

WAIMĀNALO



REGIONAL PLAN

November 2011

DEPARTMENT OF HAWAIIAN HOME LANDS





WAIMĀNALO

Contents

DEPARTMENT OF HAWAIIAN HOME LANDS

Alapaki Nahale-a
Chairman
Hawaiian Home Lands Commission

HAWAIIAN HOMES COMMISSION

Leimana K. DaMate (West Hawai‘i)
Ian Lee Loy (East Hawai‘i)
Perry O. Artates (Maui)
Henry Tancayo (Moloka‘i)
Jeremy Kamakanealoa ‘Kama’ Hopkins (O‘ahu)
Michael P. Kahikina (O‘ahu)
Renwick V.I. Tassill (O‘ahu)
Imaikalani P. Aiua (Kaua‘i)

Michelle Kauhane
Deputy to the Chairman

M. Wai‘ale‘ale Sarsona
Executive Director to the Office of the Chairman

DEPARTMENT OF HAWAIIAN HOME LANDS

Hale Kalaniana‘ole
91-5420 Kapolei Parkway
Kapolei, Hawai‘i 96707

www.hawaii.gov/dhhl

Office of the Chairman
Telephone: (808) 620-9500
Facsimile: (808) 620-9599

Mailing Address:
P.O. Box 1879
Honolulu, Hawai‘i 96805

Planning Office
Telephone: (808) 620-9480
Facsimile: (808) 620-9559

I. INTRODUCTION

Regional Plan Goals & Process
DHHL Partnering Benefits & Examples

2 - 3
4 - 5

II. HOMESTEAD & REGIONAL PROFILE

History & Cultural Aspects of the Area
Land & Natural Resources
Land Use & Demographics
Hawaiian Home Lands Map
Waimānalo Hawaiian Homestead Association & Beneficiaries
Community Leaders & Stakeholders
Elected & Appointed Officials
Political Boundaries

6
7
8
9
10
11
12
13

III. REGIONAL LAND & DEVELOPMENT

Waimānalo Homestead Village Center
Major Land Owners
Development Characteristics & Trends

14 - 15
16
17

IV. INFRASTRUCTURE & CHARACTERISTICS

Roads & Transit
Water
Wastewater/Sewer
Drainage
Regional Services & Public Facilities

18 - 19
20 - 21
22 - 23
24 - 25
26 - 27

V. HOMESTEAD ISSUES & PRIORITY PROJECTS

Status of Previous Priority Projects
Issues, Opportunities & Potential Projects
Priority Projects
Emergency Evacuation Plan
Hawaiian Cultural Learning Center
Honolulu Police Department Satellite Office
Support & Develop Affordable & Obtainable Homestead Alternatives in
Waimānalo
Waikupanaha Improvements/Ilauhole Street Extension
Waimānalo Business Park (Industrial/Technology)

28
29 - 31
32
33
34
35
36
37

I. Introduction: Regional Plan Goals

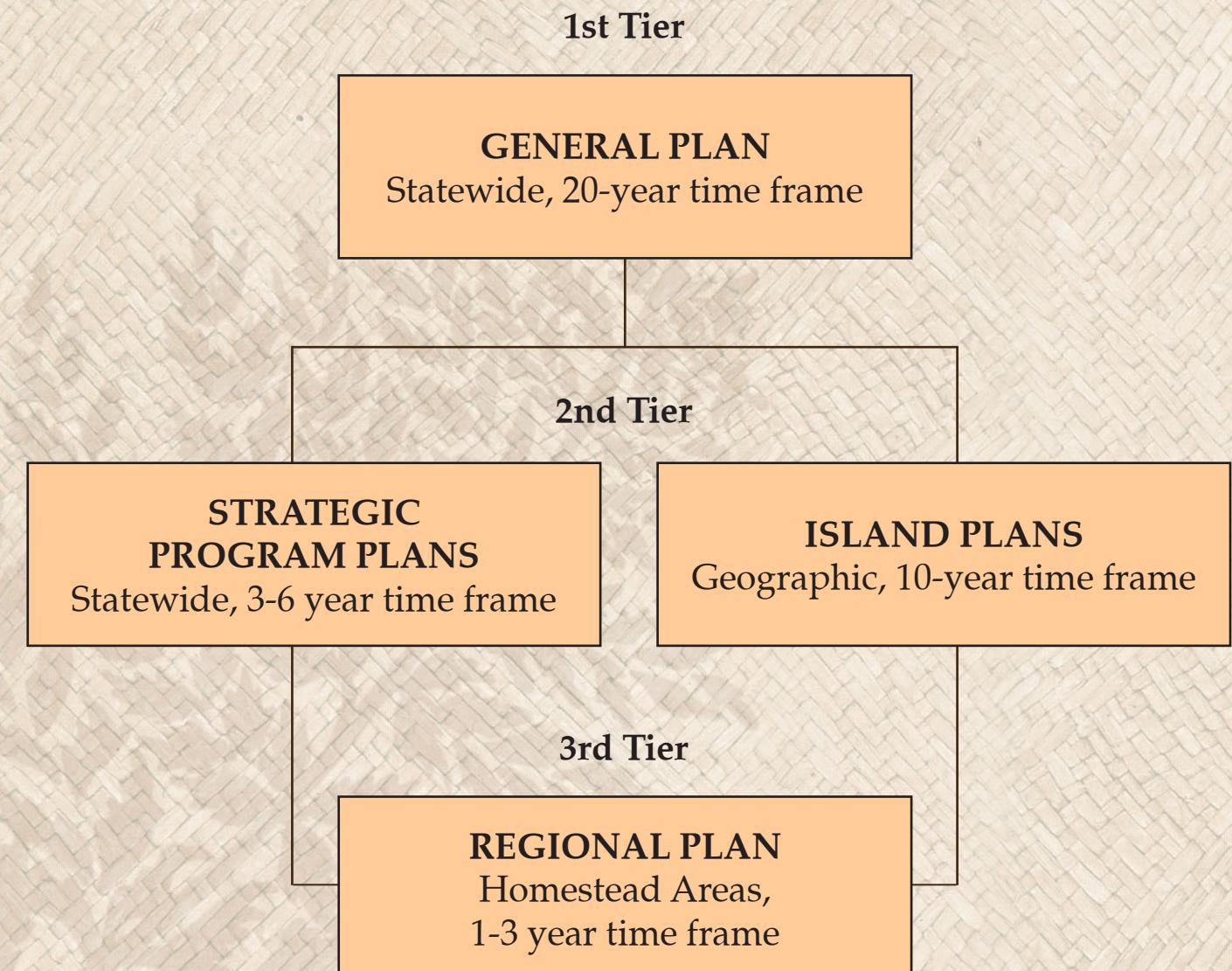
The mission of the Department of Hawaiian Home Lands (DHHL) is to effectively manage the Hawaiian Home Lands Trust and to develop and deliver lands to native Hawaiians. To accomplish this, DHHL works in partnership with government agencies, private landowners, non-profit organizations, homestead associations, 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.

This regional plan is one of twenty (20) regional plans that DHHL has developed statewide. Waimānalo is one of the regions on O'ahu that have been selected for regional planning. In these regional plans, DHHL takes on a leadership role in the region, working to strengthen the growth of the area, developing partnerships to leverage diverse resources and capital investment; and fostering beneficiary participation in determining the future direction of the homestead community. The regional plans provide the Department and the affected homestead community opportunities to 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.

What are Regional Plans?

Regional Plans are part of DHHL's 3-tiered Planning System (see diagram to right). At tier one is the General Plan which articulates long-range Goals and Objectives for the Department. 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 Department'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 Department'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 DHHL 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 Department and homestead community.



Regional Plan Process

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 in the diagram below. 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 Department, 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 DHHL knows 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, which generally have amounted to biennial updates (one update every two years), 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 applicant and lessee 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.



DHHL Partnering Benefits

BENEFITS OF PARTNERING

DHHL is working in partnership with other government agencies, the private sector, and community organizations to develop its lands and improve community life. DHHL 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 public and residential facilities. This coordination helps individual organizations achieve their goals while bringing long-term benefits to the community and region.

DHHL brings 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, and SBA to start and leverage other resources
- Flexibility in the application of development standards, zoning, and design
- Cultural understanding and resources
- A strong political partner to help achieve objectives

DHHL has participated in a number of successful partnerships. A few are highlighted on the facing page.



Kulanakaukahale Maluhia o Na Kupuna in Waimānalo



Self-Help Housing in Waimānalo

SUCCESSFUL PARTNERSHIPS

1. Residential Partnerships

Through partnerships DHHL has reduced the cost of homes to low-income beneficiaries. DHHL 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. Another innovative rental housing development is the Waimānalo Kupuna project. The Office of Hawaiian Affairs (OHA), Hawaiian Home Lands Trust Fund, Federal Home Loan Bank of Seattle grants, Low Income Housing Tax Credits, the State Rental Housing Trust Fund, and private lenders partnered to create this rental housing project on Hawaiian home lands. Eighty-five (85) units were made available to low and moderate income elderly (62 years of age and over). In these types of partnerships, DHHL often provides the land, secures federal grants, and provides access to, or assistance in, acquiring tax credits, subsidies, or other financing.

2. Infrastructure Partnerships

DHHL has partnered with county governments and utility providers on infrastructure improvements that benefit the entire community. DHHL has participated in water system development with the counties by providing funding, land easements, and access to federal and state programs. Examples include the extension of the Lower Kula Water System on Maui, the Waimea Irrigation System and the Maku'u Water System on Hawai'i, and the Waiawa-Waipahu water system on O'ahu. DHHL water systems at Anahola on Kaua'i, and Ho'olehua on Moloka'i are interconnected with nearby County water systems providing both party's backup source and storage capacity in the event of emergencies. DHHL has also provided numerous easements over its lands (including lands in Waimānalo) to electrical, water, telephone, and cable companies to service both homestead areas and the general public.

3. Public Facilities Partnerships

DHHL has participated in a number of partnerships involving public facilities and community resources. The most notable partnerships have 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 Lokahi, the Office of Hawaiian Affairs, Hawaiian community organizations, and the counties. These multi-service complexes house preschools, offices, meeting facilities, health clinics, and activity centers. For example, the Paukūkalo homestead on Maui is served by a County park on DHHL land next to a community hall, the DHHL district office, the Hawaiian Community Assets' home ownership counseling center, and a Kamehameha Schools preschool. At the heart of the Waimānalo Village Center, the Waimānalo Hawaiian Homes Association - Ka Ho'oolina na Kuhio Community Center shares a parcel along with its neighboring lessees Queen Lili'uokalani Children's Center and Kamehameha Schools - Waimānalo Preschool. DHHL, private businesses, government agencies, and private foundations have joined together to provide materials for playgrounds constructed by homestead associations and other community volunteers. This area will soon be joined by the Community Technology, Education and Employment Center (CTEEC).

4. Natural Resource Management Partnerships

Through a series of management partnerships with DLNR and the Nature Conservancy, unique ecosystems and historic sites are being protected. Examples include the Hakalau Forest Reserve, the 'Aina Hou Management Area, the Pala'au and Mo'omomi preserves, the Kalaupapa peninsula, and the Kamā'oa-Pu'u'eo National Historic District where koa forests, endangered plants and animals, and native species are being protected for future generations. Beachfront recreational values are protected through management agreements with the City and County of Honolulu for Makapu'u, Kaiona, Kaupō, Waimānalo, and Nānākuli beach parks.



Telecommunications Easement



Kamehameha Schools - Waimānalo Preschool



Makapu'u Beach Park

II. Homestead & Regional Profile: History & Cultural Aspects of the Area

PRE-CONTACT

Waimānalo – potable or sweet water – Ahupua'a, named for its largest stream, covers just over 11 square miles. The ahupua'a was once rich with Hawaiian sites, but many have vanished or been destroyed over the years. Located just south of Kaiona Beach Park, there are remnants of Pāhonu Pond, an ancient Hawaiian stone enclosure where fishermen put turtles that were to be consumed by the ali'i. Stories tell of former small fishing villages along the shore. The pu'uhonua of Haununāniho (binding the teeth), a sacred site where anyone was forgiven, formerly rested on a small hill makai of the present highway. Various sources have recorded at least four heiau in Waimānalo and numerous sacred pohaku (stones). One such stone is Pōhaku Pa'akiki, sacred to local sweet potato farmers who offered 'awa daily to Kamohoali'i, their shark god. Kaupō Beach Park was the site of the ancient fishing village of Ko'onāpou which was abandoned in 1853, due to the smallpox epidemic. Some of the earliest habitation sites in the State of Hawai'i are located in the Bellows dune fields. Twelve major archeological sites, including religious temples (heiau), have been identified in the watershed.

In pre-contact and pre-sugar days the area supported a large system of taro lo'i with a wide variety of traditional Hawaiian crops clustered around stream areas. Additional upland taro lo'i, fed by small streams and springs, existed along the base of the Ko'olau range. These lo'i were served by a system of 'auwai (irrigation ditches) from the springs and streams. The area's agricultural tradition has a long and rich history. The lo'i were destroyed when the entire ahupua'a was leased and cattle were introduced. These changes destroyed the traditional plantings of sugar cane, ti, and wauke, as well as large trees, resulting in the loss of vegetation throughout the whole area.

During the Great Mahele of King Kamehameha III from 1846 to 1848, the approximately 7,000-acre Waimānalo Ahupua'a was reserved as "Crown Lands." Between 1846 and 1851, native Hawaiians were awarded fee simple patents for their home sites and cultivated lands. In 1840, Waimānalo was a ranch for sheep and cattle, but 10 years later, sugar dominated the ahupua'a.

LATE 1800S TO MID-1900S

During the period 1850 to 1920, one family leased the King's land and acquired about 200 acres of fee simple land. They raised livestock and later developed a sugar cane plantation, the Waimānalo Sugar Company. Due to an inadequate water supply in Waimānalo and the high water volume needed to grow sugar, an irrigation system was developed to draw water from Kawainui Stream to Waimānalo. The Waimānalo Irrigation System ditches developed during this period are eligible for the National Register of Historic Places. In 1917, the 29-year-old Waimānalo Sugar Company sold 1,500 acres of beachfront property to the U.S. Government; the area that is presently Marine Corps Training Area Bellows (MCTAB).

The Sugar Company was liquidated in 1947. Leased land was sublet to local farmers, and fee simple lands were sold. As sugar became less profitable throughout the rest of the island, numerous farmers relocated away from the rapidly growing suburban centers of Kailua and Kāne'ohe to the relatively unpopulated Waimānalo watershed.

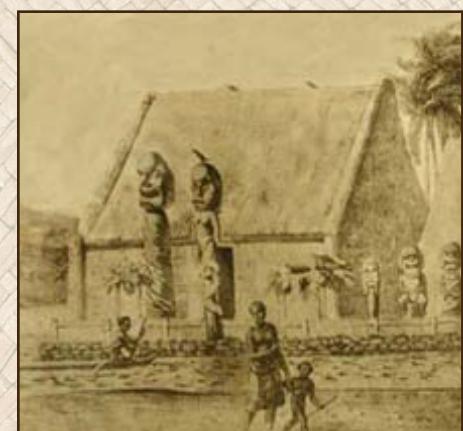
In 1921, the Hawaiian Homes Commission Act listed most of the Valley floor as "available lands" but excluded military areas, cultivated cane lands, and beach lands. The first Hawaiian Homes Commission lots were made available in 1925.

The DHHL Waimānalo lands, located in the southern end of the Ko'olau Poko District on the windward side of O'ahu, comprise over 2,000 acres and almost 7,000 Native Hawaiians. Waimānalo reflects a well-developed and mature Hawaiian community.

MODERN TIMES

The City and County's Ko'olau Poko Sustainable Communities Plan calls for maintaining agricultural land uses for flower growing, aquaculture, livestock production, and other types of diversified agriculture, while placing limits on new housing. The plans suggest revitalizing existing commercial centers and maintaining development character that is generally low-density, low-rise, small scale, and reflective of a "country" setting.

Waimānalo is country. Waimānalo is local style. Waimānalo is home. Waimānalo is Hawaiian. The words from the popular song "Waimānalo Blues" expresses the deep love of place and people that the community represents. It reflects a laid back local lifestyle that is soothing and healthful; friendly, family oriented with an unhurried pace. Slack key guitarist, Gabby Pahinui and his 'ohana and impromptu musical jamming in the garage remain quintessential Waimānalo symbols. Trade winds blow constantly and sand and sea and windblown hair are as natural as the naupaka on the beach. Fishing and surfing, picnicking and 'ukulele, paddling and horses all make up the outdoor lifestyle that is Waimānalo. Long, sandy beaches edged with ironwood trees and the dramatic Ko'olau cliffs frame the community. In the continuing development and growth of this community DHHL is committed to maintaining these precious qualities.



Ceremonial Heiau



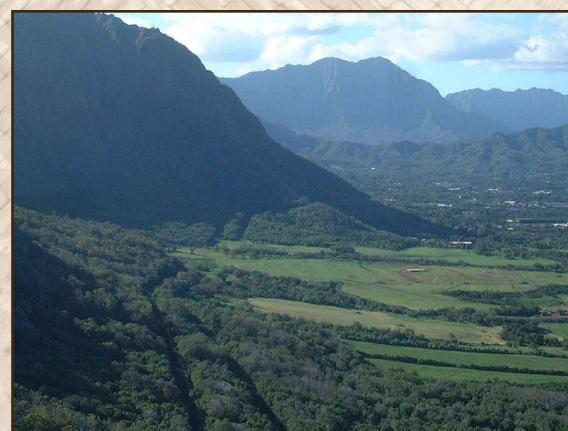
Early Lo'i Field



Waimānalo Sugar Plantation



Irrigation in Waimānalo



Small Waimānalo Farms



Sunrise over Waimānalo Bay

CLIMATE

- The overall climate in the Waimānalo region is typically mild and uniform, with an average annual temperature of 74°F.
- The wind of Waimānalo is called Limulipu'upu'u, and prevails from the northeast. The wind at Pāhonu Pond is called 'Alopali. Southwest winds associated with Kona storms can damage crops.
- The climate in Waimānalo ranges from hot and dry along the shore to wet and cool at higher elevations.
- Average annual rainfall in the Waimānalo area varies considerably with elevation, ranging from 40 inches at the shoreline to 80 and 100 inches in the Ko'olau Mountain Range. The rain of the Ko'olau Poko district is called Ua 'Āpuakea.
- Anecdotal observations of some long-time residents suggest that rainfall frequency has decreased over the last couple of decades. Waimānalo received only 10.2 inches of rain from January to May 2010, which is only 48 percent of typical rainfall levels during those months.

LAND FORMS AND TOPOGRAPHY

Waimānalo Valley contains about 12 square miles, and it is the southernmost valley on the windward or northeast shore of the island of O'ahu. The valley is bounded on the south by the cliffs (pali) of the Ko'olau Mountains; on the west by Aniani Nui Ridge and Keolu Hills which separate it from Maunawili Valley and Kailua; and on the east by Waimānalo Bay. The topography varies considerably as the terrain rises inland from the shoreline to the Ko'olau Mountain Range. The valley floor consists of a flat coastal plain that transitions into gentle rising lands with less than 12 percent slope in the inland regions. At the foot of the Ko'olau's, the slope ranges from 12 to 20 percent and contains about five percent of the land. Slopes vary from 20 percent to vertical in the remaining upper watershed. The highest point is Pu'u o Kona peak with an elevation of 2,200 feet.

GEOLOGY

- Waimānalo is a broad amphitheater-shaped valley with a relatively level floor composed of moderately sloping alluvial fans. It is in the "late mature to old Age" stage of erosional development.
- The general geology of Waimānalo is characterized by three major geological units. These units are basaltic bedrock, alluvium, and coralline deposits.

- Basaltic bedrock defines the western, southern, and eastern boundaries of Waimānalo and generally consists of basaltic flows and dikes of the Ko'olau dike complex.
- Alluvium generally lies at the base of the basalt and primarily consists of weathered basaltic sand, gravel, cobbles, and boulders in a matrix of non-calcareous clays and silts.
- Marine calcareous deposits are expected to occur seaward of the alluvium and generally consists of recent beach and dune sand and other coralline deposits, including older lithified dunes. The alluvium is typically interlayered with coralline deposits in the Waimānalo area.

SOILS

- There are 12 soil types of varying properties in the Waimānalo area.
- The southeast half consists of Jaucas sand with some Kawaihapai clay loam, Mokule'ia loam, Ewa silty clay loam, Haleiwa silty clay, and coral outcrop. Portions of the area that are underlain by Jaucas Sand deposits may contain traditional Hawaiian sites such as cultural layers and/or human burials.
- The northwestern half consists of 'Ewa silty clay loam, Kokokahi clay, Pohakupu silty clay loam, Kaloko clay, noncalcareous variant, Hanalei silty clay, Alaeloa silty clay, and Papa'a clay. The soils are usually deep and moderately well drained, except for the Hanalei which is somewhat poorly drained. Erosion hazard is generally slight.
- A Waimānalo legend entitled "Ka Lua o Pele" tells of Pele digging a crater, to be her home, just above Puha river. She stopped when she reached water, but also discovered a clay. This clay was later used by women to clean their hair. Once rubbing it into their scalp and washed it by sea, their hair would grow long and thick.
- About 2,174 acres, excluding military and residential lands, are classified as prime and important farmlands.

CRITICAL HABITAT

The ridge tops of Waimānalo are home to the endangered Hawaiian short-eared owl pueo (*Asio flammeus sandwicensis*) and designated as critical habitat for 'elepaio (*Chasiempis sp.*), and for a high concentration of threatened and endangered plants, including Haha (*Cyanea acuminata* and *Cyanea st-johnii*), Haiwale (*Cyrtandra polyantha*), Oheohe (*Tetraplasandra gymnocarpa*), *Lobelia oahuensis*, and *Hesperomea arborescens*. Makapu'u point and a portion of Kaupo Beach Park near Sea Life Park are also home to a high concentration of threatened and endangered plants, mostly beach and strand vegetation.

Manana (Rabbit Island) and Kāohikaipu (Black Rock) Islets are State Seabird Sanctuaries which support large nesting colonies. During spring and summer, the islands are teeming with sooty terns, brown noddies, wedge-tailed shearwaters, bulwer petrels, and red-tailed tropic birds who go to the islands to lay their eggs and nest their young. In 2003, the USFWS designated critical habitat on Manana for two endangered plants, 'akoko (*Chamaesyce kuwaleana*) and *Vigna o-wahuense*.

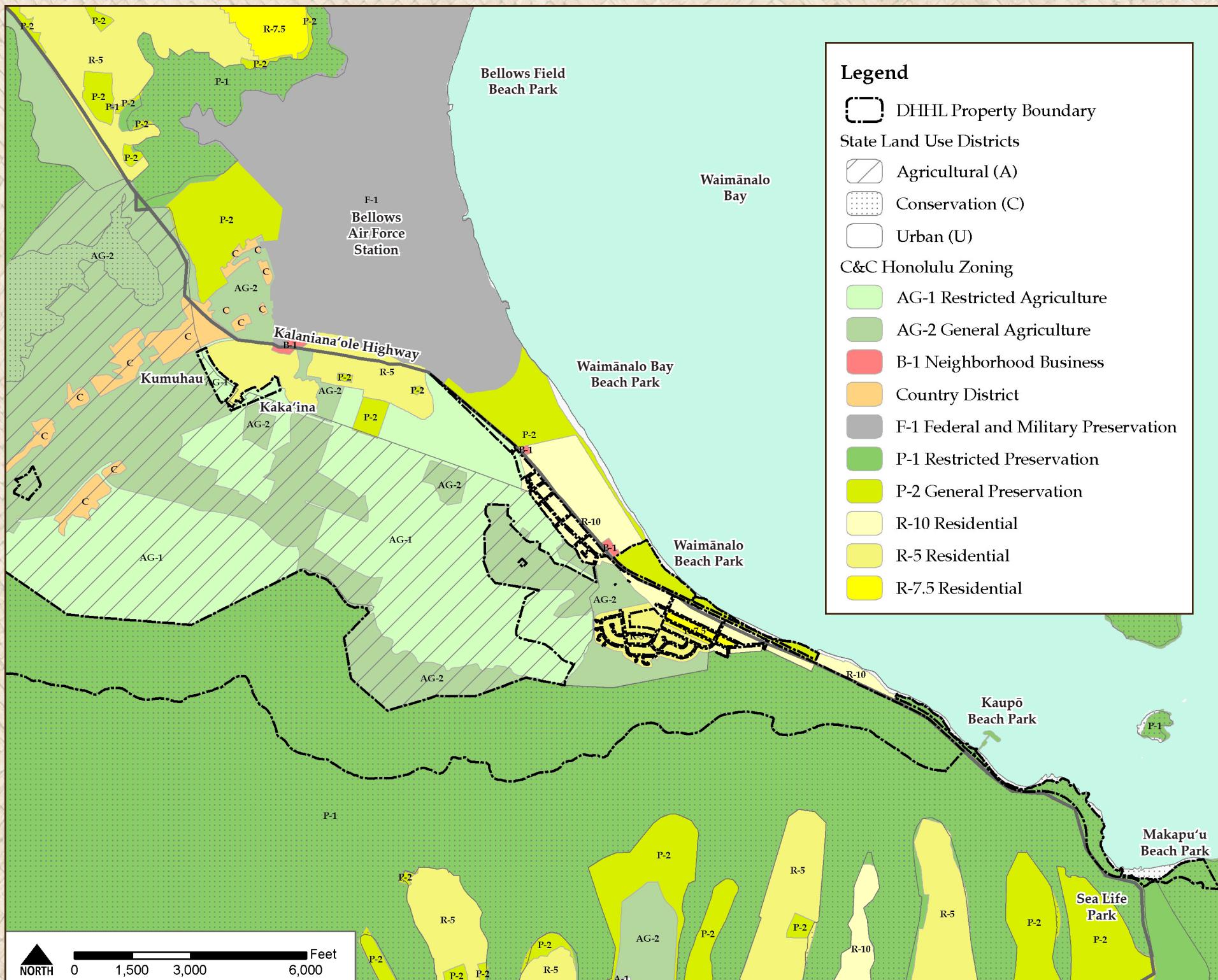
WATER RESOURCES

- Three streams feed into Waimānalo Bay. Puha, the old name for Waimānalo Stream, was formerly used for the traditional Hawaiian sport of pu'e wai (agitated water). Inoa'ole Stream (Unnamed Stream) is the second "stream" that flows intermittently; Inoa'ole is not a natural stream, but rather a drainage that was constructed as a result of sugarcane cultivation in the area. The last intermittent stream, presently called "the ditch," runs through Hawaiian Homelands, but was once called Muliwaiolena.
- The streams in Waimānalo suffer from poor circulation due to extensive plant growth, lack of water, and trash dumping. The primary source of pollutants entering Waimānalo streams appears to be from agriculture land uses rather than from urban land uses, causing algal blooms in the waters.
- Another legend of Waimānalo takes place with two springs, Kupunakane and Kupunawahine. Kupunakane was located up in the mountains and Kupunawahine was down on the level lands. On calm, sunny days, they called out to each other. This calling sounded like a woman mourning her husband. On cloudy, overcast days, the Kupunakane spring became warm and Kupunawahine spring became cool.
- Besides the natural streams, man-made water courses in the form of two agricultural ditches can be found both makai (Kailua Ditch) and mauka (Maunawili Ditch) of Waikupanaha Street. The two ditches supply the Waimānalo Irrigation System, the distribution system that supplies water to approximately 160 Waimānalo farms.
- Approximately 56 acres on Bellows Air Force Station are classified as secondary wetlands under the Hawai'i classification system.

Sources: Kalaniana'ole Highway Improvements Olomana Golf Course to Waimānalo Beach Park Waimānalo, O'ahu, Hawaii Final Environmental Assessment/FONSI, U.S. D.O.T. Federal Highway Administration and State of Hawaii D.O.T. Highways Division, 2007; Kalaniana'ole Highway Replacement of Inoa'ole Stream Bridge Draft Environmental Assessment, State of Hawai'i D.O.T., 2009; Ko'olau Poko Sustainable Communities Plan, City and County of Honolulu, 2000; Ko'olau Poko Water Quality Action Plan, Kailua Bay Advisory Council, 2002; Ko'olau Poko Watershed Restoration Action Strategy, KBAC, 2007; Ko'olau Poko Watershed Management Plan Public Review Draft, Honolulu Board of Water Supply, 2010; Waimānalo Watershed Final Watershed Plan and Environmental Impact Statement, City and County of Honolulu, 1981



Land Use & Demographics



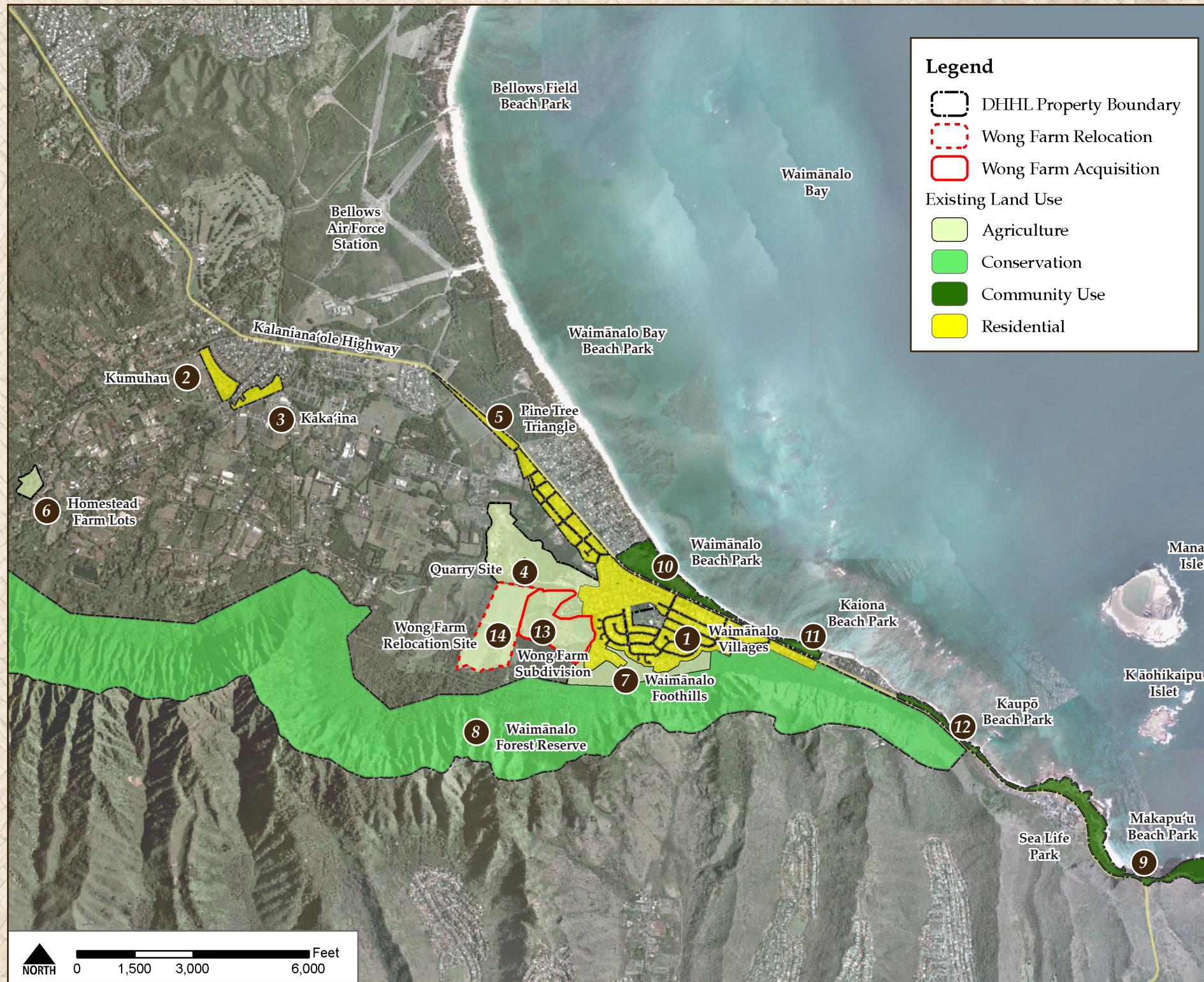
General Characteristics	Waimānalo	O'ahu	State	U.S.
Total Population	9,932	953,207	1,360,301	308,745,538
Median Age (Years)	33.8 ² , 39.3 ³	37.8	38.6	37.2
Social Characteristics¹				
High School Graduate or Higher	4,798(81.5%)	87.7%	87.2%	80.4%
Bachelor's Degree or Higher	901(15.3%)	30.8%	29.1%	24.4%
Economic Characteristics¹				
Median Household Income	\$49,242	\$55,624	\$53,554	\$41,994
Per Capita Income	\$15,302	\$24,878	\$24,452	\$21,587
Housing Characteristics				
Total Housing Units	2,446	336,899	519,508	131,704,730
Occupied Units	2,403(98.2%)	311,047	455,338	116,716,292
Units Occupied by Owner	1,621(66.3%)	174,387	262,682	75,986,074
Median Value - Single Family Home ¹	\$477,500	\$620,000	\$364,840	\$119,600
Units Occupied by Renter	782(32.0%)	136,660	192,656	40,730,218
Median Gross Rent ¹	\$751	\$874	\$871	\$519
Vacant Units	81 (3.3%)	25,852	64,170	14,988,438
Homeowner Vacancy Rate	0.7% ² , 0.1% ³	1.1%	1.6	2.4
Rental Vacancy Rate	2.5% ² , 4.0% ³	5.9%	7.8	9.2
Home Ownership Rate ¹	70%	55%	--	--
Median Age - Owner ¹	53.8	--	--	--
Median Age - Renter ¹	43.7	--	--	--

Source: U.S. Census Bureau American FactFinder, 2000 & 2010; Honolulu Board of Realtors, 2005
Note: Waimānalo statistics include both the Census Designated Place (CDP) of Waimānalo and the CDP of Waimānalo Beach unless otherwise noted
¹ 2010 data is not yet available; 2000 data is shown here
² Waimānalo CDP
³ Waimānalo Beach CDP

This map is referencing the City and State zoning as a way to look at existing and surrounding land uses. The Department is exempt from City and State zoning, and is currently in the process of developing the O'ahu Island Plan that will identify Land Use Designations.



Hawaiian Home Lands Map



DHHL OWNED PARCELS

- 1 Waimānalo Villages
- urban/residential (180.5 ac)
- 2 Kumuhau
TMKs 41008011 & 41023065
- residential (11.6 ac)
- 3 Kaka'ina
TMKs 41008081, 91, & 10
- residential (8 ac)
- 4 Quarry Site
TMKs 41008002 & 4, 41008093-96, & 41019032-33
- agriculture (84.4 ac)
- 5 Pine Tree Triangle
TMKs 41009263, 71, 81 & 84
- residential (8.65 ac)
- 6 Homestead Farm Lots
TMK 41010033
- agriculture (5.2 ac)
- 7 Waimānalo Foothills
TMKs 41017001 & 41008001
- agriculture & conservation (52.1 ac)
- 8 Waimānalo Forest Reserve
TMKs 41011001, 07-08 & 41017021
- conservation (1,470 ac)
- 9 Makapu'u Beach Park and Lookout
TMKs 41014002, 05, 15
- community use (47 ac)
- 10 Waimānalo Beach Park
TMK 41003040
- community use (22 ac)
- 11 Kaiona Beach Park
TMK 41003039
- community use (5 ac)
- 12 Kaupō Beach Park
TMK 41014006
- community use (8 ac)
- 13 Wong Farm Future Subdivision (Pending Acquisition)
TMK 41008079
- agriculture (50.3 ac)
- 14 Wong Farm Relocation Site (Pending Acquisition)
TMK 41008080
- agriculture (52 ac)

LAND SUMMARY
TOTAL
2,004.75 Acres



Waimānalo Hawaiian Homestead Association & Beneficiaries

HISTORY

The Hawaiian Homes Commission Act, 1920 as amended was authored and introduced into the United States Congress by the elected Prince Jonah Kuhio Kalaniana'ole. It was passed by Congress and signed into law by President Warren Harding on July 9, 1921 (chapter 42, 42 Stat. 108). The Waimānalo Hawaiian Homes Association and all other Hawaiian homesteads, its residents and applicants are beneficiaries of Prince Kuhio's foresight, diligence and commitment to protect and rehabilitate the Native Hawaiian population.

This brief history of the Waimānalo Hawaiian Homes Association serves as a basis and foundation to educate its members and all homesteaders, applicants and U.S. citizens.

The Waimānalo Hawaiian Homes Association (WHHA) was founded in 1938 by the first resident homesteaders awarded leases by the Department of Hawaiian Home Lands then under the authority of the Territory of Hawaii.

Aunty Rebecca Chun, a WHHA member who had passed on recalled during her early teen years of living on Kaiona Beach with her family before being awarded a lease to property they now reside on fronting Kalaniana'ole highway. She had shared black and white photos of herself standing on the beach next to their "squatters" home before moving and "I've enjoyed every moment since then..." were her last words recounting the early years of the Waimānalo Hawaiian homestead.

As later homesteaders moved onto the property that was extended from Ala Koa Street and Kalaniana'ole Highway to the present-day 7-11 convenience store, their names echo the history of an honored past...Grandma Ho, Joseph Kaakua, Joe "Gang" Kupahu, Gabby Pahinui, Tony Sang, and many more whose descendants still have moved onto other homesteads or married and assumed the leases their great grandparents once received. Yokozuna Adebono (Chad Rowan) grew up in Waimānalo and made the community proud.

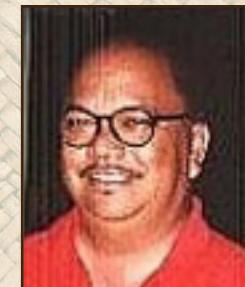
WHHA takes pride in learning and hopefully preserving this oral and candid history of this organization and those who had made this community a "strength and guide to all native Hawaiians." Our WHHA Historian is tasked in keeping these events which affected our lives directly or indirectly and to ensure we remember our heritage and history.



Prince Jonah Kuhio Kalaniana'ole Pi'ikoi



WHHA EXECUTIVE COMMITTEE



Paul P. Richards,
President



N. Kilauea Wilson,
Vice President



Moana Akana,
Secretary



Marvelle Ku'ulei Laughlin,
Treasurer



Heidi "Ilima" Ho-Lastimosa,
Historian



Roxanne Hanawahine,
Director



E. Nickie Hines,
Director



Apela "Squeaky" Peahi,
Director

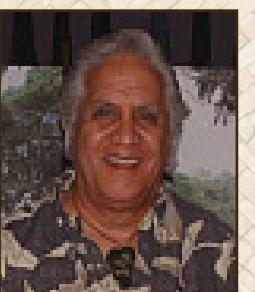
REGIONAL PLAN PARTICIPANTS

Ray Ahana, Moana Akana, Lucy Akau, Kamakana Aquino, Marbeth Aquino, Don Aweau, Sharon Basmayor, Carol Bright, Yvonne Camara, Sandra Clarke, Alfred Emond, Keoki Emond, Lehua Fuller, Rosemary Galdeira, Gary Grace, Edwin Hanohano, K.N. Hanohano, Kuualoha Hanohano, Leocadia Emma Hashimoto, Leina'ala Kalama Heine, Niu Li Heine, Lorraine Higa, A. Jamila, Iluna Jamila, Naomi K., Jessica Kaakua, Joseph Kaakua, Richard Bolo Kahawai, Jennie K. Kahlbaum, Michael Kahumoku, Sinclair M. Kahumoku, Gwendolyn Kailihwi, Jerry L.U. Kaluhiwa, Rocky Kaluhiwa, Judy May Kaniaupio, Lovell Kaopua Jr., Lovell Kaupua Sr., Maile Kaopua, John P. Keama, Lillian Keawaehu, Grace Kekawa, George Keolanui, Herbert Kihoi, Jessica Koakua, Laura Hokunani Koakua, Cardie L., Rosemary Lani, Ilima Ho Lastimosa, U. Lastimosa, Marvella Ku'ulei Laughlin, Judy Layheld, Chris Lee, Debby Lee, Carolyn L. Lono, Leonard H. Lopes Jr., Lina D.U. Lopes, Danny Low, Jennie Low, Arthur B. Machado Jr., Blanche McMillian, Annie K. Mokiao, Raymond A. Mokiao, Jorene M. Pacyau, Samuel Pacyau, Becky Paul, Apela Peahi, Jeremiah Punahale, Kaipo Punahale, Sharon Rapoza, Jay Richard, Paul Richards, Marlena Roman, Dudley Santillo, Richard Santillo, Jamie Simao, Richard Smith, Matthew Solomon, Janice Somao, Caroline Takata, Vince Takata, June Y. Toguchi-Tassill, Renwick "Uncle Joe" Tassill, Frederick Welch III, Zena Welch, Kilauea Wilson, Annette Wong, Sam Yong, Kapuanani Zuttermeister



Participants Vote on Priority Projects

Community Leaders & Stakeholders



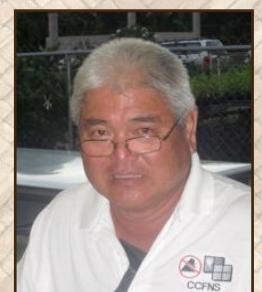
Wilson Kekoa Ho, Chair
Waimānalo NB - #32



Marvelle Ku'ulei Laughlin, President
Hawaiian Civic Club of Waimānalo



Christina Kealoha Lee, M.D.
Medical Director
Waimānalo Health Center



Clifford Migita
Waimānalo Agricultural Association



Ben Henderson
President & Executive Director
Queen Lili'uokalani
Children's Center



Dee Jay A. Mailer, CEO
Kamehameha Schools



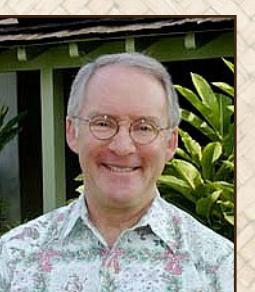
William J. Aila, Chairperson
Department of Land
and Natural Resources



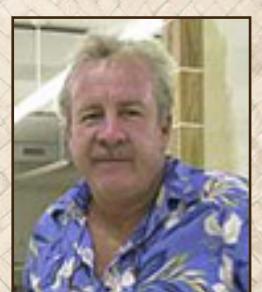
Sylvia Yuen, CTAHR
University of Hawai'i
Agricultural Experiment Station



Kevin A. Roberts, President
Castle Medical Center



Mitch D'Olier, President & CEO
The Harold K. L. Castle Foundation &
Kaneohe Ranch Company



Kevin Andrews, President
Waimānalo Chamber of Commerce



Colonel Sam C. Barnett, Commander
Bellows Air Force Station 15th Airlift Wing



Colonel Jeffrey R. Woods, Commander
Marine Corps Training Area at Bellows AFS



Colonel Marty Wong, Commander
Hawai'i Army National Guard
Regional Training Institute

Friends of Waimānalo
Hawai'i Job Corps Center
'Aikahi Elementary
Blanche Pope Elementary
Enchanted Lake Elementary
Ka'elepulu Elementary
Kailua Christian Academy
Kailua Elementary
Kailua Intermediate
Kailua High School

Jan Nagano, President
Anita Sharp, Center Director
Gay Kong, Principal
Ofelia Reed, Principal
Pua'ala McElhaney, Principal
Christine Udarbe, Principal
Diana M. Abraham, Principal
Lanelle Hibbs, Principal
Carmen Craig, Principal
Francine Honda, Principal

Kainalu Elementary
Kalaheo High School
Kamehameha Schools Preschool
Ke Kula 'o Samuel M. Kamakau
Laboratory Public Charter School
Keolu Elementary
Le Jardin Academy
Maunawili Elementary
Mōkapu Elementary
Lanikai Public Charter School

Sheri Sunabe, Principal
Susan Hummel, Principal
Lani Rae Lave, Director
Meahilahila Kelling, Co-Director
Kamehaililani Waiau, Co-Director
Alma M Souki, Principal
Adrian Allan, President & Headmaster
Ryan Amine, Principal
Traci Kane, Principal
Ed Noh, Director

Redemption Academy
Trinity Christian School
Waimānalo Elementary & Intermediate
Waimānalo Fire Station
Olomana Fire Station
Kailua Fire Station
City and County of Honolulu Police
Department District 4
'Ohana Physicians Group

Dr. Adrian Yuen, Founder & Dean
Nancy Shaw, Head of School
Noel Richardson, Principal

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.

Elected & Appointed Officials



Neil Abercrombie
Governor



Brian Schatz
Lt. Governor



Daniel K. Inouye
U.S. Senator



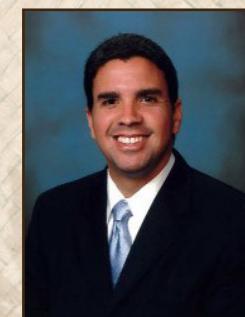
Daniel K. Akaka
U.S. Senator



Mazie Hirono
*U.S. House of Representatives
Congressional District 2*



Peter Carlisle
Honolulu Mayor



Ikaika Anderson
Council District 3



Pohai Ryan
State Senatorial District 25



Chris Lee
*State House of Representatives
District 51*



Alapaki Nahale-a
DHHL Commissioner Chairman



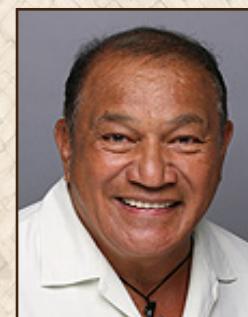
Jeremy Kamakaneoaloha
"Kama" Hopkins
O'ahu Commissioner



Michael P. Kahikina
O'ahu Commissioner



**Renwick V. I.
"Uncle Joe" Tassill**
O'ahu Commissioner

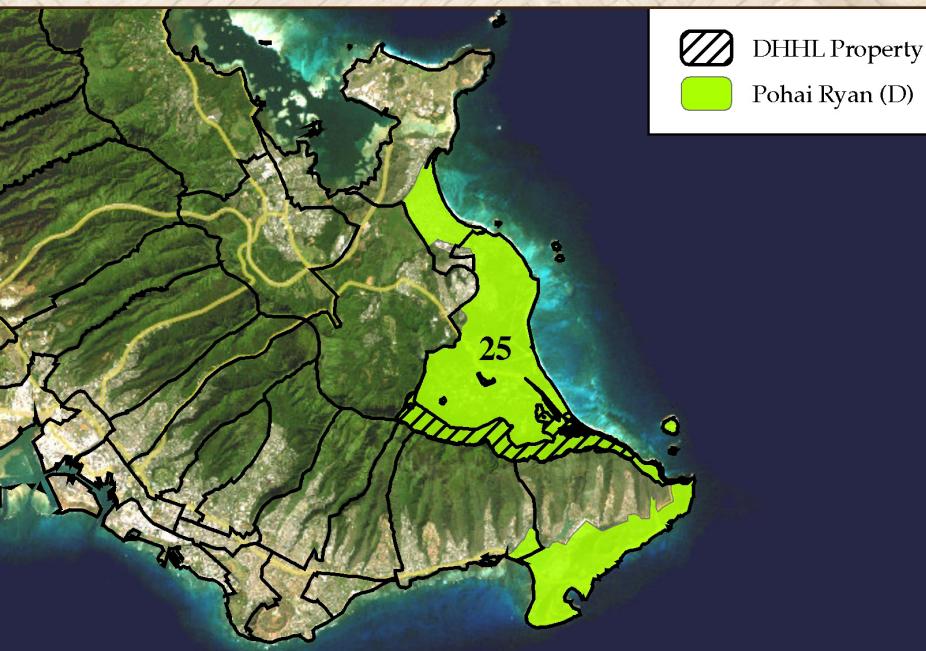


Peter Apo
OHA Trustee, O'ahu

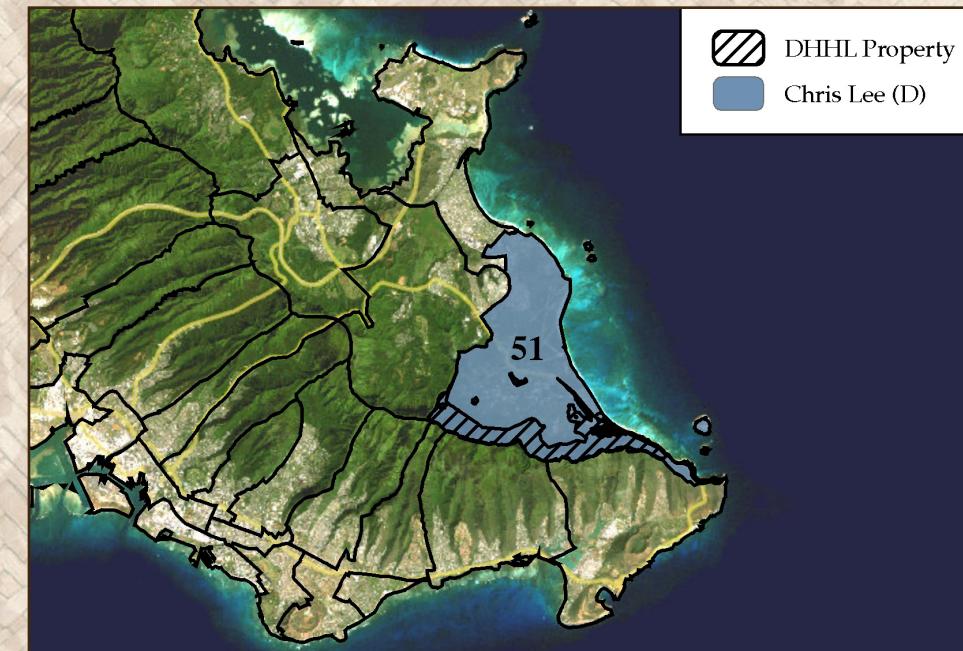
Disclaimer: The information and recommendations expressed in this report are not necessarily endorsed by the people depicted on this page. These same people cannot be held liable for the information presented or the results of the report.

Political Boundaries

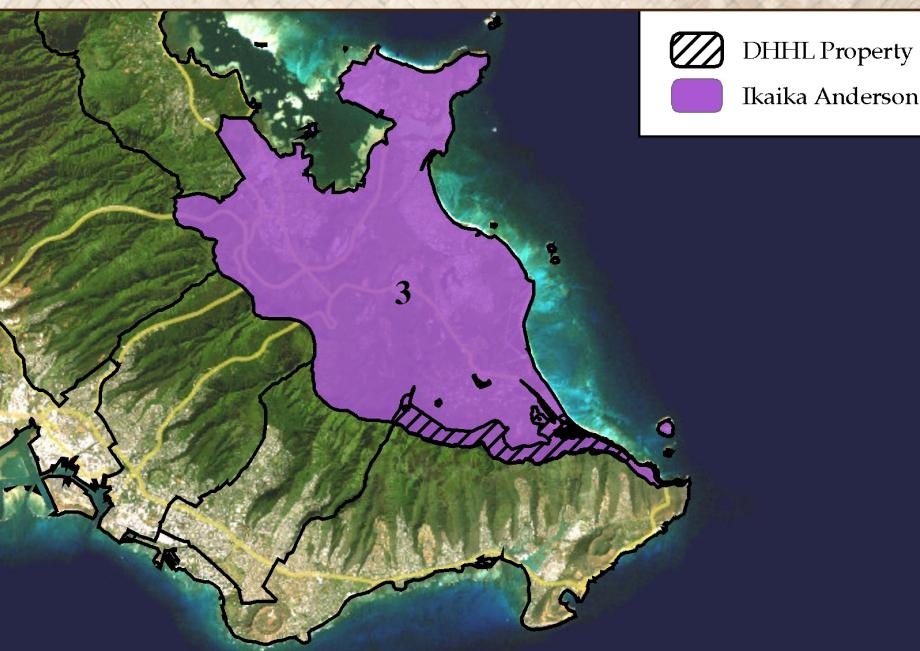
State Senatorial District



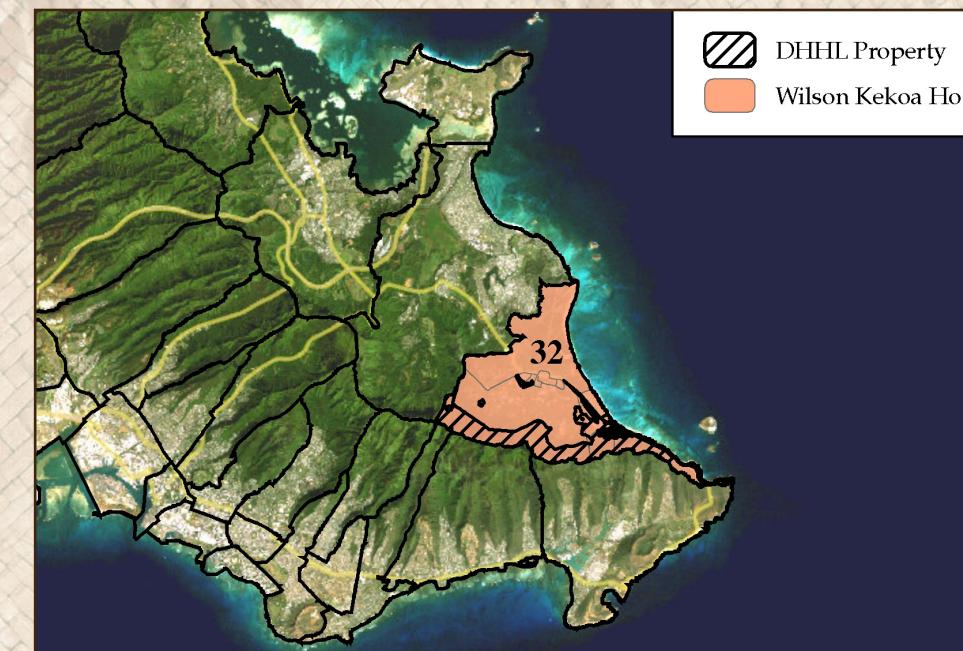
State House of Representatives District



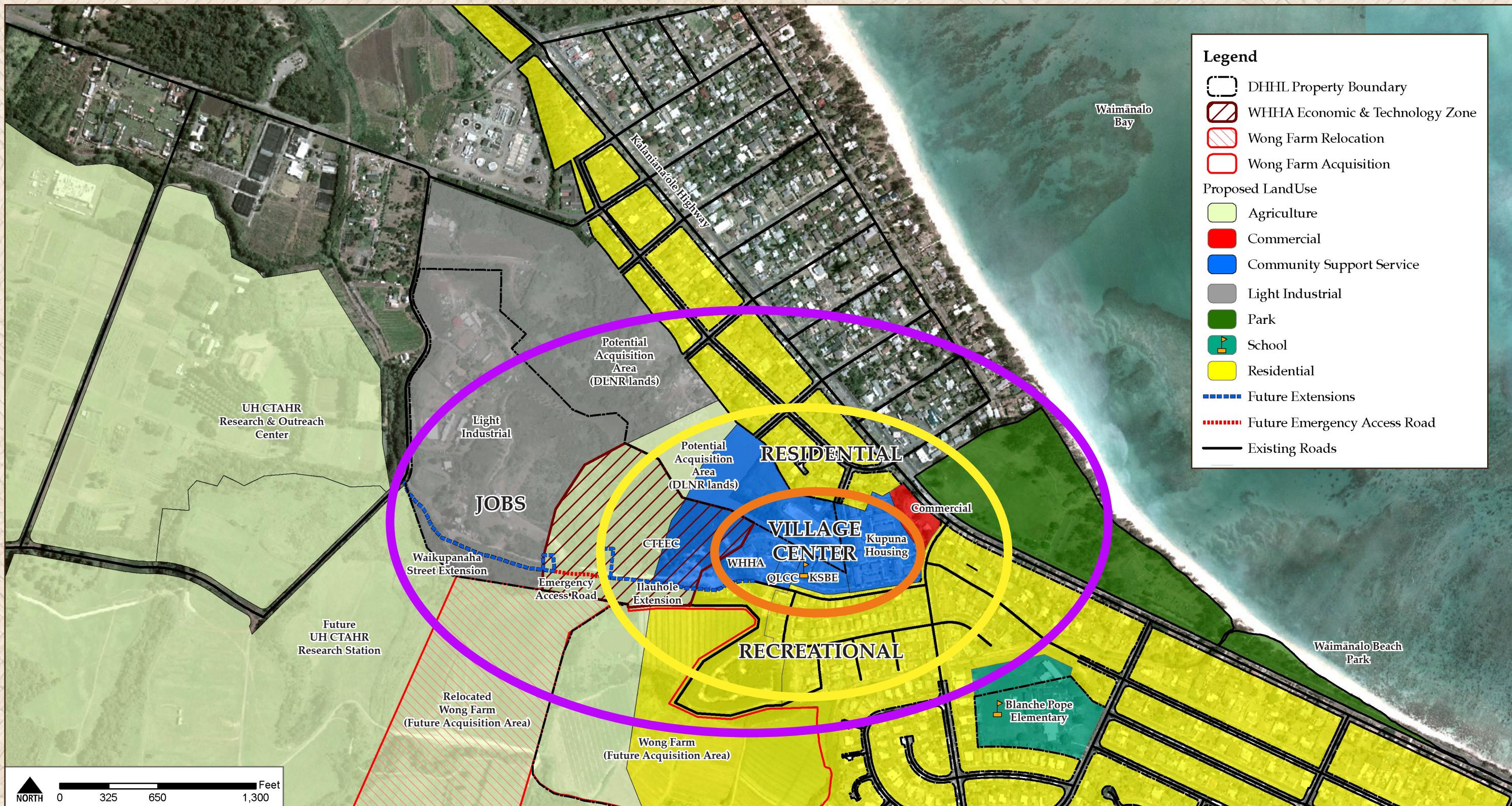
Honolulu City Council District



Neighborhood Board



III. Regional Land & Development: Waimānalo Homestead Village Center



Waimānalo Homestead Village Center

Waimānalo is a long standing Hawaiian Homes community which has evolved organically over many decades. Over time an internal development pattern has emerged. Within this context the Department of Hawaiian Home Lands' recently articulated policy of creating communities instead of simply housing guides the policy for the area. The plan calls for an extension of uses in the quarry parcel and the Wong Farm transfer area to solidify the concept of a Waimānalo Village Center with concentric elliptical, rainbow-like bands. These bands would be extensions of residential and employment areas as shown in the figure. This pattern complements existing DHHL and non-DHHL land uses adjacent to the project areas.

The village center concept builds on the existing kupuna housing complex, QLCC office, Kamehameha preschools and the Waimānalo Hawaiian Homes Association - Ka Ho'olina na Kuhio Community Center to form a nucleus of what will eventually be the center of the social and economic activities in the Waimānalo Homestead. The quarry building parcel adjacent to Kalaniana'ole Highway has been strategically identified as a property in DHHL's inventory to help maximize income generation, and will be developed into commercial uses due to its access to the highway and proximity to businesses and services along the highway. Its location allows it to meet homesteader needs and drive-by travelers along the highway. This commercial development will provide employment, entrepreneurial opportunities and a potential new non-governmental revenue stream to support DHHL's housing program. Other service and office uses may be added to the areas immediately mauka of the QLCC and KS facilities. Recreational and community facilities may be added to create a critical mass of activity integrated around a definable center. This will be a retail and community service core for the Hawaiian Home Lands and its residents. It will enhance the sense of place and provide a clear, central, sustainable area that will define the character of the Waimānalo homestead community as well as the neighboring properties.

Around the village center the plan calls for a ring of residential development mixed with recreational uses and facilities. Active and passive areas should be integrated together with recreational areas being accessible to the village center area. This residential/recreational ring should integrate the existing residential areas, the planned development of the Wong Farm site into an extension of the subdivision and a portion of the 20-acre community association expansion area. Waimānalo Beach Park could be viewed as part of this ring.

The final ring around the village center would be the non-service and employment ring. The relocated Wong Farm, the old quarry and University of Hawai'i Waimānalo Agricultural and Livestock Extension Service Areas would be a part of this ring. Recreational or open space areas would serve as a buffer from the residential areas. Ideas are being explored to make the old quarry a light industrial and entrepreneurial zone.

New roads are needed to provide access across the bands and separate alternative access routes to the agricultural and light industrial areas. The new roads will allow trucks, service vehicles and worker traffic to access the industrial area without going through residential areas. Landscaping, buffers and setbacks will mitigate potential conflicts of use and beautify the area.



Waimānalo Hawaiian Homes Association - Ka Ho'olina na Kuhio Community Center

Major Land Owners

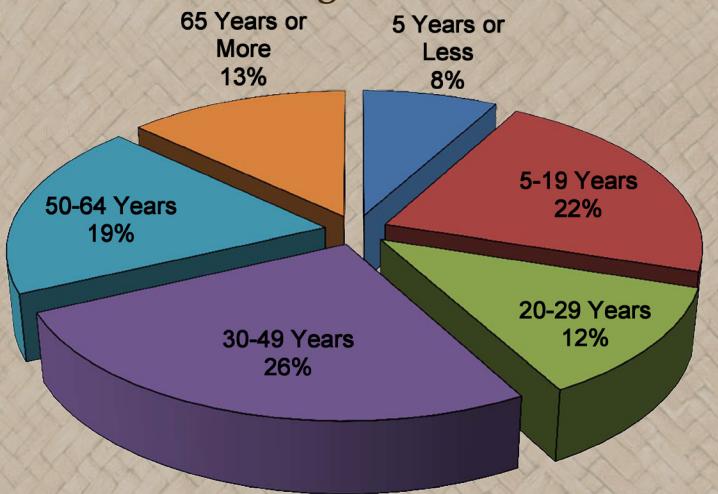


Development Characteristics & Trends

POPULATION GROWTH & INVESTMENT

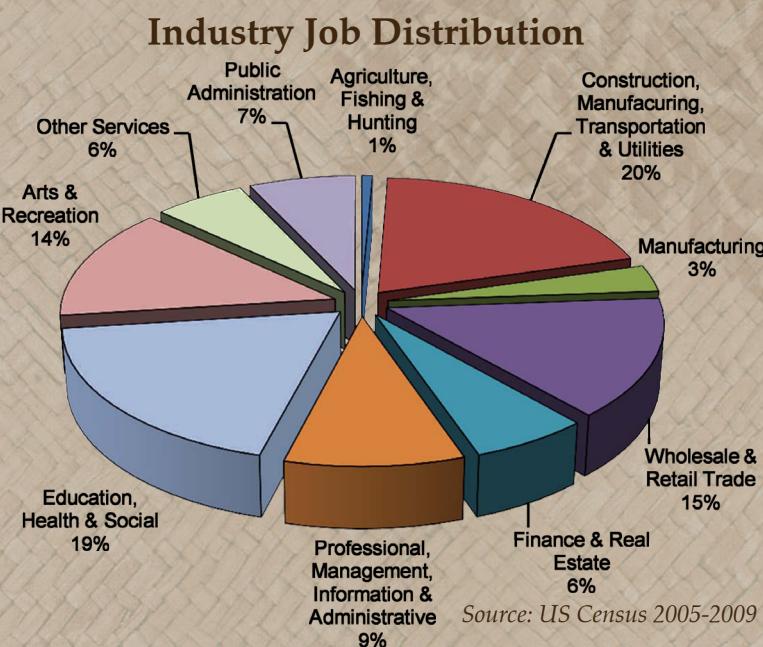
Waimānalo has a stable population base. The area is home to almost 10,000 individuals, of whom more than 69% claim full or part Native Hawaiian/Pacific Islander status. The community has experienced relatively slow developmental growth, in part, due to its rural community boundary.

Waimānalo Age Distribution



WORKFORCE

Over 3,700 residents (62% of working age citizens) of Waimānalo are in the labor force. Most of the working residents are employed outside of the community and commute an average of more than 35 minutes to their workplace. Small-scale employment opportunities in the immediate region are generally limited to agricultural related activities, retail and outdoor recreation.

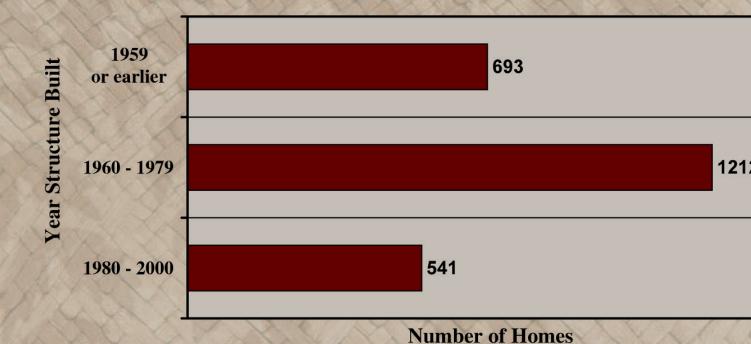


HOUSING & COMMERCIAL

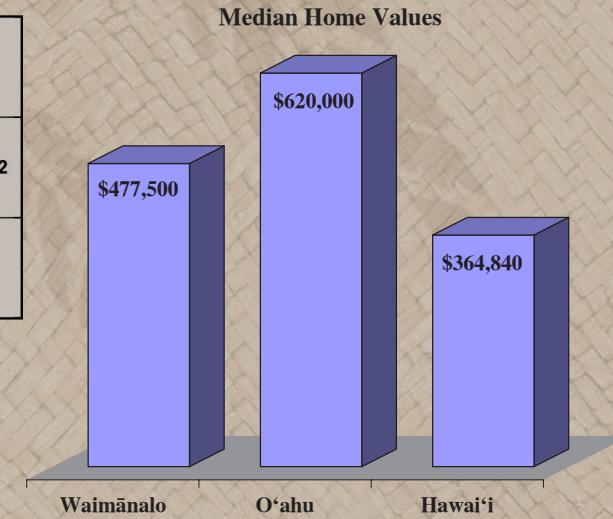
There were an estimated 2,484 housing units in Waimānalo and the area has a 65% home ownership rate (US Census 2010). The vacancy rate is 3% for area homes and a 1% rental vacancy rate. The region is characterized by older dwellings and is near buildout. Its aging infrastructure, facilities and dwellings, though, are in need of improvements and upgrades. The community places a high emphasis on natural resource preservation, agricultural and rural retention and traditional ways of life. As Waimānalo's aging housing stock is replaced, expanded or remodeled, the area is experiencing growth in the area of multi-generational and "non-traditional" households, as well as larger dwelling sizes on single-family residential lots.

Commercial uses in Waimānalo are clustered in commercial strips along Kalaniana'ole Highway. These strips are primarily located in two areas: Waimānalo Town and the makai side of the beach area between Waimānalo Bay State Recreation Area and Waimānalo Beach Park. Sea Life Park also represents a significant commercial venue.

Waimānalo's Aging Housing Stock



Median Home Values

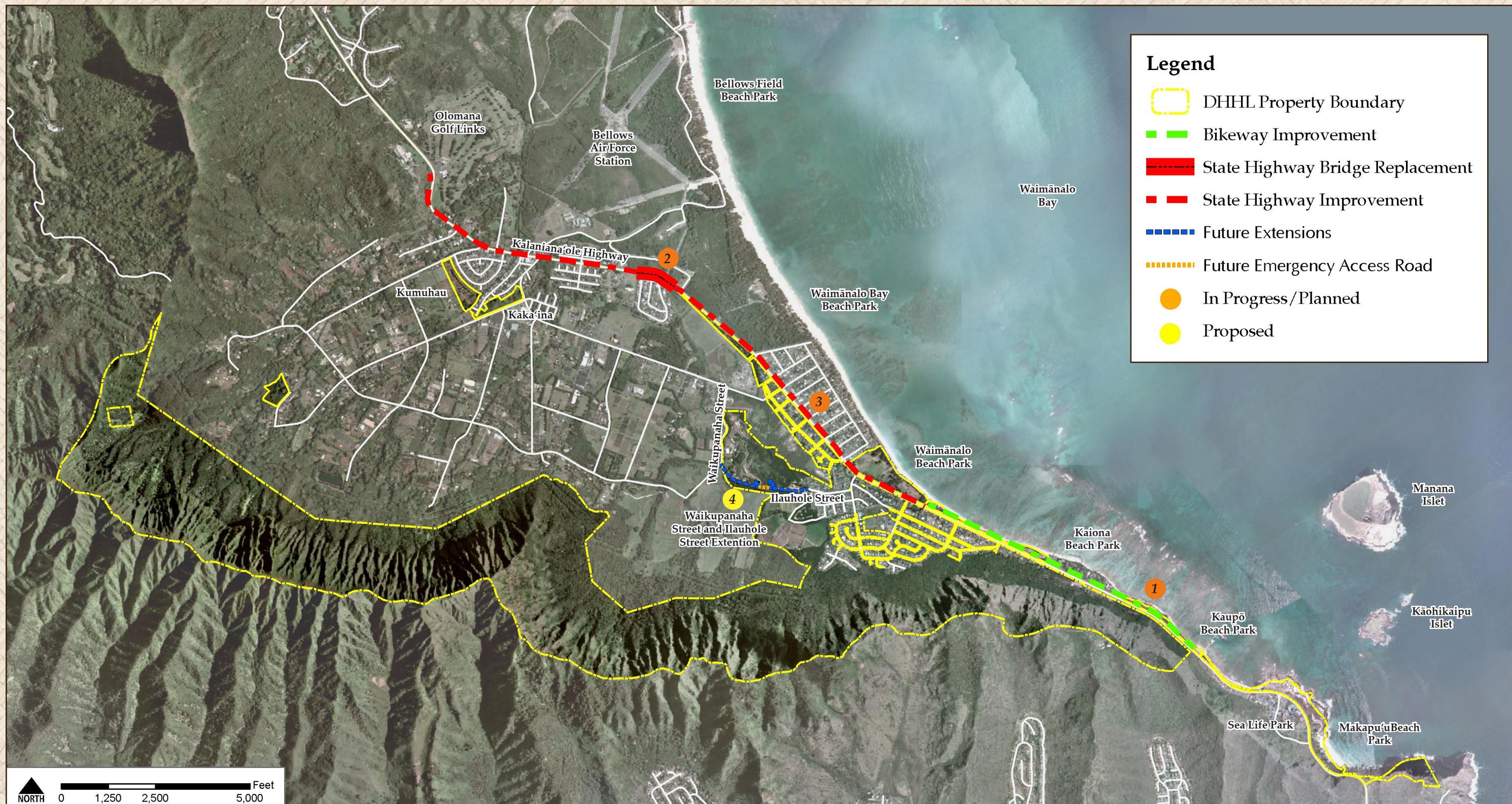


AGRICULTURE

The Waimānalo district is a vibrant area for nursery and orchard operations. Small-scale truck farms growing fresh greens and organic foods are growing in number. The area's relatively close proximity to markets, in addition to fertile growing lands is a significant positive attribute for agricultural activities. The UH Agricultural Experiment Station and Oceanic Institute serve as incubators for new crop development, best practice models, and emerging agriculture and aquaculture operations, while equestrian and ranching operations present potential opportunities to capitalize on traditional and rural activities.



IV. Infrastructure: Roads & Transit - Infrastructure



BACKGROUND OF ROADS & TRANSIT CONDITIONS

Kalaniana'ole Highway serves as the major access highway to the Waimānalo area. It links Waimānalo to communities in East Honolulu and serves as a scenic, secondary route for travel between Kailua/Waimānalo and Honolulu. The 2-lane Kalaniana'ole Highway is the primary arterial through Waimānalo and sometimes backs up during peak travel times. Traffic-relieving measures such as turning lanes, bus pullouts, and traffic signal improvements have been proposed by the State Department of Transportation commencing 2013. The Kalaniana'ole Highway retaining wall, listed as a project in the 2008 Waimānalo Regional Plan, has been completed, and is seen at right. Most DHHL lands lie in close proximity to transit stops and park and ride facilities. The Bus services the region with routes 57/57A, 77, & 89.

PROPOSED ROAD & TRANSIT PROJECTS

1 Kalaniana'ole Highway Bikeway, Waimānalo Beach Park to Makai Pier

New bike lanes have been proposed in the Ko'olau Poko Sustainable Communities Plan linking Waimānalo to East Honolulu & Kailua/Enchanted Lakes. The 2011 -2014 O'ahu Transportation Improvement Program (TIP) lists this project as OS84, requesting \$2,650,000 for construction in FY 2014. The project will provide improvements to the bike route on Kalaniana'ole Highway from Waimānalo Beach Park to Makai Pier. The bikeway would provide a shared roadway with a paved, continuous shoulder for bicycle use. Total estimated project cost is \$3,283,000.

2 Kalaniana'ole Highway Bridge Replacement, Inoa'ole Stream Bridge

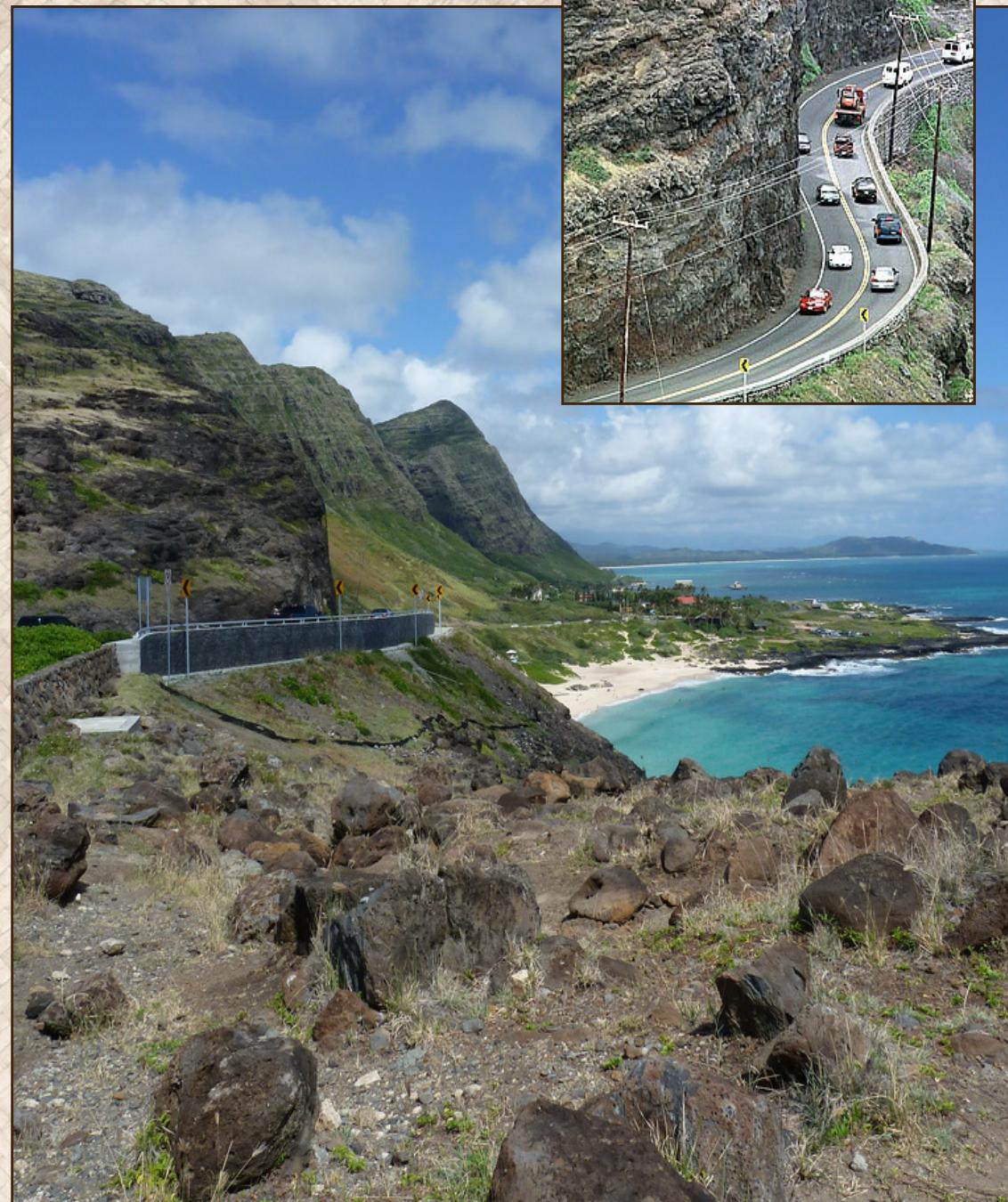
The State Department of Transportation (DOT) will be replacing the existing single-cell culvert Inoa'ole Stream Bridge structure with a multi-cell culvert bridge structure. The project includes improvements to roadway approaches, a possible detour road, and utility relocations. State DOT assessed a detour road option through Bellows Air Force Base, and submitted a draft environmental assessment with design in 2009. Estimated total cost is approximately \$10.9 million. The request for construction funding for this project, listed as Project OS33 in the FY 2011-2014 TIP, has been deferred to 2015.

3 Kalaniana'ole Highway Improvements, Olomana Golf Course to Waimānalo Beach Park

The State DOT O'ahu TIP proposes improvements to Kalaniana'ole Highway from Olomana Golf Course to Waimānalo Beach Park. The proposed improvements include construction of turning lanes, bus pullouts, sidewalks, wheelchair ramps, bike paths or bike lanes, traffic signal upgrades, lighting improvements, utility relocation, and drainage improvements. The project is listed as OS34, OS35 and OS36 in the FY 2011-2014 TIP. Phase I (Olomana Golf Course to Poalima Street) construction will begin 4Q 2013; Phase II (Poalima Street to Aloilo Street) design will begin in 2014; Phase III (Aloilo Street to Waimānalo Beach Park) design has been deferred to 2016. A Final EA has been filed. Total cost is projected at \$41.6 million and will be constructed in three phases.

4 Waikupanaha Street Improvements and Ilauhole Street Extension

The Waimānalo Hawaiian Homes Association proposes to plan and design an extension of Ilauhole Street to the future CTEEC and recreational area in the quarry. This new road provides circulation access to the inner section of the quarry. Construction of the road from Ilauhole Street to the parking lot of CTEEC will begin in 2011. DHHL is also proposing improvements to Waikupanaha Street to provide access to a future light industrial park above the quarry that may link to Ilauhole Street in the future. Original funding for the entire road was appropriated in 2009 with support from Representative Waters, but has since lapsed. The community will need to work with legislatures to resubmit the funding request for \$100,000 for planning and design of the remaining portion of the road in a future CIP budget.



Kalaniana'ole Highway at Makapu'u

Water - Infrastructure



BACKGROUND OF CURRENT REGIONAL WATER SYSTEM

The Waimānalo watershed's fresh water sources come from the mountains, springs, and a diversion from Kailua. The Honolulu Board of Water Supply (BWS) estimates potable water capacity at approximately 28 mgd and current demand at 22 mgd.

Ground Water

The Waimānalo Aquifer System in the Windward Aquifer Sector is composed of dike-impounded water, perched (or alluvial) water and brackish basal water. The dike-impounded ground water is in dike-intruded lava flows in the Ko'olau Mountains, and is high-quality water that is currently used as fresh drinking water.

The alluvial ground water is generally lower quality than the dike-impounded water. The upper aquifer is a basal (fresh water in contact with seawater) aquifer that is currently used, ecologically important, and of low salinity. The lower aquifer is a basal dike aquifer that is currently used as a fresh drinking water source. The permeable rock containing the brackish basal water is overlain by caprock materials. Although not presently considered suitable for domestic use, brackish basal water may be important for future needs.

To protect ground water quality, the BWS established a water conservation line that approximately parallels the Waimānalo Forest Reserve Boundary. The line is just downslope or towards the sea (makai) of the boundary. No cesspools are allowed uphill or toward the mountains (mauka) of the water conservation line.

BWS System

BWS provides most of the water for municipal uses in Waimānalo. A limited amount of water for agricultural use is also supplied by BWS. The BWS delivery of potable water in Ko'olau Poko is via the Windward Water System which transmits water over a distance of approximately 26 miles from Hau'ula to Makapu'u. The Waimānalo Water System is one of several of the smaller water systems that are interconnected with the larger Windward Water System. The Waimānalo Water system supplies the Waimānalo community with water from two wells and four tunnels. The system also includes three reservoirs and one booster station.

State System

The State Department of Agriculture (DOA) owns the Waimānalo Irrigation System, which serves as non-potable irrigation for Waimānalo agricultural farm lot subdivisions. The 15-mile Waimānalo Irrigation System consists of three surface water intakes located at Maunawili, Ainoni, and Makawao streams. In 2003, these intakes collected 1.48 mgd. However, the system experiences significant water losses as only 0.4 mgd of the 1.48 mgd that is diverted flows into the 60 MG Waimānalo reservoir. From the reservoir, the water is then transmitted to the farm lots via transmission lines. The irrigation system services 164 users and approximately 1,170 acres of diversified agriculture.

The Waimānalo Irrigation System only provides non-potable water for its customers. The BWS system provides potable water and fire protection to the irrigation system users. DOA estimates that the Waimānalo Irrigation System provides non-potable water to about 75%-80% of the farms in Waimānalo. Other farms, including most nurseries, are on BWS water systems. In most instances, agricultural water demand can be supplied by non-potable water sources. The development of non-potable water sources, including wastewater reclamation facilities in Waimānalo, should be considered.

The City population projections for Waimānalo include projected increases in the number of native Hawaiians living on Hawaiian homestead lands. State law sets aside water sources specifically for homestead developments that are built by DHHL. For DHHL homestead development in Waimānalo, potable water is provided by BWS. The planned subdivisions at Kaka'ina and the current Wong Farms land will drive up water demands in the area. To meet those and other demands of the area, the Ko'olau Poko Watershed Management Plan Public Review Draft (2010) proposes several projects and strategies:

- Expansion of the Waimānalo Forest Reserve
- Waimānalo Irrigation System Improvements & Conservation
- Waimānalo Watershed Project
- Waimānalo Watershed Analysis Risk Management Framework Study
- God's Country Waimānalo Programs
- Bellows AFS Integrated Natural Resource Management Plan
- Waimānalo Waste Water Treatment Plant Recycled Water Reuse
- Waimānalo Long Range Agriculture Expansion Plan
- Implement the NRCS "Alternatives for Restoration of Waimānalo Stream" Report
- Establish a Waimānalo Community Composting Facility to Dispose of Animal Wastes
- Convert the DOA Kailua Reservoir to a Sediment Retention Basin



Temporary Repairs at Maunawili Ditch

Sources: Ko'olau Poko Watershed Management Plan Public Review Draft, Honolulu Board of Water Supply, 2010; Waimānalo Watershed Final Watershed Plan and Environmental Impact Statement, City and County of Honolulu, 1981

PROPOSED WATER SYSTEM PROJECTS

The following projects are already planned or in progress:

Waimānalo Well III

The construction of a new potable water well mauka of the former Meadow Gold Dairies pasture land is expected to be completed by October 2011.

Waimānalo Irrigation System

\$2,850,000 CIP funds have been scheduled for release in 2012-2013 for Plans, Design and Construction for Improvements to the Waimānalo Irrigation System.

Wastewater/Sewer - Infrastructure



Wastewater/Sewer - Characteristics

BACKGROUND OF WASTEWATER SYSTEM CONDITIONS

In May 2008, the State completed upgrades to the Waimānalo Wastewater Treatment Plant (WWTP), increasing its capacity to serve future needs. The Waimānalo WWTP is now operational with a capacity of 1.1 million gallons per day (mgd) and a new secondary biological treatment process. New hookups were not being allowed due to capacity and performance issues of this treatment plant. The moratorium on new wastewater hookups was lifted in August 2011. The completion of this project allows housing developments in the area to move forward.

Approximately 65 percent of residences in the Waimānalo Wastewater Service Area are served by a centralized wastewater collection, treatment, and disposal system. Wastewater is collected by a network of gravity sewers, and is then treated at the Waimānalo WWTP, which has a rated average design capacity of 1.1 mgd and average flow of approximately 0.7 mgd. The wastewater collection system, including the Kahawai Wastewater Pump Station, is owned by the State of Hawai'i and operated and maintained by the City and County of Honolulu. DHHL owns the sewer main lines in the homestead area near Waimanalo Beach Park north to the WWTP (see map at left). Homes in Waimānalo that are not connected to the public sewers are served by individual wastewater systems, which are generally either cesspools or septic tanks with leaching fields. The unsewered areas include certain portions of the low lying coastal areas and all of the inland agricultural lots. Nearly 15 percent of the homes in sewer areas are not connected to the sewer system and continue to use individual wastewater systems. There are water quality and public health concerns associated with the continued use of individual treatment systems (primarily cesspools) in the low-lying coastal areas. Algal blooms occur periodically in the nearshore waters of Waimānalo, possibly stemming from nutrient loading by individual wastewater treatment systems, stormwater runoff, and/or treatment plant effluent.

Source: Ko'olau Poko Water Quality Action Plan, Kailua Bay Advisory Council, 2002 & Ko'olau Poko Sustainable Communities Plan, City and County of Honolulu, 2000.

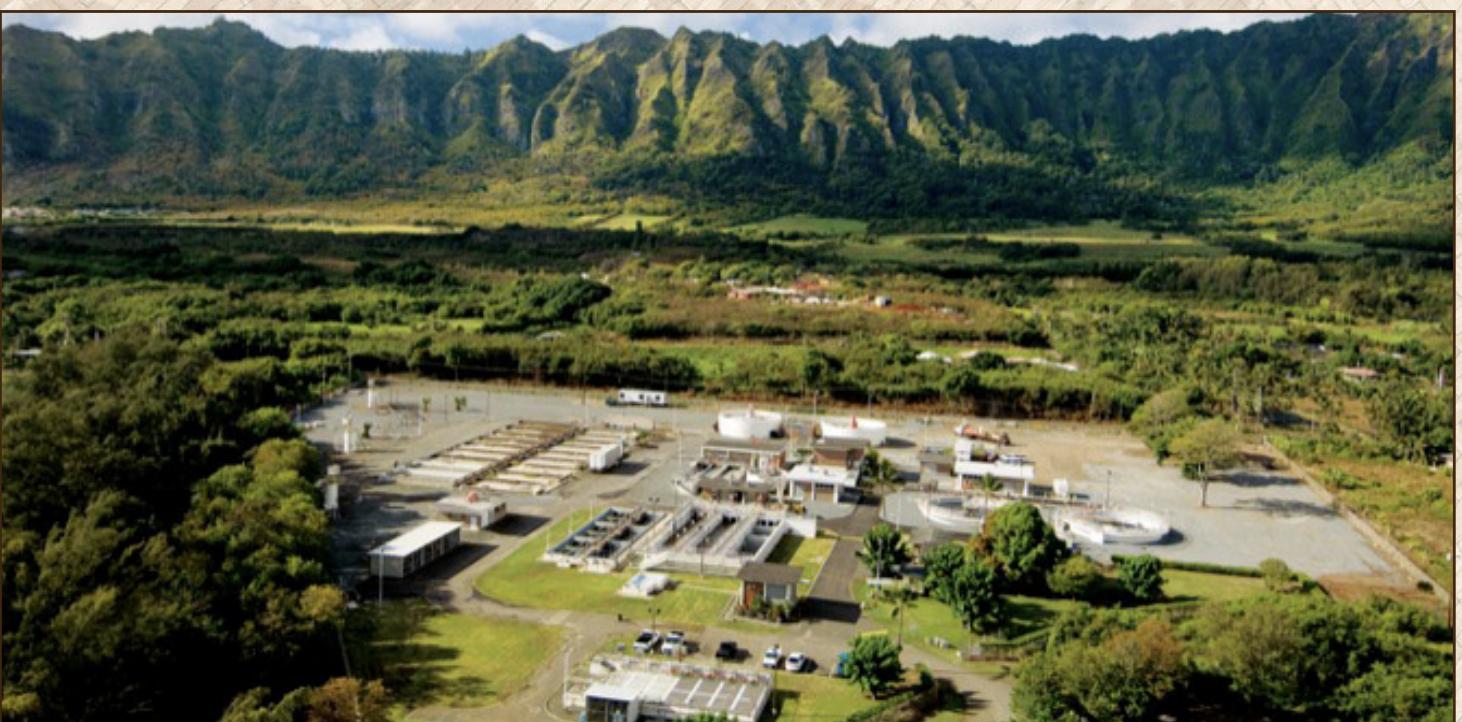
PROPOSED WASTEWATER PROJECTS

DHHL Temporary Sewer Maintenance Plan

In February 2010, the Department of Environmental Services (DES) notified DHHL that DES would not maintain or repair any sewer lines on DHHL's property. Since that time, DHHL has completed an inventory of its sewer systems on O'ahu, and is prepared for any emergency response to sewer complaints and spills. Additional steps include procuring engineers to investigate and formulate a maintenance and repair plan (expected completion - May 2012). A contractor will carry out the maintenance program, and any sewer repairs will be subject to investigation results. Ideally, DHHL would like to negotiate a shared maintenance and repair plan with DES.

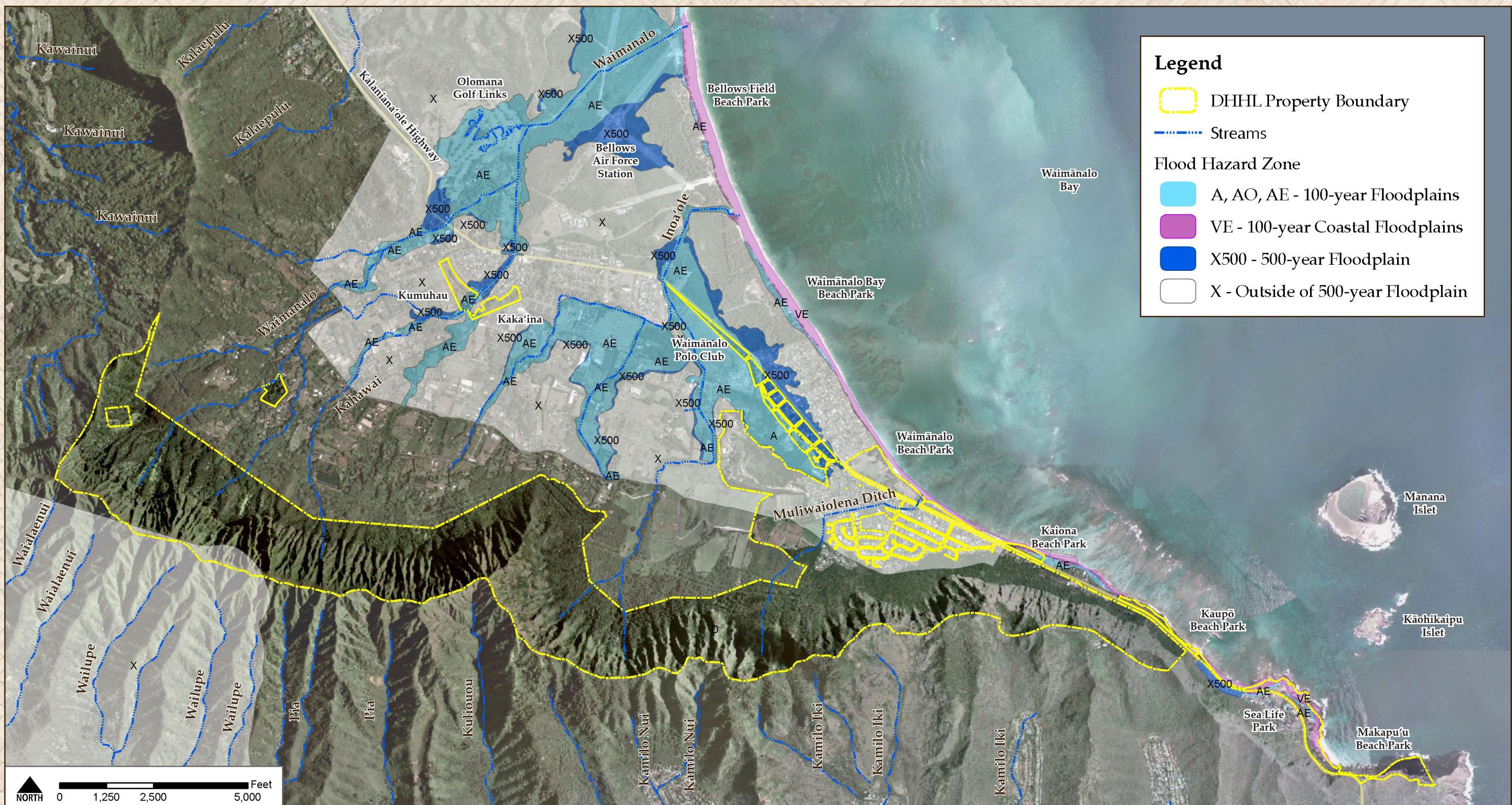
Waimānalo Wastewater Treatment Plant Upgrade

The State of Hawai'i envisions future improvements to the Waimānalo WWTP to address issues relating to reuse. Potential improvements may include planning and design of an ultraviolet disinfection system and effluent pumping facilities to allow the use of recycled water for irrigating selected agricultural lots and the Olomana Golf Links.



Waimānalo Wastewater Treatment Plant

Drainage - Infrastructure



Drainage - Characteristics

BACKGROUND OF DRAINAGE CONDITIONS

Although dry most of the year, Waimānalo Valley is severely affected during storms. The streams are shallow, overgrown with grass, and often incapable of carrying the large flows resulting from flash floods. The road culverts and bridges are inadequate and subject to obstruction by debris or siltation. These conditions often result in flooding of the adjacent lowlands, especially near the highway. The facing map illustrates flood zones for Waimānalo. Zone VE is a high risk coastal area with a 1% or greater chance of flooding and an additional hazard associated with storm waves. Zones A, AO, AE and VE are high risk 100-year floodplains, which mean that it is an area inundated by a 1% annual chance of flooding, for which flood elevations have been determined. Zones X and X500 are areas of low to moderate risk flood hazard, between the limits of the 100-year and 500-year floods.

At least 10 major storms have inundated the watershed since 1941, and it is reasonable to assume more damages can be expected as developments increase. Runoff drains into Kahawai, Waimānalo, Inoa'ole, and Muliwaiolena Streams. The drainage problem in the Waimānalo watershed is characterized by small capacity channels, badly restricted by vegetation. The vegetation not only reduces channel capacity but produces debris that moves downstream during flood flows. This debris collects at channel restrictions such as bridges and culverts resulting in flow blockages. The channels are usually very steep in the upper reaches and flat in the lower reaches that extend through the sandy soils along the coast. Large areas of Waimānalo Valley become flooded during severe rain storms, primarily because of small stream carrying capacities, inadequate road crossings, and low lying coastal plains. During past severe storms, flood waters ponded over low lying areas in the flat coastal plains, causing inundation of residential and commercial lands as well as roads and highways. Unlike the low flow velocities occurring in the ponding areas, storm waters flowing on steeper areas have high velocities, and become a greater hazard to life and property. In the steeper middle and upper sections of the valleys, overflowing waters have eroded agricultural lands, damaged crops, and partially washed out roadways. A DLNR study identified the following major problems of drainage in Waimānalo:

- Poor maintenance of existing ditches, channels and culverts
- No single agency responsible for maintenance
- Irrigation ditches need manual adjustments for flood control
- Kailua Reservoir releases can aggravate flooding
- Local ponding behind channel walls and at roads
- Land development potential restricted by flooding problems and floodplain zoning.

Source: Ko'olau Poko Water Quality Action Plan, Kailua Bay Advisory Council, 2002; Ko'olau Poko Sustainable Communities Plan, City and County of Honolulu, 2000; Report to the Twenty-First Legislature Regular Session of 2002 "Task Force to Create a Master Plan for Water Quality and Flood Mitigation for Waimānalo, DLNR December 2001; & "Total Maximum Daily Loads Estimated for Waimānalo Stream" Prepared to U.S. Environmental Protection Agency. Specifications by the Hawai'i DOH, Environmental Planning Office January 2001.

PROPOSED DRAINAGE PROJECTS

Waimānalo Ditch Annual Community Clean-up

DHHL maintains the ditch and has it cleaned every two years, however more frequent requests are made to clean the ditch. The community could get together once a year to help maintain the ditch. This could become a community spirit-buildng activity.

Sources used for this report also identify the following actions to improve drainage and stream health in Waimānalo.

In-stream flow levels must be increased by removing channel-clogging vegetation and construction of low flow channels in order to increase the ability of the stream to assimilate sediments and nutrients. Pollutant-reducing Best Management Practices, reasonable stream restoration, and an increase in base flow will bring Waimānalo streams closer to their desired condition – streams that meet the State Water Quality Standards and are fishable and swimmable.

Specific suggestions for drainage and stream improvement include:

- Increase the community's ability to protect and enhance streams;
- Improve the streams' ability to move water, filter pollutants, and support aquatic life;
- Establish vegetated buffers next to streams;
- Improve wastewater treatment;
- Assure good agricultural management practices;
- Assure good animal waste management practices;
- Reduce nutrients and sediments in urban runoff;
- Develop methods for stabilizing stream channels to allow them to filter pollutants and support aquatic life;
- Conduct regular stream cleanups and maintenance;
- Install signs and create community awareness about the effects of stream pollutants;
- Ensure access along the entire reach of channel to permit the use of heavy equipment for maintenance. Establishing a perpetual easement would have to be provided by the landowners to the public agency performing the work. This easement would need to be approximately 50 feet wide, 25 feet each side of the existing channel centerline;
- Install bridge trash racks along the Hīhīmanu and Kaka'ina Streets bridge crossings to reduce the possibility of the plugging of these bridges and of the downstream road crossing.



Regional Services & Public Facilities Map



Regional Services & Public Facilities Characteristics

Waimānalo Area Schools	Grades	Actual Enrollment 2010-2011	2007-2008 Capacity	Projected Enrollment 2012
Kailua Complex				
Enchanted Lake Elementary	K-6	428	496	295
Ka'elepulu Elementary	K-6	184	275	161
Keolu Elementary	K-6	173	364	159
Pope Elementary	K-6	229	508	261
Waimānalo Elementary & Intermediate	K-8	490	538	501
Ke Kula 'o Samuel M. Kamakau Laboratory Public Charter School	K-12	136	N/A	160
Kailua High School	9-12	866	1225	775
Olomana High & Intermediate	7-12	114	N/A	N/A
Kalāheo Complex				
'Aikahi Elementary	K-6	522	666	501
Kailua Elementary	K-6	354	546	343
Kainali Elementary	K-6	461	761	459
Mōkapu Elementary	K-6	772	792	765
Lanikai Public Charter School	K-6			330
Kailua Intermediate	7-8	653	1305	581
Kalāheo High School	9-12	808	1138	761
Private				
Kailua Christian Academy	K-12			
Le Jardin Academy	PK-12			1000
Redemption Academy	PK-12			
Total		6,327	8,614	7,052

Source: State of Hawai'i Department of Education

SCHOOLS

Waimānalo is within the Kailua-Kalāheo Complex-Area, where there are 10 elementary schools, three intermediate schools, four high schools, and four private schools.

Future Need

Existing facilities are adequate to serve the needs of Waimānalo's stable population.

HEALTH CARE FACILITIES

Waimānalo Health Center and Castle Medical Center in Kailua provide health care services for the Waimānalo region.

Future Need

Existing facilities are adequate to serve the needs of Waimānalo's stable population. However, an increased need for elder care services is anticipated to accommodate the region's aging population.

POLICE FACILITIES

Windward O'ahu, including Waimānalo is within the Honolulu Police Department's District 4.

Future Need

Although the number of police officers serving District 4 is adequate, there is no substation located in Waimānalo. The closest sub-station is located five miles away in Kailua.

FIRE/EMS FACILITIES

Honolulu Fire Department operates three fire stations in the region. They are the Waimānalo Fire Station (Engine Company), the Olomana Fire Station (Engine Company), and the Kailua Fire Station (Engine and Ladder Company)

Future Need

Existing facilities are adequate to serve the needs of Waimānalo's stable population.

LIFEGUARD STATIONS

The City and County of Honolulu operates three lifeguard stations in Waimānalo. They are Makapu'u Station 5, Waimānalo Bay Stations 6A & 6B, and Bellows Beach Station 7

Future Need

Existing facilities are adequate to serve the needs of Waimānalo's stable population.

OTHER COMMUNITY SERVICES

Sandwich Isles Communications (SIC)

Exclusive telecommunications provider for DHHL parcels that utilizes the latest technology fiber optic cables and linkups. As part of its agreement with DHHL to provide telecommunications infrastructure and networking, all upfront infrastructure is provided at no cost to DHHL. SIC's affordable access to both telephone and broad band services provides residents of DHHL lands with high speed internet access to telemed services, distance learning courses and e-commerce opportunities, among others.

Kamehameha Schools' Extension Education Program

This facility provides career education and lifelong learning opportunities for Hawaiian youth and adults.

Recreation & Other Resources

Additional recreation facilities can be found at the following: Olomana Golf Course, Waimānalo Beach Park, Kaiona Beach Park, Kaupo Beach Park, Makapu'u Beach Park, Waimānalo Regional Park, Waimānalo Bay Beach Park, Bellows Air Force Base, and Ka Iwi Scenic Shoreline. Waimānalo also has horse-riding and rodeo facilities, churches and multiple historical/cultural sites.



IV. Homestead Issues & Priority Projects: Status of Previous Priority Projects

An update of the priority projects from the 2008 Waimānalo Regional Plan is listed below. 38 new and previously proposed Potential Projects, derived from issues and opportunities presented by the DHHL Waimānalo applicant and lessee community, can be found in the spreadsheet on the following pages.

1) WONG FARM ACQUISITION & RELOCATION

Location - Existing Wong Farms and old Meado Gold Dairy site

Background and Status - DHHL selected the Wong Farm parcel as part of the settlement under Act 14. On February 23, 2007, the Board of Land and Natural Resources approved the issuance of a direct lease to the University of Hawaii, College of Tropical Agriculture and Human Resources (CTAHR), and a fee simple conveyance of state lands to DHHL on approximately 335 acres of state lands known as the former Meadow Gold Dairies site. The UH-CTAHR will receive approximately 283 acres and DHHL will receive 50 acres, more or less. Fee title of the existing 52 acre Wong Farm will also transfer to DHHL. The purpose of the subdivision is to allow DHHL to relocate the Wong Farm to the newly subdivided parcel so that DHHL can develop homestead on its existing farm lot. The subdivision process involves approval by the City and County of Honolulu and is targeted for December 2011. Once subdivision approval is granted for the new Wong Farm, operations will be relocated and DHHL will begin work on a proposed 200 unit residential subdivision.

Estimated Completion Date - Transfer: 2012

New residential subdivision: Schedule to be developed

2) KUMUHAU / KAKA'INA STREET RESIDENTIAL DEVELOPMENT

Background - In July 2006, DHHL awarded 100 undivided interest leases for the Kumuhau and Kaka'ina parcels.

Kumuhau

Location - Southeast of Bellows Air Force Station

Status - Infrastructure improvements for 52 single-family lots, park, and detention basin were completed in mid-2010. Construction of 45 turnkey houses was completed in mid-2011. Beneficiaries began moving into the homes in early 2011. The remaining seven lots are reserved for self-help house construction.

Estimated Completion Date - 2011

Kaka'ina

Location - Southeast of Bellows Air Force Station

Status - Conveyance for the Kaka'ina parcel was completed in February 2007. The parcel is currently in the design phase with 44 lots planned. Infrastructure will go out to bid in October 2011. Construction is expected to begin in 2012 with completion of infrastructure in 2013. Construction and occupancy is expected in 2014.

Estimated Completion Date - 2014

3) WAIKUPANAHA ST. IMPROVEMENT / ILAUHOLE ST. EXTENSION

Location - Waikupanaha Street/Ilauhole Street, Waimānalo

Background and Status - In 2006, the Waimānalo Hawaiian Homes Association (WHHA) proposed to plan and design an extension of Ilauhole Street to the future Community Technology, Education and Employment Center (CTEEC) and recreational area in the quarry. This new road will provide circulation access to the inner section of the quarry. DHHL is also proposing improvements to Waikupanaha Street to provide access to a future light industrial park above the quarry that may link to Ilauhole Street in the future. The existing gravel road will be retained for emergency purposes.

WHHA requested \$60,000 as part of the Waimānalo Homestead Village Center development but did not receive funding. DHHL resubmitted the funding request for \$100,000 in the FY 2009 CIP budget, which was then appropriated with support from Representative Waters. Unfortunately, this funding lapsed. Since then, WHHA was able to obtain funding through the CTEEC project for construction of the road from Ilauhole Street to the parking lot of CTEEC, which will begin in 2011. DHHL will need to resubmit a funding request for planning and design of the remaining portion of the road in a future CIP budget.

Estimated Completion Date - Ilauhole Street to CTEEC: 2012; Improvements to Waikupanaha Street: Undetermined

4) COMMUNITY TECHNOLOGY, EDUCATION AND EMPLOYMENT CENTER (CTEEC)

Location - Waimānalo Hawaiian Homes Association Community Facilities Complex

Background and Status - Phase 4 of the Waimānalo Hawaiian Homes Association Community Facilities Complex focuses on creating an "Economic and Technology Zone" that will be the services and employment-generating center for technology-related activities. Previously named Community Technology, Telehealth and Employment Center (CTTEC), the name has since changed to Community Technology, Education and Employment Center (CTEEC). The facilities will provide internet access, distance learning, and technology training to residents. It will also provide access to high technology and information industry business incubation services in partnership with local schools, community colleges, Native Hawaiian Health Systems and community health centers and other non-profit organizations and private businesses. The CTEEC will be a gateway for community learning, health information and related services, employment training, and e-commerce business development. The project broke ground on November 3, 2011.

Estimated Completion Date - 2012



Issues, Opportunities & Potential Projects

CATEGORY	POTENTIAL PROJECTS	ISSUES & OPPORTUNITIES
STATEWIDE	1) Resume H.O.A.P. (Home Ownership Assistance Program) Education - Statewide / Programmatic - This program, which helped to prepare and equip Native Hawaiians for homeownership, was helpful in the past but has since languished. HOAP offered three (3) vehicles to address barriers that Native Hawaiians may face in achieving homeownership or preserving their home: Financial Literacy Services, Job Training and Placement Services, and Addiction Treatment Services.	Getting a loan is a big issue: a) Beneficiaries wonder how they can qualify for a loan to buy a home or do repairs, b) It is important to educate young people to get them ready to own a home.
	2) Review Existing Policies on Abandoned/Older Homes - Statewide - Policies concerning those properties that are abandoned or are not being cared for should be reviewed to determine if these homes could serve as an additional option for housing beneficiaries	Abandoned houses or those that need repairs need to be addressed: a) DHHL should approach the owner to see whether they want to keep it or sell it to the next person on the list, b) DHHL could offer those beneficiaries that live on the beach the option to repair and then live in the homes
	3) DHHL Beneficiary Rights Education Program	Not all beneficiaries understand their rights pertaining to DHHL.
WAIMĀNALO REGIONAL PLAN		
HOUSING	4) Support and Develop Affordable and Obtainable Homestead Alternatives in Waimānalo* - A review of the DHHL Housing Policy may be helpful to house more beneficiaries at a quicker rate. This may include those policies that allow for the sell/transfer of newly acquired leases, what happens to beneficiaries that do not qualify for loans, or looking into additional opportunities for housing besides a single-family home (i.e., temporary, transitional, rent-to-own, townhouses, etc.).	Beneficiaries are frustrated by the wait: a) People longest on the list should have priority, b) The two lists should be condensed into one, c) The right to sell/transfer newly acquired leases should be changed, d) Many people are living under a roof or in tents, which could lead to severe health problems and stress, e) If a beneficiary doesn't qualify for loan, will they be passed over? Other options are needed for obtaining a home, which could include: a) Rent to own, b) More self-help, c) Making homeownership accessible/feasible, d) Offering simple homes, not need fancy \$270,000 homes, e) Transitional/temporary housing for young Hawaiian families, i.e. Townhouses, f) Kauhale Model.
	5) Develop Waimānalo Housing Master Plan - This master plan would take into account the current and future housing projects within Waimānalo so that the needs of the community are met most efficiently. It could discuss the completion of the Kaka'ina subdivision, the 200 potential new homes from the Wong Farm relocation, and even consider new land acquisitions in the region for housing.	The Waimānalo wait list is very long. In surveys Waimānalo has the highest preference rating, but a shortage of vacant land for more housing in the region. More kūpuna housing is needed, preferably near the beach for access to fishing. Additional housing issues are listed above.
	6) "Going Green" Education and Technical Assistance Program - CTAHR would like to be a willing neighbor in educating their DHHL neighbors with ways to make a home more 'green' and self-reliant through aquaponics, backyard gardens, and community gardening. CTAHR currently already has five agents working with DHHL in other areas of the state. DHHL sponsorship of an extension agent would help to make this possible.	There is a desire to help older homesteads to "Go Green." Some options include: a) Retrofitting for sustainability, b) Affordable options, c) Aquaponics, d) Aquaculture, e) Backyard Gardening, f) Safety, g) Food sovereignty / security
REVENUE GENERATION	7) Waimānalo Community Business Center Incubator - This is not intended to be a retail/commercial/industrial center, but rather a support facility for resident entrepreneurs starting a new business venture or existing businesses in the community. It would also help the unemployed and under employed of all ages in Waimānalo develop job skills in construction and other fields for current and future job markets. The City conducted a study in 2008, citing the Old Quarry site as priority location, next to the soon-to-be CTEEC building.	Issues include: a) The need for economic incubator, b) The need to support Hawaiian-owned / run businesses, c) The need to create a working relationship with other agencies to add support to DHHL constituents
	8) Waimānalo Business Park (Industrial/Technology)* - A business park of this type would house a Tech Innovation Center as well as be designed with larger spaces (such as warehouses) and a parking area to accommodate space needed to support industrial/construction type businesses for homesteader's trucks and heavy equipment. The lands above the quarry are a possible location.	There are many owners of construction / landscaping businesses in the area with no location for their office or to store their equipment.
	9) Shopping Center / Open Market - This type of shopping center would give preference to leasing spaces to Hawaiians, keeping revenue within the community. It would include stores such as Foodland, and could possibly be located on the corner of Nakini and Kalaniana'ole Hwy. This parcel has already been strategically identified as a potential non-governmental revenue source for DHHL.	There are no Hawaiian businesses on DHHL lands, and the opportunities for Hawaiians to start retail/commercial businesses are limited.
	10) Hawaiian Village - The Hawaiian Village concept is similar to the one that was in Keaukaha, which had gift shops, hula, and tourists busse there. This would be a place to highlight and practice culture and appropriately integrate a modern business model with cultural knowledge and practices. Sherwood Forest (now City & County (C&C) land) is a possible location, in partnership with C&C.	
	11) Bed & Breakfast - Build a Bed & Breakfast on beachfront property that would employ several beneficiaries. Sherwood Forest (now C&C land) is a possible location, in partnership with C&C.	
	12) Recreation-Type Business - DHHL could follow in the foot steps of the Federal Government and make a recreation type business with cottages, stores, horse back riding, surf school, etc. Sherwood Forest (now C&C land) is a possible location, in partnership with C&C.	
	13) Waimānalo Village Center Special Area Plan Description - A plan to improve pedestrian circulation, public transit service, landscaping and public open spaces, street fixtures and signage, and building appearance in the rural commercial/civic district, and to locate a possible private baseyard if appropriate.	The intent is to create and retain a "village center" ambiance for these areas, where uses and activities such as farmers' markets and feed stores are a visible presence. Provisions should be made for roadside vending for the sale of agricultural products in a manner that is consistent with traffic safety and rural ambience.

Issues, Opportunities & Potential Projects

CATEGORY	POTENTIAL PROJECTS	ISSUES & OPPORTUNITIES
COMMUNITY	14) HPD Satellite Office* - More prominent police presence in Waimānalo would be of value to the community and fulfill a long-standing need. The corner lot on Nakini and Kalaniana'ole is a possible location, and could be incorporated into the current commercial potential of this parcel.	There is a need for a police presence in Waimānalo - the closest HPD office is in Kailua.
	15) Homestead Police Force and Public Safety Office - Homesteaders can organize their own police force and public safety office to employ native Hawaiians, restore dignity to the people and strive towards self-determination.	Waimanalo Homestead has a lot of retired and active police, fire, correction and public safety officers.
	16) Hawaiian Cultural Learning Center* - This Center would be a place to gather and practice Hawaiian cultural activities. Classrooms would be needed to teach/practice cultural history, language, chants, prayers, hula, medicinal, lomilomi, etc. The building would need to face east and have access to the mountain and ocean. This could also serve as a site for a traditional cultural imu, which would be a private imu and not meant for commercial sales. A site of about 3 acres under consideration.	There is currently no place in the community to practice cultural activities
	17) DHHL 4H Club - A 4H Club would be an attempt to keep the Hawaiian heritage alive. Hawaiian cowboys and cowgirls, like lkua and Harriet Purdy, were both champions. A DHHL 4H Club would be a big benefit for Hawaiian youth in organizing their chores, giving them responsibilities, skills, record keeping, recognizing animals traits and behavior, being a leader, animals needs, grooming and many other chores in planning a successful ranch. This could be located behind Herbert Kihoi, Jr.'s house, Correa Ranch, or a possible partnership with the Polo Fields owner.	(There is a perception that) There are no DHHL ranches leased to Hawaiians in Waimānalo: a) There are 3,000 horses in Waimānalo and only a handful of Hawaiians own horses, mainly because no DHHL lands are available for the beneficiaries, b) Pa'u Riders rent stables from the Cooke Ranch which sits next to the old quarry, c) One beneficiary has been on the pastoral waiting list since 1965. **Clarification: Most of the ranches if not all are leased to Hawaiians; with some on the waitlist. However, they are all Revocable Permits. There are no pastoral leases in Waimānalo, only stabling or agricultural leases.
	18) Develop a Newsletter to inform beneficiaries about HHL issues in Waimānalo - This newsletter would be in addition to the waimanalo.org website, and could be mailed to homes monthly or quarterly.	(There is a perception that) There is no communication on WHA meetings, and no newsletter concerning Waimānalo Homestead, Kamehameha Preschool, Liliuokalani Children Center and other HHL issues. A newsletter and an office are needed to inform all Hawaiians of issues facing the community and a good Beneficiary to accept responsibilities and inform the HHL residents of on-going issues.
	19) Hawaiian Church on Homestead Land - More background information needs to be investigated, such as how many sites are needed, and where in the community should they be located. DOE may be a possible partner.	There are no Hawaiian churches on homestead land; The LDS (Mormon) Church on Hihimanu uses HHL land for their parking lot.
	20) Location for a Cemetery/Mausoleum - Requests for a cemetery have been made in the past. Potential location currently unknown.	The closest cemetery is in Kaneohe. Waimānalo does have an old cemetery on Strawberry Hill that is no longer used.
	21) Community Charette to Determine Commercial Uses for Nakini/Kalaniana'ole Intersection Lot, and possible integration with Waimānalo Beach Park - This parcel has already been strategically identified as a potential non-governmental revenue source for DHHL, but gathering the community to brainstorm about what the this site may look like may be helpful in appropriately siting other projects, and could be helpful in properly and prominently displaying that this is an entrance to the HHL community.	a) This is a prominent 'gateway' to the DHHL area, b) Various ideas have surfaced on what could be located there.
	22) Make Ag/Ranch Lands Available for Aquaponics/Sustainability	There are community concerns regarding sustainability, food sovereignty and security.
	23) Kaupō Beach Park Improvements - There is interest to develop it so people can use it as part of a living park, have BBQ pits, and/or as a potential area for cultural activities.	Kaupō has cultural significance in the area. The park is currently underutilized and has potential for improvement. It is currently leased by the City, and the Hawaiian Civic Club has recently become a Hoa Pāka (Adopt-A-Park) partner.
PARKS	24) Kupuna Terrace Permitting - This site has been developed, but there are issues of safety, liability and regulatory compliance. (Note: The park was torn down October 29, 2011)	a) The City is responsible to address these problems since this area is licensed to them, b) At this time the community group responsible for developing the area is being allowed time to acquire the proper permits, c) The associated issues include: 1) Safety: Limited line of sight, High speed on the highway, No parking, Crossing street, Steep slope, Shoreline is a rocky cliff without a railing; 2) ADA: Ramps and access paths do not meet requirements; 3) Environmental concerns: management, erosion, etc.; 3) Process: SMA permit, Building permit, Grading permit, County Permit; 4) Management / maintenance: Who is managing?; 5) Liability: Insurance
	25) Waimānalo Beach Park Improvements - A 'Friends of Waimānalo Beach Park' group could be formed to help support the park when there is a need to quickly purchase items for urgent repairs.	Vandalism at the park (such as urinals being torn out of the wall) have been a problem, and sometimes the City is unable to repair these problems before big events. Requests for closing the park at night may be helpful in deterring the vandalism that has been occurring at the park



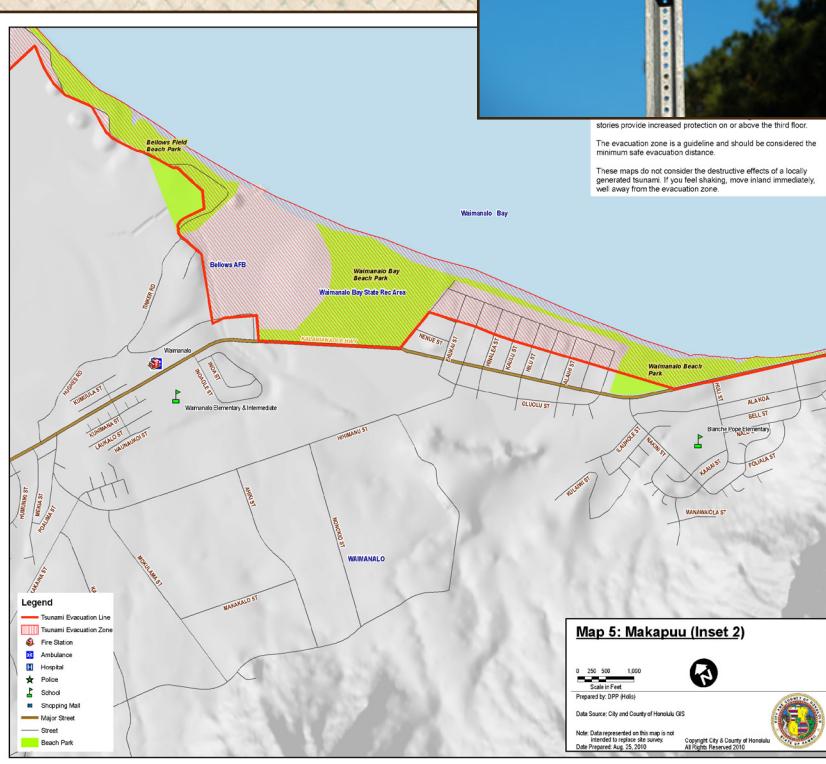
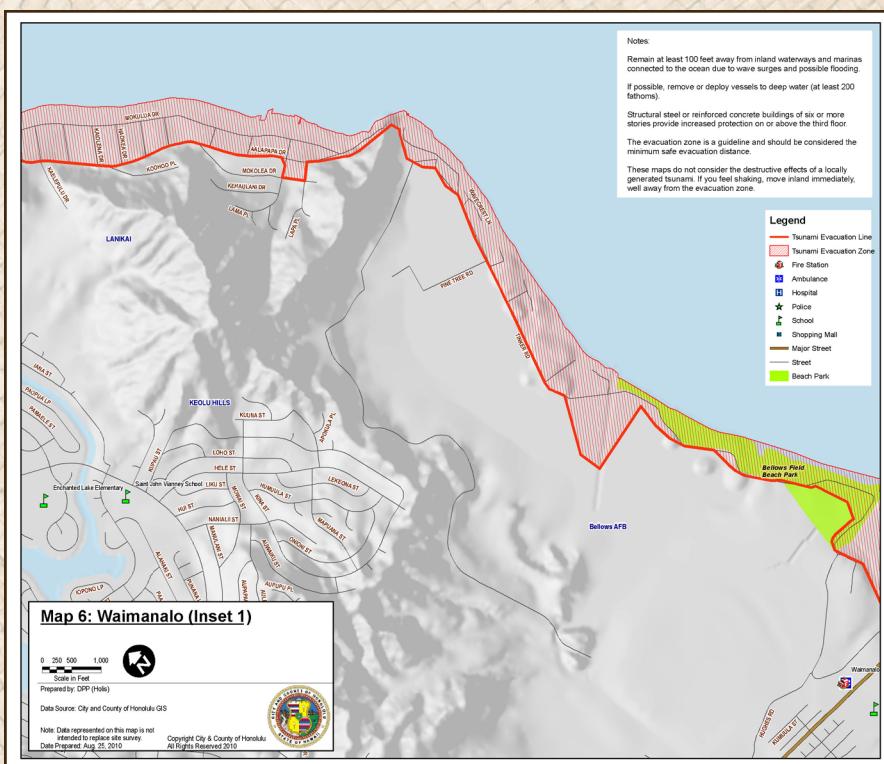
Issues, Opportunities & Potential Projects

CATEGORY	POTENTIAL PROJECTS	ISSUES & OPPORTUNITIES
INFRASTRUCTURE	26) Waimānalo Ditch Annual Community Cleanup - The community could get together once a year to help maintain the ditch.	DHHL maintains the ditch and has it cleaned at least every two years, however more frequent requests are made to clean the ditch.
	27) Identify Location to Store and Repair Cars - An auto shop to store and repair abandoned cars would be one way to get them off the streets. This would provide economic opportunity to DHHL mechanics working out of their homes and on the streets, as well as provide a place for apprentices to learn auto mechanics. The proposed Waimānalo Business Park may be a beneficial location.	Old and abandoned cars crowd the neighborhood streets.
	28) Waimānalo Irrigation System - \$2,850,000 CIP funds were released for the Plans, Design and Construction for Improvements that are scheduled for 2012-2013.	The open, unlined ditches of the more than century-old Waimānalo irrigation system has steadily deteriorated and requires major improvements to maintain its efficiency in delivering irrigation water collected for use by the Waimānalo agricultural community.
TRANSPORTATION	29) Investigate Alternative Access or Bypass Road - In order to increase traffic circulation in and out of Waimānalo, more research and studies need to be conducted to determine if there are any potential alternative access roads or a bypass road that could be developed.	Congestion along Kalaniana'ole at rush hour is quite a problem. An alternate route should also be made available during emergency events. This is not a DHHL project, but rather a DOT project to improve congestion in the area. Is the preference for a makai or mauka road? If makai, it would cut into Bellows / Military lands. If mauka, it would cut into private properties. Is DOT aware of this concern?
	30) Traffic Calming Study at Nakini and Oluolu Streets - This traffic study would allow community members to voice their concerns with regard to what kind of improvements they envision, and also to ensure that there is consensus in implementing traffic calming improvements on these streets.	<ul style="list-style-type: none"> • Nakini Road – Needs speed bumps. • Oluolu street – needs speed bumps and a four-way stop at Oluolu and Hihimanu Streets. • Nakini and Oluolu Streets – sidewalk repairs are needed, as residents have fallen due to uneven sidewalks.
	31) Emergency Evacuation Plan* - In 2012 Department of Environmental Management (DEM) will prepare a plan that includes travel routes in Waimānalo. The plan will include identifying refuge areas and shelter facilities as appropriate. If private road access will be required, DEM will identify coordination / collaboration requirements. Additionally the plan will also have a GIS evacuation route/ tsunami boundary signage plan for O'ahu using standard approved NOAA/FHWA signs.	There is an informational gap that currently exists for the community and visitor population on recommended evacuation routes from the coastal areas.
	32) Waikupanaha Improvements / Ilauhole Street Extension* - This road will provide emergency access (as in the case of a tsunami), and a road to jobs (i.e., CTAHR) from subdivisions.	This road was initially proposed in 2006. Funding appropriated with support from Rep. Waters has since lapsed. Subsequently, funding was attempted again but priority was given to California Avenue and North/South Road. WHHA and DHHL are working with area politicians to push it through.
	33) Kalaniana'ole Highway Bikeway - Construction will begin in 4Q 2013.	Existing Project.
	34) Kalaniana'ole Highway Bridge Replacement, Inoa'ole Stream - Construction will begin in 4Q 2014.	Existing Project.
	35) Kalaniana'ole Highway Improvements - This project will construct safety and operational improvements, including construction of turning lanes, sidewalks, wheelchair ramps, bike paths or bike lanes, bus pullouts, lighting improvements, traffic signal upgrades, utility relocation, and drainage improvements. Phase I (Olomana Golf Course to Poalima Street) construction will begin 4Q 2013; Phase II (Poalima Street to Aloilo Street) design will begin in 2014; Phase III (Aloilo Street to Waimānalo Beach Park) design has been deferred to 2016.	Existing Project.
	36) Guardrail Improvements at Farm Lots and Waikupanaha and Mahilua Streets - \$100,000 in CIP funds have been appropriated towards guardrail improvements in FY2012.	Guardrails were proposed due to the numerous streets that run parallel to open ditches and due to the lack of curbing; in addition, this would curtail the illegal dumping of vehicles.
RESOURCE MANAGEMENT	36) Investigate Geothermal Potential in Waimānalo - A thorough investigation into the possibility of using geothermal energy in Waimānalo would need to take place in order to determine if it would be economically feasible. The costs for drilling the geothermal well would need to be justified by the use - for instance, would Waimānalo farmers use a food drying facility?	A small source of geothermal energy was identified in Waimānalo DHHL land. It is located in the "brown zone" according to geothermal scan, which would allow enough energy to dry crops or warm water, but not drive kilowatts.
	38) Submit Comments Regarding Waimānalo Waters as Proposed Monk Seal Habitat - The issue of monk seals consuming fish needed by local fisherman needs to be brought to NMFS attention, and there may be a way to balance Hawaiian culture with endangered species. Although the comment period on this proposed rule to designate critical habitat recently passed (deadline was August 31, 2011), there is a possibility that comments received after the end of the comment period may be considered. Submit written comments to Regulatory Branch Chief, Protected Resources Division, National Marine Fisheries Service, Pacific Islands Regional Office, 1601 Kapiolani Blvd., Suite 1110, Honolulu, HI, 96814, Attn.: Hawaiian monk seal proposed critical habitat.	<p>a) During the early sixties there were no seals in Waimānalo and rarely seen on O'ahu. One (1) seal consumes over 2,000 fish annually; this has caused fishing in Waimānalo Bay to become over-fished. Five (5) seals have been seen on Rabbit Island. Seal fish consumption is more than what the Beneficiary's fish consumption is or what is caught; eventually sharks will come closer to shore to harvest the seals. b) The National Marine Fisheries Service is proposing to revise the current critical habitat for the Hawaiian monk seal by extending the current designation in the Northwestern Hawaiian Islands out to the 500-meter (m) depth contour of six new areas in the main Hawaiian Islands (including Waimānalo), pursuant to section 4 of the Endangered Species Act (ESA).</p>

*Priority Project (Priority Projects further described on pages 32-37)

This Waimānalo Regional Plan Update process involved three community planning meetings held on the evenings of August 30, September 13, and October 4, 2011 at the Waimānalo Homestead Community Center. Approximately 40 community members attended the meetings. At these meetings, issues and opportunities that should be addressed in the regional plan were identified, and a list of potential projects was developed to address those issues and opportunities. From this list lessees determined by consensus, their top five (5) priority projects (identified above with an *) that were written up with project details, budget estimates, and other pertinent project planning information. Projects #31 and #32 were originally combined as one project. After further review of project write-ups, it was determined that these two projects should be separated, giving a total of six (6) priority projects.

Priority Project: Emergency Evacuation Plan



Waimānalo area evacuation map



Description – There is an informational gap currently existing in the community and visitor population on recommended evacuation routes from the coastal areas. The most recent tsunami warning left many in Waimānalo trapped and unable to evacuate the tsunami inundation zone. The Department of Transportation Services (DTS) submitted a draft resolution in May 2011 to approve new Work Elements (WE) involving the City for inclusion in the Fiscal Year (FY) 2012 Overall Work Program (OWP). One of those work elements is an Emergency Evacuation Plan submitted by Department of Environmental Management (DEM), which will prepare an O’ahu Evacuation Plan that includes travel routes for specific geographical areas including: Wai’anae, Nānākuli, ‘Ewa Beach, Haleiwa/Waialua, Hau’ula and Waimānalo. The plan will include identifying refuge areas and shelter facilities as appropriate. Additionally, the plan will also have a GIS evacuation route/tsunami boundary signage plan for O’ahu. A Public Outreach program consisting of meetings, briefings, and public service announcements will be implemented as needed.

Location – Waimānalo District

Status – DEM is currently developing an O’ahu Evacuation Plan

Potential Partners – DEM, SCD, DOT, DOH, HAH, JTFHD, Outdoor Circle, Community Associations, and City Departments

Estimated Completion Date – December 2012

Cost – \$500,000

Potential Sources of Funding – City and County of Honolulu Capital Improvement Project Fund, Federal Highway Administration

Proposed Phasing & Timeline –

- Gap Analysis: July - September 2011
- Field Work for Geographic Area Evacuation Route Plan (various): September 2011 – March 2012
- Plan Development for Geographic Area Evacuation Route Plan (various); includes private road analyses: March – September 2012
- GIS Mapping Effort: March – September 2012
- Public Outreach Effort: September – December 2012



Priority Project: Hawaiian Cultural Learning Center



Hula Dancing and Other Hawaiian Cultural Practices



Description – The Hawaiian Cultural Learning Center would be a truly Hawaiian place of learning that perpetuates hula and other Hawaiian cultural practices, and provides space for the Waimānalo Hawaiian Homestead community and others to engage in Hawaiian cultural practices. The Center would include a pā hula (place reserved for hula dancing), a multi-use facility in harmony with the surrounding natural elements, a space for hula instruction and performances, smaller classrooms for more specialized learning, a kitchen, an area where community groups and visiting cultural practitioners could hold overnight retreats and cultural exchanges, various māla (gardens) on the property supporting the needs of the hula, lomi, la'u lapa'au, and other cultural practitioners, and a reforested native landscape.

Nā Pualei O Likolehua is a hālau hula under the direction of Kumu Hula Leina'ala Kalama Heine, a proud member of the Waimānalo Hawaiian Homestead community. Nā Pualei O Likolehua strives to maintain the cultural traditions of mele oli and mele hula, to uphold the values of traditional protocol, to remain actively responsible to the 'āina, to enrich the spiritual balance of oneself through discipline, and to empower through education. Through a Hawaiian Cultural Learning Center in Waimānalo, the stories of Waimānalo that abound with valuable traditions will be passed on through hula and the other cultural practices.

Location – Mauka of Kalaniana'ole Highway (about 3 acres) overlooking Kaupō Beach Park. Other potential sites include Sherwood Forest, Waimanalo Quarry, and Old Correa Ranch.

Status – Nā Pualei O Likolehua has requested long-term use of DHHL land overlooking Kaupō Beach Park. Nā Pualei O Likolehua has begun researching the area, and has initiated communication with potential funding sources.

Potential Partners – Nā Pualei O Likolehua, DHHL, WHHA

Estimated Completion Date – 2015

Cost – Planning and design: \$250,000; Construction cost: pending site and design

Potential Sources of Funding – OHA, DHHL, Nā Pualei O Likolehua grants

Proposed Phasing & Timeline –

- Agreement with DHHL: 2011
- Waimānalo community consultation and project planning process: 2012
- Begin pā hula building and plantings: 2013
- Hawaiian Cultural Learning Center construction: 2014 - 2015



Priority Project: Honolulu Police Department (HPD) Satellite Office



Waimanalo 'Clubhouse' on the Corner of Nakini and Kalaniana'ole



Description – More prominent police presence in Waimānalo would be of value to the community by deterring criminal activity and fulfill a long-standing need. District 4 encompasses an area of Windward O'ahu covering 127 square miles. The communities, with about 132,000 residents, include Hau'ula, Ka'a'awa, Kahalu'u, Kahuku, Kailua, Kāne'ohe, Lā'ie, Lanikai, Punalu'u, and Waimānalo. The main station is located in Kāne'ohe, and full-service substations are located in Kahuku and Kailua (5 miles away from Waimānalo). There are no substations in Waimānalo.

The substation could be located within the existing DHHL clubhouse, or a new substation could be built. The main advantage of using the existing structure is cost. Construction of a new facility could cost up to 95% more than renovating a portion of the clubhouse for HPD needs. A possible space with exterior windows within the existing clubhouse measures approximately 150 square feet, big enough for two or three police officers, two desks, some shelves and locker space. A small asphalt driveway and parking stall for the HPD vehicle could also be installed.

Location – A) The corner lot on Nakini and Kalaniana'ole (1.7 acres) is a possible location, as it is centrally located. It is also at the entrance of a majority of the Waimanalo homestead, located near a park and is easily accessible to the highway, where a police presence could help reduce speeding. B) The corner of Waimanalo Beach Park across the commercial buildings along Kalaniana'ole Highway is also another potentially good location. C) Another possible location is behind the HECO transformer near the polo fields.

Status – HPD currently parks at Waimānalo Beach Park under the ironwood trees while on patrol. DHHL and WHHA offered HPD a space within the existing Waimanalo 'clubhouse' on the corner of Nakini and Kalaniana'ole (directly across from the beach park) in April 2011. The roof of the clubhouse is currently being held together by a rope due to storm damage. The roof is expected to be renovated soon, with the donation of time from WHHA, the Mormon Church, an architect, contractors, and Eagle Scouts doing this as part of their community service.

Potential Partners – HPD, WHHA, DHHL, City and County of Honolulu

Estimated Completion Date – renovation 2 months from NTP/substation: 3.5 years from NTP

Cost - \$75,000 for clubhouse renovation; \$1.5 million for the construction of a new satellite office

Potential Sources of Funding – County CIP

Proposed Phasing & Timeline -

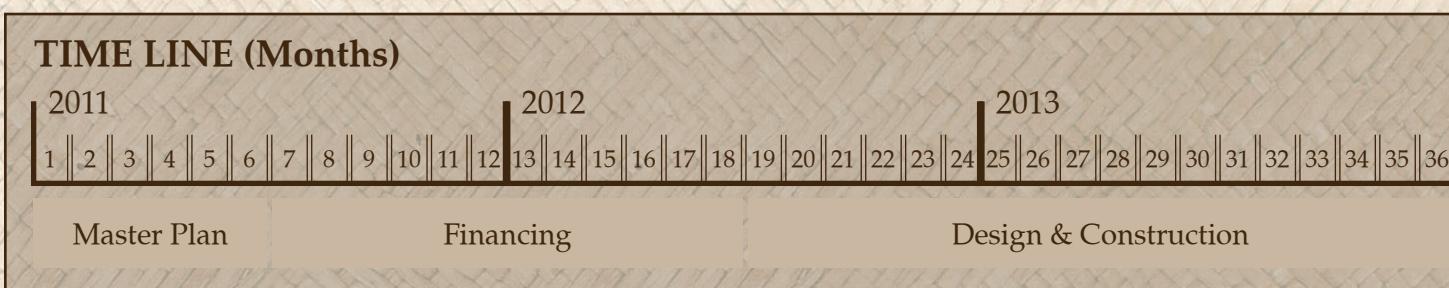
- Identify location for satellite office - 6 months
- Funding Request - 12 months
- Planning and Design - 12 months
- Construction - 12 months



Priority Project: Support & Develop Affordable & Obtainable Homestead Alternatives in Waimānalo



Ho'olimalima Rent-to-own Housing in Kapolei



Description – Many DHHL applicants are frustrated by the years of waiting before obtaining a lease; many on the waiting list have died and never received their lease, while others are facing less-than ideal living situations (such as overcrowding or homelessness) while they wait for their names to be called. Exacerbating the problem, a 2003 SMS survey states that 56% of applicants on the waiting list are below the HUD 80% of median guide, causing them to be ineligible for a home loan once their name is finally called.

DHHL should consider plans to devote a certain portion of its resources to alternative types of development in Waimānalo rather than large single family homes. For example, development of rental housing and multi-family housing (i.e., transitional, rent-to-own, townhouses, etc.) may be a more efficient means to meet the needs of some of its beneficiary population. A review of the DHHL Housing Policy may help house beneficiaries quicker, including assessing those policies that allow for the sale/transfer of newly acquired leases, and how to address beneficiaries that do not qualify for loans. Additional suggestions include smaller and simpler homes that are less expensive to build and purchase, more self-help housing, kauhale style communities, and homeowner financial planning services. A multi-story, multi-family option should also be considered, possibly in the back of the old quarry where height issues can be mitigated.

Location – Waimānalo District

Status – DHHL wants to assess why people are still spending years, even decades, on the waiting list. DHHL has asked the Legislature to fund an analysis of what kind of opportunities beneficiaries want, so that DHHL builds in the right places and builds the right kind of homesteading opportunities. In February 2011, soon after his appointment, Chairman Nahale-a looked at the possibility of launching an affordable rentals program and multifamily-unit housing as needed alternatives to DHHL's conventional single-family residence development. That proposal might have to be modified to a rent-to-own option since the Hawaiian Homes Commission Act calls for homesteading, and rentals might not qualify. Preceding any of this would be development of a master plan, in consultation with beneficiaries of the Hawaiian Homes trust, developers and others who could be involved in the process.

Potential Partners – DHHL, HUD, NAHASDA

Estimated Completion Date – Up to 3 years from NTP

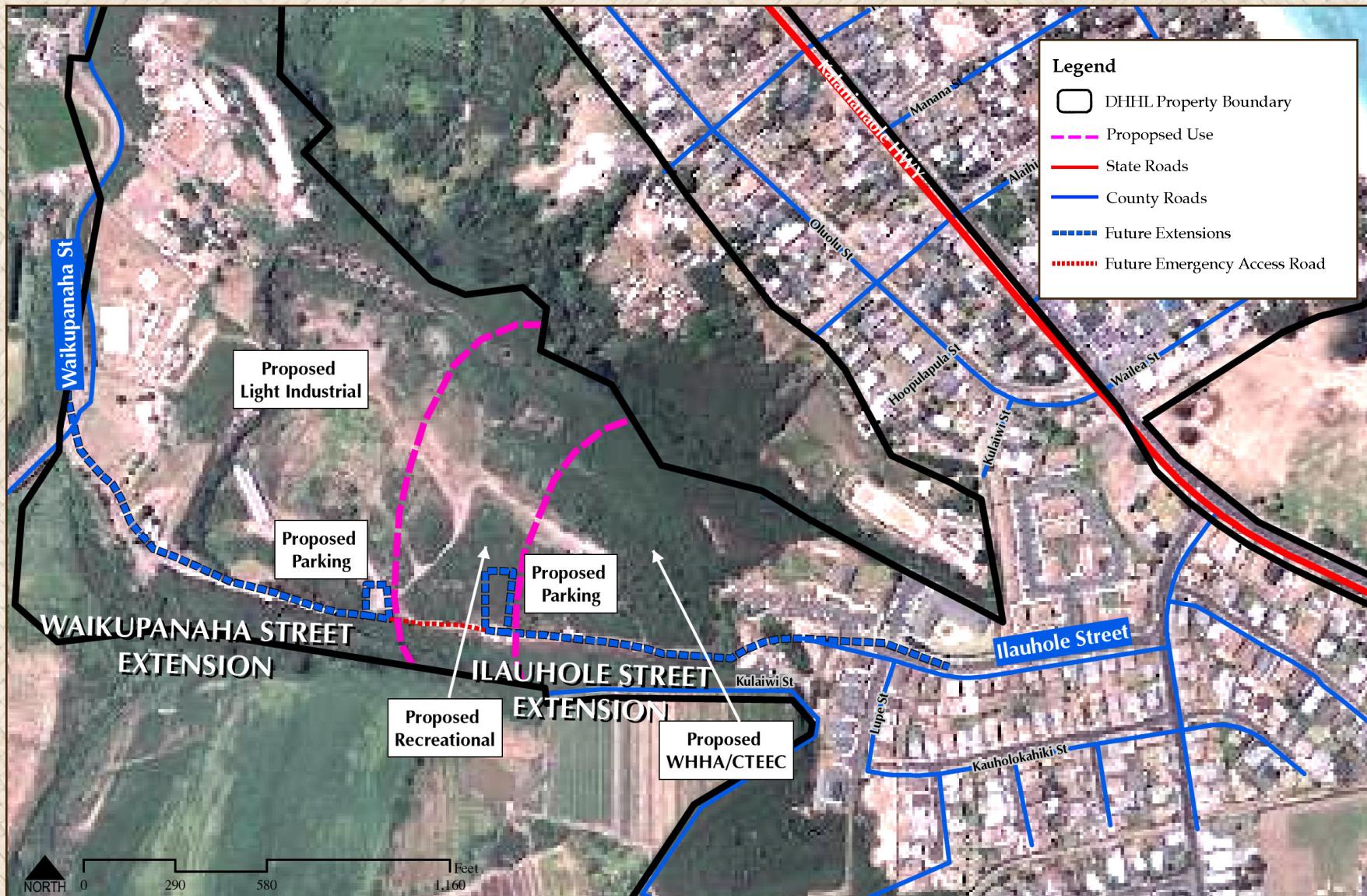
Cost – Varies. Startup master planning \$50,000 - \$100,000

Potential Sources of Funding – HUD, Private developers with HHFDC affordable housing requirements, DHHL, OHA

Proposed Phasing & Timeline –

- Develop Concept Master Plan for alternative housing and identify pilot projects: 6 months
- Obtain development financing: 6 - 12 months
- Design project and construction: 12 - 18 months

Priority Project: Waikupanaha Improvements / Ilauhole Street Extension



Description – As a previous priority project, the Waikupanaha Improvements/ Ilauhole Street Extension is still a priority because of its potential to serve as an evacuation route. This project is to be done in two phases. Phase 1 will be a 1,600 linear feet two lane extension from Ilauhole Street into the quarry to the parking lot of the new CTEEC building, which will be constructed in 2012. Phase 2 involves creating two lanes on Waikupanaha Street with an approximate right of way of 55 feet, paving, installation of sidewalks, drainage, sewer pipes, telecommunication lines and lighting. The project involves planning, designing, and constructing approximately 2,112 linear feet of improvements to the existing Waikupanaha Street from the Waimānalo wastewater treatment plant (Hihimanu Street) and extending the road on DHHL land into the inner quarry area to a proposed parking lot.

Location – Waikupanaha Street/Ilauhole Street

Status – Construction of the road from Ilauhole Street to the parking lot of the new CTEEC building will begin in 2012. Additional funding is still needed to complete the improvements to Waikupanaha Street.

Potential Partners – DHHL, DOT, WHHA

Estimated Completion Date – 3 to 5 years from NTP

Cost - \$12 million - \$13.5 million

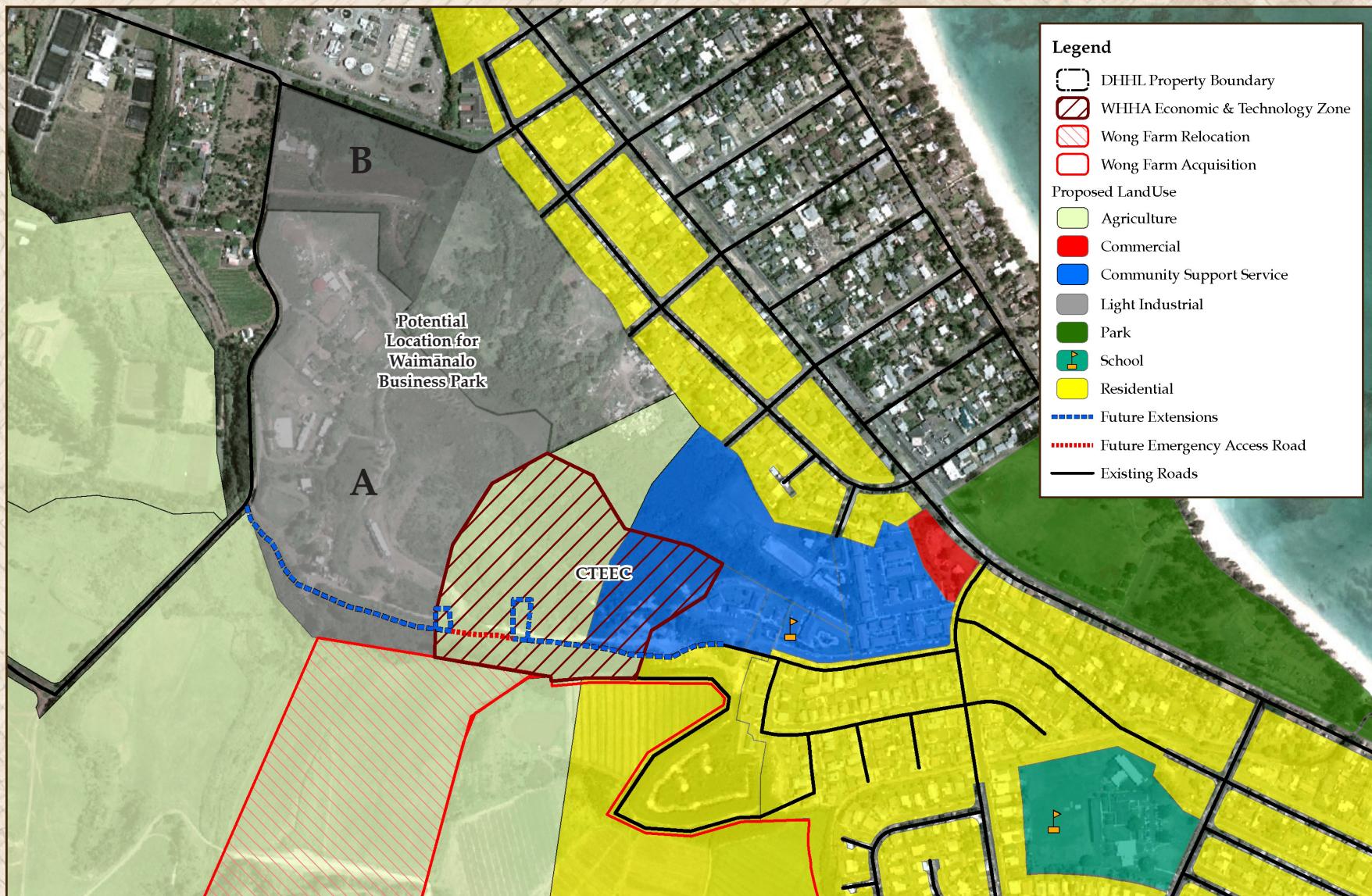
Potential Sources of Funding – City and County of Honolulu Capital Improvement Project Fund, Federal Highway Administration, New Market Tax Credits (NMTC), State of Hawaii

Proposed Phasing & Timeline –

- Ilauhole to CTEEC: March – September 2012
- Funding Request for Waikupanaha improvements and remaining extension: 12 months
- Geotechnical survey of the quarry to address any major sinkhole problems: 4 months
- Planning and Design: 12 months
- Construction: 12 months



Priority Project: Waimānalo Business Park (Industrial/Technology)



Description – A business park of this type would house a Tech Innovation Center as well as be designed with larger spaces (such as warehouses) and a parking area to accommodate space needed to support industrial/construction type businesses for homesteader's trucks and heavy equipment. The closest industrial park is the Kapa'a Quarry Industrial Park in Kailua. Otherwise, there is no light industrial area in the Waimānalo – Hawai'i Kai region. It will contain space for warehousing, storage, parking for light industrial equipment, large trucks and service vehicles that are owned and operated by area residents. The park can also function as a business incubator site for native Hawaiians.

Location – A) The lands above the quarry are a possible location. These lands are under revocable permits to house stables at the current time but could transition to other uses. B) Another site to be considered is the State Department of Land and Natural Resources (DLNR) land mauka of the wastewater treatment plant. This site is flat and easier to develop. Drainage issues need to be resolved before this site can be used.

Status - There are many owners of construction, trucking and landscaping businesses in the area with no location for their office or place to store their equipment.

Potential Partners – DHHL, OHA, Alu Like, DBEDT, HUD

Cost – Varies with the site

Potential Sources of Funding – OHA, Alu Like, Ali'i Trusts, DBEDT, Federal Economic Development Programs, Private Developers

Proposed Phasing & Timeline -

- Identify location for Business Park
- Work with DHHL's Land Management Division to market parcels
- Funding Request
- Planning and Design
- Construction



Prepared by:



For:



DEPARTMENT OF HAWAIIAN HOME LANDS