

# KA 'Ū REGION

WAILAU, WAI'ŌHINU, KAMĀ'OA-PU'U'EO, DISCOVERY HARBOR



MAY 2012



HAWAIIAN HOME LANDS TRUST  
DEPARTMENT OF HAWAIIAN HOME LANDS

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DEPARTMENT OF HAWAIIAN HOME LANDS

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# I. INTRODUCTION

The Vision of the Department of Hawaiian Home Lands Trust is to build vibrant homestead communities that flourish from the solid foundation of the Hawaiian Home Lands Trust. A trust grounded in commitment to serving and partnering with beneficiaries, implementing sound policies and procedures, following a long-term sustainable financial plan, and practicing an organizational culture that honors the spirit of its founder, Prince Jonah Kūhiō Kalanianaʻole. Trust works in partnership with government agencies, private landowners, non-profit organizations, homestead associations, and other community groups. Regional plans provide the means to solidify visions and partnerships that are essential to effectively manage Hawaiian Home Lands trust lands for the betterment of native Hawaiian beneficiaries.

The Kaʻū regional plan is one of twenty-one (21) regional plans that the Trust is developing with beneficiaries. In these regional plans, the Trust and its beneficiaries take on a leadership role in the community, working to strengthen the growth of the area, developing partnership to leverage diverse resources and capital investment. The regional plans provide the Trust and the affected homestead community opportunities to determine the future direction of the homestead, assess land use development factors, identify issues and opportunities, and identify the region's top priority projects slated for implementation within the next three (3) years.

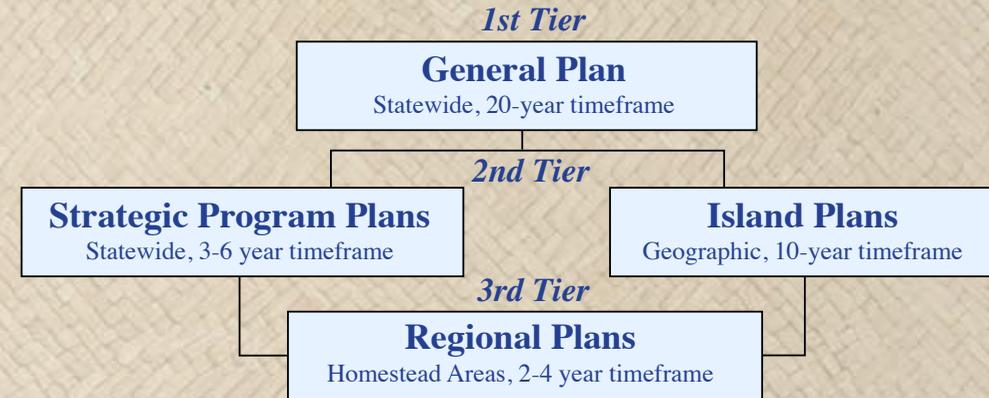


HAWAIIAN HOME LANDS

## Strategic Goals and Objectives 2012 - 2017

- Reaffirm & Assert TRUST Status
- Ensuring the Financial Well-being of the Trust
- Provide Excellent Customer Service
- Deliver Diverse Homesteading Opportunities

## Planning System



Hawaiian Home Lands Trust's Planning System

### WHAT ARE REGIONAL PLANS?

Regional Plans are part of the Trust's three-tiered Planning System. At tier one is the General Plan which articulates long-range goals and objectives for the Trust. At the second tier, there are Program Plans that are statewide in focus, covering specific topic areas such as the Native Hawaiian Housing Plan and a Native Hawaiian Development Program Plan. Also at this second tier are the Trust's Island Plans that identify the Department's land use designations per island which function similar to the counties' land use zones. The Regional Plans are located at the third tier in the Trust's Planning System which focuses at the community/regional level. The Regional Plans apply the goals, policies, and land use designations to specific geographic regions. The Regional Plans are a means to:

- Identify data - people, lands, and infrastructure of homestead communities and the surrounding region;
- Identify what Trust and other landowners are planning to do;
- Provide the primary mechanism for beneficiary input in the development of their homestead communities;
- Identify issues and potential projects; and
- Identify Priority Projects determined by the Trust and homestead community.





Homestead on a scattered lot in Discovery Harbor

the Trust understands that regional development is a dynamic process with constantly changing opportunities and emerging issues, regular regional plan updates are built into the planning process. In this way, regional plans are updated as needed, in order to keep abreast of changing conditions and new opportunities.

### HOW ARE REGIONAL PLANS USED?

As a compilation of existing plans and proposed projects for the region, the regional plan helps to coordinate the orderly development of regional infrastructure improvements. With the addition of beneficiary's input in the process, the regional plans become a powerful tool to focus energies and efforts, align interests, and secure funding for the top priorities identified in the regional plan. In this way, regional plans have become a critical tool to unify and support our beneficiary community.

### HOW ARE REGIONAL PLANS DEVELOPED?

The regional plans are developed in conjunction with lessees of the region as well as regional stakeholders (landowners, agencies, other organizations) in a series of planning meetings as illustrated. During these meetings, issues and opportunities that should be addressed in the regional plan are identified and a list of potential projects is developed to address those issues and opportunities. From this list, lessees determine by consensus their top five (5) priority projects that are written up with project details, budget estimates, and other pertinent project planning information. Draft regional plans are then subject to the approval of the Hawaiian Homes Commission, which means that the Commission and Department officially support the priorities identified in the regional plan.

Upon approval, the homestead community, the Trust, and other development partners can seek necessary funding and pursue the implementation of the Priority Projects. The Priority Projects are a key component of aligning support and providing focus to efforts to develop the region. Finally, since

### *The Regional Plan Development and Update Process*



*The Regional Plan Development and Update Process*

# INTRODUCTION

## Shared Costs & Multiple Financing Options

The Trust is working in partnership with other government agencies, the private sector and community organizations to develop its lands and improve community life. The Trust believes that partnerships are an effective way to leverage resources and capital investments, mitigate undesirable impacts of development, coordinate area growth, reduce risks in large scale community projects, and create broad community benefits.

These partnerships allow for better prioritization and coordination of infrastructure improvement and the development of regional and public residential facilities. This coordination helps individual organizations achieve their goals while bringing long-term benefits to the community and region.



*Farming on Homestead Lands on Hawai'i Island*



*Groundbreaking Ceremony*



*Community Work Project*

The Trust brings the following to these partnerships:

- Land for development in strategic locations;
- Potential use of tax-exempt financing;
- Access to legislative appropriations;
- Access to federal funding such as HUD, USDA, SBA;
- Flexibility in the application of development standards, zoning, and design; and
- Cultural understanding and resources.

## Kūlana 'Ōiwi Model

- The consortium partnership includes: The Trust, The Queen Emma Foundation, Kamehameha Schools, Queen Lili'uokalani Children's Center, ALU LIKE, Inc., and the Office of Hawaiian Affairs.
- The center is designed to house the offices and programs run by these Hawaiian organizations.
- The concept of a "one-stop service center" for the Hawaiian people will facilitate the coordinated delivery of government and private services more efficiently.
- At Kūlana 'Ōiwi, each agency provides different services, such as child welfare, social and educational services for youth, health care services, and vocational training services geared to strengthen Hawaiian families, values and culture.
- This model is being emulated in development projects proposed around the State.

The Trust has participated in a number of successful partnerships. A few of these are highlighted here.

### Public Facilities Partnership

The Trust participated in a number of partnerships involving public facilities and community resources. The most notable partnerships brought together Hawaiian agencies and non-profit organizations into a multi-service complex where a broad range of programs are housed to serve the public. Such multi-service complexes have been built on Hawaiian Home Lands in partnership with Kamehameha Schools, Queen Lili'uokalani Children's Center, ALU LIKE, Papa Ola Lōkahi, the Office of Hawaiian Affairs, Hawaiian community organizations, and the counties.



Kamehameha preschool on Trust property.

These multi-service complexes are housing preschools, offices, meeting facilities, health clinics, and activity centers. For example, the Keaukaha homestead on Hawai'i is served by a County park on Trust land, next to a gymnasium and elementary school, the Trust and OHA offices, and a Kamehameha preschool. Kūhiō Hale in Waimea provides office space for the Trust and is utilized by the Waimea Homestead Farmer's Market, Kamehameha Schools Preschool, 'Aha Pūnana Leo Hawaiian Immersion School and as a community center by the homestead association for meetings and gatherings.

Through a series of management partnerships with DLNR, the Nature Conservancy, and National Parks, unique ecosystems and historic sites are being protected. The Kamā'oa Pu'u'eo National Historic district is a great example of an opportunity for developing partnership for the protection of natural resources. Other examples outside of this region include the Hakalau Forest Reserve, the 'Āina Hou Management Area, the Pālā'au and Mo'omomi preserves and the Kalaupapa peninsula.

### Infrastructure Partnership

The Trust has partnered with county governments and utility providers on infrastructure improvements that benefit the entire community. The Trust has participated in water system development with the counties by providing funding, land easements, and access to federal and state programs. An example of this is the Maku'u Water System on Hawai'i. The Trust has also developed partnerships to provide potable water when the Moloka'i water system failed and to develop hybrid systems to service small rural communities.

The Trust was provided a unique opportunity to acquire 40 residential house lots within the Discovery Harbor Development. The infrastructure for water delivery and electricity was installed by the developer, allowing an owner-builder lessee to move forward with construction. This was a novel way to accommodate residential applicants on the Hawai'i Island waiting list without awarding unimproved lots. While only a few beneficiaries took advantage of this opportunity, the remaining scattered lots are available to qualifying beneficiaries that are ready.

The Trust has also provided numerous easements over its lands to electrical, water, telephone, and cable companies to service both homestead areas and the general public.

### Residential Partnership



Through partnerships, the Trust has reduced the cost of homes to low-income beneficiaries. The Trust has done this by sharing in the cost of infrastructure, helping to secure tax credits, and using self-help methods of construction. Partnerships in Kapolei resulted in 70 rent-to-own units constructed by Mark Development using low-income tax credits and 45 self-help homes constructed with Menehune Development and Honolulu Habitat for Humanity. In these types of partnerships, the Trust provides the land, secures federal grants, and provides access to, or assistance in, acquiring tax credits, subsidies, or other financing.

- Self-help housing partnerships:
  - Construction of 41 homes with Kōkua Housing Corporation
  - Construction of 52 homes with Menehune Housing Corporation and Honolulu Habitat for Humanity
- Co-location of various Hawaiian agencies and services providers on O'ahu, Moloka'i, and Maui

## II. HOMESTEAD REGIONAL PROFILE



*Mahalo to the all beneficiaries of Ka'ū for taking the time to help develop this plan. Without their mana'o, this could not have come to fruition.*



## Homestead Association and Beneficiaries

The legal basis for the establishment of the Trust is the Hawaiian Homes Commission Act, 1920, as amended (HHCA). It was passed by Congress and signed into law by President Warren Harding on July 9, 1921 (chapter 42, 42 Stat. 108).

In 1986, 24 lessees were awarded lots in Kamā'oa and Pu'u'eo. These were accelerated awards for parcels that did not have infrastructure. As of June 2011, 12 lessees have agriculture homesteads in Pu'u'eo, and 25 have pastoral homesteads in Kamā'oa. These homesteads, as is true for many areas in Ka'ū, are not connected to any community infrastructure such as water, electricity or sewer.

The Trust acquired approximately 13 acres for residential homesteading in the Discovery Harbor Community. As of November 2011, two of the lots were awarded for residential homesteading. Land awards in the Discovery Harbor Community includes some infrastructure, but lessees need to coordinate residential construction. During the course of the Trust's regional planning process, the beneficiary community, understanding the value of an organized community began the process of forming an Association. A testament to their spirit was their ability to provide a wonderful meal during the last regional planning meeting, held in December 2011.



Site visit to Kaulana Bay.

### *Ka'ū, hiehie i ka makani.* - Ka'ū, regal in the gales.

In *Ōlelo No'eau - Hawaiian Proverbs and Poetical Sayings*, Mary Kawena Pūku'i explained that this is an expression of admiration for Ka'ū or of a stately/ outstanding person from the district of Ka'ū.

### **POTENTIAL COLLABORATORS**

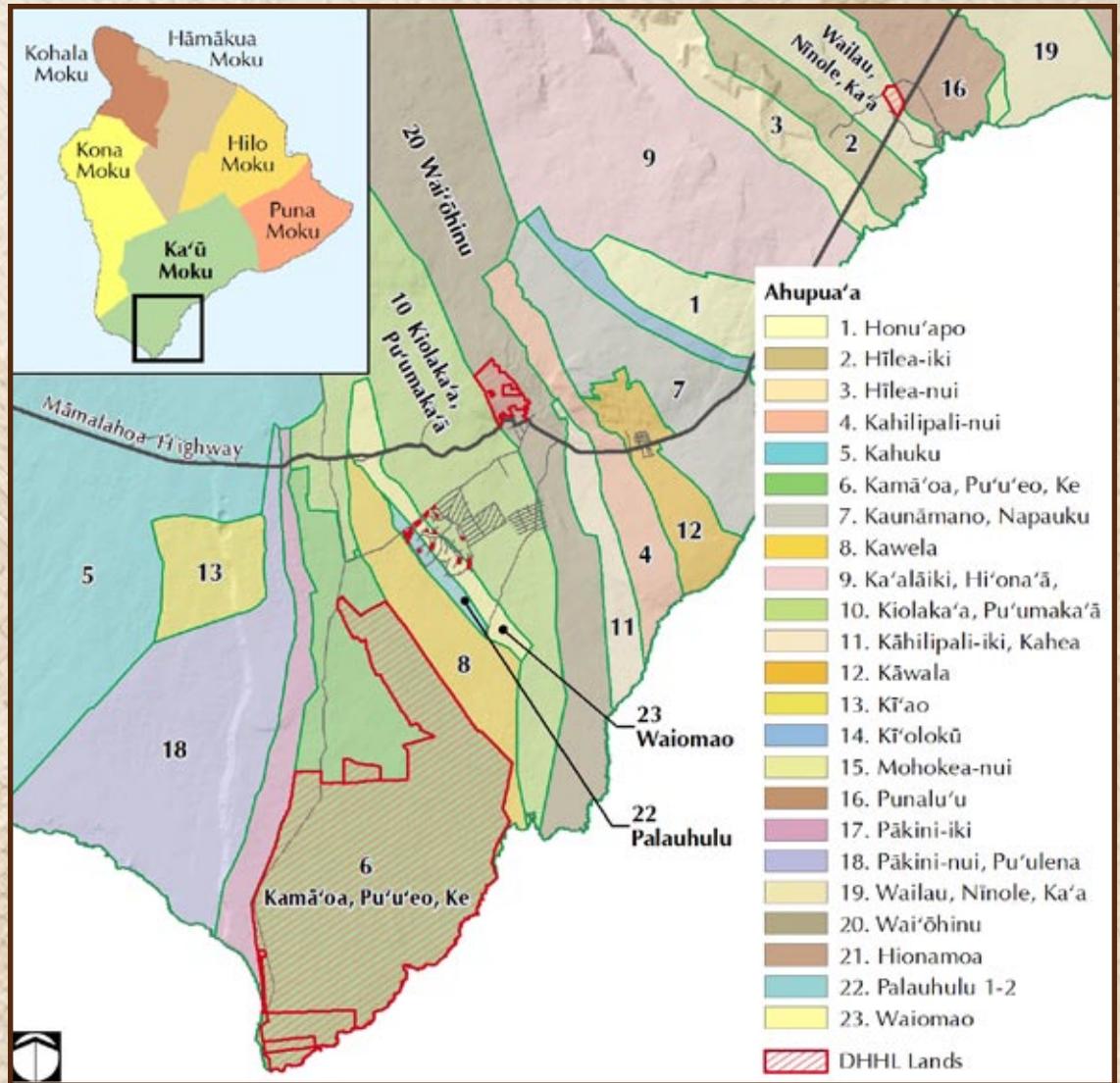
US Department of Agriculture- Rural Development  
US National Park Service - Hawai'i Volcanoes National Park  
US National Park Service - Ala Kahakai National Historic Trail  
US National Park Service - National Historic Landmarks Division  
US National Park Service - Tribal Preservation Program  
State of Hawai'i, Department of Agriculture  
State of Hawai'i, Department of Transportation  
State of Hawai'i, Department of Land and Natural Resources

State of Hawai'i, Department of Land and Natural Resources,  
Division of Forestry and Wildlife  
University of Hawai'i  
Hawai'i County, Department of Planning  
Hawai'i County, Department of Public Works  
Hawai'i County, Department of Parks and Recreation  
Hawai'i County, Department of Water Supply

Big Island Farm Bureau  
Alu Like  
Kamehameha Schools  
Qualified Native Hawaiians  
Home Depot (and other suppliers)  
Habitat for Humanity (and other mutual self-help programs)  
Rebuilding Together (and other rehabilitation programs)



# HOMESTEAD REGIONAL PROFILE



Traditional Ahupua'a.

Ka'ū is the largest district of Hawai'i island. It was the starting point for many journeys to other Pacific islands. It is likely that Ka'ū was the first place settled by Polynesians in all of Hawai'i. The National Historic Landmarks Program identifies the South Point Complex as the location of earliest record of occupation at 124 AD. The name Ka'ū is an ancient one, its meaning lost over time. However there is a similar place name in Samoa's Ta'u. Takuu, the largest island in an outlier atoll near Papua New Guinea also cognates with Ka'ū. Many historic sites can be found throughout Ka'ū.

Because of its long period of settlement, Ka'ū is frequently mentioned in mele, mo'ōlelo and 'ōlelo no'eau. The Trust's landholdings are located in just a few of the many ahupua'a of Ka'ū.

The people of Ka'ū were well known for their independence, and for rising up against injustice. An example can be seen in the story of the people exacting a fitting punishment for greed. Chief Hala'ea was requiring more fish from his people, making it hard for them to feed their families. Fed up with it, the fishermen unloaded their fish into the greedy Hala'ea's canoe while out at sea, causing him to sink.

*Note: The boundaries and names of ahupua'a identified here are from the Office of Hawaiian Affairs, October 2009, Ahupua'a GIS data, the best available resource at the time of publication. Some ahupua'a were known by several different names. This is not necessarily a complete list of known names.*

## History and Cultural Aspects of the Area

The various land holdings of the Trust include lands within the Ahupua‘a of Kamā‘oa Pu‘u‘eo, Wai‘ōhinu, Wailau, Nīnole, Wai‘ōma‘o, Pālahulu and Kiolaka‘a-Pu‘umaka‘ā. These traditional names provide insight and perspective of these places.

Most of the Trust lands are located in the area known as Kamā‘oa Pu‘u‘eo. People often refer to the area as one ahupua‘a although they were traditionally separate areas. Kamā‘oa was known for red dust. People jumped from a cliff near here into a dust heap in imitation of the sport of leaping from a cliff into water. In the days of old people would stand by and watch the foot races from the start at Kawela to Pu‘u‘eo. The winner was acknowledged on the hill of victory (Pu‘u‘eo) by the Ali‘i.

Kalae is located at the southern tip of Kamā‘oa Pu‘u‘eo. It literally means “the point.” Early archaeological sites are located at Kalae including Palahemo, a culturally significant anchialine pond where pala fern grew in/out of the crevices in the wall and Kalalea, the fishing heiau. The point is still a popular cliff fishing site. Old hoists were used to raise and lower boats. A rickety metal ladder is still used by cliff jumpers to get from the water back up to Kalae. While most of the land in Kalae is managed by the Trust, the actual point is owned by the U.S. Coast Guard.

Wai‘ōhinu translates as “Shiny waters” due to the legend of Kupua and son Kupa. There are several other mo‘olelo describing how this area came to be known as Wai‘ōhinu. Whatever the origin of the name, Mary Kawena Pukui described

this fertile farmland, “Quite distinct from the rest of Ka‘ū is the valley of Wai‘ohinu....This was the locality chosen by the chiefs for their residence.”

Wailau literally means “many waters”, but it is also used to describe a bundle of leaves for carrying food and an ancient kapa.

Nīnole is used to describe something weak or pliable. During the devastating 1868 tsunami, a man from Nīnole name Holoua became the only person known to surf a tsunami wave when his house was carried out to sea. He pulled a plank from the collapsing structure and surfed to shore and safety on the next incoming wave while villagers watched from the hillside.

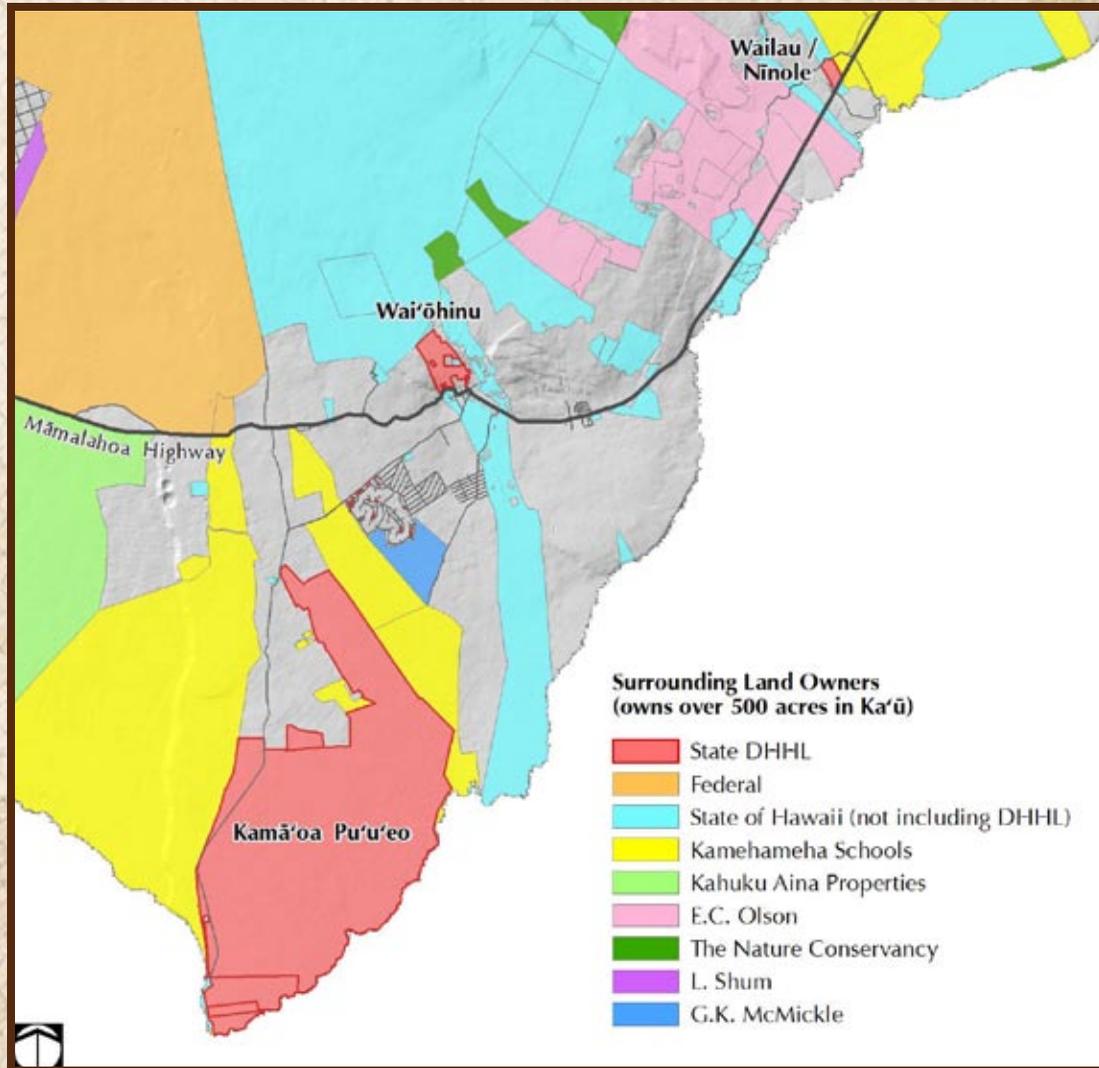
The Trust lands within Discovery Harbor subdivision are located within three traditional Ahupua‘a - Wai‘ōma‘o, Pālahulu and Kiolaka‘a-Pu‘umaka‘ā. Wai‘ōma‘o and Pālahulu are unique because they did not have any coastal lands for fishing or gathering. A portion of Discovery Harbor is also located in a larger ahupua‘a that has two names associated with it. Kiolaka‘a literally means to throw roll and is associated with bowling, while Pu‘umaka‘ā may have been named after a person, but literally means glowing eye hill.

Other places of importance to the people of Ka‘ū and gathered through oral histories include Wai‘o‘Ahukini, Pakini Nui, Pakini Iki, Kahuku Complex, Kawela, Kahilipali Kahea, Kahilipali Iki, Kioloka‘a, and Ka‘alu‘alu

### Registered Historic Sites and Complexes in Ka‘ū

Name	Area
Manukā Bay Petroglyphs	Manukā
Platform and Mounds	Manukā
Kuleana Complex	Manukā
Koa	Manukā
South Manukā Bay Complex	Manukā
Platform and Shelters	Manukā
Lava Tube Complex	Manukā
Kaiakekua Complex	Manukā
Keawaiki Complex	Ka‘ūpua‘a
Manukā Bay Hōlua Slide	Manukā
Heiau and Trail	Manukā
Kīpuka Malua Complex	Manukā
Shrine and Heiau	Manukā
Habitation Complex	Manukā
South Point Complex	Kamā‘oa
Mahana Archeological District	Kamā‘oa
Kapalaoa Archeological District	Kamā‘oa
Ki‘i Petroglyphs	Wai‘ōhinu
Kīlauea Crater	Hawai‘i Volcanoes National Park
1790 Footprints	Kapapala Forest Reserve
‘Ainapō Trail (Menziess Trail)	Hawai‘i Volcanoes National Park
Wilkes Campsite	Hawai‘i Volcanoes National Park
‘Ainahou Ranch House	Hawai‘i Volcanoes National Park
Whitney Seismograph Vault No. 29	Hawai‘i Volcanoes National Park
Old Volcano House No. 42	Hawai‘i Volcanoes National Park
Mauna Loa Trail	various
Puna-Ka‘ū Historic District, Hawai‘i Volcanoes National Park (District w/ multiple sites)	various





Major land owners.

## Major Land Owners

There are three major land holders in Ka'ū, the State and Federal Governments as well as Kamehameha Schools. The Trust's lands are located adjacent to large tracts of land held by Kamehameha Schools, G.K. McMickle and the State as well as numerous small land owners. Other large land owners in the region include Kahuku 'Āina Properties and E.C. Olson.

### State of Hawai'i

DLNR manages approximately 237,410 acres of lands in Ka'ū. Their mauka landholdings closely correspond with critical habitat for forest birds and the Ka'ū Forest Reserve. The Trust lands in Wai'ōhinu and Wailau are adjacent to DLNR lands. The Nature Conservancy has acquired several tracts of land adjacent to DLNR's Ka'ū Forest Reserve to expand contiguous habitat for forest birds.

### The U.S. Government

The U.S. Government is a major landholder in Ka'ū with approximately 246,690 acres of land. Land holdings are primarily part of the National Park Service Kahuku Unit and Volcanoes National Park. The light house at Kalae is also part of the federal government's land holdings.

### Kamehameha Schools

Kamehameha Schools is the largest private land owner in the state of Hawai'i. They hold approximately 67,357 acres of land within the Ka'ū District. Kamehameha Schools is a private, charitable, perpetual trust dedicated to the education of Hawaiian children and youth. Established in her will of 1883, the Kamehameha Schools is a legacy of Princess Bernice Pauahi Bishop, great-granddaughter and last direct royal descendant of King Kamehameha the Great. Income generated from numerous investments, and residential, commercial, and resort leases, fund the schools' maintenance and educational services. Kamehameha is the primary land owner adjacent to the Trust lands in Kamā'oa Pu'u'eo and Wailau.

## Trust Lands

### Land Use Designations

The Trust is not subject to the State of Hawai'i State Land Use Designations, nor the County of Hawai'i land use planning allocation guidelines or zoning regulations. Being exempt from these regulations provides the Trust with the opportunity as well as the responsibility to ensure that the designated land uses are appropriate based on the needs of the Department and its beneficiaries, as well as protective of key environmental and cultural resources. Land use designations included in the General and Island Plans are recommendations predicated on site suitability taking into account features such as topography, average rain fall, geology, proximity to urban centers, et cetera. Development of lands based on the land use designations depends on the economic feasibility of development as well as the availability of funds. The Trust lands are categorized into ten different land use designations or zones. There are four homesteading designations: Residential, Subsistence Agriculture, Supplemental Agriculture, and Pastoral. The remaining six designations are General Agriculture, Special District, Community Use, Conservation, Commercial and Industrial. While lands designated "General Agriculture" may be utilized for agriculture, it is also the designation given to lands for which the Trust has not determined the final disposition.

### Lands

The Trust has identified three areas for future homesteading, two for residential, and one for subsistence agriculture homesteading. Within the existing Discovery Harbor development, the Trust has acquired 40 scattered residential lots, the primary location for residential homesteading. Currently two lessees and their families reside in the Discovery Harbor scattered lots. With the infrastructure already in place, there are 38 lots available and ready for owner-builder residential homesteading. Due to the overall high demand for residential homesteading, Trust has also designated 63 acres for future residential development in Wailau. It is likely that infrastructure improvements will not occur prior to leasing all 40 scattered lots in Discovery Harbor. Wai'ohinu was identified in the Island Plan as an area with appropriate resources for subsistence agricultural use. However, development of agricultural homesteads will likely require significant infrastructure improvements.

#### Homesteading Uses

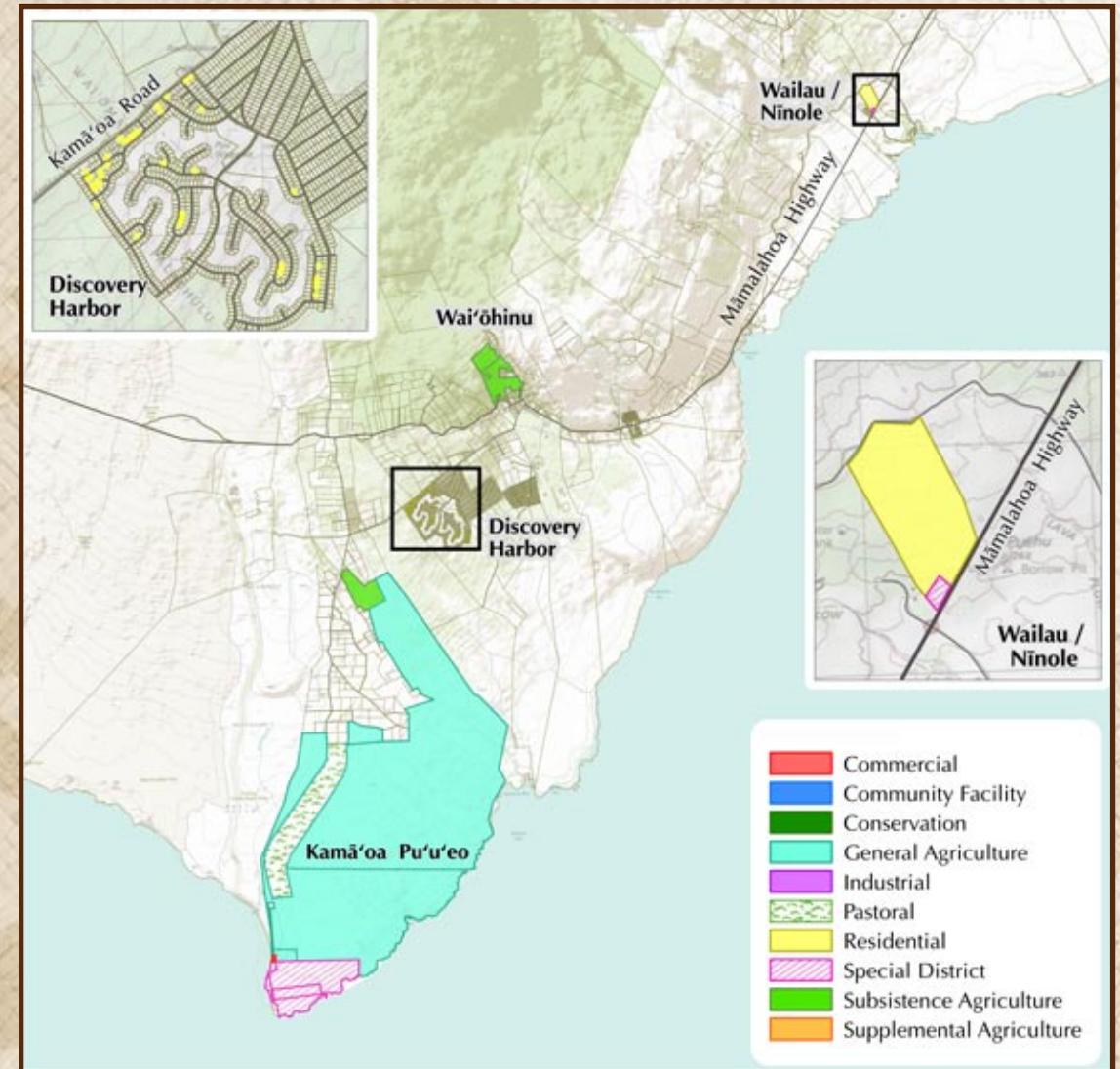
	Acres	Number of Homesteads		
		Res	Farm	Ranch
<b>Kamā'oa Pu'u'e'o</b>	10,972	-	12	25
<b>Wai'ohinu</b>	262	-	-	-
<b>Wailau</b>	65	-	-	-
<b>Discovery Harbor</b>	13	2	-	-
<b>Total</b>	<b>11,312</b>	<b>2</b>	<b>12</b>	<b>25</b>

#### Non Homesteading Uses

Type	Use	#	Acres	Income per year
License	Easements	1	N/A	<\$1
License	Telecomm	2	<1	\$480
Revocable Permit	Pastoral	6	8,307	\$12,768

Sources: 2011 Annual Report

Sources: 2011 Annual Report



Trust Land Use Designations

# HOMESTEAD REGIONAL PROFILE

The Trust has approximately 11,312 acres of lands within Ka‘ū. Within Ka‘ū, three Census Designated Places (CDP) Discovery Harbor, Hawaiian Ocean View and Nā‘ālehu have been designated by the Federal government. Kamā‘oa Pu‘u‘eo has also been designated for census data collection by the Federal government as a Hawaiian Homestead.

The U.S. Census Bureau has released population and age data collected during the 2010 Census. The remainder of the information provided was collected from the American Community Survey Estimates, also prepared by the U.S. Census Bureau.

## Area

Ka‘ū is the largest moku within the County of Hawai‘i with over 660,000 acres. As a result of its remote location from the primary employment centers of Hilo and Kona, and the large percentage of land designated for conservation, the population has remained relatively small.

## Population

The 2010 Census estimates the resident population of Discovery Harbor CDP at 949 persons, Hawaiian Ocean View CDP at 4,437 persons, and Nā‘ālehu at 866 persons. The entire Ka‘ū District (Ka‘ū CCD) was estimated by the 2010 Census to have just 8,451 people, less than 5% of the County of Hawai‘i population. The 2010 census recorded 14 residents living within the homestead communities of Kamā‘oa Pu‘u‘eo.

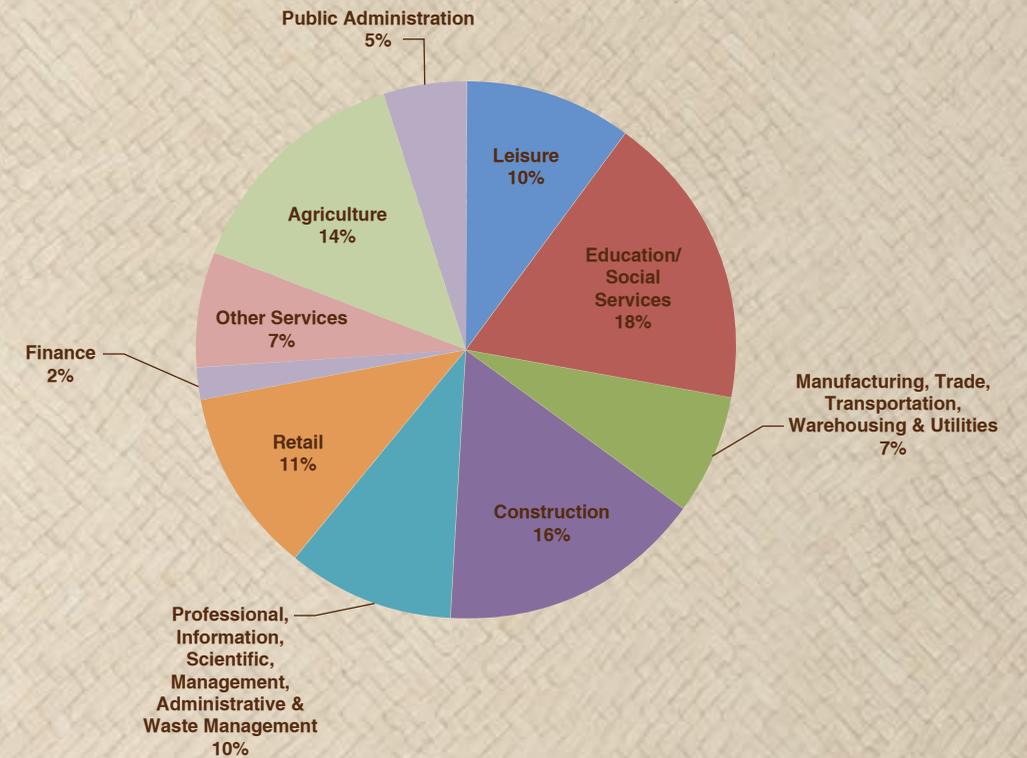
## Age

The three Ka‘ū CDPs have very distinct populations. The median age in 2010 within Discovery Harbor was 53, 44 in Hawaiian Ocean View, and 37 in Nā‘ālehu. The median age of the small beneficiary community was estimated at 34 during the 2010 Census.

## Employment

There are limited job opportunities in Ka‘ū. Approximately 61% of workers travel over 30 minutes to work, indicating the need to travel outside the district for employment. Although many of Ka‘ū’s residents have found work, it appears that a significant portion of the population is struggling to make ends meet. At \$41,352, the median household income for the district, while highly variable between the census designated places, was still far below the State and County median in 2010. Over 14% of households receive some type of public assistance for food. This is nearly twice the State average of 7.4%.

## Workforce Breakdown by Trade within Ka‘ū CCD



## Regional Demographics



Fishing provides food security for many Ka'ū families.



Ranching in Ka'ū.

Characteristics	Kamā'oa Pu'u'eo†	Discovery Harbor CDP	Hawaiian Ocean View CDP	Nā'ālehu CDP	Ka'ū CCD	County of Hawai'i	State of Hawai'i
Population and Age - from 2010 U.S. Census							
Total Population	14	949	4,437	866	8,451	185,079	1,360,301
Median Age	34	53	44	37	45	41	39
Population 19 and under	3	181	1,174	271	2,168	46,933	338,301
Population 65 and older	3	189	538	149	1,266	26,834	195,138
Educational Attainment - from 2010 U.S. Census							
Population 25 and older with a high school diploma (includes equivalency)	N/A	93.8%	93.1%	74.1%	88.9%	90.5%	89.8%
Population 25 and older with bachelor's degree	N/A	14.0%	26.2%	8.7%	20.3%	26.6%	29.4%
Household from U.S. Census - 2010 Estimates							
Average household size	2	2.34	2.52	3.45	2.63	2.7	2.89
Median household income in 2010 dollars*	N/A	\$35,750	\$43,525	\$50,972	\$41,352	\$54,996	\$64,420
Percent of family living below the poverty level	N/A	22.9%	10.3%	12.8%	17.9%	10.3%	6.7
Percent of households receiving public assistance income (cash)	N/A	5.8%	2.2%	2.8%	2.6%	4.4%%	3.4%
Percent of households receiving public assistance (food stamps/SNAP**)	N/A	30.6%	10.4%	16.5%	14.1%	11.5%	7.4%
Percent of working residents 16 years & over travelling 30+ minutes to work	N/A	16%	80%	68%	61%	35%	41%
Housing Market - from 2010 U.S. Estimates							
Median monthly housing cost for homes with a mortgage	N/A	\$1,166	\$1,465	\$881	\$1,352	\$1,691	\$2,225
Median monthly housing cost for occupied units paying rent	N/A	\$1,137	\$876	\$1,036	\$931	\$1,009	\$1,260

\*Inflation-adjusted dollars.

\*\*Supplemental Nutrition Assistance Program

†Due to the small population size, some demographic information was not calculated by the US Census Bureau

# State, Federal, & County Leaders

*Disclaimer: The information and recommendations expressed in this report are not necessarily endorsed by the people depicted on this page. These same people cannot be held liable for the information presented or the results of the report.*



**Neil Abercrombie**  
*Governor*



**Brian Schatz**  
*Lieutenant Governor*



**Daniel K. Inouye**  
*U.S. Senator*



**Daniel K. Akaka**  
*U.S. Senator*



**Mazie K. Hirono**  
*Congressional District 2*



**Alapaki Nahale-a**  
*Hawaiian Homes Commission  
Chairman*



**Ian Lee Loy**  
*Hawaiian Homes Commission  
East Hawai'i Commissioner*



**Leimana K. DaMate**  
*Hawaiian Homes Commission  
West Hawai'i Commissioner*



**Colette Y. Machado**  
*Office of Hawaiian Affairs  
Chairperson*



**Robert K. Lindsey, Jr.**  
*Office of Hawaiian Affairs  
Trustee, Hawai'i*



**Gilbert Kahele**  
*State Senate  
District 2*



**Robert Herkes**  
*State House of Representatives  
District 5*

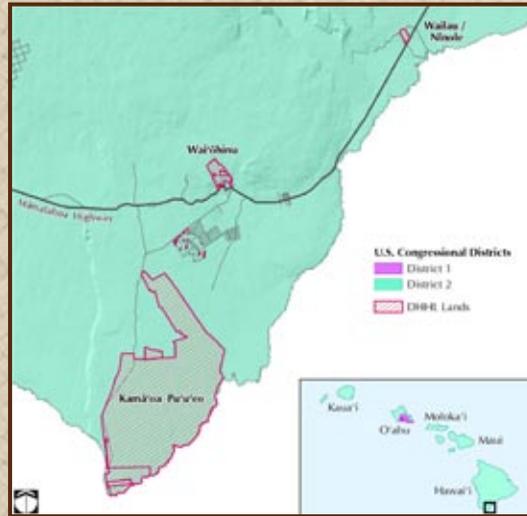


**Billy Kenoi**  
*Hawai'i Mayor*

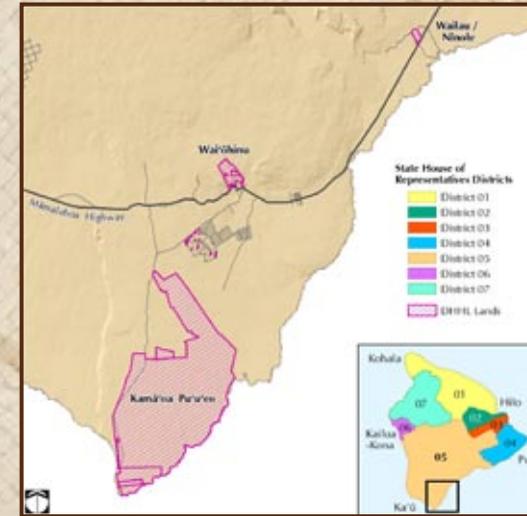


**Brittany Smart**  
*Council District 6*

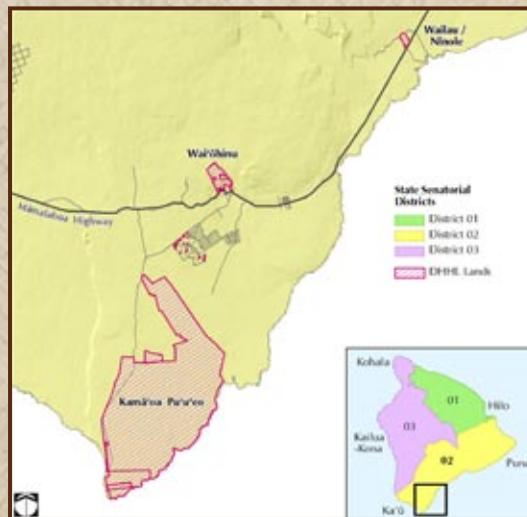
# Elected Officials and Political Boundaries



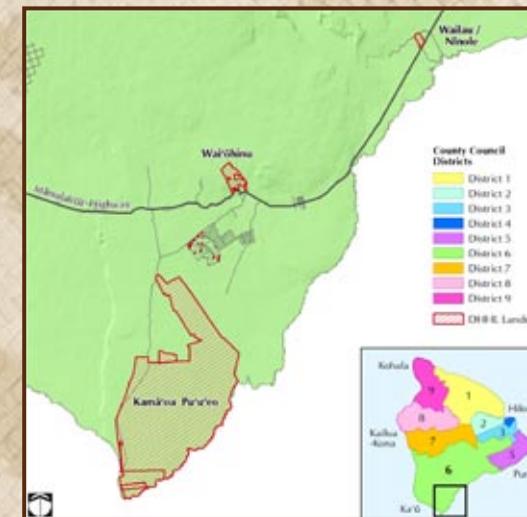
*U.S. Congressional District 2*  
**Congresswoman Hirono**



*State Senate District 2*  
**Senator Kahele**



*House District 5*  
**Representative Herkes**

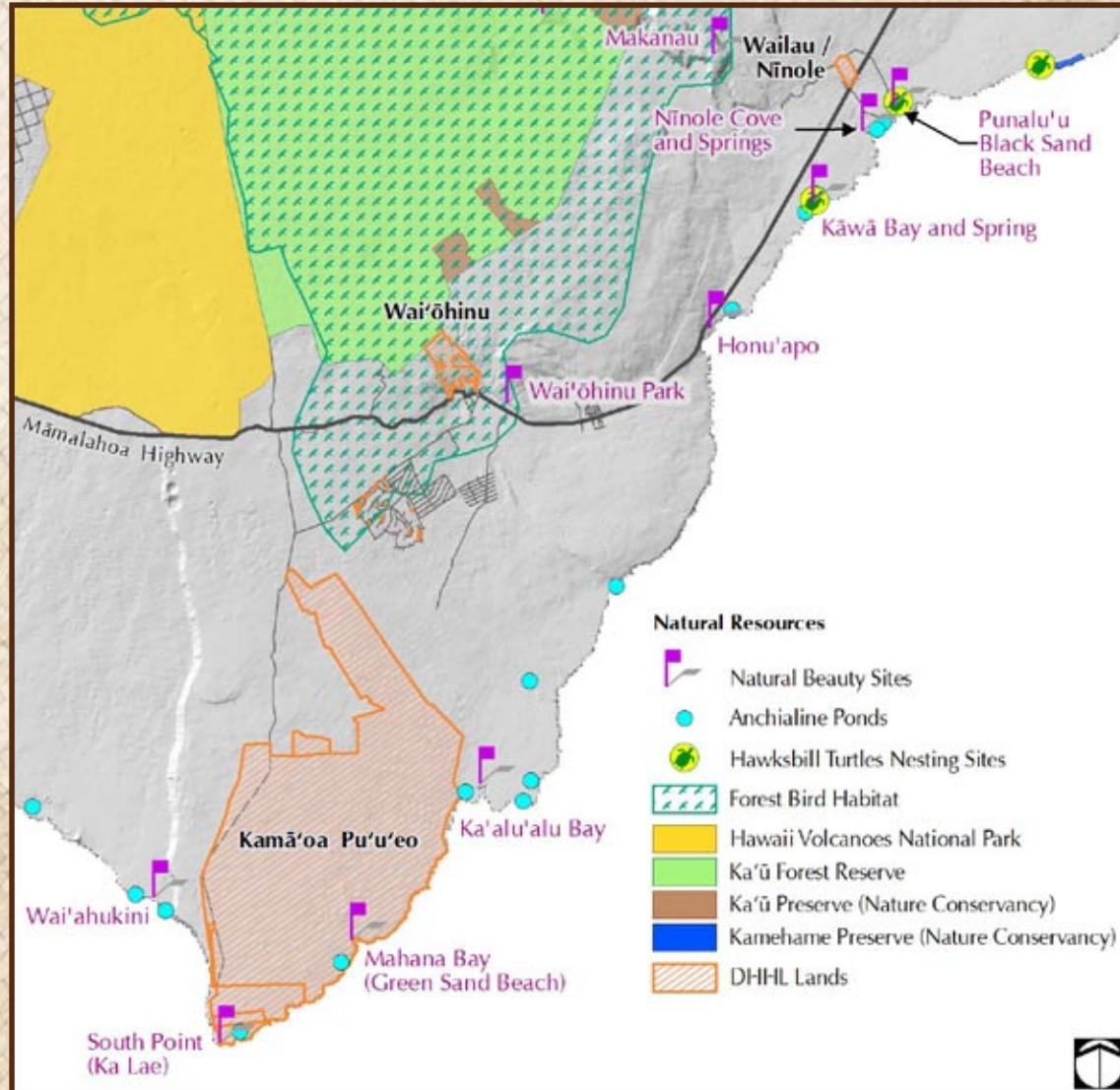


*County Council District 6*  
**Council Woman Smart**

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### III. LAND AND NATURAL RESOURCES



Natural Resources  
 Sources: Ka'u Community Development Plan Charrette, County of Hawaii General Plan, National Park Service, US Fish and Wildlife, Hawaii'i Department of Land and Natural Resources

Natural Beauty Sites, District of Ka'u Site	Ahupua'a or Region
Pōhue Bay	Kahuku
Volcano area including National Park	Kahuku, Keauhou
South Point (Ka Lae)	Pākini Iki, Kamā'oa
Mahana Bay	Kamā'oa
Wai'o'Ahukini	Pākini Nui
Ka'alu'alu Bay	Kiolaka'a
Honu'apo	Honuapo
Kāwā (Kawa'a) Bay and Spring	Ka'alāiki, Hilea Nui
Nīnole Cove & Springs	Nīnole
Punalu'u Black Sand Beach	Punalu'u
Lava Flows of 1868, 1887, & 1907	Various
View of Mauna Loa from Volcano-Ka'u Highway	Various
Scenic view of shoreline between Pahala and Punalu'u	Various
Wai'ōhinu Park	Various
Na pu'u: 'Enuhe, Mākanau, Kaiholena and One	Various

Numerous locations have been identified as natural beauty sites in Ka'u. Those shown here are on or near the Trust's land holdings.



Kalae is the southernmost point of the USA and located within the Trust land-holdings. While Kalae and Mahana Bay are popular destinations for tourists, many visitors are unaware of the sensitive cultural and natural resources that are damaged or desecrated as they traverse through Trust lands to peer over the point or touch the green olivine sand of Mahana.

Ka'ū is the southern most district of Hawai'i. It is also the largest in Hawai'i County with over 660,000 square acres. The district encompasses coastal and mauka areas and includes over 65 miles of coastline. Inland, the elevation rises to approximately 13,680 feet above sea level at the summit of Mauna Loa. The land and natural resources of Ka'ū are influenced by Mauna Loa and Kīlauea.

“Culturally significant oral tradition involving Pele, and her youngest sister Hi'iaka may involve the two largest volcanic events to have taken place in Hawai'i since human settlement: the roughly 60-year-long 'Aila'au eruption during the 15th century and the following development of Kīlauea's caldera....Recent geologic studies confirm the essence of the oral traditions and illustrate the potential value of examining other Hawaiian chants and stories for more information about past volcanic activity in Hawai'i”.

D.A. Swanson, *Journal of Volcanology and Geothermal Research*

### Geology

- Mauna Loa and Kīlauea primarily formed the lands of Ka'ū. Mauna Loa literally means the long mountain. It is the largest volcano in the world and one of the most active. Kīlauea may have been named for its spewing lava flows during pre-contact eruptions.
- Remnants of what may have been a much older volcano, identified as the Nīnole volcanic series, created some of the oldest exposed rock formations in Ka'ū. The extensive eruptions of Mauna Loa covered much of this older volcano. Now just the tops of ridges and prominent hills such as Maka'alia, Makaanau, Kaiholena and Pu'u 'Enuhe remain exposed.
- A visible feature of the Ka'ū shoreline is the presence of littoral cones. The largest, Pu'u Hou, was formed in 1868 as a flow from Mauna Loa entered the sea.



*Mahana Bay is frequently called Green Sand Beach in reference to the volcanic sand rich in olivine.*

### Soils

Soils within Ka'ū along the coast frequently are rocky and stony, a result of relatively recent volcanic activity. However, interspersed amongst the rocky shorelines, wave action has created a few sandy beaches. The Trust's land holdings include several such beaches along the shoreline within the Ahupua'a of Kamā'oa Pu'u'eo including Mahana Bay.

Within the Trust's mauka land holdings, the soil is more developed. The western half of Wailau consist of Punalu'u Extremely Rocky Peat. However, the eastern portion has been described as Very Stony Land. Wai'ōhinu primarily consist of Kona Extremely Rocky Muck.

# LAND AND NATURAL RESOURCES



*Abandoned wind farm on private lands adjacent to both Kamehameha and Trust lands.*



*Kamā'oa Wind Farm, located adjacent to the Trust's lands on Kamehameha Schools-Bishop Estate land.*

## *Climate*

The climatic patterns within Ka'ū are greatly influenced by Kīlauea and Mauna Loa.

- Rainfall ranges from desert conditions at the summit of Mauna Loa and the coastal regions to tropical rainforest conditions along the saddle between Kīlauea and Mauna Loa. The Trust lands within Kamā'oa Pu'u'eo receive very little rain, averaging between 10 and 40 inches annually. Much of the precipitation occurs during kona wind patterns when wind blows between Mauna Loa and Kīlauea. Water catchment is generally not considered adequate to meet residential potable water requirements in areas with less than 60 inches of rainfall annually. Of the Trust's land holdings in Ka'ū, Wai'ōhinu receives the most rain at 40-50 inches annually.
- Wind patterns are affected by the local geology. High winds are generated around the island points, the elevated plains between the large mountains, and places with abrupt changes in elevation like the cliffs of Kamā'oa Pu'u'eo Ahupua'a. Wind is a natural resource that has proved profitable to harness for energy production in Ka'ū. One of the prominent wind names in Ka'ū is "Ku'ehu Lepo" referring to the constant winds that stir up dust. Wind power density within the Trust's land holdings in Kamā'oa Pu'u'eo Ahupua'a are estimated to range from 800 watts per square meter (W/m<sup>2</sup>) at Ka Lae to 300 W/m<sup>2</sup> inland. In comparison, it is estimated that the wind power density in Hawaiian Ocean View in western Ka'ū is less than 100 W/m<sup>2</sup>.
- The intensity of solar energy is typically inversely related to rainfall patterns. The Trust's south facing landholdings in Ka'ū are well positioned for optimal conversion of solar radiation into usable energy, generating approximately 400-450 calories of energy per square centimeter daily.
- The temperature in the coastal regions such as the Trust's landholdings in Kamā'oa Pu'u'eo, and the scattered lots in Discovery Harbor average from 70 to 80 degrees Fahrenheit. Temperatures are cooler in the mauka landholdings of Wai'ōhinu.

### *Anchialine Pools*

These land-locked pools near the ocean are connected indirectly to the ocean underground. There are numerous pool systems in Ka'ū, many located within Kamaō'a Pu'u'eo Ahupua'a. The ponds are home to unique invertebrate such as 'ōpae 'ula that are often adapted to the specific salinity of the pool they are found in. The most famous of these is Palahemo. It has been said that if you have seen all of Ka'ū, but not Palahemo, then you have not seen Ka'ū. In years past, Palahemo was a clear pool with refreshing water. The pala fern used to grow in the crevices along the walls. Today, the water is sometimes muddy from the dust generated from erosion caused by rain, wind and vehicles.



*Palahemo*

### *Vegetation*

Vegetation in Kalae must be able to withstand the strong winds, salt spray, and rocky soils with little organic material. Non-native plant coastal communities dominate Kalae. Vehicular traffic is especially destructive to native species such as the naio papa, 'ilima kūkahakai, and hinahina. Alien species also dominate Wailau, Wai'ōhinu and the scattered lots in Discovery Harbor. Higher rain fall makes the vegetation more lush within the Trust's mauka land holdings.



*Arid plains of Kamaō'a Pu'u'eo.*



*Mauka of Wai'ōhinu.*



*Wind swept Kalae.*

### Synopsis of Planning in Ka'ū

Numerous planning activities and resource studies have occurred over the past thirty years, starting with the 1979 Ka'ū Community Development Plan prepared by the County Planning Department. There have also been numerous private proposals for developments in Ka'ū. These plans and studies provide insight into the work previously conducted, success stories, as well as failures in creating projects with wide scale community support. The plans and studies included here do not include development proposals, but may include studies conducted in support of these proposals in Ka'ū.

Date	Organization	Name/Description
2010	Hawai'i County	Honu'apo Park Resource Management Plan: The goal of the plan is to protect and restore natural and cultural resources within Honu'apo as well as integrating recreational and educational opportunities that are respectful of the resources.
2010	Private	2010 Ocean View Dwelling Survey Results: Ocean view dwellings include numerous unconventional residential structures.
2009	Hawai'i Volcanoes National Park	General Management Plan (currently under development): Alternatives for future park management as well as wilderness study.
1998, 2009	The Nature Conservancy	Ecoregional Plan: A series of assessments and plans to assist in targeting conservation areas.
2008	NPS	Ala Kahakai National Historic Trail, Comprehensive Management Plan: Identification of alternatives while addressing cultural and natural resource protection, current use by local residents, Native Hawaiians and visitors.
2007	Hawai'i Volcanoes National Park	The visitor study was designed to determine visitor demographics, sites visited within the park and duration of stay.
2007	Hawai'i Volcanoes National Park	The study was designed to examine the effect of natural and human-caused sounds (including air tours) on visitor experience within the park.
2007	Three Mountain Alliance	Three Mountain Alliance Management Plan: A partnership aimed at collaborating efforts across Mauna Loa, Kīlauea, and Hualālai to sustain water and important habitat.
2007	Department of Land and Natural Resources	Ka'ū Coastal Conservation Task Force Report: Analysis of fragile and historically essential coastal lands and near shore areas
2007	Hawai'i County	Ka'ū Listening Project: Talk-story sessions that identified community sentiment as wanting a secure natural environment and additional economic opportunities.
2006	The Nature Conservancy	FEA- Ka'ū Preserve Natural Area Partnership: Maintain the native ecosystem, and protect rare plants and animals.

Date	Organization	Name/Description
2006	NPS	Ka'ū Coast Reconnaissance Survey: An overview of natural and cultural resources along the shoreline between Kapā'o Point and Kahuku Point.
2005	State Office of Community Affairs	Alu Mai Ko Ka'ū; Ka'ū Community Plan
2005	Ka'ū High School and University of Hawai'i	Na Wahi Pana o Ka'ū- The Celebrated Place of Ka'ū- A Ka'ū High School Oral History Project
2002	Private	A Feasibility Report for the Creation of a Food Processing Visitor Center in Ka'ū.
2001	Hawai'i County	Hawai'i County General Plan Draft
2000	Private	A Feasibility Report for a Food Processing Facility and Visitor Center at Pahala.
1999	Private	A Vision for Ocean View
1998	State of Hawai'i	An Economic Development Plan for the District of Ka'ū for DBEDT
1998	State of Hawai'i	A Strategic Community Development Plan for the District of Ka'ū
1998	University of Hawai'i	Community Planning in the Ahupua'a of Kamā'oa-Pu'u'eo and Punalu'u
1996	State of Hawai'i	Hilo-Ka'ū Region: Economic Environment and Resources for DBEDT
1996	Private	1,000 Bed Minimum Security Correctional Facility in Ka'ū
1995	Private	Nā'ālehu Main Street Strategic Plan: Survey of Nā'ālehu
1994	NRCS	Ka'ū River Basin Study
1992	Hawai'i County	County of Hawai'i Agriculture Development Plan
1991	Private	Sazole Black Sands Resort: Shoreline and Pond Management Plan
1989	Hawai'i County	Hawai'i County General Plan (and updates)
1988	Private	Prosperity Through Preservation in the Great and Majestic District of Ka'ū
1987-1995	State of Hawai'i	Multiple reports/plans regarding the evaluation of Space-Related industries including commercial space port in Ka'ū



# INFRASTRUCTURE - WATER

## Water

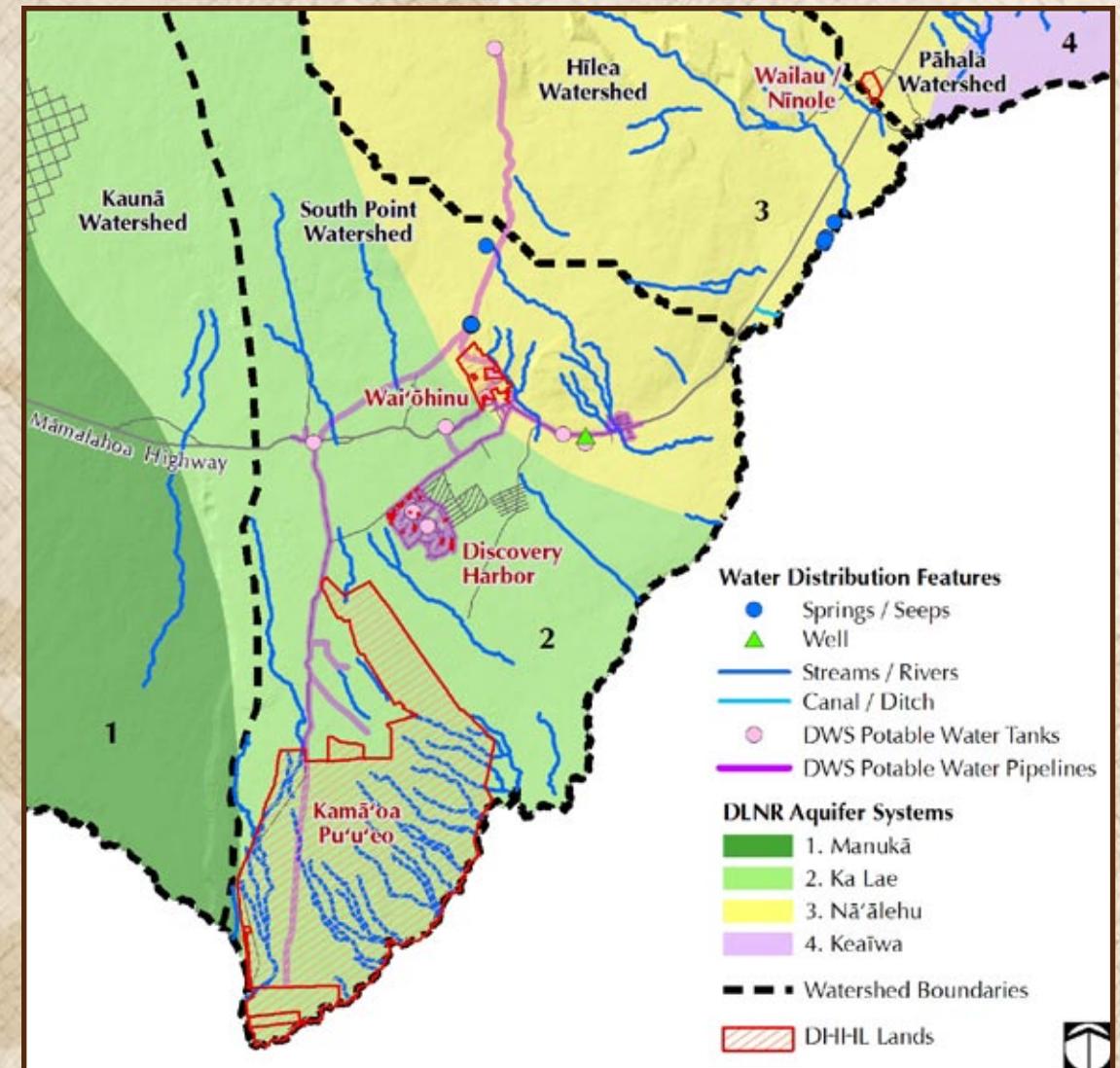
There are no perennial streams or freshwater lakes in Ka'ū because the volcanic rock is so permeable. However, there are numerous coastal seeps and springs. In Kalae, water in these seeps is brackish as a result of sea water moving inland through cracks and crevices formed during relatively recent volcanic activity.

Most households living outside of Wai'ōhinu, Nā'ālehu, or Discovery Harbor need to either collect their own water through catchment devices or haul it to their residences. None of the agriculture homestead lots have water service. Of the twelve pastoral lots, there are four meters. While there is a water main connecting Kamā'oa Pu'u'e'o to the DWS water system, it is too small to accommodate additional connections without affecting service to existing water users.

### PROPOSED PĀ'AU'AU STREAM CHANNEL RESTORATION

Hawai'i County requested \$200,000 in CIP funding for the fiscal year 2010-2011 to complete channel capacity restoration work which requires the removal of debris and sediment and illegal structures built within the channel maintenance right of ways. The project also requires the removal of vegetation. If it does not meet maintenance requirements, the stream channel may be classified inactive by the United States Army Corps of Engineers, which would affect its eligibility for federal assistance and Federal Emergency Management Agency reimbursements.

*Ka ua Hā'ao o Waiōhinu.* - The Hā'ao rain of Waiōhinu.



Water Resources and Aquifer Systems in Ka'ū.

# *I*NFRASTRUCTURE - UTILITIES

## *Gas*

Propane gas is widely used in residential and commercial facilities on the island of Hawai'i. In some rural areas of the County, gas is the only source of power. The Public Utilities Commission (PUC) regulates 67 miles of gas mains and service lines on the Big Island. Most of these lines are located in Hilo. Gas service is also provided by tank or cylinder. This type of service is not regulated by the Public Utilities Commission.

## *Telephone Service*

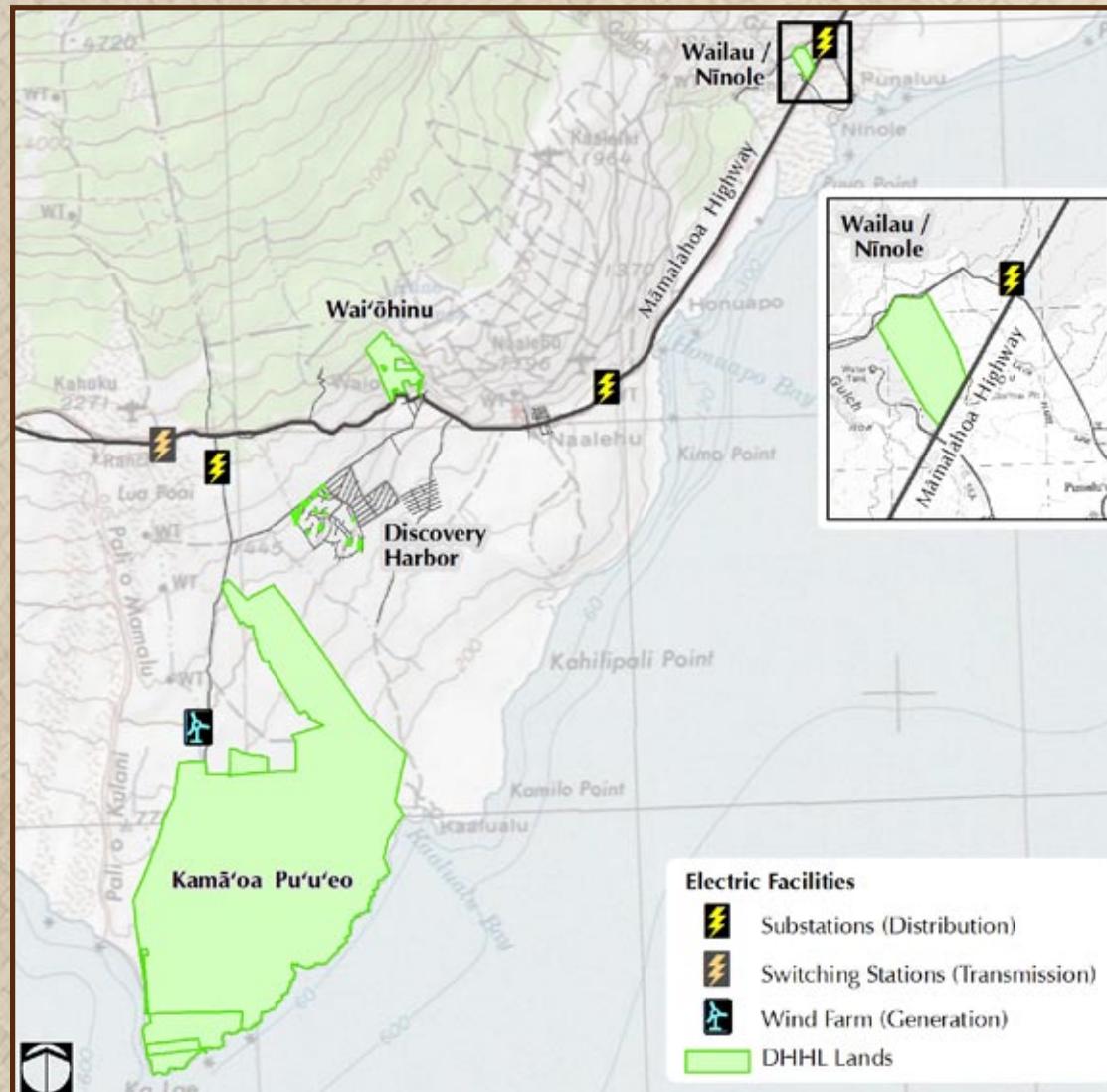
Hawaiian Telcom provides telephone service to the existing homesteads. Sandwich Isles Communications will provide fiber optic telephone service to any new homestead developments created on Trust lands.

## *Existing Sewer System*

Most residences in the area are served by individual cesspools and septic systems. In both Nā'ālehu and Pāhala large capacity cesspools service multiple public and private facilities.

## **PROPOSED NĀ'ĀLEHU AND PĀHALA LARGE CAPACITY CESSPOOL REPLACEMENT**

Hawai'i County received \$17,548,000 in Capital Improvement Program (CIP) funding to connect lots in Nā'ālehu and Pāhala currently serviced by large capacity cesspools to a collection system serviced by a wastewater treatment and disposal system. A federal grant provided \$1,843,000 in matching funds. \$984,000 in CIP funding was appropriated for the fiscal year 2010-2011. The project is a legal mandate, required by federal law. The Environmental Protection Agency promulgated Underground Injection Control regulations on December 7, 1999 (40CFR 144-G) which requires large capacity cesspools existing before that date to be upgraded or closed by April 5, 2005. The project will include land acquisition, installation of new sewer pipes and sewer treatment plant. C. Brewer has installed sewer laterals within the residential lots that will connect to county pipes. An additional \$6,215,000 is being requested for the fiscal year 2011-2012 for additional design and construction costs. Construction in Nā'ālehu is expected to begin within the fiscal year 2011-2012. The State has approved construction of the sewer plant. It is anticipated that the project will cost approximately \$12,000,000 to complete and will be operational by the end of 2014.



Electrical Facilities in Ka'u.

### Electrical Service

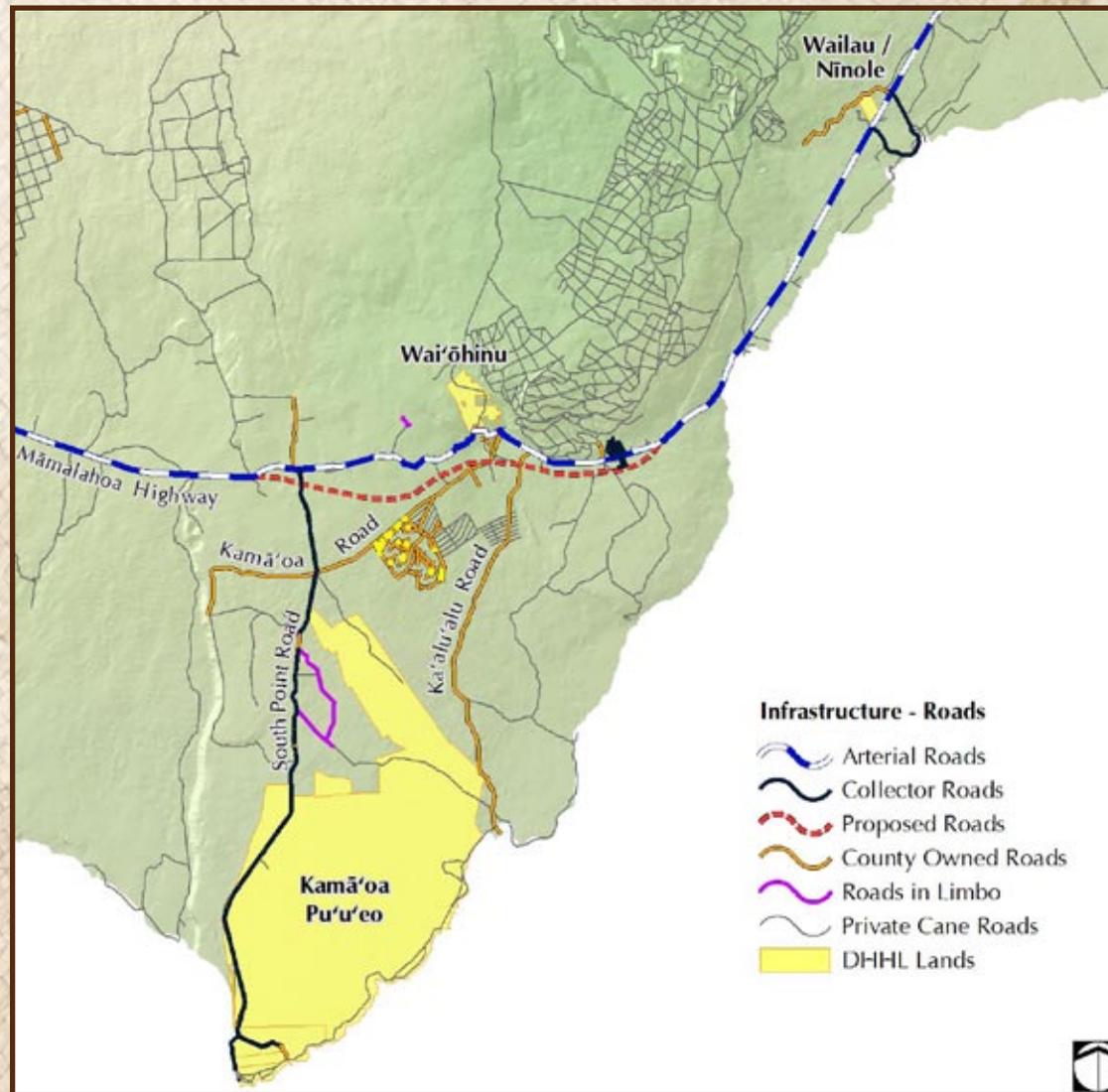
The Hawai'i Electric Light Company, Inc. (HELCO) supplies electricity for the County of Hawai'i. HELCO purchases power from three privately-owned companies - Hilo Coast Power Company, Hāmākua Energy Partners and Puna Geothermal Venture. The balance of power is produced by HELCO-owned steam units, diesel units, and gas turbines. HELCO also owns and purchases hydroelectric units and windfarm energy providing additional energy to the system.

There are two levels of transmission voltages to transfer power between areas on the Big Island. The main transmission voltage is 69kV. HELCO has four 69kV cross-island transmission lines. The existing distribution system consists of several different voltage levels: 2.4kV, 4.16kV, 7.2kV, 12.47kV and 13.8kV. The distribution system basically consists of overhead pole lines and underground systems. Because of the vastness of the Big Island, the majority of the distribution system consists of overhead pole lines. Underground systems have been used more extensively in the newer subdivisions and developments. HELCO currently operates major switching stations at critical locations around the island. Distribution substations, which transform voltages to distribution voltages, are also located island-wide in proximity to communities and other developments.

In Ka'u, many households located outside of town and away from the main roadways are off grid, producing their own energy. Within the Trust homesteads, HELCO supplied electricity is available at the Discovery Harbor scattered lots and the pastoral lots. The agriculture and pastoral lots have not had any infrastructure improvements.



# INFRASTRUCTURE - ROADS



Roads in Ka'u.

## Roads

Due to the rural nature of Ka'u, the existing roads such as Māmalahoa Highway are for critical to linking communities. A bypass road has been proposed in the past, but development has been tied to projects that were never constructed.

Within the Trust's and Kamehameha Schools' lands makai of Kamā'oa Road, too many roads have been a concern. The soft earth is easily rutted as cars and trucks drive across these private lands on their way to the scenic coastal points. Dirt paths that used to be one lane wide are now as wide as a four or five lane highway. When the ruts become too deep to pass, drivers will often blaze a new path adjacent to the rutted roadway. Both visitors and kama'āina alike contribute to the degradation of the area whenever they drive on this unimproved network of "roads."

### PROPOSED WOOD VALLEY BRIDGE REPLACEMENT

A total of \$800,000 in County CIP funding was approved for the fiscal year 2010-2011 to replace four wooden bridges with reinforced concrete bridges. The County is expected to request an additional \$6,000,000 in CIP funding over the next three fiscal years to fund construction. The project includes the demolition of the existing bridges; construction, maintenance and removal of a detour road if needed; and construction of a new bridge with the associated appurtenances. The existing wooden bridges are old and structurally substandard. Repairing and maintaining the bridges requires major work. Failure of any of the four bridges will cut off access to the residences of Wood Valley.



Vehicular traffic on unpaved areas in Kamā'oa Pu'u'eo results in huge ruts and environmental degradation.

### *Schools*

Schools in Ka'ū are part of the Ka'ū-Kea'au-Pāhoa Complex. Within the Ka'ū region of the complex, the primary public schools are Ka'ū High and Pāhala Elementary School established in 1881, and Nā'ālehu Elementary School established in 1928. Both schools have not met the "No Child Left Behind" performance targets and are under restructuring. Volcano School of Arts and Sciences is a public charter school located in the Ka'ū region of the Complex. The charter school met performance targets and is in good standing.

#### **PROPOSED KA'Ū HIGH AND PĀHALA ELEMENTARY SCHOOL RENOVATIONS**

The State appropriated and allocated \$1,947,000 in (CIP) funding for various projects at Ka'ū High and Pāhala Elementary School including termite treatment, electrical upgrade work and renovations. All projects are in the planning and design phase. Two additional projects have been proposed, renovation of teacher's cottage #6 and special education restroom, but the estimated \$180,000 has not been appropriated.

#### **PROPOSED NĀ'ĀLEHU ELEMENTARY SCHOOL RENOVATIONS**

The State appropriated and allocated \$360,000 in CIP funding for the installation of water coolers and interior renovation work at Nā'ālehu Elementary School. Both projects are in the planning and design phase. Yamada Paint Contracting (dba GW Construction) recently completed construction of a six classroom building. The actual construction award amount was \$3,929,853.

### *Libraries*

There are two public libraries in Ka'ū. The Nā'ālehu Branch is generally open weekdays until 5:00 p.m. The Pāhala Public and School Library is typically open in the afternoons on Monday, Thursday and Friday. However, as a result of staffing shortages it is currently closed.

### *Medical Services*

The Ka'ū Hospital, located on Kamani Street in Pāhala, is the only hospital in Ka'ū. The 21-bed facility provides acute and long-term care services. The Ka'ū Family Health Center operated by the Bay Clinic provides non-emergency medical, dental and behavioral health care and is located in Nā'ālehu along Māmalahoa Highway.

### *Fire*

There are five fire stations/substation in Ka'ū. The stations are located at Ocean View, Nā'ālehu, Discovery Harbor, Pāhala and Volcano. With the exception of the Discovery Harbor station, all of the stations have a combination of paid staff and volunteers. Discovery Harbor is an all volunteer station.

### *Police*

Ka'ū is served by a primary district station located in Nā'ālehu and a substation located at Pōhue Plaza.

#### **PROPOSED NĀ'ĀLEHU POLICE STATION REPAIRS**

The County has requested \$75,000 in CIP funds to conduct deferred maintenance. The police station exterior is weathered and paint is faded. Some of the metal exterior siding is extremely corroded, and emergency repairs have been requested. This accelerated weathering is caused by the harsh sun and steady ocean breeze. Additionally, the evidence cage is also badly corroded. There is concern that this evidence storage area be properly maintained as this is the only secure storage area in Ka'ū for vehicles and other large items. Funds have not yet been appropriated for this project.

### *Community and Recreational Facilities*

There are several recreational facilities and community centers in Ka'ū that are operated by County, State and Federal agencies. The County has recreational facilities at Ka'ū High and Pāhala Elementary School, Kahuku Park, Wai'ōhinu Park, Nā'ālehu Park/Community Center, Whittington Beach Park and the Pāhala Community Center and Swimming Pool. The State operates Manukā State Wayside Park, Hou'apo Pier, Kaulana Ramp, and Punalu'u Harbor. The U.S. National Park Service oversees Hawai'i Volcanoes National Park.

#### **PROPOSED MANUKĀ STATE WAYSIDE PARK**

Facility improvements, including comfort station, parking, landscape and picnic area improvements, are underway for Manukā State Wayside Park. Bolton, Inc. was awarded \$476,296 in CIP funding to complete the improvements.

#### **PROPOSED PĀHALA TENNIS COURT IMPROVEMENTS**

\$50,000 in CIP funding was requested for the fiscal year 2010-2011 for the design and installation of lighting for nighttime usage of the Pāhala tennis courts, court resurfacing to address deterioration of the existing surface, and related improvements. Funding will be requested annually to support operations and maintenance.

#### **PROPOSED PĀHALA GYM**

The State appropriated \$16.9 million for use by the County for the construction of a new gymnasium and multi-purpose facility to be located at the Ka'ū High and Pāhala Elementary School Campus. The facility will also serve as a disaster shelter. Construction is anticipated to begin during the summer of 2012, and take approximately 18 months to complete.

# V. HOMESTEAD PRIORITIES

In 2010, the Trust began the development of a Resource Management Plan for Kamā'oa Pu'u'eo. Trust Staff and their consultants conducted site visits and met with the pastoral lessees. A number of issues were raised during this meeting that ultimately led to a shift of planning in this region from a very narrow focus of just Kamā'oa Pu'u'eo, to a more regional focus encompassing resource management as well as other community identified issues. The issues raised during the 2010 meeting as well as those identified during the 2011 Regional Planning process have been consolidated in this list of issues and opportunities.

During the Regional Planning Process, various entities were provided an opportunity to share information on issues that could affect trust beneficiaries.

Big Island Invasive Species Committee (BIISC) spoke about Axis Deer control. While the Trust-Land Management Division was granted temporary access to Trust lands, survey and eradication actions would be conducted by the BIISC, not the Trust. The BIISC explained that they are hoping to work with the community and eventually get locals trained and certified to be a part of the axis deer control.

The West Hawai'i Commissioner, Leimana DaMate, also utilized the Regional Plan forum to explain what the commissioners are doing to address the many issues set before them. She was able to help the community better understand what happens during the monthly meetings, what the Ad Hoc committees are doing as well as the meetings held by the Commissioners of OHA and the Trust.



## Water

1. Increased transmission of water into Kalae is needed.
2. Source development is necessary to access the substantial groundwater resources.

## Community

1. The community should form an association.
2. Ecotourism proposals should be approved by the community in conjunction with the Trust's Land Management Division.



*Natural Resources*

1. Access within Kalae needs to be regulated.
2. Recreational use should be regulated.
3. Utilization of all-terrain vehicles should be regulated taking into account the differences between recreational use and use for accessing resources.
4. Regulation should include an educational component including signage and some type of public forum.

*Homesteading*

1. More affordable housing opportunities need to be developed.
2. More self-help homes are needed.
3. The Trust should consider turning the remainder of the lots in Discovery Harbor into a Community Self-Help project.
4. Alternatives to the turn-key option/set builder are necessary.  
The options should be for residential, agriculture and pastoral.
5. Building Code is not flexible enough to allow alternative building types and construction practices.
6. Discovery Harbor DCCRs should be evaluated to determine if provisions are hindering the applicants from accepting lots.

*Agriculture* (Farm and Pastoral)

1. The Trust should consider a partnership with DLNR to make agriculture lots available to Trust beneficiaries on DLNR lands.
2. Wai'ōhinu should be considered for agricultural homesteading.



# IV. HOMESTEAD PRIORITIES

The issues and opportunities identified by beneficiaries were consolidated into a list of potential projects. Based on discussions with meeting participants the potential project list was modified. Once the final list of potential projects was agreed upon, meeting participants were provided with dots to show their support of up to five potential projects. Participants were allowed to vote for each project only once. The table below includes all of the potential projects and identifies those elevated to priority projects by community consensus. The details for the five priority projects described on the following pages were evaluated and expanded upon by the Trust, their consulting team and key stakeholders. These priority projects were then reviewed and approved by the community prior to submission to the Commission for approval.

Potential Project	Community & Trust Discussion	Type
<b>*Support Development of Affordable Homesteading Alternatives</b>	<ul style="list-style-type: none"> <li>• Lower price points for homes being offered</li> <li>• Provide more self-help opportunities</li> <li>• Alternative options should address housing type and provide more agriculture/pastoral opportunities</li> <li>• The Trust should explore exemptions to Building Code</li> </ul>	Homesteading
<b>Award Discovery Harbor Lots</b>	<ul style="list-style-type: none"> <li>• Stringent DCCRs including food production and animal husbandry limitations negatively impact applicants willingness to accept Discovery Harbor lots</li> <li>• Requirement to utilize a single builder drives up the cost of home construction</li> <li>• Self-help should be applied to all remaining Discovery Harbor lots (i.e. Habitat for Humanity, etc.)</li> </ul>	Homesteading
<b>*† Create Partnership with DLNR for Hawaiian Homesteading</b>	<ul style="list-style-type: none"> <li>• DLNR has good agriculture lands that may be available in Ka'ū</li> <li>• DLNR lands are located within areas with higher average rainfall (than Kamā'oa Pu'u'eo) and may be better suited for ranching and farming</li> </ul>	Homesteading
<b>*†Award Agriculture Homestead Leases at Wai'ōhinu</b>	<ul style="list-style-type: none"> <li>• Wai'ōhinu lands are well suited for agriculture and pastoral homesteading</li> </ul>	Homesteading
<b>Revise Rules to Allow Animal Husbandry and Farming on either Pastoral or Agriculture Leases</b>	<ul style="list-style-type: none"> <li>• Planting of foods, particularly 'uala, corn, kalo should be allowed on pastoral homesteads</li> </ul>	Homesteading
<b>Assess the Implications of a Non-Standard Building Code</b>	<ul style="list-style-type: none"> <li>• Existing Building Code is not flexible</li> <li>• Safe homes can be built without meeting current County Building Code requirements</li> <li>• Utilize alternative building materials that are locally produced and/or sustainable</li> <li>• The Trust should utilize exemptions to Building Code. Safe homes can be built utilizing such exemptions</li> <li>• Utilize local community resources</li> </ul>	Homesteading
<b>Identify Renewable Energy Opportunities with Community Benefits</b>	<ul style="list-style-type: none"> <li>• Renewable energy initiatives on Trust lands should directly benefit the local community</li> </ul>	Infrastructure
<b>*Obtain Additional Water for Homestead Lots in Pu'ueo, Kama'oa, and Wai'ōhinu</b>	<ul style="list-style-type: none"> <li>• Inadequate water is available for lessees on agriculture and pastoral lots</li> <li>• Improve the water system</li> </ul>	Infrastructure

\* By consensus, the community elevated these potential projects to community priority projects.

\*† Projects were combined into a single project. project.



## Potential Projects

Potential Project	Community & Trust Discussion	Type
* ° Develop Vehicular Roadway(s) and Pedestrian Pathways within the Coastal Area of Kalae (to manage access to Kaulana Bay, the fishing grounds at Kalae and protect sensitive resources.)	<ul style="list-style-type: none"> <li>• Access needs to be regulated and managed</li> <li>• Vehicles including ATVs are damaging cultural and natural resources</li> <li>• New trails are created as older trails become too rutted to utilize</li> <li>• This large network of trails is negatively impacting native plants like naio papa, and affecting the water quality of Palahemo</li> <li>• As one trail becomes rutted and impassable, vehicles create new ones</li> <li>• Creation of maintained paths in the coastal areas to the fishing grounds at Kalae, and Kaulana Bay could reduce degradation of cultural and natural resources</li> <li>• Guard rails along the roadways could help keep tourists out of sensitive areas</li> <li>• Pathways for non-vehicular access (people and/or horses) could provide routes to visit cultural and natural resources while limiting degradation</li> </ul>	Infrastructure
*Create a Ka'ū Homestead Association	<ul style="list-style-type: none"> <li>• An association can help the community form its own destiny</li> <li>• Create an official relationship with the Trust</li> </ul>	Community
Organize Economic Opportunities at Kalae	<ul style="list-style-type: none"> <li>• Land claims should be settled before licensing eco-tours</li> <li>• Eco-tourism cannot be stopped, but some method should be developed to ensure that the Hawaiians in Ka'ū benefit</li> <li>• Ecotourism Ventures should be vetted by the community and benefit the community at large</li> <li>• Vending and other Community Based Economic Development</li> <li>• The old barracks and/or the pastoral lot designated for community could be licensed to a community association for Economic Development, Cultural preservation, etc.</li> <li>• Uncontrolled access throughout Kalae negatively impacts resources (such as Palahemo, Mahana, Kaulana, heiau, iwi, etc.)</li> </ul>	Community
* ° Protect and Preserve Cultural Sites in Kamā'oa	<ul style="list-style-type: none"> <li>• Palahemo is being desecrated by vehicular activity including ATVs.</li> <li>• Kalae is a national landmark, historic preservation is necessary</li> <li>• Enforcement needs to be improved</li> <li>• Uncontrolled access throughout Kalae negatively impacts resources (such as Palahemo, Mahana, Kaulana, heiau, iwi, etc.)</li> <li>• Traditional fishing practices cannot be utilized when numerous people are present</li> <li>• Lack of sanitary facilities may result in increased degradation of the natural resources found at Kalae</li> </ul>	Resource Protection/Management
Create a Regional Fire Control Plan	<ul style="list-style-type: none"> <li>• Fire breaks have reduced/eliminated fire hazards within Kamā'oa Pu'u'eo.</li> <li>• A plan (encompassing the major regional land owners/lessees would provide improved protection from fire for the region</li> </ul>	Resource Protection/Management
Develop a Public Educational Forum	<ul style="list-style-type: none"> <li>• Educating visitors to Kalae (locals and tourists) regarding the cultural significance of the area and the need for site sensitivity may reduce degradation</li> <li>• The biggest economic driver is Mahana Bay, which draws visitors to its green sand</li> <li>• Control access to Mahana and educate visitors of its significance</li> </ul>	Resource Protection/Management
Create Signage to Identify and Educate People about Resources in the Region	<ul style="list-style-type: none"> <li>• Signs could be utilized to educate visitors of the area regarding significant sites</li> </ul>	Resource Protection/Management
Designate Sensitive Areas, "No Vehicular Access"	<ul style="list-style-type: none"> <li>• Uncontrolled access throughout Kalae negatively impacts resources</li> </ul>	Resource Protection/Management

\*By consensus, the community elevated these potential projects to community priority projects.

° Projects were combined into a single project.



# *P*Riority Project - *Support Development of Affordable Homestead Alternatives in Ka'ū*

*I wawā 'ia ka hale kanaka. Na wai e wawā ka hale kanaka 'ole*  
- *Voices are heard around an inhabited house. Who hears voices about an uninhabited one?*

## *Goal*

The primary goal of this priority project is to actively engage the community in exploring alternative, affordable and obtainable housing options. Beneficiaries should be provided with more choices and options that are innovative, appropriate and affordable for Ka'ū.

## *Description*

When the Trust first began awarding homestead leases, homesteaders had a single option for home construction, owner-build. For many years, this was the only option available. The advantage to this option was that the house built was based on what was affordable to the lessee's household. The disadvantage of owner-build construction is that it limited homesteading to those with the requisite knowledge to build their own home, and/or manage contracted labor. Some communities are still sparsely populated because lessees have not yet built residences years after lease awards. An alternative to the owner-build option was first offered to beneficiaries with the development of Princess Kahanu Estates on O'ahu. For the first time, waiting list applicants were provided an opportunity to accept a developer built (turn-key) residential homestead. This allowed thousands of applicants with an alternative to constructing their own home and many applicants were removed from the waiting list. Entire communities were built quickly, and utilizing economies of scale, prices were controlled. In Ka'ū, the turn-key method was utilized as part of the Discovery Harbor award process. However, for many applicants in Ka'ū, the turn-key package available was not affordable. As a result, only two of the 40 scattered lots within the Trust's Discovery Harbor project were awarded.

Many applicants in Ka'ū have been offered a homestead, but have deferred award due to a lack of financial capacity, location of homestead offer, and/or other barriers. The Trust recognizes that alternatives to the current housing options need to be developed.

The beneficiaries observed that often individuals, particularly in rural areas like Ka'ū, cannot afford developer built turn-key homes. However, while individual financial capacity may be limited, the cooperative power of beneficiaries working together is endless. Beneficiaries have proposed that if they work together along with a self-help developer, homeownership in Ka'ū is not only more affordable, but obtainable.

## *Process*

The Trust should consider the following when creating alternative affordable housing options in Ka'ū:

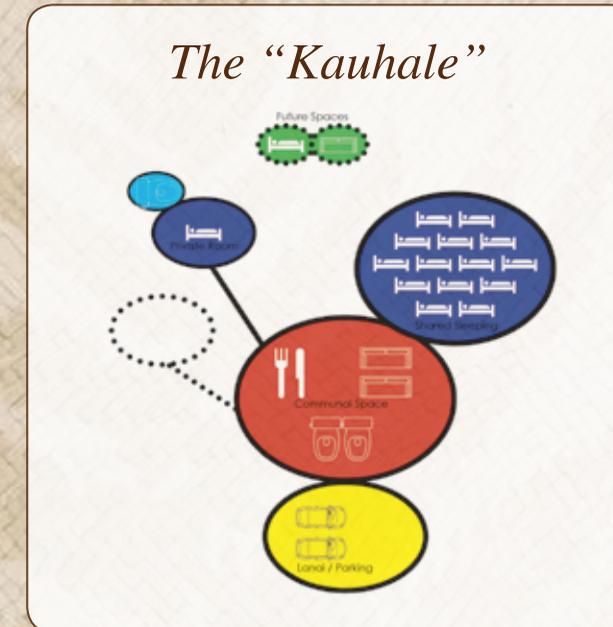
- Provide more mutual self-help opportunities
  - Work with a Hawaiian homestead association recognized by the Trust to create community work groups to build homes together.
  - Identify self-help organizations (Habitat for Humanity, etc.)
  - Develop support mechanism to pair local skilled labor with lessees engaged in homestead construction.
  - Re-assess the advantages of traditional "barn-raising" events
- Provide lower price points for quality homes by utilizing more traditional, less expensive home construction
  - Post and pier rather than slab on grade
  - Single-bedroom/bath homes properly sited and designed accommodate affordable additions as funds become available
  - Local vendors
  - Coordination with contractors for re-use of overstock
  - Military surplus
  - Subsidies

## *Priority Project - Support Development of Affordable Homestead Alternatives in Ka'ū*

- Provide green options that don't increase cost
  - Green Architectural Design
  - Use of local materials
  - Use of natural or recycled materials
  - Photovoltaic paid for by installer
  - Septic Systems
- Options to the traditional single-family home ownership
  - Kupuna housing
  - Multi-family
  - 'Ohana housing
  - Rental with option to purchase home
  - Rental
  - Kauhale
- Investigate agriculture opportunities within Discovery Harbor community
  - Landscaping for cultural harvesting
  - Community gardens
  - Backyard food security
  - Chickens
  - Vegetables
  - Aquaponics
- Evaluate the existing building code for exceptions and exemptions that can reduce costs
- Contractor Accountability and Trust Oversight Contractors should be held accountable for the service they provide. Quality workmanship should be enforced by the Trust.

### *Phasing*

- I. Participate in the Trust's Alternative Housing Option discussion
- II. Engage Ka'ū Community in
  - o Determining appropriate housing types and price points
  - o Creating hands-on opportunities
- III. Planning & Design
- IV. Construction of options/models of alternatives
- V. Evaluation of options/models



### *Cost*

This is administrative project that will result in internal costs borne by the Trust.

### *Collaboration*

Hawaiian Home Lands Trust  
 University of Hawai'i  
 USDA-Rural Development  
 Various Contractor Unions  
 Homestead Association

Beneficiaries  
 Home Depot and other suppliers grant programs  
 Habitat for Humanity and other mutual self-help programs  
 Rebuilding Together and other rehabilitation programs



# *P*Riority Project - *Create a Ka'ū Homestead Community Association*

*'A'ohē hana nui ke alu 'ia*  
*No task is too big when done together by all*

## *Goal*

The primary goal of this priority project is to establish a Ka'ū Hawaiian Homestead Community Association.

## *Description*

The establishment of a Hawaiian Homestead Community Association is a priority for the beneficiaries of Ka'ū. The formation of an association recognized by the Trust could provide numerous benefits to both Trust beneficiaries and the community at large. A Hawaiian Homestead Community Association could work with the Trust and other organizations to manage cultural and natural resources, improve homeownership opportunities through self-help projects and create economic opportunities within the region that benefit the Ka'ū beneficiaries as a whole. By working together as an association, the beneficiaries can represent the interests of the lessees and applicants to both the Trust and other organizations.

The Trust has been working with Hawaiian Homestead Community Associations to support community development, economic sustainability, and resource management. A democratically-elected association in Ka'ū could respond to community needs as well as represent the interest of its constituency to the Hawaiian Home Lands Trust.

The long-term goals of an association representing Ka'ū beneficiaries should include:

1. An elected leadership that ensures transparency and accountability in homestead activities.
2. Strong organizational capacity.
3. Effective homestead association programs that serve the beneficiaries.
4. Sustainability of both the association and the beneficiary community.
5. Manage natural and cultural resources, including invasive species control.
6. Develop strategic partnerships to leverage resources and funding.

## *Process*

Convene Ka'ū beneficiaries in order to establish a Hawaiian Homestead Community Association

1. Identify purpose and goals
2. Develop guidelines for composition of board (51% should be Trust beneficiaries)
3. Formalize and adopt by-laws
4. Elect leaders and board members
5. Incorporate Association

## *Cost*

This is an administrative project that will result in internal cost borne by the Trust.

## *Collaboration*

Hawaiian Home Lands Trust Alu Like

# Priority Project - Obtain Additional Water for Homestead Lots in Kamā'oa, Pu'u'eo, and Wai'ōhinu

*Ke kula wai 'ole o Kamā'oa* "The waterless plain of Kamā'oa."

Mary Kawena Pukui explained that in the past, the plain of Kamā'oa in Ka'ū was well populated, but its people had to go upland for their water supply.

## Goal

The beneficiaries have identified the need for the water system to be improved to meet their homesteading needs and for fire suppression.

## Description

In Ka'ū, 12 pastoral and 25 agriculture lots have been awarded 99 year homesteading leases. These homesteads are located in Kamā'oa Pu'u'eo, a dry, windswept area with rainfall averages between 10 and 40 inches per year. One impediment to successful homesteading of these farms and ranches is inadequate water for plants, livestock, and potable water for human consumption. None of the 25 awarded agriculture lots have harvested a single crop, due in part to the lack of adequate water. Lessees on some of the pastoral lots have been more successful, but limited water, available water meters and inadequate water pressure make it challenging and almost impossible for lessees to raise livestock. Hauling water is an option but it is both expensive and time consuming.

A Kamā'oa Pu'u'eo Water Master Plan should be done first. A water master plan should include the following actions:

1. Determine the amount of water necessary to meet the needs of current and proposed uses in Kamā'oa Pu'u'eo.
2. Assess the availability of water and/or identification of water source.
3. Determine the feasibility of utilizing the former military barracks water system (storage and conveyance).
4. Prepare preliminary engineering costs for necessary source development, water conveyance and storage to meet water requirements.
5. Consult with U.S. Department of Agriculture-Rural Development (USDA-RD) to determine if project is eligible for funding.

6. Consult with County of Hawai'i Department of Water Supply regarding hybrid system development.
7. Assess and evaluate alternatives.

This project will need to be conducted in several phases.

## Phasing

- I. Conduct a Kamā'oa Pu'u'eo Water Master Plan (priority project)
- II. Conduct required entitlement and environmental assessments
- III. Secure funding
- IV. Construction

## Project Cost - for Phase I

Phase I: Kamā'oa Pu'u'eo Water Master Plan  
\$75,000

## Collaboration

Hawaiian Home Lands Trust  
County of Hawai'i, Department of Water Supply  
USDA-Rural Development  
Qualified Native Hawaiians  
University of Hawai'i - Engineering Program Practicum  
Kamehameha Schools



Ha'ao Springs

# *P*RIORITY PROJECT - *Protect and Preserve Cultural Sites & Natural Resources in Kamā'oa*

*I puni iā 'oe o Ka'ū a i 'ike 'ole 'oe iā Palahemo, 'a'ohē nō 'oe i 'ike iā Ka'ū*  
*If you haven't seen Wai 'o Palahemo, you haven't seen Ka'ū.*

## *Goal*

The primary goal of this priority project is to protect the resources of Kamā'oa Pu'u'eo.

## *Description*

Within the coastal areas of Kamā'oa Pu'u'eo near Kalae is an area of great cultural importance. It is believed that this is the place where Polynesians first discovered Hawai'i. It is estimated that these Polynesians may have settled here in Ka'ū and became the first Hawaiians as early as 124 AD. Oral tradition from the community identifies Kalae as the launching and landing point for Hawaiians journeying to Tahiti, Te Henua Enana (the Marquesas Islands), Rapa Nui (Easter Island), Alaska, and Aotearoa during pre-contact times. In 1962, approximately 700 acres of Kamā'oa Pu'u'eo were nominated and designated as a National Historic Landmark, an area with the longest and most complete archaeological record of human occupation in Hawai'i.

The native Hawaiian beneficiary community is connected to this place and has expressed a desire to protect the many important resources for future generations. Important resources includes natural and cultural sites, including places like Palahemo and other anchialine ponds that provided water to generations of Hawaiians with the knowledge to capture freshwater floating on seawater in the ponds. It also includes places like the coastline Kamā'oa Pu'u'eo, that one kama'āina explained was known for fishing done by women in small pools. Techniques passed from one generation to the next allowed the women to scoop up fish with their skirts. Fishing on the coastline between Kalae and Kaulana Bay was eventually designated for women only by chiefly decree.

These and other places of cultural importance are being desecrated as ATVs ride haphazardly between Kalae and Mahana Bay. Dust and debris make once clear pools dirty and unusable. Native plants are replaced by invasive species. Populations of naio papa, a prostrate variety of false sandalwood found only in Kalae are being destroyed as people create new trails. Unmarked burials of iwi kūpuna and heiau are being trampled on as ATVs and unknowing visitors drive throughout the area.

While access to these areas is important, protection is necessary. People should be able to visit culturally important areas. Families should be allowed to enjoy the area and respectfully fish and gather along the coast. However, without controls in place, the resources and cultural treasures will be lost.

It has been many years since the Historic Landmark Division assessed the state of the area. Updating the historic designation could bring renewed appreciation for Kamā'oa Pu'u'eo as well as training and technical assistance to a designated association aimed at protecting these resources.

Developing and implementing a circulation plan with appropriate signage could significantly reduce the damage and degradation. A circulation pattern that creates paved roadways that get vehicles to Kalae and Kaulana Bay could eliminate vehicular traffic between the two points of interest, increasing protection for cultural resource and eventually allowing native plants to be re-established.



# Priority Project - Protect and Preserve Cultural Sites & Natural Resources in Kamā'oa

## Phasing

It is anticipated that this project will be done in multiple phases.

- I. Organize Community
- II. Update the Historic Landmark Designation
- III. Develop Circulation Plan
- IV. Pursue Partnerships
- V. Develop Signage, Educational Programs
- VI. Obtain Funding
- VII. Construct roads, fencing, and educational signage

## Cost

Update Historic Landmark Designation and Development of a Circulation Plan is anticipated to cost approximately \$65,000.

## Collaboration

Ka'ū Community  
National Park Service - Hawai'i Volcanoes National Park  
National Park Service - Ala Kahakai National Historic Trail  
National Park Service - National Historic Landmarks Division  
National Park Service - Tribal Preservation Program  
Historic Preservation Grant programs  
University of Hawai'i  
Kamehameha Schools  
Hawaiian Home Lands Trust  
Department of Land and Natural Resources - Division of Forestry and Wildlife  
Native American Graves Protection and Repatriation Act



Boat ramp at Kaulana Bay



Entrance to Mahanā Bay



Mahana Bay



Directions to sites frequented by visitors to Ka'ū



Historic Complex Marker



Palahemo

# *P*RIORITY PROJECT - Agriculture Homestead Leases at Wai'ōhinu and pursue partnership with DLNR for Hawaiian Homesteading

*He keiki aloha nā mea kanu*  
*Beloved children are the plants*

## *Goal*

The primary objective of this priority project is to create farming opportunities for native Hawaiians in Wai'ōhinu Ahupua'a.

## *Description*

The Trust has 11,312 acres of lands in Ka'ū and a majority of these lands are located within the Kamā'oa Pu'u'e'o Ahupua'a. A total of 25 lots have been awarded in Ka'ū for farming. All of these agriculture lots are located in the dry Kamā'oa Pu'u'e'o Ahupua'a within a lava field. Due to the difficult conditions, none of these lessees have worked the land.

The Trust's lands in Wai'ōhinu may be a more appropriate area for farming. Located adjacent to Hā'ao spring, the Trust's Wai'ōhinu lands are in an area that receives abundant rainfall to keep the area lush, green and teeming with yellow ginger and other water loving plants. Traditionally kalo was grown in Wai'ōhinu Ahupua'a. Lo'i are still present, particularly within the Department of Land and Natural Resources landholdings in Wai'ōhinu Ahupua'a.

The Trust identified the need to re-evaluate and designate land uses for all its landholdings on Hawai'i Island. In 2002, the Hawai'i Island Plan was completed which included recommendation for appropriate uses of Trust lands in Ka'ū. While Wai'ōhinu was identified as the best location for agriculture homesteading in the Ka'ū region, a more detailed evaluation is necessary before any awards can be made.

## *Cost*

Site Assessment and Preliminary Master Plan of Wai'ōhinu  
\$100,000

## *Phasing*

- I. Conduct detailed Site Assessment and Preliminary Master Plan of Wai'ōhinu lands for development of subsistence agriculture lots
- II. Work in conjunction with the Kamā'oa Pu'u'e'o Water Master Plan to determine water needs for Wai'ōhinu
- III. Evaluate interim use options designed to provide opportunities to native Hawaiians interested in pursuing farming in Wai'ōhinu
- IV. Consult with the Department of Land and Natural Resources regarding farming opportunities for native Hawaiians within their landholdings
- V. Survey applicant pool
- VI. Secure Planning and Design Funding
- VII. Prepare Master Plan for Subsistence Agriculture Subdivision
- VIII. Conduct Preliminary Engineering
- IX. Prepare Entitlement and Environmental Documentation
- X. Secure Construction Funding
- XI. Develop training program for awardees
- XII. Construct Infrastructure
- XIII. Award Lots

## *Collaboration*

DLNR  
USDA-RD  
University of Hawai'i  
Farm Associations



*An example of a Hawaiian Homestead Lot in Waimea, Hawai'i*

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