I. Introduction - Regional Plan Goals & Process

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. Papakōlea 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 topics 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 include 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.

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 is 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 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.
**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, SBA
- Flexibility in the application of development standards, zoning, and design
- Cultural understanding and resources

**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. 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 Waiau-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 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. Such multi-service complexes have been built on Hawaiian Home Lands in partnership with Kamehameha Schools, Queen Lili‘uokalani Children’s Center, Ahu Like, Papa Ola Lōkahi, 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 Pa‘uikōkalo 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. DHHL, private businesses, government agencies, and private foundations have joined together to provide materials for playgrounds constructed by homestead associations and other community volunteers.

4. **Natural Resource Management Partnerships**
   
   Through a series of management partnerships with DLNR, the Nature Conservancy’s Honouliuli Preserve, and other property owners, unique ecosystems and historic sites are being protected. For example, DHHL is partnering with DLNR to protect the red ‘ilima (abutilon) in East Kapolei. Other examples include the Hakalau Forest Reserve, the ‘Aina Hou Management Area, the Pala‘au and Mo‘omomi preserves, the Kalaupapa peninsula, and the Kama‘aina-Pu‘ukolola 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, Kaupo, Waimānalo, and Nānākuli beach parks.
Papakölea is located in the Punchbowl-Tantalus area of Honolulu at the base of the Ko’olau Range in the Honolulu ahupua’a of the Kona Moku. The Department of Hawaiian Home Lands has a total of 183 acres in the region, inclusive of three homestead communities: Papakolea, Kewalo, and Kalawahine. Of the total acreage, 89 acres are used for homesteading while the remaining 94 acres are designated for community use or conservation. There are 270 homes in Papakolea and upper Kewalo and approximately 1500 residents. House lots tend to be small and on the slopes of the mountainside. Homes are close together. With the exception of Tantalus Drive, which is the main thoroughfare through Papakolea, streets are narrow and off-street parking is limited. As a result, many families must park on the street making passage through some streets difficult.
Regional Demographics

**General Characteristics**

<table>
<thead>
<tr>
<th>Region</th>
<th>Honolulu County</th>
<th>State</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population</td>
<td>1,575</td>
<td>905,034</td>
<td>1,228,198</td>
</tr>
<tr>
<td>Median age (Years)</td>
<td>32.8</td>
<td>37.3</td>
<td>38.1</td>
</tr>
</tbody>
</table>

**Social Characteristics**

- High School Graduate or Higher: 82% (Honolulu), 88.8% (State), 89.4% (U.S.), 84% (Papakōlea)
- Bachelor’s Degree or Higher: 17.5% (Honolulu), 30% (State), 29.2% (U.S.), 27% (Papakōlea)

**Economic Characteristics**

- Median Household Income: $52,167 (Honolulu), $64,355 (State), $63,746 (U.S.), $50,007 (Papakōlea)

**Housing Characteristics**

- Total Housing Units: 334 (Honolulu), 332,000 (State), 507,000 (U.S.), 26,237,884 (Papakōlea)
- Occupied Units: 100% (Honolulu), 90.7% (State), 86.7% (U.S.), 88.4% (Papakōlea)
- Units Occupied by owner: 100% (Honolulu), 57% (State), 60% (U.S.), 67.3% (Papakōlea)
- Median Value - Single Family Home: $183,700 (Honolulu), $521,500 (State), $535,400 (U.S.), $181,800 (Papakōlea)
- Units Occupied by Renter: -- (Honolulu), 39.3% (State), 36.4% (U.S.), 33.8% (Papakōlea)
- Median Gross Rent: $554 (Honolulu), $1,161 (State), $1,94 (U.S.), $781 (Papakōlea)
- Vacant units: 38 (Honolulu), 9% (State), 13% (U.S.), 11.6% (Papakōlea)
- Homeowner vacancy rate: -- (Honolulu), 0.9% (State), 1.2% (U.S.), 2.2% (Papakōlea)
- Rental vacancy rate: N/A (Honolulu), 4.8% (State), 9.4% (U.S.), 7.8% (Papakōlea)
- Home ownership rate: -- (Honolulu), 56.9% (State), -- (U.S.), -- (Papakōlea)


**Geographic Area**: Aauwaiolimu, Kalāwahine, Kewalo, Papakōlea Homestead

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**Primary Urban Center**

Papakōlea is located within the Primary Urban Center and therefore within minutes to major commercial, medical and other business and service sector areas including downtown Honolulu, Makiki, Ala Moana and Kalihi.

Kalāwahine Streamside consists of 55 multilevel duplexes and 33 three story single family houses that provide homes for 87 Hawaiian Homestead Applicants. Assuming a household of 3 per house, the estimate population for Kalāwahine is 261.
Homestead Leaders

Homesteaders and leaders from Papakōlea, Kewalo and Kalāwahine are valuable assets to this Regional Plan. Below are a few homesteaders and leaders who participated in the Regional Planning process.
# Community Leaders & Stakeholders

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Company/Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patricia Hamamoto</td>
<td>Superintendent</td>
<td>Department of Education</td>
</tr>
<tr>
<td>Anthony J.H. Ching</td>
<td>Executive Director</td>
<td>Hawai‘i Community Development Authority</td>
</tr>
<tr>
<td>Sylvia Young</td>
<td>Chair</td>
<td>Nu‘uanu / Punchbowl Neighborhood Board #12</td>
</tr>
<tr>
<td>John Steelequist</td>
<td>Chair</td>
<td>Makiki / Lower Punchbowl / Tantalus Neighborhood Board #10</td>
</tr>
<tr>
<td>Kaulana H.R. Park</td>
<td>Chairman, Hawaiian Homes Commission</td>
<td></td>
</tr>
<tr>
<td>Donald S. M. Chang</td>
<td>O‘ahu Commissioner</td>
<td></td>
</tr>
<tr>
<td>M.R.C. Greenwood</td>
<td>President</td>
<td>University of Hawai‘i</td>
</tr>
<tr>
<td>Sylvia Young</td>
<td>Chair</td>
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</tr>
</tbody>
</table>

**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 Officials

Linda Lingle  
Governor

Duke Aiona  
Lt. Governor

Daniel K. Inouye  
U.S. Senator

Daniel K. Akaka  
U.S. Senator

Neil Abercrombie  
U.S. House of Representatives  
Congressional District 1

Walter Meheula Heen  
OLHA Trustee, O‘ahu Chair

Mufi Hannemann  
Honolulu Mayor

Carol Fukunaga  
State Senatorial District 11

Suzanne Chun Oakland  
State Senatorial District 13

Della Au Bellati  
State House of Representatives  
District 25

Sylvia Luke  
State House of Representatives  
District 26

Rod Tam  
Council District 6

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.
The lands of Kalāwahine and Papakōlea are a part of a rich historical past from traditional times and continue to be a source of cultural knowledge as preserved in the moʻolelo, mele, and place names in the surrounding area. Papakōlea is contained within the traditional mokuokolo of Kona and within the Honolulu ahupuaʻa. Traditionally, the Honolulu ahupuaʻa extended from the shores of Iwilei, Māmāloa (Honolulu Harbor), Kukuluaʻeʻo, Kalia to the Nuʻuanu Pali overlooking the windward side of Oʻahu. The breadth of the Honolulu ahupuaʻa extended from Kapalama Stream to west until the edge of Mānoa Valley to the east. Papakōlea is nestled between the significant land forms of Kupanahi (Pacific Heights), Pūowaina (Punchbowl, and home today to the National Memorial Cemetery of the Pacific), and Puʻuʻōhiʻa (Tantalus), and Maunalaha (Makiki), with the streams of Pauoa and Kanahā traversing from the upper slopes.

Archival information indicates that the surrounding area, including the side of Pūowaina crater facing Papakōlea, was primarily suited and utilized for ʻuala cultivation since the time of Kamehameha through the late 1800s and early 1900s. The upper forested slopes were denuded in the nineteenth century as a result of ʻiliali (sandalwood) harvesting, the transitioning land tenure patterns for using nearby trees for local firewood and cattle grazing.

Although the traditional ruling centers of Oʻahu included ʻEwa, Waikīkī and Koʻolaulopoko, Honolulu was an important and fertile area on the island. The establishment of Honolulu as the main trading port of Oʻahu in the 1800s and the official capital for the entire Hawaiian Kingdom by 1850 highlights the importance of the area. By 1848, the time of the Māhele, the ahupuaʻa of Honolulu was divided into over forty ʻili, as listed in the Indices of Awards. The organization of the ʻili appears to be complex and the archival documentation of the ʻili boundaries is limited by the lack of pre AD 1850 maps of Honolulu. Extensive trails connected the residences near the harbor to the base of Pūowaina up through Nuʻuanu and Pauoa valley. Kalāwahine is understood to be an ʻili of Honolulu, comprised of three ʻili lele.

In 1831, German botanist F.J.F. Meyen documented the presence of a well established village of Hawaiians in Papakōlea and noted the active cultivation of taro in the adjacent valleys. Additionally, Meyen noted an abundance of maʻaloa, olona, maile, ʻilmia, papala, kukui, and koa with evidence of slope lands being transformed into grass lands for horses and cattle grazing.

Oral accounts suggest the lands of Kalāwahine were a puʻuhonua, a place of refuge, including the forest lands of Kapíhe, during the period of the overthrow of Queen Liliʻuokalani. One remaining feature that highlights this sentiment is the near adjacent gardens of Uluhaimalama (translated as “inspiring offering of enlightenment”). After the 1893 overthrow, the right of assembly was suspended through the imposition of martial law. However, by 1894, tensions seemingly subsided and with the Queen’s efforts to create, the gardens of Uluhaimalama. An article published in the October 1894 publication of Ka Makāʻāina, highlights the significance of the opening, allowing for Hawaiians to informally gather but allow for the resurgence of political alliances. Additionally the symbols and spiritual significance of the plant selected to be part of the garden were indicative of the unwavering loyalty to the Queen and the Hawaiian kingdom. A selection of plants included: hala polapola, kou, kukui, ʻawalau, kōpāpāʻa, ʻokea, ʻuhala, pōpōlo, ʻape Hawaiʻi, kōpilimai, and maʻa Hawaiʻi. Additionally, a pōhaku ʻelekū was “planted”, as a reminder as to the preference to “eating stones” as a metaphor of loyalties to the Queen.

Another reminder of the resilience and perseverance of Hawaiian identity within this region is the mele “Papakōlea”, which celebrates the area’s place names and the cultural practice of lei-making, as evidenced with the formation of the first Association of Lei Sellers, led by Kupuna Ma.

PAPAKŌLEA

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

Source: www.haupala.org, Matsuoka Collection, Interpreted by Manu Boyd

- Attributed to John K. Ahmida; many believe this was composed by Mrs. Wright from Papakōlea. Stringing leis is often used to symbolize lovemaking in Hawaiian poetry.
Land Ownership

Legend
- DHHL Lands
- Major Land Owners
  - E. M. Stack
  - City and County of Honolulu
  - Federal Government
  - Kamehameha Schools
  - Mark A Robinson Trust
  - The Queen Emma Foundation
- State Owned Lands - Oahu
  - State of Hawaii
  - DOT - State of Hawaii
  - HCDCH - State of Hawaii
Hawaiian Home Lands

The Papakōlea Regional Plan combines three residential homestead communities: Papakōlea, Kewalo and Kalāwahine. Papakōlea is a 27 acre homestead with 270 homes and about 1500 residents. The community was added to the Hawaiian Homestead Act in 1924. Kewalo is a 12 acre homestead established in the 1940s just makai of Papakōlea residential lots. Kalāwahine Streamside is a 12 acre homestead with 55 multilevel duplexes and 33 three story single family houses that provide homes for 87 Homestead applicants.

DHHL land assets in this region also includes conservation parcels mauka of the Papakōlea Residential Lots and a vacant parcel along the slope of Pūowaina adjacent to Lincoln Elementary and Stevenson Intermediate.

Beyond the region, but in the Honolulu region are scattered DHHL parcels that are being used for income generation for the Department of Hawaiian Home Lands. These parcels are located on Isenberg Street near the University of Hawai‘i, in Fort Shafter Flats.
DHHL Proposed Land Uses

The DHHL General Plan provides 10 possible land use designations for Hawaiian Home Lands. In lieu of an O‘ahu Island Plan, this regional plan begins identifying land uses for the Hawaiian Home Land assets within the Papakōlea region. Three land uses are proposed for this region: Residential, Conservation and Community Use/Special District.

**Residential** consists of the existing homestead areas including Papakōlea, Kewalo and Kalawaihine. Residential homesteads are the priority land use designation in an Island Plan. Residential is the only land use that requires occupancy and that infrastructure be built to County standards.

**Conservation** consists of the undeveloped mauka properties currently zoned by the County as P-1 and P-2 and which are designated as State Conservation lands. Conservation areas are to be consistent with State Land Use Designations. Conservation areas protect the resources of the ahupua’a.

**Community Use / Special District** is designated for the Pūowaina parcel located on the slopes of Punchbowl and adjacent to Lincoln Elementary and Stevenson Intermediate schools.

**Special District** areas have unusual opportunities and or constraints. This category is applied to environmentally or culturally sensitive land that requires some conservation principles but can also be used for compatible activities if managed correctly. This Pūowaina parcel is located in the City and County Punchbowl Special District and therefore will be subject to unique development constraints.

**Community Use** land use designation includes a variety or community uses such as parks and recreation, cultural centers, community based economic development projects, schools, camping areas, meeting pavilions, social service centers, cemeteries, and other public amenities. Commercial activities not intended as income generation tools for DHHL are generally designated Community Use. Through the regional planning beneficiary consultation process, this parcel has been requested to be designated for community use.
1 University of Hawai'i, Mānoa Campus, Long Range Development Plan

The University of Hawai'i, Mānoa Campus has received $28 million to start planning and designing the Cancer Research Center of Hawai'i, facility in Kaka'ako. The funding is part of more than $200 million Gov. Linda Lingle released for UH construction and campus improvement projects. The $28 million will be used to hire a project manager, development team and project consultants.

The primary purpose of the center will be to improve cancer care in Hawai'i. Construction of the Kaka'ako facility, a cancer research and clinical trials center are estimated to cost at least $200 million. The University of Hawai'i plans to build the facility next to the John A. Burns School of Medicine in Kaka'ako and expects groundbreaking for late next year and project completion for 2013. The project will provide an up-to-175,000-square-foot, state-of-the-art facility for researchers. The Cancer Research Center is a designated National Cancer Institute center, but its current operations are scattered, with 150 researchers doing most of their work at a 30,000-square-foot building on Laulau Street near The Queen's Medical Center. Another 30 people work at the UH medical school, and 50 people, mostly administrators, are housed in leased space at the former Gold Bond building on Ala Moana Boulevard.

2 University of Hawai'i Cancer Research Center of Hawaii, Kaka'ako

The Queen's Medical Center, located in downtown Honolulu, Hawai'i, is a private, non-profit, acute medical care facility. It is the largest private hospital in Hawai'i, licensed to operate with 521 acute care beds and 28 sub-acute beds. As the leading medical referral center in the Pacific Basin, Queen's offers a comprehensive range of primary and specialized care services. The medical center was established in 1859 by King Kamehameha IV and Queen Emma to provide health care services to improve the well-being of Native Hawaiians and all the people of Hawai'i. The Queen's Medical Center continues to serve this mission and continues to expand its facilities and services for perpetuity. In 2004, the medical center was remodeled to showcase the 9,000-square-foot Women's Health Center within the main lobby. Today, Queen's Medical Center continues to develop a master plan for new facilities, renovation, alteration, and or upgrades of existing facilities and structures. TMI#: 2-1-18: 46; 2-1-35:01, 03 to 08 & 10; 2-1-37:02

3 Sand Island Wastewater Treatment Plant

Primary Treatment, Phase 2

Construction Budget: $10.0 million

This project includes:
1) reconfiguration of the primary influent channels and addition of flow splitting flumes;
2) construction of new clarifier effluent piping;
3) improvement and optimization of six existing clarifiers; and
4) refurbishment of the solids thickening and wet sludge storage areas.

4 Honolulu Rail Transit

The Honolulu Rail Transit Project is a 20-mile elevated rail line that will connect West O'ahu with downtown Honolulu and Ala Moana Center. The system features electric, steel-wheel trains capable of carrying more than 300 passengers each. Trains can carry more than 6,000 passengers per hour in each direction. New bus routes will provide direct connections to the stations. The purpose of the Honolulu High-Capacity Transit Corridor Project is to provide high capacity rapid transit in the highly congested east-west transportation corridor between Kapolei and UH Mānoa, as specified in the O'ahu Regional Transportation Plan 2030 (ORTP) (O'ahuMPO 2007). The project is intended to provide faster, more reliable public transportation service than can be achieved with buses operating in congested mixed flow traffic. It would provide reliable mobility in areas of the corridor and would serve rapidly developing areas of the corridor.
IV. Infrastructure - Water
The Honolulu Board of Water Supply (BWS) is responsible for the management, control and operation of O‘ahu’s municipal water system that serves the entire Primary Urban Center Development Plan area. The BWS system is an integrated, islandwide system with interconnections between water sources and service areas. Water is exported from areas of available supply to areas of municipal demand. The East and Central sections of the Primary Urban Center (PUC) overlie the Honolulu aquifer. The western Primary Urban Center area overlies the Pearl Harbor aquifer. The Primary Urban center supports 48% of the island of O‘ahu’s resident population. Approximately 85.5 million gallons a day of water is pumped in the PUC area. The Honolulu Board of Water Supply has begun the development of district-wide Watershed Management Plans. A plan for the Primary Urban Center is scheduled for 2011-2013.

**Papakōlea Water System**

The Board of Water Supply owns and maintains two water systems in the DHHL Residence Lots area. The upper area above the elevation 305 feet are served off of the 705’ elevation system. The 705’ system has various size pipe lines in the area including an 8-inch line within Kau STREET. The areas below elevation 305 feet are served off of the 405’ elevation system. This system includes and 9-inch line within ‘Iaukea Street and Ananiokū Street. At this time there are no improvements to existing water system.

**Kapi‘olani Water Improvements**

The Kapi‘olani water main was installed in 1935 and is currently being replaced. A new 12” water main is designed for an 80 year service life. Improvements along Kapi‘olani Boulevard started in 2006 to replace and rehabilitate the existing water mains along Kapi‘olani Boulevard, portions of Kamake‘e street and Atkinson.

**Kalāwahine 180 Reservoir**

The City and County of Honolulu Board of Water Supply (BWS) proposes to alleviate the existing potable water storage deficit in the Metro Low West (180’) potable water system service area (below the 180’ elevation from Salt Lake to Diamond Head in Honolulu). The deficit reported in 2002 for water storage is 55 million gallons (MG) as reported in the Honolulu 180’ Regional Reservoir Site Location Study. Additional 2.0 MG storage would improve water system performance and reliability in meeting domestic fire protection needs as well as provide greater flexibility of the water system in emergency situations.

The proposed action is to construct a 2.0 MG reservoir at the Kalāwahine site above Roosevelt High School and approximately 6,000 lineal feet of 24-inch influent/effluent line from the reservoir to Alapai street connecting to the existing Punchbowl 180’ Reservoir’s 18-inch influent/effluent line. The proposed 24-inch influent/effluent line will run from the Kalāwahine reservoir site inside the west property line of Roosevelt High School and south down Auwaioimu and Pensacola Streets to Wilder Avenue then west along Thurston Avenue and Green Street and connect to the existing Punchbowl 180’ Reservoir’s 18-inch influent/effluent line at Alapai Street.

The Final Environmental Assessment was completed in August 2002.

**TMK:** 2-4-43:82 Reservoir.  
**TMK:** 2-4-43: Portion of 90 Access Road.  
**TMKs** 2-4-32:01 and 02; 2-4-14, 17, 18, 30 & 32 and 2-1-39 Waterline.  
Estimated Construction Cost: $7 million

Status: $7.3 million in CIP fund were budgeted in 2003. The project has not been constructed.
Papakölea is within two watershed systems: The West Honolulu Watershed and the Ala Wai Watershed which both terminate in Māmala Bay. Māmala Bay is the water body that encompasses the area offshore of Southern O‘ahu from Kalaeloa to Diamond Head.

Management of stormwater within the City and County of Honolulu is shared among Federal, State, and City agencies. City responsibilities are shared among the Departments of Planning and Permitting, Design and Construction, and Environmental Services. Polluted stormwater runoff from agriculture, urban development, recreational boating and marinas, and wetlands activities are the leading cause of water pollution in waters across the country and in Hawaii.

The Primary Urban Center is highly urbanized and relies heavily on the attractiveness of its coastal waters and beaches for tourism, and recreational and cultural uses. Recent studies of Māmala Bay have determined that urban runoff (nonpoint sources) entering Māmala Bay from subembayments such as Pearl Harbor, Ke’hī Lagoon-Honolulu Harbor, Kewalo Basin, and the Ala Wai Canal is the most significant contributor to the pollution of nearshore waters. The control and management of urban watersheds and protection of its coastal water quality are the leading stormwater management issues in the Primary Urban Center.

The mauka, upland areas of the Primary Urban Center are drained via natural drainageways and streams that ultimately empty into Māmala Bay. In the east and central sections of the Primary Urban Center, Moanalua Stream and Kalihi Stream flow into Ke‘hī Lagoon; Kapalama Canal and Nu‘uanu Stream empty into Honolulu Harbor; and the Mānoa, Palolo, and Makiki Streams drain to Māmala Bay via the Ala Wai Canal. In the western section, the major drainageways are Waiau, Waimalu, and Hālawa Streams, which flow into the East Loch of Pearl Harbor. The lower reaches of most of the Primary Urban Center’s major streams have been channelized to facilitate the rapid transport and disposal of runoff from urbanized areas.

Waikīkī

The Ala Wai Canal watershed covers a significant portion of the central and eastern portion of the Primary Urban Center, including most of Waikīkī. The Ala Wai Canal is a significant contributor of pollutants to the beaches and nearshore waters of Waikīkī. The State Department of Health, in cooperation with City agencies, is implementing a community-based watershed management plan that included the dredging and cleanup of the canal.

Ala Wai Watershed

The Ala Wai watershed is comprised of approximately 12,033 acres that include the sub-watersheds of Makiki, Mānoa, and Palolo, and extends from the top of the Ko‘olau Mountains to the near-shore waters of Waikīkī and Māmala Bay.

Papakölea resides between the ridgeline and Kanahā Stream. In general, the lots slope down toward ‘Auwaiolimu Street or Kanahā Stream. The conditions of the residential lots range from about a 50 percent slope (Tantalus Drive area) to less than a 2 percent slope (Anianikū, Kapahu and Na‘āle Street area).

Pū‘owaina is located within the Ala Wai Watershed with 1,6787 acres of the Makiki Stream feeding into the Ala Wai Canal.

Kanahā Stream

Kanahā connects to Makiki Stream via Makiki Ditch, a 6,400 foot long lateral channel. Modifications downstream of the Kanahā Stream - Makiki Stream confluence include revetments, lined channels, extended culverts and elevated culverts.

Today there are no perennial streams in the ravine between Makiki Valley and Pauoa Valley. The one intermittent stream is Kanahā Stream in the ravine. The stream is normally dry and has intermittent flows only during periods of substantial rainfall. The channel and banks of the stream are covered with vegetation consisting of shrubs and trees.

The Kanahā Stream runs from the Ko‘olau Mountain Range toward ‘Auwaiolimu Street and is bordered by the Papakölea Residence Lots on the west and Kalāwahine residence to the east. The tributary area for Kanahā stream is 216 acres.

An 8’ x 2’ box culvert was constructed across Kapahu street by the Kalāwahine Streamside development and conveys Kanahā stream runoff downstream to a ponding basin prior to its return to the stream. The ponding basin is maintained by Kalāwahine Streamside Association.
Papakōlea is within the Māmala Bay Sewerage District. The City’s Department of Environmental Services manages the municipal wastewater collection, treatment, and disposal system and provides almost complete service coverage for the Primary Urban Center through the Māmala Bay Sewerage District. Most of the Primary Urban Center is within the East Māmala Bay service area, with outflows processed through the Sand Island Wastewater Treatment Plant. The western portion of the Primary Urban Center, from Hālawa through Pearl City, is within the West Māmala Bay service area, with outflows processed through the Honolulu Wastewater Treatment Plant. The East Māmala collection system, which is much older than the West Māmala system, experiences significant water infiltration. In some areas of the East Māmala subdistrict, the age of sewer lines is approaching 100 years old. The Primary Urban Center’s aging collection system is recognized as a major obstacle to the orderly development of the city. In large parts of central Honolulu, new development is restricted due to inadequate sewer capacity. Current wastewater policy requires new developments to pay for the correction of existing system deficiencies, in addition to improvements directly related to the project. In many cases, high costs for off-site wastewater facilities make development economically infeasible.

Within Papakōlea, the aging wastewater infrastructure is located within city and county roadways. Maintenance and management of the utilities were once a responsibility of the city and county.

DHHL recently assumed responsibility for utility maintenance and management of sewer lines related to Papakōlea. Improvements to the sewer system require replacement and repair.

**Sand Island Wastewater Treatment Plant**

The Sand Island Wastewater Treatment Plant (SIWWTP) serves metropolitan Honolulu to (but not including) Hawai‘i Kai. This region generates 85 percent of O‘ahu’s wastewater. The basin runs from the Ko‘olau Mountains to the sea. The SIWWTP, a primary treatment facility, is the largest wastewater treatment plant on O‘ahu. The facility was put into service, starting in 1976 and completed in 1980. The plant has gone through numerous upgrades since 1980, including the addition of ultraviolet (UV) disinfection before disposing of effluent through its 78-inch diameter pipe via a deep ocean outfall 1.7 miles offshore at an average depth of 240 feet. The SIWWTP processes an average of approximately 60 million gallons per day (mgd) of wastewater. It serves the communities from Kūlì‘ou‘ou in the east to Salt Lake in the west, including Kahala, Kaimuki, Waikīkī, Mānoa, Makiki, downtown Honolulu, and Kālihi. The design average flow for this facility is 82 mgd with a design peak wet weather flow capacity of 200 mgd. Capacity of the outfall is 270 mgd. Improvements to the Sand Island Wastewater Treatment Plant to meet Environmental Protection Agency Standards are ongoing.

**Kapi‘olani Water and Sewer System Improvements**

The Kapi‘olani water and sewer system improvement projects began in 2006. Kapi‘olani sewer main was installed in 1923 and the water main in 1935. A new 12” water main is designed for an 80 years service life and the new 36” sewer main is designed for a 50-75 year service life.

General areas of work include the following:

1. Kapi‘olani Boulevard from Ward Avenue to Kalākaua
2. Kalākaua Avenue from Kapi‘olani Boulevard to the Ala Wai Canal
3. Kamekea Street from Kapi‘olani Boulevard to Auahi Street
4. Atkinson

This replacement and rehabilitation project also involves installation of manholes, as well as upgrading curb ramps for ADA compliance along the length of the project.
Infrastructure - Roads & Transit

Legend
- DHHL Papakolea Roads
- Highway
- Freeway
- Roads with Bus Routes
- Bus Stops
Primary Roads & Transit

The Papakōlea Residence Lots, Kewalo and Kalawahine Streamside communities consist of the following streets: Kapahu, Naʻale, Anianikū, Hiʻilani, Iaukea, Kaʻuhane, Krauss, Moreira, Keʻōpua, Kalamakū, Kautilāʻau, and Tantalus. Roads have been dedicated to the City and County of Honolulu.

Road Improvements
The city road improvement projects consisting of reconstruction, cold planing and resurfacing of asphalt concrete pavements, adjustments of utility manhole covers, installation of vehicle loop detectors and pavement markings in the Nuʻuanu, Pacific Heights, and Pauoa area were conducted in July 2009.

Interstate Route H-1, Ward Avenue On-Ramp to University Interchange, Eastbound
The State Department of Transportation is planning improvements to the eastbound traffic flow from Ward Avenue to the University Interchange. Estimated cost is $17 million. Neighborhoods immediately affected include Makiki-Lower Punchbowl-Tantalus, Mānoa, McCully and Mōiliʻili.

Rail Transit
The largest transportation plan in this Region is the proposed Mass Transit Corridor also known as The Rail Transit. The City and County of Honolulu approved a plan to develop a fixed guideway 26 mile commuter rail transit system stretching from West Kapolei to the University of Hawaiʻi Mānoa and Waikiki. Locations of the 34 transit stations along the rail route were approved on May 10, 2008 by the City Council. Preliminary engineering studies and a Draft EIS has been prepared and is available on the OEQC website. The City hopes to release the Final EIS in Fall 2009; award the design/build contract for first guideway segment in Fall 2009; and start construction in January 2010.

The Draft EIS estimates that in fiscal year 2008 dollars, the cost to complete the route from Kapolei to Ala Moana will be between $4.3 billion (Salt Lake route), $4.5 billion (Airport route) or $5.3 billion (combined Salt Lake-Airport), depending on the route. Either the Salt Lake or Airport routes are affordable with the ½ cent GET surcharge and federal funding. Operating and maintenance costs have been updated to between $63 million and $96 million per year.
Infrastructure - Public Facilities
Electrical, telephone and cable television services are available from the overhead utility lines. Papakōlea is served by the Hawaiian Electric Light Company (HECO). Telecommunications service on Hawaiian Home Lands is provided by Sandwich Isle Telecommunications, Inc.

Fire Protection
The Makiki Fire Station is the primary fire station to serve the Papakōlea area located at Wilder and Pi‘ikoi. Response time to Kalāwahine is three to five minutes. Back-up, or secondary support, will come from Kuakini and/or Central Fire Stations. The water transmission systems and lines with adequate fire flow capacity and fire hydrants are provided. Water system is within the Board of Water Supply jurisdiction. Access for emergency vehicles into Kalāwahine is from Kapahu Street extension. Roadways at Kalāwahine are all-weather surfaces and designed to meet Department of Transportation Services Standards. The Honolulu Fire Department serves the Primary Urban Center from 21 fire stations. It also maintains a training facility on military land near the airport that is to be relocated once a new site is identified and secured.

Emergency Services
Ambulance service, provided by the City’s Emergency Medical Services Division, is currently delivered from each of the fire stations. Emergency ambulance service to serve the area is available from several locations in the primary urban center. The closest available service would respond from St. Francis, Punchbowl Street, Young Street and Liliha Street which all serve the Papakōlea area.

Police Protection
The Downtown Police Substation located on Hotel Street and the Main Police Station located on South Beretania Street currently serve the Papakōlea area. The Honolulu Police Department serves the Primary Urban Center out of its Capitol District Headquarters and substations in Downtown-Chinatown, Waikīkī, Kalihi, and Pearl City.

Health Care
Honolulu-based clinics and hospitals provide primary patient care to adults, women, and children. The nearest hospitals to the Papakōlea area are Queen’s Medical Center, Kuakini Hospital, St. Francis Hospital, Kaiser Hospital, and Straub Clinic and Hospital, Inc.

Recreational Facilities
Papakōlea Recreational Center and three public schools are located in the area. A park and streamside walking trail, and open air pavilion is located at Kalāwahine Streamside project.

Public Transit
The City and County of Honolulu Bus System provides public transportation to and from the Papakōlea community. Bus stops are located at ‘Auwaiolimu Street near the intersections of Aniani‘ikī and Kapahu Streets and on Tantalus Drive near Krauss Street.

Primary Urban Center
Papakōlea is located within the Primary Urban Center and therefore within minutes to major commercial, medical and other business and service sector areas including downtown Honolulu, Makiki, Ala Moana and Kalihi.

Schools
Public schools which serve the project area include Lincoln Elementary, Stevenson Intermediate, and Roosevelt High School. The 2009 State Legislature approved the following appropriations for area capital improvement projects:

- **Lincoln Elementary School**, $260,000
- **Roosevelt High School**, $313,000
- **Stevenson Middle School**, $280,000

The current enrollments at all three schools are below capacity.

The Primary Urban Center hosts the State’s largest concentration of public and private post-secondary institutions, including the University of Hawaii at Mānoa. Other major campuses include the University of Hawai‘i’s community colleges (Kapi‘olani and Honolulu), Chaminade University, Hawai‘i Pacific University’s downtown campus and a number of smaller private colleges. The University of Hawai‘i also operates research and teaching facilities at Kākā‘ako, Honolulu Harbor, Sand Island, and the Waikīkī Aquarium.

School capacity and 2012 enrollment projects are as follows:

<table>
<thead>
<tr>
<th>GRADE</th>
<th>ACTUAL ENROLLMENT 2007/2008</th>
<th>PROJECTED ENROLLMENT 2012</th>
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</thead>
<tbody>
<tr>
<td>ROOSEVELT COMPLEX</td>
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<tr>
<td>Anuenue K-12</td>
<td>389</td>
<td>344</td>
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<tr>
<td>Lincoln Elementary K-5</td>
<td>744</td>
<td>716</td>
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<tr>
<td>Ma‘em‘ae Elementary K-5</td>
<td>583</td>
<td>562</td>
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<tr>
<td>Mānoa Elementary K-6</td>
<td>459</td>
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<td>352</td>
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<td>Fausa Elementary K-6</td>
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<tr>
<td>Robert Stuart Stevenson Middle 6-8</td>
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<td>Theodore Roosevelt High 9-12</td>
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<tr>
<td>PRIVATE</td>
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<tr>
<td>Halau Lokahi K-12</td>
<td>253</td>
<td>309</td>
</tr>
<tr>
<td>Myron B. Thompson Academy K-12</td>
<td>583</td>
<td>840</td>
</tr>
<tr>
<td>Voyager K-8</td>
<td>11,684</td>
<td>11,623</td>
</tr>
</tbody>
</table>
V. Homestead Issues & Priorities

The following issues and opportunities were raised during the Beneficiary Consultation process:

1. SEWAGE & DRAINAGE

A. Kapahu St. in Kalawaihine. Water seeping under roadway could potentially lead to infrastructure collapse. (8)
B. Top of Kapahu St. / above Kalawaihine Streamside. (7)
C. Broken drainage culvert between homes on Kaululau and Tantalus Dr. (20+ years). (10)
D. Drainage ditches clogged on Kapahu in Kewalo. (2)
E. Drainage ditch / culvert on Tantalus Drive (mauka side) to Hiilani Street is not working properly. Rain, mud and debris on Tantalus on to private properties at 2343 and 2349 Tantalus. (3)
F. Phase II & III of Papakolea Drainage Project. (3)

2. SAFETY

A. Directly affects homes in Kewalo and Kalawaihine (Kapahu, Anianikû, Kamalalehua and Tantalus). (5)
B. Loose dirt from residence sliding onto road obstructing sidewalk (corner of Krauss and ‘Iaukea). (2)
C. Bus stops along Tantalus Drive are dangerous; cars park in front of bus stops. (8)
D. No sidewalks on Tantalus Drive between Puowaina Bridge & Moreira St., ‘Iaukea & Ka’uhane, Pauoa side.) Flooding problem to homes on these streets. (8)
E. Added sidewalk on Ka’uhane street now cars cannot drive in driveway. (2)
F. Phase II & III of Papakolea Drainage Project. (3)

3. REPAIR & MAINTENANCE

A. Throughout Papakolea and Kewalo, telephone poles very old and need to be replaced. (8)
B. Consider underground utilities. (5)
C. Broken sidewalks throughout Papakolea. (7)
D. Repair stone walls on both sides of Tantalus Drive (from Puowaina Bridge to Moreira St.). (7)
E. Old water lines are breaking throughout Papakolea and Kewalo (Ka’uhane & Tantalus most recent). (13)
F. Back road repair work left from Perfecto Construction (drainage project). See Kaululau St. between 2367 and 2373 where the road buckled and dropped in and last road repair job done on ‘Iaukea between 739 & 745. (12)
G. Repair stone walls on both sides of Kaulula’au Street.
H. Wall at 2403 Kaulula’au cracked and leaning, built 1949. (3)

4. PAPAKOLEA COMMUNITY PARK

A. Solar Energy (hot water and/or photovoltaic). (15)
B. Need a new parking lot. (13)
C. Court and building improvements. (11)

5. OTHER ISSUES

A. Abandoned cars. (19)
B. People living in cars. (5)
C. Unoccupied properties/overgrown foliage, rats, chickens, other rodents.
D. Street signage.
E. Rising energy costs for residents.
F. Rising energy-income. (2)
G. Health access.
H. Community Commercial Space.

* Number in parenthesis represent DHHL Beneficiaries who concur with item as an issue.
Potential Projects

The following project ideas were identified in the regional planning process by homestead lessees and regional stakeholders. A total of 7 potential projects were identified. Of the total, 5 were identified as priority projects. These are noted with an asterisk (*) and are described on the following pages. The other 2 projects are briefly described below.

*1. Repair, Replacement and Maintenance of Aging Infrastructure

*2. Papakōlea Community Center Park Improvements

*3. Native Hawaiian Education and Culture Community Center

*4. Hawaiian Homestead Kūpuna Assisted Living Center

5. Pūowaina Interpretive Center

*6. Community Clean Up Project / Abandoned Homes

7. Energy Efficient Homes

Pūowaina Interpretive Center
The Pūowaina Interpretive Center targets the thousands of tourists that come to Punchbowl National Cemetery to pay homage to fallen war heroes. The Interpretive Center will have a number of features to offer visitors, including: a museum with interactive exhibits; a mini-theater where visitors can watch videos on Hawaiian culture and the Papakōlea area; a demonstration area where native artists can demonstrate their crafts; a retail gifts/souvenir store; a restaurant; shuttle services to and from the National Cemetery; and other ancillary tours through Makiki, Mānoa, Pauoa, and the Pali. The project would seek partnerships from relevant and interested organizations.

Energy Efficient Homes Project
In January 2009, the Hawaiian Homes Commission approved an “Energy Policy” that contains six (6) objectives that promote energy self-sufficiency. Objective four (4) is to provide energy efficiency, self-sufficiency, and sustainability opportunities to existing homesteaders and their communities.” This project would assist homesteaders with the retrofitting of their homes. Retrofit applications may include: solar hot water heating systems, insulation/radiant barriers, low-flow toilet and shower head, photovoltaic system, CFL bulbs, ENERGY STAR appliances, energy efficient windows, clothes line, ventilation techniques, and roof/attic vents, etc.
Priority Project: Address Abandoned Homes

**Description** - Homesteaders are concerned about the homes that are found throughout Papakōlea homesteads. Residents would like to develop a process with DHHL to address abandoned/vacant homes in Papakōlea in order to make them viable residences that can be awarded to waitlisted families.

**Location** - Abandoned homes located in Papakōlea and Kewalo residential communities.

**Status** - DHHL and community leaders began to identify and address abandoned homes in the fall of 2007.

**Partners** - DHHL, Homesteaders, City and County of Honolulu

**Cost** - TBD

**Phasing** -
1. DHHL to begin developing a process for dealing with abandoned homes.
2. Begin implementing the process with currently identified abandoned homes.

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**Timeline for Addressing Abandoned Homes**

<table>
<thead>
<tr>
<th>Year</th>
<th>Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>Identify Problem / Assess and Verify Data</td>
</tr>
<tr>
<td>2011</td>
<td>Discuss and Develop DHHL Policy</td>
</tr>
<tr>
<td>2012</td>
<td>Biennial Regional Plan Update</td>
</tr>
<tr>
<td></td>
<td>Apply policy to Individual Homestead Communities</td>
</tr>
<tr>
<td></td>
<td>Develop Feedback Tool</td>
</tr>
</tbody>
</table>
**Priority Project: Hawaiian Homestead Kūpuna Supportive Living Center**

**Description** - Since the majority of Papakōlea homes are built against the mountains and only have stairway access, the lack of safe housing conditions is a significant concern. The Kūpuna Supportive Living Center is envisioned as a “village” for Kūpuna to age safely in the community. In addition to providing Kūpuna with assisted-care residence, the project would provide a friendly gathering place for social, cultural, and wellness activities that encourages multi-generational support for Papakōlea ‘ohana. This project would provide service learning opportunities for native Hawaiian health professionals as well as allied health providers. The project would also provide opportunities for native Hawaiian business development which support Kūpuna living such as a community market, restaurant, and Hawaiian medical and traditional healing practices.

**Location** - Pūowaina parcel.

**Status** - Project needs further partnership commitments. Community to engage in DHHL’s Kula I Ka Nu’u program to negotiate lease or license agreement for use of the proposed parcel.

**Partners** - University of Hawaii-John A. Burns School of Medicine, Queens Medical Center, Kapi‘olani Community College, Alu Like, Inc., Papa Ola Lökahi, Office of Hawaiian Affairs, DHHL, Papakōlea Community Development Corporation.

**Cost** - $150,000 for planning and design

**Phasing**
1. Secure land-lease
2. Assess property
3. Land use plan
4. Preliminary engineering cost estimates / preliminary architecture
5. Implementation
6. Design and Construction
7. Manage and Sustain

---

**Timeline for Hawaiian Homestead Kūpuna Supportive Living Center**

<table>
<thead>
<tr>
<th>2010</th>
<th>2011</th>
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<tbody>
<tr>
<td>Secure Funding</td>
<td>Business Plan</td>
<td>Environmental Assessment</td>
</tr>
<tr>
<td>Assess Property</td>
<td>Preliminary Engineering / Cost Estimates / Preliminary Architecture</td>
<td>Implementation / Design &amp; Construction</td>
</tr>
</tbody>
</table>
Priority Project: Native Hawaiian Education & Culture Community Center

Description - Native Hawaiian Education and Culture Community Center that would be the piko of the Pūowaina Hawaiian Home Land site. This project will provide a place for social, educational and cultural enrichment for ‘ohana of all ages infant to kūpuna. The project envisions partnerships with other Native Hawaiian organizations and community programs to provide quality service to the center such as kūpuna services and activities, enrichment programs for ‘ōpio K-12 and Native Hawaiian college and career assistance program for college bound high school students and ‘ōpio in college, Hawaiian culture place-based ‘ohana strengthening, job and career opportunities and volunteer and mentoring programs.

This center envisions the following components: A Hawaiian Language School developed in partnership with the Pūna Leo; Classrooms and Offices for Native Hawaiian practitioners and businesses; Playground and open space; full kitchen; hälau and hall; a garden and aquaculture area and parking.

The center is intended to be a family educational facility that will be in line with the DHHL Ho’omaluhia Energy Policy in achieving energy efficiency, self sufficiency and sustainability in Hawaiian Homestead communities.

Location - Pūowaina Parcel

Status - Project needs further partnership commitments. Community to engage in DHHL’s Kulia I Ka Nu’u program to negotiate lease or license agreement for use of the proposed parcel.

Partners - Hui Maka‘ainana a Kalāwahine, Papa Hawai‘i, DHHL, Aha Pūna Leo, Ala Like, College Connections, Na Pua No eau, Pacific American Foundations

Cost - $150,000 for preliminary planning and concept development.

Phasing -
1. Secure land-lease
2. Assess property
3. Land use plan
4. Preliminary engineering cost estimates / preliminary architecture
5. Implementation
6. Design and Construction
7. Manage and Sustain

Timeline for Native Hawaiian Education & Culture Community Center

<table>
<thead>
<tr>
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</tr>
<tr>
<td>Assess Property / Develop Land Use Plan</td>
<td>Preliminary Engineering / Cost Estimates / Preliminary Architecture</td>
<td></td>
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</tbody>
</table>
**Priority Project: Papakōlea Community Center & Park Improvements**

**Description** - The Papakōlea Community Center and Park, located at 2150 Tantalus Drive, is a two-story 38,000 sq. ft building with two large meeting rooms, a small kitchen, three offices, a community library, a wellness office and restrooms on each level. The City and County of Honolulu operated the facility from 1964 to 2002.

The Papakōlea Community Development Corporation (PCDC) acquired the management and operation of the park and community center in September 2002 and began a series of major repairs. Since taking over, several improvements and major repairs have been completed.

Through a series of community planning meetings additional improvements have been identified that will produce both economic development benefits for local residents (business ownership, new jobs, and increased income) and generate revenue to help with the center’s operating costs. Improvements include expansion of the parking area; enclosure to the open basketball courts, building improvements and upgrading the community kitchen. In particular, upgrades to the kitchen will give residents a place to operate small food-service businesses and provide a better facility for community and family gatherings. PCDC will work in concert with the Department of Hawaiian Home Lands to provide existing homesteaders with energy efficiency, self-sufficiency and sustainability opportunities.

**Location** - Papakōlea Community Center Park

**Status** - Community to begin Planning and Design of improvements.

**Partners** - Papakōlea Community Development Corporation, DHHL, U.S. Department of Housing and Urban Development, City and County of Honolulu, Office of Hawaiian Affairs and the State of Hawaii.

**Cost** - $150,000 for planning and design

**Phasing** -
1. Secure funding
2. Preliminary engineering cost estimates / preliminary architecture
3. Design and Construction

**Timeline for Papakōlea Park Improvements**

<table>
<thead>
<tr>
<th>2010</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Secure Funding</td>
<td>Preliminary Engineering / Cost Estimates / Preliminary Architecture</td>
<td>Design &amp; Construction</td>
</tr>
</tbody>
</table>
Description - Due to Papakölea’s aging infrastructure, there are many repairs and/or replacement projects that need to be addressed by DHHL and/or the City and County of Honolulu in order to ensure the health and safety of our community. The projects relate to: drainage systems, sewer lines systems, water pipes systems, sidewalks, and bus stops. The projects, especially those that replace aging infrastructure, will require substantial funds. This project would address the list of specific problems in phases and provide a means for homesteaders and DHHL to work together to secure necessary funding and attention to these important projects. Drainage issues in Kalawaihine are to be addressed.

Sewage systems in Papakölea for repair and maintenance are highlighted in the map (see map at right). The area sewer system began as far back as 1941. This specific system is severely damaged and goes through systematic (routine) cleaning, but is in need of complete replacement and would cost about $2.2 million.

Location - Kalawaihine, Kewalo, Papakölea

Status - DHHL is nearing the end of Phase 1. Phase 2 is only conceptual, therefore design and construction funds are needed. However, a sewage break in October 2009 needs immediate attention and is projected to cost $2.2 million. Approximately $14 million is required to fund the design and construction of the other two phases of repair and maintenance.

Partners - DHHL, City and County of Honolulu

Cost - $17 million

Phasing - Three phases of repair and maintenance projects are identified for drainage systems at Papakölea. Phase 1 address the rock slide at Anianikü. Phase 2 involves a new drainage system at Kaululā’au and Tantalus. Phase 3 involves stream and drainage improvements to Anianikü.

Timeline for Repair and Maintenance Improvements

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<th>2010</th>
<th>2011</th>
<th>2012 Biennial Regional Plan Update</th>
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<tr>
<td>Secure Funding</td>
<td>Phase 2 Improvements</td>
<td>Secure Funding</td>
</tr>
<tr>
<td>Develop Community Feedback for Needed Improvements</td>
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</tbody>
</table>

DHHL Papakölea Streams
- Sewer systems installed in 1941
- Boulder Protection Area
- Lot Drainage Improvements
- Drainage
- Phase 1 (Completed)
- Phase 2 (Conceptual)
DEPARTMENT OF HAWAIIAN HOME LANDS

Hale Kalanianaʻole
91-5420 Kapolei Parkway
Kapolei, Hawaiʻi  96707

Telephone: (808) 620-9500
Facsimile: (808) 620-9559

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Prepared by:

Contact Information