Pali		P.O. Box 154 Kipuu 96757		567-6769
David MacFarlane		P.O. Box 1922 Kaunakakai 96748		53-7573
James Powell		P.O. Box 45 H'ua		567-1034
DeGray Vanderbilt	Molokai Water Workers Group Molokai County Commission	Box 1348 Kaunakakai 96748		283-8171
JENNIFER KAHANA		P.O. Box 8 Kipuu 96757		567-9686
Mokey Jagan		Box 16 Kipuu 96757		567-6356
BO. KAWA		Box 227 H'ua		567-6442
Joyce Kainoa		P.O. Box 664 K'Kai, HI 96748		1-888-222-9420



DEPARTMENT OF HAWAIIAN HOME LANDS  
MOLOKA'I ISLAND PLAN



Meeting Location: Lanikena Ho'olenua

Meeting Date: 10/26/04 community mtg

PLEASE SIGN IN:

NAME	ORGANIZATION	ADDRESS	E-MAIL	PHONE
Kunio Lopez		P.O. Box 37 H'ua		658-0754
Mahiki Lenzford		P.O. Box 21 H'ua		6552-0211
William Wallace		P.O. Box 216 H'ua		567-6727
Ray Wallace		P.O. Box 216 H'ua, HI 96729		567-6727
M/M Semblon		Kaluaaka Moloka		5588157
J Kehala		P.O. 235 Hoolehua		567-6731
Nina Schmidt		P.O. Box 514		567-6604
JOHN KAPU		P.O. Box 517 96729		567-0252
Li Colon		P.O. Box 189 H'ua		567-6394
Kickay Paush		" " 112 "		567-9052
Weldon Wichman		P.O. Box 219 Niohuan 96729		560-6215
Eladine Adolpho		P.O. Box 43 "		560-5484
Laelani Namahoe		" " 462 "		567-6530



DEPARTMENT OF HAWAIIAN HOME LANDS  
MOLOKA'I ISLAND PLAN



Meeting Location: Lanikēha Ho'olehua

Meeting Date: 10/26/04 community mtg.

PLEASE SIGN IN:

NAME	ORGANIZATION	ADDRESS	E-MAIL	PHONE
M/M Solomon Kupan		P.O. Box 528 Hoolehua		567-9070
Ellen Pateka		P.O. Box 86 Hoolehua		458-0625
Harry Hanaokahi		PO Box 507 Hoolehua		560-6203
Vanda Hanaokahi		" " " "		560-6203
Milton K. Pa		" " 105 "		567-6428
Cheryl Keach		PO Box 51 Hoolehua		567-6292
Alexander Bystro		P.O. Box 200 Hoolehua		567-6464
Don D. Pa		P.O. Box 367 Hoolehua		
Erica Melody Kahim		POB 361 K'kai		553-5161
Kiddie Pord		<del>Hoolehua</del> P.O. Box 84		567-6601
Saron Vick		Panalo Hale Manneloe		552-2847
Carolyn Brist		Box 487 Hoolehua		560-6264
Louise M. Pord		Box 121 Hoolehua		567-6675

DEPARTMENT OF HAWAIIAN HOME LANDS  
MOLOKA'I ISLAND PLAN

Meeting Location: LANIKEHA HO'OLEHUA

Meeting Date: 10/26/09 COMMUNITY MTG.

**PLEASE SIGN IN:**

[illegible]





DEPARTMENT OF HAWAIIAN HOME LANDS  
MOLOKA'I ISLAND PLAN



Meeting Location: Kilohana Comm. Ctr.

Meeting Date: Nov. 4, 2004

PLEASE SIGN IN:

NAME	ORGANIZATION	ADDRESS	E-MAIL	PHONE
1 Judy L. Caparide		P.O. Box 222 K'kai, HI. 96748		5588-558
2 Joanna Pualii		P.O. Box 1864 Keene, HI 96749		968-8789
3 Cora Schnackenberg		7158 Carpinteria Ave. <sup>Ventura</sup> CA 93001		805-652-1359
4 Leimann Nale Hui Kaka		Leimann Nale P.O. Box 713		558-8194
5 Douglas Duda		P.O. Box 84 Kipuli HI, 96757		558 8971
6 Shona Pineda (Shona Pineda)		HCOI BOX 870 K'kai HI 96748		558-8445
7+8 Janet Dami Pedro		HCOI 633 Kaka 96748		558 8157
9 Deldrine Papuni		PO 1718 Kaunakakai 96748		558-83276
10 Jeanette Akiona		P.O. Box 403 K'kai 96748		5588220
11 Philip Akiona Jr		POB 403 K'kai, HI 96748		558-8220
12 Kui Lester		HCOI Box 731 K'kai 96748		558-8220
13 -uana Hamakua				



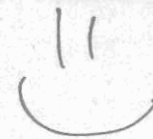
Meeting Date: NOV 4, 2004

PLEASE SIGN IN:

[illegible]



# ALOHA Please sign in



DEPARTMENT OF HAWAIIAN HOME LANDS  
MOLOKA'I ISLAND PLAN

GROUP 70  
INTERNATIONAL

Meeting Location:

Kukuna'Oiwi

Meeting Date:

February 18, 2005

PLEASE SIGN IN:

NAME	ORGANIZATION	ADDRESS	E-MAIL	PHONE
1) Angel Kaaakumaha		P.O. Box 1004-3 Kikui HI		553-9024
2) Milton Pa	DHHC	P.O. Box 105 Hahaione 96729	mikepa@aloha.net	567-6428
3) NGECANI NGALU		P.O. Box 845 KIKAI 96748		
4)				
5)				
6)				
7)				
8)				
9)				
10)				
11)				
12)				
13)				

# ALOHA - Please sign in



DEPARTMENT OF HAWAIIAN HOME LANDS  
MOLOKA'I ISLAND PLAN



Meeting Location: Kulano 'Oiwai  
Meeting Date: February 18th, 2005

PLEASE SIGN IN:

NAME	ORGANIZATION	ADDRESS	E-MAIL	PHONE
1) Tracy Hao-Frantz	Homesteader	P.O. Box 561 Hookehuan, HI 96729		5555822
2) Harriet K.P. Fukuoka		P.O. Box 181 K'kae, HA. 96748		336-1166
3) C. Lette Machado	OHA	_____	_____	_____
4) Irene Koshanui	OHA	P.O. Box 1717 K'kae 96748		560-3963
5) Zachary Helm	Kalamaula Hawaiian Homestead Assoc.	Box 123 96748	ZachHelm@yahoo.com	553-3512
6) Kapo Kincaid	Hui Kakaoo	767 Kailua Rd #212, Kailua 96734		
7) Ron Davis Sr	Kapaekua	P.O. Box 409 K'kae HI	96748	_____
8)				
9)				
10)				
11)				
12)				
13)				

# ALOHA! please sign in



DEPARTMENT OF HAWAIIAN HOME LANDS  
MOLOKA'I ISLAND PLAN

GROUP 70  
INTERNATIONAL

Meeting Location: Kulana O'iwi

Meeting Date: February 1st, 2005

PLEASE SIGN IN:

NAME	ORGANIZATION	ADDRESS	E-MAIL	PHONE
1) <u>William Chan</u>		<u>P.O. Box 1065</u>		<u>808-5588192</u>
2) <u>Joe &amp; Pearl Souza</u>		<u>Lot 21 Kalamula</u>		
3) <u>Melody Kahim</u>		<u>Lot 19 Kalamula</u>		
4) <u>Barbara Kakekua</u>	<u>KHHA</u>	<u>P.O. 1375 K'Kai Hi 96748</u>		<u>553-3689</u>
5) <u>D. Gosper</u>	<u>Kapaekua</u>	<u>P.O. Box 1045</u>	<u>Sunnyhi at Earthlink</u>	
6) <u>Barbara Jones</u>	<u>MPC</u>	<u>P.O. Box 259 Manalo</u>		
7) <u>Jessica K. Oswald</u>		<u>P.O. Box 1296 K'Kai Hi 96748</u>		<u>808 336-0558</u>
8) <u>Lynn Dilash</u>		<u>Box 128 H'ua Hi 96729</u>		
9) <u>Debbie Kelly</u>	<u>MLSWCD</u>	<u>Box 396 H'ua</u>		<u>567-6868x102</u>
10) <u>Ann Peters</u>		<u>Hc 01-633 Kaka 96748</u>		<u>808-5588157</u>
11) <u>Dora Wajima</u>	<u>Homesteader</u>	<u>P.O. Box 57, H'ua</u>	<u>Pelekunu@hotmail.com</u>	<u>(808) 567-6780</u>
12) <u>Jeanette Kahalekoe</u>	<u>Kalamula Assoc</u>	<u>P.O. Box 543, Kalamula 96748</u>		<u>553-5825</u>
13) <u>Carolyn Terence</u>	<u>Waiting list</u>	<u>P.O. 148 Kalamula K'Kai 96748</u>		<u>553-5441</u>



# ALOHA - Please sign in!



DEPARTMENT OF HAWAIIAN HOME LANDS  
MOLOKA'I ISLAND PLAN

GROUP 70  
INTERNATIONAL

Meeting Location: Kulana'Oiwi  
Meeting Date: February 18th, 2005

PLEASE SIGN IN:

NAME	ORGANIZATION	ADDRESS	E-MAIL	PHONE
1) M. Kamelamela		P.O. Box 2086		553-3779
2) Patricia Silver		P.O. Box 556		553-3290
3) Kalyin		Hc-01 Box 551 96744		558-8159
4) Stacy Crivello		Box 1097, Kai 96748	stacy@aloha.net	558 8 275
5) Lorraine Luyke		P.O. Box 252, K'Ke'hi 96748		553-3454 (WL)
6) Lori-Lei Rawlins-Crivello		PO Box 346 Kaimakakai		553-3939
7) Kaani Napsillo		P.O. Box 192 K'kai		553-5232
8) Bill Kapuni	Kalama Ula <sup>Assoc</sup> Maula	P.O. Box 1962 "	billkapuni@hotmail.com	553 9867
9) Kyno Savelle	" " "	" " " "	" "	" "
10) Alike Kalanihaia Jr.		P.O. 210 Kualapua HI 96757	noamkk@wave.hicv.net	
11)				
12)				
13)				

ALOHA...



DEPARTMENT OF HAWAIIAN HOME LANDS  
MOLOKA'I ISLAND PLAN



Meeting Location:

Kukuna'Oiwi

Meeting Date:

February 1st, 2005

PLEASE SIGN IN:

NAME	ORGANIZATION	ADDRESS	E-MAIL	PHONE
1) P. Kuamoo		P.O. Box 2086 K'kai, HI 96748		553-9024
2) Pearl Pinatele		P.O. Box 88 H'ula 96729		567-9258
3) Brennan Puntzer	Molokai Island Times	Po Box 1887, Molokai Shores #320		553-4443
4) Hokunani DeCosta		HCOI Box 733 96748		558-8538
5) Norman DeCosta		HCOI Box 733 96748		558-8538
6) KANAKUA Jodi	KAPAHEA HOMESEAD	LOT #16 KAPAHEA LP 96748		553-3784
7) Leilani Wallace	KAPAHEA, HI	Lot #25 KAPAHEA LP 96748		553-8111
8) Gayle Monai	KAPAHEA	Lot #81 P.O. Box 4426		553-3960
9) Rotchie Kapu Saffy	Hui Kalo's	P.O. Box 1864 Kapahe 96748		968-8778
10) Dwayne Kala	Kapahe	P.O. Box 61 K'kai, HI 96748		553-5391
11) C.M. Kinau Tino		P.O. Box 1095 K'kai, HI 96748		553-3574
12) Tommy Kusdy		Box 84 H'ula		567-6601
13) B.K. Abjima	H'ula	P.O. Box 57 #1 96729		



DEPARTMENT OF HAWAIIAN HOME LANDS  
MOLOKA'I ISLAND PLAN



Meeting Location:

Lanikena

Meeting Date:

Feb 2nd, 2005

PLEASE SIGN IN:

NAME	ORGANIZATION	ADDRESS	E-MAIL	PHONE
1) Robin Dudoit		HC-01-Box 721		558-8351 553-3506
2) Donnie Hama Boren		P.O. Box 191 Hoonua, HI		244-6041
3) Charity Kekauoha		P.O. Box 1562 K'Kai		658-1029.
4) Richard Markham		41-9690/40th St Waimanalo		(813)3238920
5) Pearl M. Pundole		P.O. Box 88 Hoonua 96729		567-9258
6) John Pundole		P.O. Box 353 Hoonua 96729		567-9090
7) D. Geyer		P.O. Box 1045		
8) Irene Kaahani	OTHA	P.O. Box 1717, K'Kai	96748 Irene K @oha.org	560-3963
9) Judy L. Caparide		P.O. Box 222 K'Kai	96748	5588-558
10) Tuanna Pili Alii		P.O. Box 1571 Hoonua	96748	
11) Louise M. Bue		Box 128 Hoonua	96748 / Kinamalakani @hotmail.com	567-6678
12) Scrineelo				
13) Frank Keohi		Box 522 Hoonua, HI		567-6141





DEPARTMENT OF HAWAIIAN HOME LANDS  
MOLOKA'I ISLAND PLAN



Meeting Location: Lanikēha

Meeting Date: Feb 2, 2005

PLEASE SIGN IN:

NAME	ORGANIZATION	ADDRESS	E-MAIL	PHONE
1) Upla Forbes		PO Box 225, Hoolehua		567-6704
2) William K. Kihauohu Jr.		P.O. Box 1562 K. Kai		658-1029
3) Mona Kaawa				
4) Edwin Kaawa				
5) Milton R.		P.O. Box 105 Hoolehua		567-6428
6) Martha K. Nakagawa		P.O. Box 415 Hoolehua		567-6195
7) Frank Wilk		P.O. Box 1291 Lohi		
8) Leiff KBush				
9) Cecilia Gluck		P.O. Box 12 H'ua 96709		567-6568
10) Colette Puaoi	HHAA	P.O. Box 50 H'ua 96729		
11) Ernest Puaoi	HHAA	" " " " "		
12) Lynn DeLoe		Box 125 H'ua		567-9234
13) Nina Schmidt		514 Hoolehua 96709		567-6604





DEPARTMENT OF HAWAIIAN HOME LANDS  
MOLOKA'I ISLAND PLAN



Meeting Location: Lanikena

Meeting Date: Feb 2nd, 2005

PLEASE SIGN IN:

NAME	ORGANIZATION	ADDRESS	E-MAIL	PHONE
1) Gene' Burr	H. hua Homestead	DB - Healea		567-6017
2) Hank K. Pordy	HOOLEHUA	PO Box 84		567-6601
3) B. K. Njima	Hoolehua	P.O. Box 57-96729		
4) Alike Katarikua		P.O. Box 210 Kualapua 96757	noamkk@wave.hicv.net	
5) Debbie Davis	Hua	Po Box 17		
6) Mac Pappas	Hua	P.O. Box 173 <sup>Kualapua</sup> 96757		
7) <del>Bob</del> Adolph	H. Hua	Box 475 96729		
8) Leimara Nak	Manae	Box 173 96748		558-8194
9) Wayne Pears	H. Hua	1093 K-kai 96748		567-9165
10) Dukhie Saffery	Hui Kakaoo	PO Box 1864 Keane 96749		968-8189
11) Watter Pito		Box 486 Kilauea		
12) William S. Saffery	Hoolehua Home Stander	Box 194 Hoolehua		567-6121
13) Mike Kuni		96757-0267		

Molokai Homestead Assoc.



DEPARTMENT OF HAWAIIAN HOME LANDS  
MOLOKA'I ISLAND PLAN



Meeting Location: Lanikena

Meeting Date: Feb 2nd, 2005

PLEASE SIGN IN:

NAME	ORGANIZATION	ADDRESS	E-MAIL	PHONE
1) MARTIN KAHAE	Hei lani/MLC Homesteader			658-1537
2) Weldon Withman	Homestead			560-6215
3) David Bush				560-6264
4) William Puaoi	Hoboken Ag. Ass			
5) Cecilia Y. Machado	OHA			
6) HARLOU KAPPICK	Homesteader	P.O. Box 339 K'ia, 96729	OHA	336-0653
7) Steve Teves	Homesteader	P.O. Box 261 Kona 96757		567-6683
8) Jane Teves	Homesteader	P.O. Box 261 Kona 96757		
9) Loke Han		P.O. Box 34 H'UUA		567 6390
10) Lonetta Riffe	Homesteader	P.O. Box 484 K'Kai		567-9415
11) John Kephau Jr	Applicant/Waiting list	P.O. Box 514 H'UUA 96729		561-6686
12)				
13)				



DEPARTMENT OF HAWAIIAN HOME LANDS  
MOLOKA'I ISLAND PLAN



Meeting Location: Lanikulu  
Meeting Date: Feb 2, 2005

PLEASE SIGN IN:

NAME	ORGANIZATION	ADDRESS	E-MAIL	PHONE
1) Tracy Ho-Franky	H'hua Homestead	Box 501 H'hua Hi 96729		553-5822
2) Edward H. Ayau	" "	Box 365 Hoolehua 96729	halealoha@wave.hicv.net	553-5738
3) Faith Tuipulotu	" "	Box 541 " "	faitht@allnet	560-6227
4) D.J. Pelekai	H'hua "	Box 57 " "	Pelekai@hotmai.com	
5) Noah Kuoha	H'hua	Box 491 " "		567-9020
6) Julian Naka	One alii	Box 773 Kilauea	Elano 808.@yahoo.com	553-5337
7) Samuel Naki	One Alii	Box 773 Kilauea		553-5339
8) John Kapa	Hoolehua	Box 517 H'hua 96729		560-8065
9) Raipo Kuncid	Hui Kaka	767 Kilauea Pl. #212, Kilauea		567-9052
10) Mickey Pele	Hoolehua	P.O. Box 112, Hoolehua		
11) John Kechulua	Homesteader	P.O. Box 1053 Kilauea Hi 96748	PineApple@Mobattsh.net	567-4220
12) Moana Kechulua	Homesteader	" "	" "	" "
13)				

## D. Leasee & Applicant Survey Report





***Beyond Information. Intelligence.***

*Consulting*

*Database Marketing*

*Economic & Social Impact  
Studies*

*Research*

*Training*

**SMS**

1042 Fort Street Mall  
Suite 200  
Honolulu, HI 96813  
Ph: (808) 537-3356  
Toll Free (877) 535-5767  
Fax: (808) 537-2686  
E-mail: [info@smshawaii.com](mailto:info@smshawaii.com)  
Website: [www.smshawaii.com](http://www.smshawaii.com)

## **MOLOKAI ISLAND PLAN**

---

### **Final Report**

**SMS Affiliations and Associations:**

Alan Barker Associates  
Experian  
Hospitality Advisors, LLC  
International Survey Research  
Latham Synchronized Relationship Marketing  
Mediamark Research Inc.  
NCQA Certified  
Stephanie Kaneshiro – Big Island Affiliate  
Warren Dastrup – Kauai Affiliate  
3i Marketing & Communications



**Prepared by:**  
Research & Marketing Services, Inc  
December 17, 2004



# CONTENTS

<b>INTRODUCTION.....</b>	<b>1</b>
BACKGROUND AND OBJECTIVES .....	1
STUDY METHOD AND SAMPLE .....	1
<b>FINDINGS .....</b>	<b>2</b>
APPLICANT PREFERENCES .....	2
<i>Housing Preferences</i> .....	3
<i>Agricultural and Pastoral Award Preferences</i> .....	4
AREA PREFERENCES .....	5
LOT SIZES .....	8
QUALIFICATIONS FOR AWARD ACCEPTANCE .....	10
<i>Financial Qualification</i> .....	10
FACILITIES AND AMENITIES .....	12
SATISFACTION WITH MOLOKAI HOMESTEADS .....	13
<i>What Lessees Like About Their Communities</i> .....	13
<i>Lessee Suggestions for Improvement</i> .....	13
KEEPING BENEFICIARIES INFORMED .....	14
SUBSISTENCE ACTIVITIES .....	15
<b>APPENDIX A: STUDY METHODS.....</b>	<b>17</b>
<b>APPENDIX B: SURVEY INSTRUMENTS .....</b>	<b>4</b>
APPLICANT SURVEY .....	1
LESSEE SURVEY .....	6
<b>APPENDIX C: SUMMARY DATA - APPLICANTS .....</b>	<b>12</b>
<b>APPENDIX D: SUMMARY DATA - LESSEES .....</b>	<b>26</b>
<b>APPENDIX E: OPEN-ENDED RESPONSES - LESSEES.....</b>	<b>1</b>
POSITIVE ASPECTS OF HOMESTEAD LIFE .....	1
SUGGESTIONS FOR IMPROVEMENT.....	8

## LIST OF TABLES

TABLE 1. INTEREST IN AWARD TYPES, MOLOKAI, 2004.....	2
TABLE 2. DHHL LAND AWARD TYPE PREFERENCES, MOLOKAI, 2004.....	3
TABLE 3. HOUSING TYPE PREFERENCES, MOLOKAI, 2004.....	4
TABLE 4. AGRICULTURAL AND PASTORAL AWARD PREFERENCES, MOLOKAI, 2004.....	4
TABLE 5. FIRST CHOICE FOR TYPE OF HOMESTEAD AWARD .....	7
TABLE 6. PREFERRED LOT SIZES FOR AGRICULTURAL AND PASTORAL APPLICANTS.....	9
TABLE 7. FINANCIAL QUALIFICATIONS OF APPLICANTS WHO WILL LIVE ON THE LAND.....	11
TABLE 8. SUGGESTED FACILITIES AND AMENITIES BY AREA .....	12
TABLE 9. PREFERRED METHOD OF COMMUNICATION.....	14
TABLE 10. CURRENT SUBSISTENCE ACTIVITIES .....	15
TABLE A1. LIST STATISTICS, DHHL BENEFICIARY SURVEYS, MOLOKAI, 2004 .....	2
TABLE C1. CHOICES.....	1
TABLE C2. LAND AWARD PREFERENCES .....	2
TABLE C3. LAND AWARD PREFERENCES .....	3
TABLE C4. ALTERNATIVE HOUSING ARRANGEMENTS FOR DHHL AWARDS .....	5
TABLE C5. AGRICULTURAL APPLICANT PREFERENCES .....	6
TABLE C6. PASTORAL APPLICANT PREFERENCES .....	7
TABLE C7. LOCATIONS BY TYPE OF AWARD.....	8
TABLE C8. FIRST CHOICE FOR LOCATION BY TYPE OF AWARD .....	9
TABLE C9. ALL LOCATION CHOICES: RESIDENTIAL .....	10
TABLE C10. ALL LOCATION CHOICES: AGRICULTURAL .....	11
TABLE C11. ALL LOCATION CHOICES: PASTORAL.....	12
TABLE C12. LOT SIZE PREFERENCES.....	13
TABLE C13. QUALIFICATIONS .....	14
TABLE C14. CHARACTERISTICS OF CURRENT HOUSING UNIT .....	15
TABLE C15. COMMUNITY ISSUES SUMMARY .....	16
TABLE C16. COMMUNITY AMENITIES & ISSUES .....	17
TABLE C17. CURRENT SUBSISTENCE ACTIVITIES .....	22
TABLE C18. PROBLEMS WITH SUBSISTENCE ACTIVITIES .....	23
TABLE C19. CONTACT PREFERENCES.....	24
TABLE C20. DEMOGRAPHIC CHARACTERISTICS OF APPLICANTS.....	25

## LIST OF FIGURES

FIGURE 1. MAP OF DHHL LAND AREAS ON THE ISLAND OF MOLOKAI.....	6
--	---

# **INTRODUCTION**

## **BACKGROUND AND OBJECTIVES**

The Department of Hawaiian Home Lands (DHHL) has a mandate to provide access to Hawaiian Home Lands for qualified Native Hawaiian applicants. Many home lands are currently unimproved, and development will be required before applicants can make use of them. In 2004, DHHL initiated long-range planning for home lands on the Island of Molokai. The planning process was to include DHHL's renewed emphasis on securing beneficiaries' input for decision-making.

Group 70 International was selected to prepare a land use plan for all of the Hawaiian home lands on the Island of Molokai. One of the first tasks in that project was to survey applicants and lessees of Molokai to determine their needs and preferences. That information would be used to support effective development planning. A comprehensive study was designed to estimate demand, identify applicant needs and preferences, and measure concerns of applicants and lessees.

The goal of the project was to supply planners with information needed to formulate plans that fit the needs of applicants. It was also intended to provide broad coverage of the beneficiary population so that planning could proceed with optimum and timely data on how beneficiaries would like to have things done. The specific objectives of the study were:

1. To determine land area preferences among applicants for awards on Molokai;
2. To identify applicant needs and preferences related to land use and lot size;
3. To quantify opinions on issues related to land use and distribution.

## **STUDY METHOD AND SAMPLE**

Two separate surveys of Department of Hawaiian Home Lands beneficiaries were completed for the study. The first gathered need, preference, and opinion data from current applicants for awards on Molokai. The second gathered land use data and opinions of lessees occupying DHHL homestead leases on the Island of Molokai.

Mailed, self-administered surveys were used for both surveys. The survey of applicants was mailed to 1,021 applicants for awards on the Island of Molokai. After a single mailing, 202 (20.0%) complete and useable forms were received. The resulting sample had a sample error of plus-or-minus 6.2 percentage points at the 95 percent confidence level. The self-administered lessee survey was mailed to 690 current Molokai leaseholders. In all, 114 surveys (16.7%) were returned by those respondents. The sample error for that survey was plus-or-minus 8.4 percentage points at the 95 percent confidence level. A more detailed description of the study method can be found in Appendix A: Study Method, and copies of the two survey instruments are included in Appendix B: Survey Instruments.

## FINDINGS

All findings reported here are based on the results of the two surveys conducted for the project. However, the report primarily focuses on the data from DHHL applicants.

Because the sample design eliminated duplicate applicant entries<sup>1</sup>, the applicant data were weighted to the total number of applicants on the DHHL lists as of July 2004. Specifically, the 202 applicant survey respondents accounted for a total of 272 pending applications: 118 residential, 116 agricultural, and 38 pastoral. Surveys from these respondents were weighted to represent 1,021 applicants who made 1,351 applications: 535 residential, 684 agricultural, and 132 pastoral.

### APPLICANT PREFERENCES

Among applicants for DHHL land awards on the Island of Molokai, a total of 354 (34.7%) were applicants for more than one type of award. For planning purposes it is useful to identify the first choices of these applicants. Table 1 shows the survey results measuring first choices for types of awards.

**Table 1. Interest in Award Types, Molokai, 2004**

DHHL List Membership	First Choice for Type of Award							
	Residential		Agricultural		Pastoral		No Preference*	
	num	pct	num	pct	num	pct	num	pct
Residential only	187	26.8	35	16.3	15	15.8	5	50.0
Agricultural only	222	31.9	71	32.6	20	21.1		
Pastoral only	45	6.5	30	14.0	30	31.6	5	50.0
Res & Ag	187	26.8	76	34.9	10	10.5		
Res & Pastoral	56	8.0	5	2.3	20	21.1		
Total applicants	698	100.0	217	100.0	96	100.0	10	100.0

\* Respondent did not provide any choices.

Applications for land on Molokai are unique among Hawaii's four counties. The majority of applications (684) was for agricultural rather than residential awards. When queried for their first choice, however, 698 applicants (68%) expressed their preference for residential awards. Past beneficiary studies have all shown that residential awards are the primary interest of DHHL applicants, and that first choices have very different patterns than list membership. Among applicants for homestead awards on Molokai, about 21 percent of all applicants specified agricultural awards as their first choice. About nine percent preferred pastoral awards first, and less than one percent had no preference.

<sup>1</sup> Some lessees are applicants for other types of land awards.

In the remainder of this report we will present data for applicants for homestead awards on Molokai according to their first choices for type of award as shown in Table 1.

## Housing Preferences

As Table 2 shows, different groups of applicants were interested in different types of land awards. Those primarily seeking a residential award were mainly interested in receiving improved land with a house already in place (58%). Very few of them wanted an award of unimproved raw land (5%). In contrast, agricultural and pastoral applicants were much less interested in receiving an already-built house (21%). Instead, they primarily wanted an award consisting of improved land with no house on it.

**Table 2. DHHL Land Award Type Preferences, Molokai, 2004**

Land Award Type	First Choice for Type of Award							
	Residential		Agricultural		Pastoral		No Choice*	
	num	pct	num	pct	num	pct	num	pct
Unimproved raw land	35	5.1	30	14.0	30	31.6		
Improved land, no house	233	33.3	126	58.1	45	47.4		
Improved land with house	404	58.0	45	20.9	20	21.1	5	50.0
No Response	25	3.6	15	7.0			5	50.0
Total applicants	698	100.0	217	100.0	96	100.0	10	100.0

\* Respondent did not provide any choices.

Once the award is made, applicants for land on Molokai had different ideas about how the housing unit might be provided. In all, about 48 percent wanted to build their own unit and 33 percent would rather have DHHL provide the housing unit.

Among those who want DHHL to build the unit, most preferred the turnkey single-family unit option that has been standard in the past (19% of all applicants). About 8 percent of all applicants opted for the rent-to-own program in this survey, and about four percent said they would prefer a single-family rental unit. Two percent of applicants would prefer a multi-family unit provided by DHHL.

Other than the fact that agricultural and pastoral applicants are more likely to have indicated no housing type preference, the preference patterns are fairly similar across the three applicant groups.

**Table 3. Housing Type Preferences, Molokai, 2004**

Housing Type Preference	First Choice for Type of Award							
	Residential		Agricultural		Pastoral		No Choice*	
	num	pct	Num	pct	num	pct	num	Pct
House built by DHHL	157	22.5	25	11.6	5	5.3	5	50.0
House built by my contractor	323	46.4	116	53.5	51	52.6		
Multi-family (duplex)	20	2.9						
Single family rental	30	4.3	5	2.3				
Rent-to-own	61	8.7	15	7.0	5	5.3		
Kupuna housing	10	1.4						
No first choice	96	13.8	56	25.6	35	36.8	5	50.0
Total applicants	698	100.0	217	100.0	96	100.0	10	100.0

\* Respondent did not provide any choices.

### Agricultural and Pastoral Award Preferences

A fairly high number of applicants for agricultural or pastoral awards on Molokai are already engaged in farming or ranching right now.

**Table 4. Agricultural and Pastoral Award Preferences, Molokai, 2004**

	First Choice for Type of Award			
	Agricultural		Pastoral	
	Number	Percent	Number	Percent
Number currently farming or ranching.	91	41.9	35	36.8
Current level of farming or ranching				
Subsistence	56	25.6	20	21.1
Supplemental	30	14.0	15	15.8
Commercial	0	0.0	0	0.0
No response	5	2.3	0	0.0
Number who will farm or ranch:	217	100.0	96	100.0
Intended use				
Will build a house	25	11.6	10	10.5
Will build a house and farm/ranch	142	65.1	66	68.4
Will farm or ranch only	0	0.0	0	0.0
Not sure, haven't decided yet.	50	23.3	20	21.1
Type of Operation Anticipated*				
Subsistence farming or ranching	71	32.6	30	31.6
Supplemental farming or ranching	96	44.2	51	52.6
Commercial farming or ranching	35	16.3	10	10.5
No indication	15	7.0	5	5.3

Note: \*Applies to applicants who will ranch or farm. Additional details in the appendix.



At the time of the survey, about 42 percent of applicants for agricultural awards were currently farming, and 37 percent of pastoral applicants were currently raising animals. All of these farming and ranching activities are currently being conducted on the subsistence or supplemental level.

As in past studies, applicants seem to think of agricultural and pastoral awards at least partly as housing solutions. Among the agricultural or pastoral applicants, none said that they would use the land solely for farming or ranching, without residing there.<sup>2</sup>

Preferences for type of farming or ranching operations were based on DHHL definitions of subsistence<sup>3</sup>, supplemental<sup>4</sup>, or commercial<sup>5</sup> farming and ranching. Survey results clearly indicated that relatively few applicants (16% and 11%) were interested in commercial farming or ranching. More were interested in subsistence (33% and 32%) or supplemental (44% and 53%) operations. Those preferences will have an impact on lot size and on the amount of training or experience required to produce successful farming or ranching operations on homestead land. If business plans are required for commercial or supplementary awards, or if periodic performance reports are needed, additional assistance may be required for applicants without experience or training.

Molokai lessees on agricultural land seem to have the same issues as applicants. One-third of them are subsistence farmers, 12 percent said they are currently farming at the supplemental level, and six percent are commercial farmers. About 41 percent would say they only have a few plants but are not really farming the land, and nine percent are not growing any crops at all. Those who were farming at the time of the survey were mostly growing garden fruits and vegetables, taro, nuts, or native or tropical plants. When the non-farming agricultural lessees were asked why they were not farming, the main reasons given were a lack of equipment, a need for more training, a lack of sufficient water infrastructure, and an inability to afford farming costs.

## AREA PREFERENCES

One of the major questions in land planning is which area to develop first. Although there are many other elements that must be considered in the development schedule (infrastructure cost, feasibility, access, water, etc.), identifying applicant preferences was the primary focus of the present study. All other things considered, more applicant needs can be satisfied sooner if development proceeds according to applicants' area choices.

---

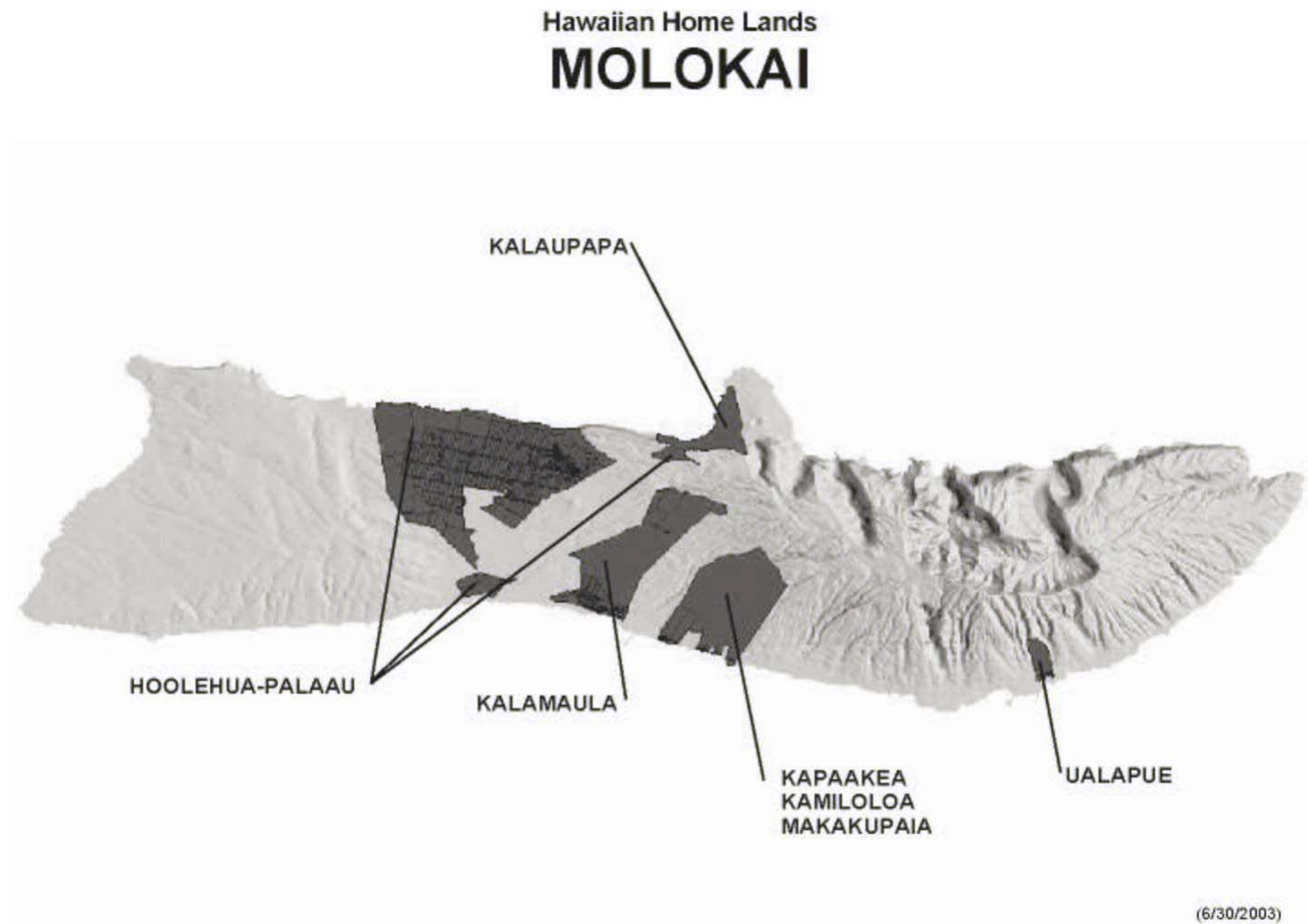
<sup>2</sup> Table 4 includes only applicants whose first choice was for an agricultural or pastoral award. Data on other choices, land use intentions, and levels of farming or ranching can be found in the appendix.

<sup>3</sup> **Subsistence Farming/Ranching** = grow crops/raise animals to supply minimal needs of the immediate family, living in the household.

<sup>4</sup> **Supplemental Farming/Ranching** = crops grown/ excess of animal products will supply some, but not all of the income/goods/services needed by the family.

<sup>5</sup> **Commercial Farming/Ranching** = crops grown/ excess of animal products will provide all of the income/goods/services needed by the family without other employment.

Figure 1. Map of DHHL Land Areas on the Island of Molokai



**Table 5. First Choice for Type of Homestead Award**

Preferred Location	First Choice or Type of Homestead Award								Group Total	
	Residential		Agricultural		Pastoral		No Preference		Count	Col %
	Count	Col %	Count	Col %	Count	Col %	Count	Col %		
Hoolehua-Palaau	243	42.1	91	52.9	45	64.3	5	100.0	384	46.6
Kalamaula	136	23.7	25	14.7	5	7.1	0	0.0	167	20.2
Ualapue	66	11.4	51	29.4	10	14.3	0	0.0	126	15.3
Kapaakea Kamiloloa Makakupala	91	15.8	5	2.9	5	7.1	0	0.0	101	12.3
Kalaupapa	40	7.0	0	0.0	5	7.1	0	0.0	45	5.5
Makes no difference	30		5		5				40	
No response	91		40		20		5		157	
Total Applicants	698	100.0	217	100.0	96	100.0	10	100.0	1,021	100.0

All surveyed applicants were asked to rate each of five land areas on the Island of Molokai for each of their applications. The land areas described in the survey were Hoolehua-Palaau, Kalaupapa, Kalamaula, Kapaakea Kamiloloa Makakupala, and Ualapue<sup>6</sup>. Respondents were also permitted to record no area choice with the clear understanding that location made no difference to them.

The number of applicants who chose each area is shown in Table 5, arranged in order of applicant preference. About four percent of applicants said they had no preference for any specific area, and 15 percent did not respond to the question. Table 5 shows all of these non-respondents and presents percentages based only on respondents who made a first choice. We should note that many applicants rated fewer than five areas, indicating that they were not interested in some areas. Some applicants chose only one area and indicated that they were not interested in awards in other areas of the island.

The most popular location, by far, was DHHL homestead land in Hoolehua-Palaau. That area was selected as first choice by 47 percent of all Molokai applicants, garnering 42 percent of first choice selections among the residential group, 53 percent among the agricultural group, and 64 percent among the pastoral group. The Kalamaula homestead was the second most popular area among residential applicants (24%). However, among agricultural and pastoral applicants, Ualapue was the second place finisher (29% and 14%).

## LOT SIZES

For agricultural and pastoral lots, size may be directly related to the type of crops or livestock to be raised, and to the scope of operations intended (supplemental or commercial). Table 6 presents data on lot sizes preferred by agricultural and pastoral applicants in the year 2004. Further details, including lot sizes preferred by applicants for residential awards, can be found in Table C12 in the Appendix to this report.

Of the applicants for agricultural awards who plan to conduct subsistence farming, the majority (66%) reported that they would need between three and five acres of land. Among those who plan on supplemental agriculture, nearly half (48%) also anticipated needing three to five acres. For those who intended to go into commercial agriculture, about 43 percent hope to receive six to ten acres of farmland, while another 43 percent believe that three to five acres is sufficient for their commercial ventures. Only 14 percent of the commercial group is seeking more than ten acres of land.

Raising livestock typically requires more space than raising crops, and accordingly, preferred lot sizes were much larger for pastoral awards than for agricultural awards. The average lot size requested by a pastoral applicant was 344 acres, compared to an average request of 9 acres by an agricultural applicant. In fact, the average lot size among those applicants intending to pursue pastoral activities on a commercial basis was 876 acres.

---

<sup>6</sup> See Figure 1, Molokai Map.

**Table 6. Preferred lot Sizes for Agricultural and Pastoral Applicants**

Prefer Agricultural Award			Prefer Pastoral Award		
Lot Size	Number	Percent	Lot Size	Number	Percent
Total Applicants	217	100%	Total Applicants	96	100%
Total Applicants will farm	196	90%	Total Applicants will ranch	75	78%
<b>Total Applicants</b>	196		<b>Total Applicants</b>	75	
2 acres or less	15	8%	less than 20 acres	15	20%
3 to 5 acres	106	54%	21 to 50 acres	15	20%
6 to 10 acres	35	18%	51 to 250 acres	10	13%
11 to 40 acres	40	20%	251-750 acres	15	20%
average lot size	9.2		751 to 1,000 acres	20	27%
			average lot size	344.4	
<b>SUBSISTENCE</b>	61		<b>SUBSISTENCE</b>	20	
2 acres or less	5	8%	less than 20 acres	0	0%
3 to 5 acres	40	66%	20 to 50 acres	5	25%
6 to 10 acres	5	8%	51 to 250 acres	5	25%
11 to 40 acres	10	17%	251-750 acres	5	25%
average lot size	7.3		751 to 1,000 acres	5	25%
			average lot size	340.5	
<b>SUPPLEMENTAL</b>	85		<b>SUPPLEMENTAL</b>	15	
2 acres or less	10	12%	less than 20 acres	0	0%
3 to 5 acres	40	48%	20 to 50 acres	5	33%
6 to 10 acres	15	18%	51 to 250 acres	5	33%
11 to 40 acres	20	24%	251-750 acres	5	33%
average lot size	9.7		751 to 1,000 acres	0	0%
			average lot size	162.2	
<b>COMMERCIAL</b>	35		<b>COMMERCIAL</b>	10	
2 acres or less	0	0%	less than 20 acres	0	0%
3 to 5 acres	15	43%	20 to 50 acres	0	0%
6 to 10 acres	15	43%	51 to 250 acres	0	0%
11 to 40 acres	5	14%	251-750 acres	0	0%
average lot size	9.5		751 to 1,000 acres	10	100%
			average lot size	875.5	
<b>NO PREFERENCE</b>	15		<b>NO PREFERENCE</b>	30	
2 acres or less	0	0%	less than 20 acres	15	50%
3 to 5 acres	10	67%	20 to 50 acres	5	17%
6 to 10 acres	0	0%	51 to 250 acres	0	0%
11 to 40 acres	5	33%	251-750 acres	5	17%
average lot size	12.8		751 to 1,000 acres	5	17%
			average lot size	261.1	

## QUALIFICATIONS FOR AWARD ACCEPTANCE

### Financial Qualification

DHHL's past surveys, as well as its actual experience of making award offers, have shown that many applicants are unprepared to accept awards because they lack the resources necessary to obtain financing. We might expect that future awardees for Island of Molokai home lands will also have difficulties with financial qualifications. To development planners, this will mean that absorption rates will be slower than indicated by our survey respondents' expected schedules for occupation. To DHHL, it once more underlines the need for training to produce financial readiness and the need for special financing.

Financial qualification depends on a host of factors specific to each applicant at the time an award is offered. These can include equity in current Real Estate, available cash, credit worthiness, borrowing rates, availability of assistance from family and friends, household income, household size, access to special financing, and many others. It would not be possible to gather all of these items in a single survey. Rather, the applicant survey gathered some basic qualifying data to provide an indication of financial qualification.

Table 7 presents survey data on applicants' financial status, indicating their ability to finance a home on awarded DHHL lands.

The data in Table 7 suggest that relatively large numbers of current applicants may not have the level of financial resources required to qualify for standard financing. The finding is consistent with DHHL staff experience in qualifying applicants across the State. Although about 50 percent of them own their own homes, about 17 percent of applicant households reported no adults employed. About 35 percent of the applicants have household incomes (combined income of applicant and spouse) greater than \$50,000 per year. At \$50,000, monthly shelter payments in excess of \$1,000 would produce a shelter-to-income ratio in excess of 24 percent, an acceptable limit for standard financing. Currently, only 35 percent of all applicants have shelter payments greater than \$800 per month.

In an attempt to develop a quantitative measure of the likelihood of financial qualification, we developed the classification scheme (Qualification Summary) shown at the bottom of Table 7. A problem was defined as having either a total household income less than \$50,000, or no adults employed, or not being a homeowner, or having monthly housing payments greater than \$800. The classification system is a rough indicator of financial qualification. It reflects only equity, income, employment status, and current shelter payments. Having other assets may increase qualifications for some applicants. Others may have credit problems, debts or unusual expenses that would decrease their financial qualifications to accept an award. The classification system reflects the financial situations of applicants for land awards on Molokai in 2004, and things could change by the time an award is made. Overall, however, the measure reflects relative financial ability to accept an award.



**Table 7. Financial Qualifications of Applicants Who Will Live on the Land**

Housing Type Preference	First Choice for Type of Award							
	Residential		Agricultural		Pastoral		No Choice*	
	num	pct	Num	pct	num	pct	num	Pct
Total Applicants	698	100.0	217	100.0	96	100.0	10	100.0
Household Income								
Less than \$ 20,000	162	25.4	61	28.6	20	21.1		
\$20,000 to \$29,999	91	14.3	30	14.3	5	5.3		
\$30,000 to \$39,999	91	14.3	25	11.9	10	10.5		
\$40,000 to \$49,999	81	12.7	15	7.1	20	21.1	5	100.0
\$50,000 to \$59,999	86	13.5	20	9.5	10	10.5		
\$60,000 to \$74,999	40	6.3	40	19.0	5	5.3		
\$75,000 to \$99,999	56	8.7	5	2.4	5	5.3		
\$100,000 or more	30	4.8	15	7.2	20	21.1		
Number Adults Employed								
None	111	15.9	45	20.9	20	21.1		
One	202	29.0	66	30.2	25	26.3		
Two	253	36.2	66	30.2	20	21.1	10	100.0
Three or more	71	10.1	35	16.3	25	26.4		
no response	61	8.7	5	2.3	5	5.3		
Home Ownership								
Own home	318	45.7	126	58.1	56	57.9	10	100.0
Rent or pay no cash rent	359	51.5	91	41.8	40	42.1		
no response	20	2.9						
Monthly Shelter Payment								
Less than \$500	137	19.6	25	11.6	35	36.8	10	100.0
\$500 to \$799	111	15.9	35	16.3	15	15.8		
\$800 to \$1,099	111	15.9	45	20.9	10	10.5		
\$1,100 to \$1,499	86	12.3	15	7.0	15	15.8		
\$15,00 or more	45	6.5	20	9.3	10	10.6		
no response	207	29.7	76	34.9	10	10.5		
Qualification Summary								
No problems indicated	25	3.6	15	7.0	10	10.5		
One problem	283	40.6	81	37.2	46	47.4	5	50.0
Two or more	339	48.6	106	48.8	40	42.1		
Insufficient data	51	7.2	15	7.0			5	50.0

\* Respondent did not provide any choices.

About 5 percent of all Molokai applicants had no problems according to the data available from the survey. About 40 percent had one problem and may be able to qualify for standard financing. But according to the survey data, more than half (47%) of all applicants for awards on Molokai will probably not be qualified for standard financing.

The measure of financial qualification developed for this study suggests that financing may be a problem for about half the DHHL applicants for home land awards. For development planners, this would suggest that more DHHL supplied units may be required than is indicated by the preference of the applicants alone.

## FACILITIES AND AMENITIES

Beyond individual award choices, the survey gathered information on preferred facilities and amenities for communities that will grow in each area. Table 8 shows applicant preferences ranked from most to least important.

**Table 8. Suggested Facilities and Amenities by Area**

	Award Preference			
	Residential	Agricultural	Pastoral	Total
	score	score	Score	Score
Total Applicants <sup>a</sup>	698	217	96	1,021
Amenities used now <sup>b</sup>				
Parks	81.2%	79.1%	63.2%	79.2%
Community centers	39.9%	44.2%	31.6%	40.1%
Ball fields and courts	35.5%	46.5%	31.6%	37.6%
Playgrounds	34.1%	37.2%	26.3%	34.7%
Community Amenities Preferred <sup>c</sup>				
Medical facilities	78.3	82.4	79.7	79.1
Parks, rec. facilities	75.9	67.4	70.9	73.9
Schools, preschools	69.7	69.1	68.2	69.6
Neighborhood store	67.4	67.3	64.7	66.9
Community/cultural centers	56.2	61.0	50.3	56.4
Library	57.2	53.0	55.2	56.4
Kupuna housing	56.1	49.2	43.6	53.7
Community meeting place	50.5	50.8	52.7	50.6
Churches, temple	42.0	52.4	64.2	46.7
Commercial shopping areas	43.8	34.4	34.5	41.3
Cemetery	18.7	21.0	24.0	19.6
Other	44.4	54.5	40.9	45.5

a. Applicants with no preference were excluded from the table. Data are shown in Table C15 in the appendix.

b. Figures presented are the percent of applicants who said they used each amenity in their current community.

c. Figures are the average ranking scaled to 100. The score can be read as if it was a percentage, but carries the weight of both having selected the item and the ranking (from 0 to 12) given that item.

A majority of applicants chose nearly all of the items on the list, indicating some interest in fully developed communities. Medical facilities, parks or recreational facilities, schools, and neighborhood stores were elected by 60 percent or more. Commercial shopping areas and churches or temples were below the fifty-percent mark. Cemeteries were below the 20 percent mark, indicating that a cemetery in one's own community is not a priority.

Amenities profiles were very similar for all types of applicants. Applicants for residential awards on Molokai ranked parks, Kupuna housing, and commercial shopping centers a bit higher than other applicants. Pastoral and agricultural applicants gave higher ranks for churches and temples. Agricultural applicants also gave higher ranks to community and cultural centers.

Lessees on Molokai were asked the same set of questions about facilities they'd like to see in their communities. In general, their response profiles were very similar to those of the applicants. As was the case with applicants, the lessees' number one concern was for medical facilities, next followed by parks and schools. However, lessees gave slightly higher scores to Kupuna housing, community and cultural centers, and libraries than did their applicant counterparts.

## **SATISFACTION WITH MOLOKAI HOMESTEADS**

### **What Lessees Like About Their Communities**

DHHL leaseholders on the Island of Molokai were asked to list the best aspects of life in their homestead community. Two of the most common themes resonating across the lessees as a whole were their appreciation for how spacious the homestead lots were and their enjoyment of their neighbors' friendliness and 'ohana spirit. The two concepts may seem contradictory to some, but perhaps it is true that having enough elbow room can be more conducive to fostering a sense of community than is living in more cramped quarters.

A few aspects of homestead life were mentioned more frequently by residential lessees than by those living on agricultural or pastoral lots. Residential lessees were much more likely to say that their property was conveniently located. On the other hand, agricultural and pastoral lessees were more likely to emphasize their contentment with the quiet and peaceful environment and with the suitability of the land for farming or ranching endeavors.

### **Lessee Suggestions for Improvement**

When asked what improvements they would like to see in their homestead community, the lessees emphatically responded with infrastructure issues.

The top vote-getter among residential lessees was the need for more clean-up efforts, including getting rid of abandoned vehicles and clearing vacant lots of dried brush and other fire hazards. The next most popular request was for more roads and better maintenance of existing roads, followed by requests for more parks, youth programs, community centers, and other recreational activities. Two other suggestions were for more street lights and better flood prevention.

Roads and road maintenance were the top priority among agricultural and pastoral lessees, with over half this group specifically listing this as a problem. These lessees were more likely to list “infrastructure” in general, rather than naming a specific aspect of infrastructure like their residential counterparts. However, a large number of agricultural and pastoral lessees did specifically mention water shortages and water infrastructure as a major problem.

Further details, including the lessees’ verbatim responses to these open-ended survey questions, may be found in Appendix E of this report.

## KEEPING BENEFICIARIES INFORMED

In an effort to keep all beneficiaries informed about DHHL’s Island of Molokai land planning progress, the survey included items asking applicants and lessees how DHHL might best contact them. The results are shown in Table 9.

**Table 9. Preferred Method of Communication**

	Award Preference				
	Residential	Agricultural	Pastoral	No Preference	Total
	percent	Percent	percent	percent	percent
Total Applicants	698	217	96	10	1,021
Direct mailings to you	83.3	88.4	94.7	50.0	85.1
Ka Nuhou Newsletter	44.9	51.2	52.6	100.0	47.5
Telephone	33.3	39.5	36.8		34.7
E-mail	26.1	14.0	26.3		23.3
Community meetings	13.8	16.3	15.8	100.0	15.3
Web-page or Internet	12.3	11.6	15.8		12.4
Other	2.9		5.3		2.5

Figures are percent of applicants who said yes to each communication method. Multiple responses were permitted.

Nearly all respondents preferred to be contacted by mail – 85 percent for applicants and 86 percent for lessees. About 48 percent of the applicants said it would be acceptable to communicate through DHHL’s *Ka Nuhou* newsletter, and 35 percent said that telephone was acceptable. Among the lessees, *Ka Nuhou* was more popular (54%) and telephone contact was less acceptable (26%). Preference for electronic communication through e-mail is up to 23 percent for applicants and 16 percent for lessees. Communicating via community meetings was at about 15 percent for applicants and 18 percent for lessees. The popularity of using Internet websites for DHHL communication was at about 12 percent for applicants and 4 percent for lessees.

## SUBSISTENCE ACTIVITIES

Many Molokai residents take great pride in their ability to live off the land. As Table 10 shows, among applicants whose first choice is for a residential award, 66 percent currently live in households that rely on some level of subsistence for the food they eat. That proportion is roughly the same for pastoral applicants (68%), and is even higher among agricultural applicants (84%). In each applicant group, approximately 10 percent use subsistence activities to provide over three-fourths of what they eat.

**Table 10. Current Subsistence Activities**

	First Choice for Type of Homestead Award					
	Residential		Agricultural		Pastoral	
	Count	Col %	Count	Col %	Count	Col %
About what percentage of your family's food comes from subsistence activities?						
None	157	22.5	5	2.3	10	10.5
Less than 10%	56	8.0	15	7.0	15	15.8
10% to 24%	116	16.7	56	25.6	10	10.5
25% to 49%	91	13.0	51	23.3	15	15.8
50% to 74%	131	18.8	40	18.6	15	15.8
75% or more	66	9.4	20	9.3	10	10.5
No response	81	11.6	30	14.0	20	21.1
Group Total	698	100.0	217	100.0	96	100.0
In the last 6 months have you or your family had any problems with subsistence activities?						
No problem	389	55.8	96	44.2	35	36.8
Not much of a problem	101	14.5	40	18.6	30	31.6
Yes, a serious problem	40	5.8	15	7.0	10	10.5
Yes, a very serious problem	20	2.9	10	4.7		
No response	147	21.0	56	25.6	20	21.1
Group Total	698	100.0	217	100.0	96	100.0
What are the biggest problems with subsistence activities on Molokai?						
People from Molokai take too much	40	13.1	25	20.8		
Off-island people take too much	157	50.8	86	70.8	20	33.3
Pollution	71	23.0	15	12.5	5	8.3
Over-development	56	18.0	25	20.8		
Erosion, soil run off	91	29.5	40	33.3	20	33.3
Lack of access, restricted areas	116	37.7	51	41.7	25	41.7
Misuse	86	27.9	61	50.0	15	25.0
Waste of resources	86	27.9	51	41.7	10	16.7
Lack of law enforcement	35	11.5	35	29.2	15	25.0
Taking of undersize juveniles	91	29.5	51	41.7	10	16.7
Commercialization	61	19.7	51	41.7		
Other	35	11.5	10	8.3		
Total Applicants	308	100.0	121	100.0	61	100.0

The agricultural applicants appear to have more complaints about the state of subsistence than any other group. This is perhaps due to their stronger dependence on subsistence activities for their livelihood. Many agricultural applicants complain that their subsistence efforts are hampered because off-island people take too much. They also feel that misuse and waste of resources are barriers to successful subsistence living.

Agricultural and pastoral applicants agree that off-islanders' over-consumption is among the top three problems. However, they also feel that blocked access and soil run-off are major issues.





## E. Fact Sheets





**Total Acreage:** 13,464

**Homesteads:**

- 518 leases total: 154 residential, 343 agricultural, 21 pastoral

**Population Information**

- Total: 1,086
- Native Hawaiian: 960 (88%)
- Veterans: 16%
- Median Age – 32
  - Under 20: 38%
  - Between 21-55: 42%
  - Over 55: 20%

**Economic Information:**

- Unemployment rate: 13%
- Median Family Income: \$39,375

**Housing Information:**

- Homeownership rate: 52%
- Age of Housing
  - 0-14 years old: 23%
  - 15-34 years old: 39%
  - Over 35 years old: 38%
  - 5% of houses lack complete plumbing and kitchen facilities. 6% without telephone

**Non-Homestead Use:**

- General Lease: 149.1 acres to Agrigenetics, 363.7 acres for Radio Receiver site, 1 acre for Post Office
- Revocable Permit: 735 acres to agricultural and pastoral use
- Right of Entry: Various for trenching and cable installation for telecommunications
- Licenses: 34.3 acres to church groups, community organizations and public utility easements

**Infrastructure:**

- Roads: Class 3 light duty with 20' asphalt pavement with 50' right of way; many Class 4 unimproved roads
- Water: DHHL Ho'olehua Water System Service, issues w/ water level in Kualapu'u aquifer. Water use approx .0423mgd. Moloka'i Irrigation system, needs upgrades & source development.
- Sewer: IWS only
- Electric: Available, 2 power plants, Pālā'au (main) and Pu'unānā (substation)
- Communications: Available, underground fiber optics through Sandwich Isles Communications

**Community Facilities:**

- Medical Services: Moloka'i General Hospital & Saint Francis Healthcare System Moloka'i Dialysis Kaunakakai.
- Fire & Police: Fire – Ho'olehua, Moloka'i Airport Rescue fire fighting; Police – Kaunakakai
- Schools: Kualapu'u Elementary School and Moloka'i High School
- Parks & Recreation: No facilities on DHHL land. Closest is Kualapu'u Park (6.7 acres)

**Land Use:**

- State: Agriculture, Conservation & Urban
- DHHL: Agriculture, Pasture, Residential, Community Use, & Military

**Soils:**

- Well drained, fine textured soils; majority of agricultural lands considered prime

**Natural Hazards:**

- Wildfire
- Flooding during high periods of rainfall

**Topography:**

- Level to rolling; steep cliffs at northern portion
- Elevation varies from 10-850 ft above sea level
- Kalaupē'elua & Mane'opapa Gulch bisect the northeast area; Anahaki Gulch cuts through northwest Ho'olehua

**Significant Natural Resources:**

- Mo'omomi Preserve dune habitat

**Rainfall:**

- 15-35 inches annually; summer 1 inch/month; winter 3-4 inches/month

**Cultural Resources:**

- Pālā'au heiau, Anahaki Gulch complex, Kauleo Nānāhoa

**Flora and Fauna:**

- Natural vegetation is comprised of kiawe, 'ilima, 'uhaloa and finger grass
- High concentration of endangered species plants in the northeast section near Mo'omomi



**Total Acreage:** 1,247

**Homesteads:**

- none

**Population Information**

- Total: 122
- Native Hawaiian: 64 (52%)
- Veterans: 0%
- Median Age – 58
  - Under 20: 2%
  - Between 21-55: 43%
  - Over 55: 55%

**Economic Information:**

- Unemployment rate: 0%
- Median Family Income: \$26,250

**Housing Information:**

- Homeownership rate: 0%
- Age of Housing
  - 0-14 years old: 0%
  - 15-34 years old: 15%
  - Over 35 years old: 83%
  - 15% of houses lack complete kitchen facilities; all have plumbing. 8% without telephone

**Non-Homestead Use:**

- General Lease: 1,247 acres to National Park Service(NPS) for \$131,160

**Infrastructure:**

- Roads: Access by 2.4 mile trail, airplane, or barge (1 time/year); residential roads on peninsula
- Water: Available, NPS operates present potable system
- Sewer: IWS only; NPS has plans for treatment plant
- Electric: Available, old system which NPS plans to upgrade by 2005
- Communications: Telephone available

**Community Facilities:**

- Medical Services: Available, State Department of Health provides for patients
- Fire & Police: Volunteer fire service with two trucks, one appointed sheriff, Moloka'i police assist
- Schools: None on the peninsula
- Parks & Recreation: Entire area is a National Park

**Land Use:**

- State: Agriculture, Conservation & Urban
- DHHL: Community Use

**Soils:**

- Land is not productive for agriculture except for a small strip bisecting the property

**Natural Hazards:**

- Flood hazard for coastal area
- Tsunami inundation hazard zone at coast

**Topography:**

- Peninsula separated from main island area by 1,600 ft cliff
- Kauhako crater at center of peninsula, 300 ft
- Most of peninsula 1-10% slope

**Significant Natural Resources:**

- Waikolu perennial stream

**Rainfall:**

- 25 inches/year at shore; 45 inches/year near cliffs

**Cultural Resources:**

- Substantial cultural and historical features remain undisturbed
- Entire settlement historically significant
- Kuahu heiau, Ka'ahemo heiau, Kamanuolalo heiau, Kukuiohāpu'u heiau

**Flora and Fauna:**

- Valley habitat includes many endemic and rare species
- Ecological communities include: coastal mesic forest, mixed montane bog, high salinity anchialine pool, mixed shrub coast dry cliff
- Deer, cattle, goat & feral pig present



**Total Acreage:** 5,967

**Homesteads:**

- 240 leases total: 161 residential, 76 agricultural, 3 pastoral

**Population Information**

- Total: 232
- Native Hawaiian: 188 (81%)
- Veterans: 10%
- Median Age – 34
  - Under 20: 25%
  - Between 21-55: 39%
  - Over 55: 26%

**Economic Information:**

- Unemployment rate: 7%
- Median Family Income: \$80,000

**Housing Information:**

- Homeownership rate: 81%
- Age of Housing
  - 0-14 years old: 15%
  - 15-34 years old: 37%
  - Over 35 years old: 48%
  - 17% of houses lack complete plumbing and kitchen facilities. All have telephone

**Non-Homestead Use:**

- General Lease: 6 acres to two churches for 5 years
- Revocable Permit: 0.8 acre to Kalama'ula Motors; 1.2 acre to educational hālau; majority of land is to Moloka'i Homestead Livestock Association
- Licenses: 10 acres to six different churches for 30 years; Approx. 30 acres for various licenses ranging from water line access to community service uses

**Infrastructure:**

- Roads: Kamehameha V Hwy. access makai to paved Class 3 roads. Class 4 unpaved mauka roads
- Water: DHHL Ho'olehua Water System potable water (0.08mgd). Issue with water level in Kualapu'u source. No irrigation water
- Sewer: IWS – sewer treatment is available subject to connections and expansion of wastewater treatment plant in Kaunakakai. Plant capacity is 0.3 mgd and presently services a flow of 0.27 mgd
- Electric: Available
- Communications: Available, underground fiber optics through Sandwich Isles Communications

**Community Facilities:**

- Medical Services: Moloka'i General Hospital & Saint Francis Healthcare System Moloka'i Dialysis Kaunakakai
- Fire & Police: Kaunakakai (less than 5 miles)
- Schools: Kualapu'u Elementary School (less than 5 miles); Moloka'i High School
- Parks & Recreation: Coconut Grove beachside park on DHHL land. Kaunakakai has Ball Park, Cooke Memorial Pool, Mitchell Pauole Center along with a few other small parks.

**Land Use:**

- State: Rural, Conservation & Agriculture
- DHHL: Residential, Community Use, Agriculture & Pasture

**Soils:**

- Small strip of prime agricultural land makai of highway near power plant; most land not classified

**Natural Hazards:**

- Brush fire potential
- Flooding

**Topography:**

- Gentle slope upwards to higher mountains ranging 0-10%, some gulch areas of more than 10%
- Sea level to 1,800 feet elevation
- Kuhua'awi Gulch and Kaluaiohe Gulch

**Significant Natural Resources:**

- Wetlands

**Rainfall:**

- 20 inches/year makai, 40 inches annually mauka

**Cultural Resources:**

- Tract takes the form of the ahupua'a.
- Significant habitation and agricultural complexes as archaeological features
- Kapuāiwa Grove, 'Ōhi'apili Fishpond
- 'Ōpae'ula heiau, Pu'upāpa'i heiau, Kalama'ula heiau, Pu'uomo'o heiau

**Flora and Fauna:**

- Small portions of the middle and upper elevations support habitat for threatened and endangered plant species
- Fishponds have silted in creating wetland habitat at shoreline





**DEPARTMENT OF HAWAIIAN HOME LANDS**  
**Moloka'i Island Plan Kapa'akea, Kamiloloa,**  
**Makakupa'ia Fact Sheet**



**Total Acreage:** 5,565

**Homesteads:**

- 79 leases total: 74 residential, 5 pastoral

**Population Information**

- Total: 295
- Native Hawaiian: 255 (86%)
- Veterans: 11%
- Median Age – 36
  - Under 20: 37%
  - Between 21-55: 40%
  - Over 55: 24%

**Non-Homestead Use:**

- Revocable Permit: 6 acres for pasture to two people
- Right of Entry: 1.3 acres for cemetery
- Licenses: 0.4 acre for roadway drainage easement

**Infrastructure:**

- Roads: Kamehameha V Hwy access makai to paved residential roads. Limited access mauka
- Water: County system potable water, new source required. Transmission only reaches 200 ft level. Drainage improvements needed in Kamiloloa and Makakupa'ia
- Sewer: IWS only
- Electric: Available
- Communications: Available, underground fiber optics through Sandwich Isles Communications

**Community Facilities:**

- Medical Services: Moloka'i General Hospital & Saint Francis Healthcare System Moloka'i Dialysis Kaunakakai
- Fire & Police: Kaunakakai is the closest (less than 5 miles)
- Schools: Kaunakakai Elementary School (less than 5 miles away); Moloka'i High School
- Parks & Recreation: No facilities on DHHL land. Kaunakakai has Ball Park, Cooke Memorial Pool, Mitchell Pauole Center along with a few other small parks

**Land Use:**

- State: Agriculture & Conservation
- DHHL: Residential & Pastoral

**Natural Hazards:**

- Severe flooding possible in coastal flood plain and fishpond areas
- Erosion potential

**Significant Natural Resources:**

- Major drainage channels help form wetlands near shoreline, specifically Kamiloloa Ditch & Gulch

**Cultural Resources:**

- Three adjoining ahupua'a: Kapa'akea, Kamiloloa, Makakupa'ia
- Ali'i and Kaloko'eli fish ponds
- Kamiloloa Habitation and Agricultural Complex

**Economic Information:**

- Unemployment rate: 20%
- Median Family Income: \$40,407

**Housing Information:**

- Homeownership rate: 89%
- Age of Housing
  - 0-14 years old: 6%
  - 15-34 years old: 47%
  - Over 35 years old: 47%
- All houses have complete plumbing and kitchen facilities; 9% without telephone

**Soils:**

- Majority is not good for agriculture

**Topography:**

- Slopes mild and severe with both steep rocky areas and gently sloping agricultural land ranging 0-10%, some more than 35%
- Sea level to 2,000 ft elevation

**Rainfall:**

- 15-40 inches annually depending on elevation

**Flora and Fauna:**

- Wetland habitat at shoreline supports threatened and endangered water bird species
- Kamiloloa plant sanctuary has 'Ōhi'a (lowland dry shrub) and Koai'a (lowland dry forest)
- Makakupa'ia has several flora species proposed as candidates for the threatened and endangered species list



**Total Acreage:** 398

**Homesteads:**

- none

**Economic Information:**

- Not Available

**Population Information**

- Total: 6
- Native Hawaiian: 5 (90%)
- Veterans: Not Available
- Median Age –
  - Under 20: 40%
  - Between 35-65: 60%

**Housing Information:**

- Not Available

**Current Use:**

- Revocable Permit: 375 for pastoral use
- License: 2.1 acre to Ka Hale Pomaikai for Alcohol Treatment Center

**Infrastructure:**

- Roads: Access only along Kamehameha V Hwy
- Water: DHHL parcel not currently serviced; 'Ualapu'e part of County DWS system. Calculated, projected available supply for 'Ualapu'e region is 2.5 mgd. One well managed by DWS delivers an average of 68,000 gpd.
- Sewer: Not available, IWS only
- Electric: Available
- Communications: Not available, can be integrated with fiber network by Sandwich Isles Communications

**Community Facilities:**

- Medical Services: Moloka'i General Hospital & Saint Francis Healthcare System Moloka'i Dialysis Kaunakakai.
- Fire & Police: Kaunakakai, East end in need of police and fire nearby
- Schools: Kilohana Elementary (less than 5 miles)
- Parks & Recreation: No facilities on DHHL land. Closest is Kilohana Community Center (3.3 acres)

**Land Use:**

- State: Agriculture, Conservation & Urban
- DHHL: Agriculture

**Soils:**

- Poorly drained soils over soft weathered rock. Not agriculturally productive. (Jaucas-Mala-Pulehu & Amalu-Olokui associations)

**Natural Hazards:**

- No hazard threats known

**Topography:**

- Makai area gradually sloping 0-10%; majority 11-20% slope
- Elevation – 25 to 1,000 ft
- Manawai Gulch

**Significant Natural Resources:**

- None

**Rainfall:**

- 35-45 inches annually

**Cultural Resources:**

- Kalauonākukui heiau, 'Ualapu'e fishpond, Kahua maika, Halemahana Fishpond, Pu'ukuhe

**Flora and Fauna:**

- High elevation area has a high concentration of threatened & endangered species (mauka)
- Dry Forest region consists of wiliwili, naio, lama, 'ohe, olopua, sandalwood, hō'awa, māmane, pūkiawe, ko'oko'olau
- Coastal region consists of naupaka, lauhala, and hau





