WAI’ANAЕ AND LUALUALEI
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 is developing statewide. Wai‘anae and Lualualei region is one of the five 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 Figure 1). 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.

Figure 1. DHHL’s Planning System
I. Introduction - Regional Plan Process

How are Regional Plan 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 Figure 2. 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 Plan 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 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.

Figure 2. The Regional Plan Development and Update Process
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, SBA
- Flexibility in the application of development standards, zoning, and design
- Cultural understanding and resources

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

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. A partnership with Kauai Habitat for Humanity resulted in 20 homes in Hanapepe and a partnership with Kokua Housing resulted in 41 self-help homes at Laiopua in Kona.

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 Oahu. DHHL water systems at Anahola on Kauai and Waimea on Kona are interconnected with nearby County water systems providing both parties backup source and storage capacity in the event of emergencies. DHHL has also provided numerous easements over its lands 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. Examples include the Hakalau Forest Reserve, the ‘Aina Hou Management Area, the Pala’au and Mo’omomi preserves, the Kalaulapua peninsula, and the Kamaooa-Pu’ueo 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, Kupō, Waimānalo, and Nānākuli beach parks. A three-mile stretch of ocean front Hawaiian home lands property at Anahola on Kaua’i is maintained as open space and made part of the County’s walking/biking system, which will eventually stretch from Līhu’e to Moloa’a.

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 Kalaulapua peninsula, and the Kamaooa-Pu’ueo 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, Kupō, Waimānalo, and Nānākuli beach parks. A three-mile stretch of ocean front Hawaiian home lands property at Anahola on Kaua’i is maintained as open space and made part of the County’s walking/biking system, which will eventually stretch from Līhu’e to Moloa’a.
## General Characteristics

<table>
<thead>
<tr>
<th></th>
<th>Wai‘anae Region*</th>
<th>O‘ahu</th>
<th>Hawai‘i</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population</td>
<td>16,449</td>
<td>876,156</td>
<td>1,211,537</td>
<td>281,421,906</td>
</tr>
<tr>
<td>Median age</td>
<td>28.6</td>
<td>35.7</td>
<td>36.2</td>
<td>35.3</td>
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</table>

## Social Characteristics

<table>
<thead>
<tr>
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<th>Wai‘anae Region*</th>
<th>O‘ahu</th>
<th>Hawai‘i</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>High school graduate or higher</td>
<td>78%</td>
<td>84.8%</td>
<td>84.6%</td>
<td>80.4%</td>
</tr>
<tr>
<td>Bachelors degree or higher</td>
<td>7.2%</td>
<td>27.9%</td>
<td>26.2%</td>
<td>24.4%</td>
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</tbody>
</table>

## Economic Characteristics

<table>
<thead>
<tr>
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<th>Wai‘anae Region*</th>
<th>O‘ahu</th>
<th>Hawai‘i</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median household income</td>
<td>$46,252</td>
<td>$51,914</td>
<td>$49,820</td>
<td>$41,994</td>
</tr>
<tr>
<td>Per capita income</td>
<td>$13,267</td>
<td>$21,998</td>
<td>$21,525</td>
<td>$21,587</td>
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<tr>
<td>Families below poverty level</td>
<td>18.3%</td>
<td>7.0%</td>
<td>7.6%</td>
<td>9.2%</td>
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</tbody>
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## Housing Characteristics

<table>
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<th>Wai‘anae Region*</th>
<th>O‘ahu</th>
<th>Hawai‘i</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total housing units</td>
<td>4,427</td>
<td>315,988</td>
<td>460,542</td>
<td>115,904,641</td>
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<tr>
<td>Average household size</td>
<td>4.13</td>
<td>2.95</td>
<td>2.92</td>
<td>2.59</td>
</tr>
<tr>
<td>Owner-occupied housing units</td>
<td>60.5%</td>
<td>54.6%</td>
<td>56.5%</td>
<td>66.2%</td>
</tr>
<tr>
<td>Renter-occupied housing units</td>
<td>39.5%</td>
<td>45.4%</td>
<td>43.5%</td>
<td>33.8%</td>
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<tr>
<td>Median value of single-family owner-occupied homes</td>
<td>$166,950</td>
<td>$309,000</td>
<td>$272,700</td>
<td>$119,600</td>
</tr>
</tbody>
</table>

## Homestead Characteristics

<table>
<thead>
<tr>
<th></th>
<th>Wai‘anae Region*</th>
<th>O‘ahu</th>
<th>Hawai‘i</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homestead units</td>
<td>546 (12.3%)</td>
<td>2,897 (0.9%)</td>
<td>5,875** (1.3%)</td>
<td></td>
</tr>
<tr>
<td>Total population in Homestead units</td>
<td>2,411 (14.7%)</td>
<td>14,556 (1.7%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sources: U.S. Census Bureau, 2000 and Profiles of Homestead Communities within the Hawaiian Homestead Lands Based on Census 2000 Data.

*Data for “Wai‘anae Region” is based on the Wai‘anae and Mā‘ili Census Designated Places, according to the U.S. Census.

**DHHL 2003 Annual Report, based on total number of residential leases.
Community Leaders and Stakeholders

Wai'anae Coast Neighborhood Board #24
Jo Jordan
Chair

Wai'anae Harbor
William Aila
Harbor Master

Wai'anae Coast Community
Alternative Development Corporation (WCCADC)
Puanani Burgess

Wai'anae Valley Homestead
Community Association
Lokana Keli‘ikoa Pua
President

Wai'anae Kai Homestead
Community Association
Herbert Hew Len
President

Ka'ala Farm
Eric Enos
Program Director

Wai'anae Harbor
William Aila
Harbor Master

Wai'anae Coast Community
Alternative Development Corporation (WCCADC)
Puanani Burgess

Wai'anae Kai Homestead
Community Association
Beatrice Hew Len

Thomas Zizzi
Law Office of Thomas C. Zizzi

Community Planners

Ho'opo Decambra
Billie Hauge
Geri Marullo
Leilani Collins
Kali Watson
Dee Jay A. Mailer
Lynn Okamura
John Wataoka
Randall Miura
Dita Hauge
Raechelle Fabrao
Nelson Shigeta

The organizations listed below have also been recognized by the Wai'anae community as important leaders and stakeholders:

‘Opelu Fishermen
Kaiser Permanente
Kamehameha Schools, CEO

Tamura’s Supermarket
Wai'anae Civic Club

Habitat for Humanity
Mā'ili Bible School

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.
II. Homestead and Regional Profile - Elected and Appointed Officials

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.
III. Regional Land and Development - History and Cultural Aspects of the Area

The Name

The name Wai‘anae means waters (wai) of the striped mullet (‘anae). As a location, Wai‘anae refers to both the larger district, which encompasses the western coast of O‘ahu, as well as the specific ahupua‘a. Traditionally, the area was designated as a moku, which included a narrow piece of land that extended across the middle of the island, known as Wai‘anae uka.

Wahi Pana

- The most sacred place in Wai‘anae is generally considered to be Mount Ka‘ala, easily recognizable as the highest point of the Wai‘anae ahupua‘a. The peak reaches 4,040 feet, which is also the highest point on O‘ahu.
- Pu‘u o Hulu - Pu‘u Mā‘ili‘ili‘i are hills bounding the lands of Mā‘ili. Pu‘u o Hulu was said to be a chief who was in love with Mā‘ili, one of twin sisters, but he could never tell the sisters apart when he saw them. A mo‘o (mythical lizard) was said to have turned them all into hills, so Pu‘u o Hulu remains there watching and trying to distinguish his loved one.
- Pu‘u Pahe‘he‘e Heiau is located on the makai end of Pahe‘he‘e Ridge. The heiau is believed to have been a walled heiau of two or three divisions; completely destroyed with the enlargement of the Oriental Cemetery.
- Ka hoali‘i Heiau is located on the western side of Pu‘u Pahe‘he‘e. The heiau is also known as Kamohaloi‘i Heiau. When Kahahana became ruler in 1773, he set out to restore the most important heiau. Kahahana was said to have restored Ka hoali‘i Heiau.
- There are numerous other sacred religious and house sites in Wai‘anae and Lualualei ahupua‘a.

Pre-Contact

Population (moku): Estimated between 4,000 to 6,000 people, mostly residing in Wai‘anae and Lualualei ahupua‘a
Livelihood:
- Fishing
- Dry land agriculture
- Kalo farming
Land Use:
- Wai‘anae ahupua‘a: houses, religious sites, irrigated kalo lands in the mauka and makai areas and dry crop lands scattered throughout
- Lualualei ahupua‘a: houses, religious sites, dry crop lands in upper areas, and irrigated lo‘i in Kolekole Pass and Pāhawai.

1800s to mid-1900s

Population (moku): Drastically declined, estimated at approximately 500 people (1800s)
Livelihood:
- Changing from traditional subsistence to industrial
- Sandalwood trade lasted from 1811 to 1829
Land Use:
- Cattle ranching (Early 1800s - present)
- Sugar plantation (1878 - 1947)
- Hawaiian homesteaders (1920 - present)
- U.S. Military, Lualualei Naval Magazine Pearl Harbor (1933 - present)

Sources: McGrath, et al., 1973; Cordy, 2002; Sterling, E.P and Catherine C. Summers, 1979
Wai‘anae and Lualualei Land and Natural Resources

**Climate**
- The Wai‘anae and Lualualei region has a generally arid climate.
- The coastal area of the region receives 20 inches of rainfall per year.
- In Wai‘anae and Lualualei, rainfall gradually increases from 20 inches per year near the shore to 60 and 40 inches per year in the upper valley areas.

**Geology**
Wai‘anae and Lualualei region is part of the Wai‘anae Mountains, which was once a large shield volcano that formed a gently sloping dome. Over time, the massive volcano began to erode from rain, wind, and wave actions resulting in wide and gently sloping valleys with dramatic hills dotting low lying areas, thus forming the dramatic features of Wai‘anae today.

**Soils**
- Coastal areas: coral outcrops and soils with thin topsoil over coral or sand.
- Lower to mid-level elevation: scattered good agricultural soils especially along the main stream channels.
- Upper ridges: steep, stony and rocky mountain lands.

**Vegetation**
- Pre-contact vegetation cover:
  The Wai‘anae District was dominated by lowland dry forest and lowland dry shrubland and grassland. The lowland dry forest encompassed approximately 50 percent of the land area, primarily in the valleys. The lowland dry shrubland and grassland covered up to 20 percent of the land area and can be found primarily on the coastal plains.
- Modern vegetation:
  Non-native vegetation communities cover up to 96 percent of the landscape. Native communities can only be found on those lands that are generally inaccessible due to private ownership or rough, steep terrain. Lowland dry forests currently account for only about 0.06 percent of the vegetation and lowland dry shrubland and grassland account for only 0.14 percent of the vegetation.

**Water Resources**
- Two streams are found in the Wai‘anae and Lualualei region: Kaupuni Stream and Mā‘ili‘ili‘i Stream. Both streams are “intermittent” or flowing only after significant rainfalls.
- Both Wai‘anae and Lualualei have limited ground water resources. Federal and private water systems can be found in Lualualei. Approximately a quarter of all BWS water produced for the Wai‘anae District comes from sources within the Wai‘anae ahupua‘a.
- The nearshore waters of Wai‘anae and Lualualei are heavily utilized by residents and visitors. Nearshore water quality has been threatened by both current uses and historical military weapons disposal in the coastal area.

**Land Forms and Topography**

**Critical Habitat**
A critical habitat is an area determined to have essential resources for the continued viability of threatened or endangered species. Several parts of the upper Wai‘anae and Lualualei Valleys have been designated as critical habitats for ‘elepaio birds and some native plants. Additionally, some wetlands in Lualualei Valley have been designated as waterbird critical habitats.

Sources:
III. Regional Land and Development - Hawaiian Home Lands in Wai‘anae and Lualualei Ahupua‘a

**TOTAL:** 546 existing single-family residences
• Approximate population of 2,410

**Wa‘ianae Kai Hawaiian Homesteads**
• 150 single-family residences on 22 acres; approximate population of 650

**Wa‘ianae Valley Hawaiian Homesteads**
• 396 single-family residences on 98 acres; approximate population of 1,760

**Freitas & Carlos Dairy Projects**
• Planned 32 single-family residences and 21 agricultural lots on 93 acres

**Ka‘ala Farm**
• Native Hawaiian Cultural Center on 97 acres; TMK 8-5-05:36

**Pāhe‘ehe‘e Ridge**
• Planned 19 farm lots on 234 acres, site work completed
• No houses built because area needs drainage plan and rock fall mitigation

**Wa‘ianae Coast Comprehensive Health Center and Former City Baseyard Site**
• 7.4 acres on TMKs 8-6-01:22, 40, 41, 46, & 57

**Wa‘ianae Coast Comprehensive Health Center Site-2**
• 19.8 acres land on TMKs 8-6-01:25, 26, 27, 28
• Currently leased to Wa‘ianae Coast Comprehensive Health Center for their facilities

**Kaupuni Village**
• Planned 18 house lots and a community center on a 3.353 acres
• Lot construction is completed, first house is expected to be completed in 3rd quarter of 2010

**Former Voice of America Site**
• 89 acres on TMK 8-7-10:7; currently vacant
• Title is held by the Federal GSA, pending transfer to DHHL

**Proposed Lands for DHHL Homestead Development in Partnership with Kamehameha Schools in the Ka Pua Makaha Project**
• 234 acres on TMKs 8-4-02:05, 56, 57; currently used as golf course

**Lualualei Lands**
• 74.533 acres on TMKs 8-6-03:1-3, 51-52, and 8-6-14:1
• Mostly in agricultural use

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**Future Kamehameha Schools Learning Center.**
Part of the DHHL and KS "Ka Pua" Makaha project

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**Miles**

0 0.5 1 2
Reserved for information on the proposed DHHL and Kamehameha Schools “Ka Pua” Mākaha Project, pending beneficiary consultation and Hawaiian Homes Commission approval
III. Regional Land and Development - Map of Development Projects

- **Future KS Learning Center**
- **Wai'anae Valley Hawaiian Homesteads**
- **Kaupuni Village**
- **Wai'anae Kai Hawaiian Homesteads**
- **Wai'anae Coast Comprehensive Health Center**
- **Princ. Kahanu Estates (Part of Nanakuli DHHL Region)**
- **Former Voice of America Site**
- **Maipalaoa Bridge replacement**
- **Farrington Hwy Safety Improvements (proposed project #16)**
- **Intersection Improvements at Lualualei Homestead Rd**
- **Conversion of WWTP to R-1 recycled water**
- **Safety Improvements from Leihoku St to Makau Street (in progress project #14)**
- **Kaupuni Bridge Replacement**
- **Proposed lands for DHHL homestead development in partnership with Kamehameha Schools in the Ka Pua Mākaha Project**

**Key:**
- **DHHL Property Boundary**
- **Farrington Hwy**
- **Other roads**
- **Planned/In Progress Project**
- **Proposed Project**

**Miles:**
- 0
- 0.5
- 1
- 2
Development Projects Summary

**Water**

*Planned/In Progress*
1. Lualualei Line Booster Improvements
2. Wai‘anae 242 Reservoir No. 2
3. Wai‘anae District Water Main Replacement

*Proposed*
4. Increase Potable Water Imports from the Pearl Harbor Aquifer
5. BWS Kalaeloa Desalination Plant

**Drainage**

*Planned/In Progress*
6. Various City and County Drainage Improvements

*Proposed*
7. Wai‘anae District Local Drainage Improvements Plan and Program
8. Sediment Control Program
9. Implementation of Flood Study Recommendations for Lualualei

**Wastewater**

*Planned/In Progress*
10. Phased Program for Replacement of Old Sewer Lines

**Wastewater - Continued**

*Proposed*
11. Conversion of Wai‘anae Wastewater Treatment Plant to R-1 Recycled Water
12. Coordination between City and DHHL for Sewer Connection Program

**Roads and Transit**

*Planned/In Progress*
13. Bridge Replacement
14. Various Improvement Projects along Farrington Highway
15. Honolulu High-Capacity Transit Corridor Project

*Proposed*
16. Farrington Highway Safety Improvements
17. Emergency Access Road
18. Wai‘anae Second Access Highway
19. TheBus Service Expansion

**Community/Public Facilities**

*Planned/In Progress*
20. Kaupuni Neighborhood Park
21. Wai‘anae Coast Comprehensive Health Center - Mālama Recovery Center

*Note: Projects that are not demarcated on map are either outside of the map boundaries or do not correspond to a specific location.*
III. Regional Land and Development - Development Characteristics and Trends

### Workforce

The labor force in the Wa’ianae DHHL Area consists of 6,914 residents, or 59 percent of the working age citizens. Most of these residents are employed outside of the community and commute an average of 41 minutes to work.

High unemployment rate has been a major problem in Wa’ianae. The Draft Leeward Coast Initiative Inventory Report (August 31, 2007) reported that the unemployment rate has been much higher in Wa’ianae than the State average and the gap has widened over the past twenty years.

### Employment Opportunities

One of the goals of the Wa’ianae Sustainable Communities Plan is to increase employment opportunities within the District. Community members believe that having more job opportunities in Wa’ianae would increase their quality of life, since it would reduce commute time and traffic. Similarly, increased job opportunities within the Kapolei area could also decrease commute time.

The WSCP 2009 recommends the development of more strongly defined local commercial and service centers. Local small businesses and light industrial operations are an important source of jobs for Wa’ianae people.
Future Kamehameha Schools Learning Center

In Summer of 2009, West Honolulu Investments LLC and HRT, Ltd. announced a plan to transfer 66 acres of their Mākaha lands TMK 8-4-02:07 to Kamehameha Schools. Preliminarily, Kamehameha Schools plans to develop a “Learning Innovation Center” that will include teachers laboratories and land-based learning facilities at an estimated costs of $100 million. The new Learning Center will complement current Kamehameha Schools’ programs on the Wai‘anae Coast and will be developed in partnership with DHHL in the Ka Pua Mākaha Project.

Seawinds Apartments

To include 20 studios and 30 two-bedroom units on TMK 8-5-028:44 located mauka of Wai‘anae Satellite City Hall. The Seawinds Apartments was developed by Homeless Solutions, Inc. at an estimated costs of $13.5 million. Homeless Solutions has secured $10 million in Federal grants and is hoping to raise the rest of the funds from private foundations.

Hale Wai Vista Apartments

To include 215-two and three bedroom units on TMK 8-6-1:35 located on the Mākaha (western) side of Wai‘anae Mall. The Hale Wai Vista Apartments plans were originally rejected by the Wai‘anae Coast Neighborhood Board because they did not comply with the 30 ft. maximum building height specified in the Wai‘anae Sustainable Communities Plan. The Hawai‘i Housing Development Corporation, developer of the plan, revised their plans to meet the maximum height requirement in 2007 and secured neighborhood board approval. The first building of the Hale Wai Vista is expected to be completed in 2010.
IV. Infrastructure - Water

- Freitas & Carlos Dairy Projects
- Princ. Kahanu Estates (Part of Nānākuli DHHL Region)
- Former Voice of America Site

- Proposed Lands for DHHL homestead development in partnership with Kamehameha Schools in the Ka Pua Mākaha Project

- Future KS Learning Center
- Wai‘anae Valley Hawaiian Homesteads
- Wai‘anae Coast Comprehensive Health Center

- DHHL Property Boundaries
- Water Mains
- Reservoirs

Proposed Project:
- Lualualei Line Booster Improvements

Scale: 0.5 1 2 Miles
**Existing Water System**

Based on the pumpage records available from the State of Hawai‘i Commission on Water Resource Management (CWRM), the Honolulu Board of Water Supply (BWS) provided almost all of the water consumed in the Wai‘anae District in 2008. In the same year, BWS produced about 9.3 mgd (million gallons per day), of which about 8.1 mgd was consumed. The balance was water lost through leaks in the system. The source of the total water produced by the BWS was roughly 45 percent from Wai‘anae water sources and 55 percent from the Pearl Harbor aquifer.

DHHL has a reservation with the CWRM for future water allocations for their developments. Although no significant developments are planned in the near term for DHHL lands in the Wai‘anae District, the population of the district as a whole is projected to grow, which in turn will drive up water demands. To meet that demand, the Wai‘anae Watershed Management Plan (2006) proposes several projects ranging from increase in potable water imports from the Pearl Harbor aquifer to the development of recycled water from the Wai‘anae Wastewater Treatment Plant. The projects that are most likely to be implemented are listed under the “Proposed Water Projects.” The following projects are already planned or in progress:

1. **Lualualei Line Booster Improvements**
   Status: The Lualualei Booster Improvement project is still under design; construction is scheduled to begin in 2011.

2. **Wai‘anae 242 Reservoir No.2**
   Status: Potential sites for the Reservoir are being investigated in the back of Wai‘anae Valley; construction is tentatively scheduled in FY 2015.

3. **Wai‘anae District Farrington Highway Water Main Replacement Project**
   BWS has continued to work on various water main replacement projects within Wai‘anae. For FY 2011, three water main replacement projects are planned. They are located along Pühäwai Road, Kuwale Road, and Pu‘uhulu Road in Lualualei Valley with total construction cost estimated at $2.4 million.

*Note: projects that are not demarcated on map are either outside of the map boundaries or do not correspond to a specific location.*

**Proposed Water Projects**

1. **Increase Potable Water Imports from the Pearl Harbor Aquifer**
   The Wai‘anae Watershed Management Plan (WWMP), a City and County comprehensive watershed and water development plan for the Wai‘anae District, projects an increase in potable water demand for Wai‘anae. To meet this increase, additional water imports from the Pearl Harbor Aquifer Sector have been identified as the most cost-effective short-term solution.
   
   Status: This appears to still be an effective short-term solution that will most likely be implemented. However, as water demand grows in ‘Ewa and the Primary Urban Center, an increasing amount of water from the Pearl Harbor Aquifer will be allocated to those areas, and other water supply options will need to be developed for Wai‘anae. This situation also highlights the importance of water conservation programs for the district.

2. **BWS Kalaeloa Desal Plant**
   The BWS has developed preliminary designs for a future brackish water desalination plant at Kalaeloa, on lands conveyed for public benefit from the federal government. The initial phase would produce 5 mgd, expandable to 15 mgd or more. This facility will utilize Reverse Osmosis (RO) membrane filtration to filter high quality basal brackish water from deep wells into fresh water. Once constructed, it should serve to meet the future water needs of the Districts of ‘Ewa and Wai‘anae.
   
   Status: The final design and construction of the Kalaeloa desalination plant has been deferred. The primary limiting constraint is funding the $40 million to construct the facility.
IV. Infrastructure - Drainage

DHHL Property Boundary
Stream
Drainage Ditch

Wai‘anae Valley Hawaiian Homesteads
Proposed Lands for DHHL homestead development in partnership with Kamehameha Schools in the Ka Pua Mākaha Project
Future KS Learning Center

Freitas & Carlos Dairy Projects

Wai‘anae Kai Hawaiian Homesteads
Wai‘anae Coast Comprehensive Health Center
Princ. Kahanu Estates (Part of Nānākuli DHHL Region)
Former Voice of America Site

Wai‘anae Valley Hawaiian Homesteads

Kaupuni Village

Hawaiian Homesteads Freitas & Carlos Dairy Projects

Wai‘anae Kai Hawaiian Homesteads
Wai‘anae Coast Comprehensive Health Center
Princ. Kahanu Estates (Part of Nānākuli DHHL Region)
Former Voice of America Site

Future KS Learning Center

Wai‘anae Valley Hawaiian Homesteads
Proposed Lands for DHHL homestead development in partnership with Kamehameha Schools in the Ka Pua Mākaha Project

Future KS Learning Center
Background of Drainage Conditions

There are no perennial streams in the coastal areas of the Wai‘anae District, and the average annual rainfall in the coastal plain is less than 20 inches. Nonetheless, the area has experienced drainage problems and damage as a result of severe storms. Studies conducted in the 1950s showed that the major cause of flooding was the accumulation of sand at the dry stream mouths, which blocked water runoff during heavy rains.

As a result of these studies, the lower reaches of five streams in the District were channelized to improve storm water flow to the ocean. The Wai‘anae ahupua‘a contains the Kaupuni Stream channel, while Lualualei has three such streams: the Mā‘ili‘ili‘i, the Mā‘ili, and the Ulehawa Streams. The fifth channelized stream is the Nānakuli Stream, located in the Nānakuli ahupua‘a.

Localized flooding is still a problem in the District due to the following factors:

- Some areas along Farrington Highway are higher in elevation than mauka lands which creates a damming effect for water flowing to the ocean.
- Lack of adequate drainage facilities in subdivisions and existence of unpermitted property walls that divert storm water
- Alteration to the natural drainage swales and ditches
- Clogged storm drains from debris

Proposed Drainage Projects

Wai‘anae District Local Drainage Improvements Plan and Program

To successfully mitigate the current drainage problems within the Wai‘anae District, the Wai‘anae Sustainable Communities Plan 2009 (WSCP 2009) proposes a comprehensive approach that combines the following components: (1) construction of flood mitigation measures; (2) creation of programs for the enforcement of rules and regulations relating to drainage systems on residential and agricultural lands; (3) creation of public education programs. The development of these projects and programs should take into account the need for stream environmental protection as well as the need for preservation of the rural character of the area.

Status: The City has recently submitted a proposal to the Department of Land and Natural Resources (DLNR) through the “Flood Mitigation Assistance Program” (FMA Program) to prepare a “Drainage Master Plan” for Wai‘anae.

Sediment Control Program

The WSCP 2009 also proposes the establishment of a sediment control program to protect both stream quality and the quality of nearshore waters. Minimally, the WSCP proposes that standards for the creation and use of sediment basins at critical locations on both agricultural and urban lands should be established.

Implementation of Flood Study Recommendations for Lualualei

A Flood Study for Lualualei was performed by the US Army Corps of Engineers and the US Department of Agriculture – Natural Resources Conservation Service in 2001. Analysis of flooding in this area found insufficient drainage infrastructure. Sumps without drainage relief were also found to be prevalent in the area.

Status: The implementation of the Lualualei Flood Study recommendations has proceeded very slowly and in a piecemeal fashion. The Navy has secured some funding for design studies to implement a detention basin and the City is working on drainage improvements on Hakimo Road and Auyong Homestead Road.

*Note: projects that are not demarcated on map are either outside of the map boundaries or do not correspond to a specific location.
IV. Infrastructure - Wastewater/Sewer

- Conversion of Wai’anae Wastewater Treatment Plant to R-1 Recycled Water

Proposed Lands for DHHL homestead development in partnership with Kamehameha Schools in the Ka Pua Mākaha Project

Freitas & Carlos Dairy Projects

Wai’anae Valley Hawaiian Homesteads

Kaupuni Village

Future KS Learning Center

Wai’anae Kai Hawaiian Homesteads

Wai’anae Coast Comprehensive Health Center

Princ. Kahanu Estates (Part of Nānākuli DHHL Region)

Former Voice of America Site

DHHL Property Boundary

Sewer Main

Proposed Project

0 0.5 1 2 Miles
Existing Wastewater, Collection, Treatment, and Disposal

Wastewater for the Wai’anae District is collected at the Wai’anae Wastewater Treatment Plant (WWTP) located north of Pu’u Mā’ili’ili’i and south of Wai’anae Mall. The WWTP has design capacity to treat an average of 5.2 mgd (millions of gallons per day), and a peak flow of 13.8 mgd. In 2007, the Plant treated approximately 3.5 mgd, thus it still has excess capacity for additional flows.

Even though the Treatment Plant has excess capacity, many of the older homes that were initially developed with cesspools have not yet connected to the wastewater collection system. In 2000, that number was approximately 1,180 homes in the Waianae District, many of which are on property that was developed by DHHL. For DHHL homesteaders without sewer connection, the responsibility of hooking up lies with the residents.

Phased Program for Replacement of Old Sewer Lines

The program for the phased replacement of old sewer lines in Farrington Highway and in the main valley roadways should be continued. The sewer main that services areas between Pōka’i Bay and Mākaha Valley is operating at capacity and will need to be upgraded should development and growth continue in Mākaha.

Status: The sewer lines are currently being replaced in various stages.

Proposed Wastewater/Sewer Project

Conversion of Wai’anae Wastewater Treatment Plant to R-1 Recycled Water

The Wai’anae Wastewater Treatment Plant (WWTP) was recently upgraded to secondary level treatment (R-2 effluent). The ocean outfall located approximately 1.1 miles offshore has also been extended to a greater depth.

R-1 is the highest quality recycled water and is approved for a variety of irrigation purposes. The BWS Islandwide Non-Potable Water Master Plan (2006) preliminarily identified several potential users for R-1 recycled water should it be made available through the upgrade of the current WWTP. Potential users identified include various agricultural operations located mauka of the treatment plant, the NAVCAM EASTPAC military facility in Lualualei, and various State and City parks in the vicinity.

No plan is currently in place for further conversion of the R-2 effluent to R-1 quality. The principal constraint for the development of recycled water facilities at the WWTP is the high chloride content of the wastewater due to aging sewer mains that allow for infiltration of seawater.

Status: The Wai’anae Watershed Management Plan (2006) states that the conversion to R-1 effluent should be part of the overall long-range water resources management plan for the district. The Plan also encourages the City and County of Honolulu to plan for a timely replacement of the old sewer mains.

Coordination Between City and DHHL for Sewer Connection Program

The Wai’anae Sustainable Communities Plan (2009) recommends that the City and DHHL work together to establish a program that will assist DHHL homesteaders to connect to the wastewater collection system. For this purpose, assistance can be provided in the form of small grants or low interest loans to lower income families.

*Note: projects that are not demarcated on map are either outside of the map boundaries or do not correspond to a specific location.
IV. Infrastructure - Roads and Transit

- Wai‘anae Valley Hawaiian Homesteads
- Proposed Lands for DHHL homestead development in partnership with Kamehameha Schools in the Ka Pua Mākaha Project
- Future KS Learning Center
- Wai‘anae Coast Comprehensive Health Center
- Princ. Kahanu Estates (Part of Nānākuli DHHL Region)
- Former Voice of America Site
- Former Voice of America Site (Part of Nānākuli DHHL Region)
- Kaupuni Village
- Kaupuni Bridge replacement
- Intersection Improvements at Lualualei Homestead Rd
- Maipalaoa Bridge replacement
- Freitas & Carlos Dairy Projects
- Hakimo Rd
- Lualualei Homestead Rd
- Wai‘anae Valley Rd

Map symbols:
- DHHL Property Boundary
- State Road
- County Road
- Federal Road
- Private Road
- Safety Improvements from Leihoku St to Makau St
- Safety Improvements from Ali‘inui Dr to Mākua Valley Rd
In Progress/Planned Road and Transit Projects

1 Bridge Replacement
State Department of Transportation (DOT) currently has two active projects in Wai’anae, replacement of Mākaha Bridges #3 and 3A in the vicinity of Mākaha Beach Park and replacement of Maipalaoa Bridge near the Maipalaoa Road. These projects are currently in various stages of development.

2 Various Improvement Projects along Farrington Highway
The FY 2008-2011 Transportation Improvement Program (TIP) includes several other improvement projects along Farrington Highway, namely Kaupuni Bridge replacement, intersection improvements at Lualualei Homestead Road, and safety improvements from Leihoku Street to Makau Street.

3 Honolulu High-Capacity Transit Corridor Project
The Honolulu High-Capacity Transit Corridor Project is a 20-mile elevated rail line project designed to run from East Kapolei through downtown Honolulu to Ala Moana Center. The system will feature electric steel-wheel trains. When completed, this project could be utilized by those people who commute from Wai'anae to Honolulu, although they would have to first travel to Kapolei.

Status: On October 22, 2009, The City awarded the first phase design and construction project to Kiewit Pacific, Co. The first phase rail system will run from East Kapolei to Pearl Highlands near Leeward Community College and is expected to be fully operational in 2012.

Proposed Road and Transit Projects

4 Farrington Highway Safety Improvements
In addition to improvements listed in the 2008-2011 TIP, longer term improvements have also been proposed on O’ahu Regional Transportation Plan 2030 (ORTP 2030) Long-Range Plan Project List (2016 to 2030). The project is generally termed “Farrington Safety Improvements” and includes the realignment of Farrington Highway, around Mākaha Beach Park. Project boundaries are from Ali‘inui Drive to Makua Valley Road and was estimated to cost around $ 69.7 million (in 2005 $).

5 Emergency Access Road
The Emergency Access Road would go from Farrington Highway, up Lualualei Naval Road, and through Kolekole Pass to Kunia Road. The Road would only be opened in times of emergency.

Status: Proposed by the local community, the potential for implementation of the Emergency Access Road is limited due to Navy security restrictions.

6 Wai’anae Second Access Highway
The Wai’anae Second Access Highway is proposed from Farrington Highway, up Lualualei Naval Road, through the Wai‘anae Mountain Range at Pōhakea Pass, to connect to Kunia Road in the ‘Ewa District.

Status: The Second Access Highway is currently on O’ahu Regional Transportation Plan 2030 (ORTP 2030) Long-Range Plan Project List (2016 to 2030), with an estimated capital cost of $ 423 million (in 2005 $).

7 TheBus Service Expansion
The ORTP Mid-Range Plan Project List (2006 to 2015) includes expanded bus service to Wai‘anae, including increased Express service.

Status: The project timeline has not yet been determined.

*Note: projects that are not demarcated on map are either outside of the map boundaries or do not correspond to a specific location.
IV. Infrastructure - Public Facilities

- DHHL Property Boundary
- Healthcare Facility
- Police Station
- Fire Station
- Public School
- Public Park
- Library

In Progress/Planned Project
1. Kaupuni Neighborhood Park
2. Mālama Recovery Facility

Wai‘anae Valley Hawaiian Homesteads
Proposed Lands for DHHL homestead development in partnership with Kamehameha Schools in the Ka Pua Mākaha Project

Wai‘anae Intermediate
Wai‘anae Elementary
Wai‘anae High

Mākaha Elementary
Future KS Learning Center

Kamaile Intermediate

Leihoku Elementary
Mā‘ili Elementary

Wai‘anae Coast Comprehensive Health Center
Wai‘anae Kai Hawaiian Homesteads

Freitas & Carlos Dairy Projects

Mākaha
Wai‘anae
Leihoku
Mā‘ili

Kaupuni Village

Former Voice of America Site

Wai‘anae Valley Rd
Lualualei Homestead Rd
Wai‘anae Coast Hawaiian Homesteads

0 0.5 1 2 Miles

WAI‘ANAE AND LUALUALEI
Parks

The Wa‘ianae District currently has 20 parks from seven different categories. This number, however, constitutes a shortage especially in the number of Neighborhood Parks and in the total acreage of park lands. Development of adequate public parks is a top priority listed in the Wa‘ianae Sustainable Communities Plan (2009). The Plan recommends at least one more Neighborhood Park and one additional Community Park be developed by the year 2020.

1. Kaupuni Neighborhood Park

City’s Department of Design and Construction (DDC) has contracted a design consultant to develop the Park Plan. Phase 1 construction is expected to begin by end of October 2010. Phase 1 construction includes lighted basketball courts, retaining walls along the slope on the northwestern edge of the Park, concrete stairs along the retaining walls, pedestrian pathways, and perimeter walls. Next phases of the Park include construction of a T-ball field, volleyball field, a community center, and the rest of perimeter walls and sidewalks.

Status: Phase 1 construction is expected to be completed by end of May 2011.

Schools

The State Department of Education (DOE) currently operates 9 public schools in the Wa‘ianae District, three of which are in Wa‘ianae. This includes four elementary schools, one intermediate, and one high school. In addition, there are two private schools and two charter schools in the area. Overall, these schools generally have sufficient capacity for the limited growth projected for the District.

<table>
<thead>
<tr>
<th>School</th>
<th>Grades</th>
<th>Capacity SY 09-10</th>
<th>Actual Enrollment SY 09-10</th>
<th>% of Capacity</th>
<th>Projected Enrollment SY 10-11</th>
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<tbody>
<tr>
<td>Wa‘ianae Complex</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Le‘eahi Elem</td>
<td>K – 6</td>
<td>993</td>
<td>787</td>
<td>79%</td>
<td>886</td>
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<tr>
<td>Mā‘ili Elem</td>
<td>K – 6</td>
<td>928</td>
<td>694</td>
<td>75%</td>
<td>782</td>
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<tr>
<td>Mākaha Elem</td>
<td>K – 6</td>
<td>656</td>
<td>494</td>
<td>75%</td>
<td>587</td>
</tr>
<tr>
<td>Wa‘ianae Elementary</td>
<td>K – 6</td>
<td>892</td>
<td>511</td>
<td>57%</td>
<td>601</td>
</tr>
<tr>
<td>Wa‘ianae Intermed</td>
<td>7 – 8</td>
<td>1093</td>
<td>713</td>
<td>65%</td>
<td>884</td>
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<tr>
<td>Wa‘ianae High</td>
<td>9 – 12</td>
<td>1902</td>
<td>1612</td>
<td>85%</td>
<td>1865</td>
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<tr>
<td>Charter School</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kamaile Academy</td>
<td>K – 6</td>
<td>820</td>
<td>766</td>
<td>93%</td>
<td>890</td>
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<tr>
<td>Ka Waihona o ka Na‘a‘ao</td>
<td>K – 8</td>
<td>570</td>
<td>574</td>
<td>1%</td>
<td>N/A</td>
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<tr>
<td>Private Schools</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adventist Mālama Elem</td>
<td>K – 8</td>
<td>39</td>
<td>60</td>
<td>65%</td>
<td>39</td>
</tr>
<tr>
<td>Mā‘ili Bible School</td>
<td>K - 12</td>
<td>95</td>
<td>260</td>
<td>37%</td>
<td>N/A</td>
</tr>
</tbody>
</table>

The figure in red indicates the percentage by which the school was over capacity for the ’09-10 school year.

Library

The Wa‘ianae Public Library is the only Hawai‘i State Public Library in the Wa‘ianae District. It therefore services the entire region. However, in July 2006, Governor Lingle released $46,000 to finance a project development report and master plan to assist the Hawai‘i State Public Library System in planning a new public library in Nānākuli.

Healthcare Facilities

- Kaiser Permanente is located in the Nānākuli Clinic in Nānākuli. The facility offers regular health care services, including family practice, internal medicine, and pediatrics, along with clinical services such as diabetes education, diagnostic imaging, and nutrition counseling.
- Queen Lili‘uokalani Children’s Center offers services for Hawaiian orphans and destitute children.
- Wa‘ianae Coast Comprehensive Health Center (WCCHC) is an outpatient medical clinic that offers a wide variety of services including counseling for family violence, substance abuse, and diabetes, health and wellness programs, traditional Hawaiian healing, adult day care, and health screening.

Fire/EMT Services

The Honolulu Police Department services the Wa‘ianae District through the Wa‘ianae Police Station and the Barbers Point substation. The Wa‘ianae Police Station handles a large number of 911 calls and a large number of arrests, typically about 6,000 to 7,000 calls to 911 and 500 to 600 arrests in an average month. This situation calls for an increase in the manpower for the Wa‘ianae Station as adequate police services are critical for the safety and welfare of the Wa‘ianae community.

The Honolulu Fire Department has two fire stations in the Wa‘ianae District – one in Nānākuli (Station 28) and the other in Wa‘ianae Valley (Station 26). The Nānākuli Fire Station is equipped with an engine, a tanker truck, and an inflatable rescue boat. The Wa‘ianae Valley Station is equipped with an engine, a quint (combination pumper/ladder truck), and a tanker. Back-up service is provided by fire stations in Kapolei, Makakilo, ‘Ewa, and Waipahu.
### V. Homestead Issues and Priorities - Issues, Opportunities, and Potential Projects

<table>
<thead>
<tr>
<th>Issues</th>
<th>Opportunities/Potential Projects</th>
</tr>
</thead>
</table>
| Traffic | - Install speed bumps/humps or raised crosswalks on segment of road fronting Leihoku Elementary  
- Implement the emergency access road through Kolekole Pass  
- Fix Farrington Highway and other roads to allow for better traffic  
- DHHL send notes of aloha to remind homesteaders to keep the sidewalks walkable |
| Community Education | - Immersion and/or charter school in Wai’anae  
- Develop a center that will educate the public about local history and cultural roots  
- Need financial literacy and business education programs for the community |
| Community Use Areas | - Identify and determine areas for community use  
- Identify steps toward the implementation of community vision for the Kaupuni Park’s community center  
- Development of Voice of America site should include suitable community uses  
- Explore possibility of acquiring Mākua lands for community use  
- DHHL position itself to receive Lualualei lands once Navy’s use is terminated |
| Community-Based Economic Development Project |  
- Identify suitable sites for community-based economic development projects  
- Preliminary ideas: community-run gathering facility with certified kitchen; look at possibility of acquiring Pililā‘au Army Recreation Center for community-run facility |
| Cemetery |  
- Identify potential sites for a cemetery |
| Water, Sewer, and Illegal Dumping |  
- Investigate potential for homestead associations to police common areas  
- Identify other small and doable projects to address illegal dumping  
- Develop a feasibility project to reuse gray water  
- Develop a program that helps homesteaders hook up to City’s sewer lines  
- Determine possibility of installing separate irrigation water meter to reduce sewer charges |
| Homesteaders’ Houses |  
- Develop an energy project to retrofit houses with solar or PV panels and identify funding sources  
- Repair older homes  
- Get homesteaders to plant one front tree on every homestead lot |
| Agriculture and Food Security |  
- Develop an agriculture master plan for the region in collaboration with agricultural operations in Wai’anae  
- Preliminary ideas: 1) develop small farm lots in Wai’anae; 2) develop community gardens at each homestead site; 3) teach backyard aquaponics system  
- Acquisition of lands leased to Wai’anae Valley Ranch from Department of Agriculture |
Priority Project: Kaupuni Community Center

**Location**
- Wai’anae Valley Homesteads, TMK 8-5-32:039

**Description**
- The Kaupuni Neighborhood Center occupies a 7.5-acre parcel of land within the Wai’anae Valley Homesteads. The land is owned by DHHL and is leased to the City until the year 2020. The City has a plan to develop Kaupuni Park, including athletic fields and courts as well as a community center. Upon completion of the community center, the Wai’anae Valley Homestead Association proposes to manage it for revenue generating activities.

**Status**
- Funding has been secured for Phase I construction. Currently, funding has not been programmed for Phase II, Phase III, and Phase IV construction.

**Potential Partners**
- DHHL, Wai’anae Valley Homesteads Association, City’s DPR, City’s DDC

**Cost**
- Phase I: $1.15 Million (2009 $)
- Phase II: $1.27 Million (2004 estimate)
- Phase III: $1.12 Million (2004 estimate)
- Phase IV: N/A

**Phasing**
- **Phase I:** Lighted basketball courts, retaining walls along the slope on the northwestern edge of the park, concrete stairs along the retaining wall, pedestrian pathways connecting the retaining wall and Punanaula Street, perimeter walls along Kaneaki Street and around the end of Punanaula Street.
- **Phase II:** Multi-purpose field
- **Phase III:** Community center
- **Phase IV:** T-ball field, volley ball field, keiki lot

**Project Sequence**
- 2009
  - Project Design
- 2010
  - Phase I Bidding and Awarding of Contract
- 2011
  - Phase I Construction
  - Next Phases Construction
- 2012

**Description**
- The Kaupuni Neighborhood Center occupies a 7.5-acre parcel of land within the Wai’anae Valley Homesteads. The land is owned by DHHL and is leased to the City until the year 2020. The City has a plan to develop Kaupuni Park, including athletic fields and courts as well as a community center. Upon completion of the community center, the Wai’anae Valley Homestead Association proposes to manage it for revenue generating activities.

**Location**
- Wai’anae Valley Homesteads, TMK 8-5-32:039

**Status**
- Funding has been secured for Phase I construction. Currently, funding has not been programmed for Phase II, Phase III, and Phase IV construction.

**Potential Partners**
- DHHL, Wai’anae Valley Homesteads Association, City’s DPR, City’s DDC

**Phasing**
- **Phase I:** Lighted basketball courts, retaining walls along the slope on the northwestern edge of the park, concrete stairs along the retaining wall, pedestrian pathways connecting the retaining wall and Punanaula Street, perimeter walls along Kaneaki Street and around the end of Punanaula Street.
- **Phase II:** Multi-purpose field
- **Phase III:** Community center
- **Phase IV:** T-ball field, volley ball field, keiki lot

**Cost**
- Phase I: $1.15 Million (2009 $)
- Phase II: $1.27 Million (2004 estimate)
- Phase III: $1.12 Million (2004 estimate)
- Phase IV: N/A
### V. Homestead Issues and Priorities - Priority Project: Wai‘anae Kai Community Development

**Description** - The Wai‘anae Kai Hawaiian Homestead Association (WKHHA) is planning several projects on DHHL lands located in the vicinity of the Wai‘anae Kai Homesteads. The concept is to develop both revenue-generating and community facilities, including a photovoltaic (PV) farm, a community center, and kūpuna and transitional housing.

**Location** - DHHL lands in the vicinity of Wai‘anae Kai Homesteads.

**Status** - The WKHHA in collaboration with Hawaiian Community Development is currently developing conceptual plans for Wai‘anae Kai Ridgeside, an affordable rental housing project on the ‘Ewa side of Pahe‘ehe‘e Ridge. The WKHHA is also developing plans for PV farms and community parks with sports facilities at nearby locations. For these projects, the WKHHA needs to secure a long term lease.

**Potential Partners** - DHHL, WKHHA, Hawaiian Community Development, HECO

**Phasing** - Phase I: Establishment of a formal organization, typically a non-profit corporation and development of organization’s vision, mission, and goals.

Phase II: Preliminary project planning including identification of potential projects and applying for implementation grants.

Phase III: Project implementation steps, including: 1) development of business plans, securing site, property assessment, and development of plans and cost estimates; 2) partnership building, financing, and negotiation with developers; 3) design and construction.

Phase IV: Marketing and management for a sustainable project.

**Cost** - Not yet determined
Priority Project: Wai‘anae Transportation Corridor Coordination and Improvements

**Description** - To provide coordination among all stakeholders with the ultimate goal of providing relief for Waiʻanae/Nānākuli coast residents which have had to deal with years of constant interruptions along Farrington Highway. Improvements to coordinate include corridor beautification, undergrounding of utilities, utility repairs, roadway widening where appropriate, and construction of traffic and safety improvements.

**Location** - Farrington Highway from Hakimo Road to Malu‘u Road.

**Status** - Currently, when work needs to be completed along Farrington Highway, the agency usually schedules a public meeting or addresses the Neighborhood Boards to inform them of their work. There was a recent infrastructure coordination body (City’s Government and Public Utilities Task Force) that was created which may be useful in implementing this Priority Project.


**Phasing** -

- **Phase I**: Identify a core group of homesteaders that can work on this project. DHHL call meeting of stakeholders to determine what can be done to implement the project.
- **Phase II**: Stakeholders develop a Plan of Action for approval/consent by affected agencies.
- **Phase III**: Coordinated road construction.

**Cost** - Not yet determined

**Map**

- DHHL Properties Boundary
- Public Parks
- Farrington Highway

**Project Schedule**

- 2010: Core group identification and stakeholder meetings
- 2011: Development of Plan of Action
- 2012: Coordinated road construction
### V. Homestead Issues and Priorities - Priority Project: Going Green in Wai‘anae

**Description** - The objective of this project is to create energy and water efficient homes within existing DHHL homesteads in Wai‘anae. The following components are proposed for inclusion in the project:
1. Energy retrofitting and installation of solar water heaters and/or photovoltaic panels.
2. Determination of feasibility for reuse of gray water and determination of possibility for installation of a separate irrigation water meter to reduce sewer charges.
3. Programs that assist homesteaders hook up to City sewer system.

**Location** - DHHL homesteads in Wai‘anae

**Status** - A pilot project for “green homes” is being developed at the nearby Kaupuni Village. Kaupuni Village can be the prototype for this project.

**Potential Partners** - DHHL, Wai‘anae Kai Homestead Association, Wai‘anae Valley Homestead Association, HECO, BWS

**Phasing** -
Phase I: Kaupuni Village development.
Phase II: Learning from Kaupuni Village’s experience, the project can proceed with identification of effective and feasible energy and water retrofitting devices for installation in existing homesteaders’ houses. This phase should also include identification of sources of grants and partnerships to assist in project implementation.
Phase III: Detailed design and approval process
Phase IV: Install green devices

**Cost** - Not yet determined

---

### Project Schedule

<table>
<thead>
<tr>
<th>Year</th>
<th>Phase I</th>
<th>Phase II</th>
<th>Phase III</th>
<th>Phase IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>Kaupuni Village Development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>Project Planning (Phase II)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>Detailed Design and Approval process</td>
<td>Install green devices</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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**Map**

- Wai‘anae Valley Homesteads: 396 single family homes
- Wai‘anae Kai Homesteads: 150 single family homes
- Future Kaupuni Village: 18 single family homes, pilot model for “green homes”
- Planned PV farm on the ‘Ewa side of Pahe‘ehe‘e Ridge
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**WAI‘ANAE AND LUALUALEI**
Priority Project: Agriculture/Aquaculture Production and Food Security

Description - The decline in agricultural operations in Wai'anae is alarming given the importance of food security in the context of Hawai'i’s geographical isolation. Active cultivation of agricultural land is of critical importance to the revitalization of agriculture in Wai'anae. Equally important is the development and support for subsistence agriculture, within smaller residential lots. This project aims at providing educational and training programs that would allow existing lessees to engage in agricultural production for subsistence or for supplemental income.

Location - DHHL lands in Wai'anae

Status - A pilot project for community and backyard aquaponics system is being developed at Kaupuni Village.

Potential Partners - Wai'anae Kai Homestead Association, Wai'anae Valley Homestead Association, Ka'ala Farm, MA'O Organic Farm, OPELU project, other farmers, local fishermen, community gardeners, DHHL, DLNR, DOA, UH-CTAHR

Phasing - Phase I: Development of Kaupuni Village, including the establishment of aquaponics system training at the Village; Phase II: Development of agriculture master plan for Wai'anae. The master plan should include components such as development of DHHL agricultural lots and identification of strategic steps toward acquisition of more lands for future farms. Additionally, using experiences from the Kaupuni model, identify effective programs that teach community/backyard farming. Programs that establish linkages between homesteaders and local agriculture/aquaculture practitioners should also be pursued; Phase III: Agricultural site construction and program implementation

Cost - Not yet determined