

KEALAKEHE - LA'I 'ŌPUA



REGIONAL PLAN

NOVEMBER 18, 2009



DEPARTMENT OF HAWAIIAN HOME LANDS

DEPARTMENT OF HAWAIIAN HOME LANDS

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I. INTRODUCTION

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. Kealakehe/La'i 'Ōpua is one of the six regions on the island of Hawai'i 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.

HOW ARE REGIONAL PLANS DEVELOPED?

The regional plans are developed in conjunction with lessees of the region as well as regional stakeholders (landowners, agencies, other organizations) in a series of planning meetings as illustrated in 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.

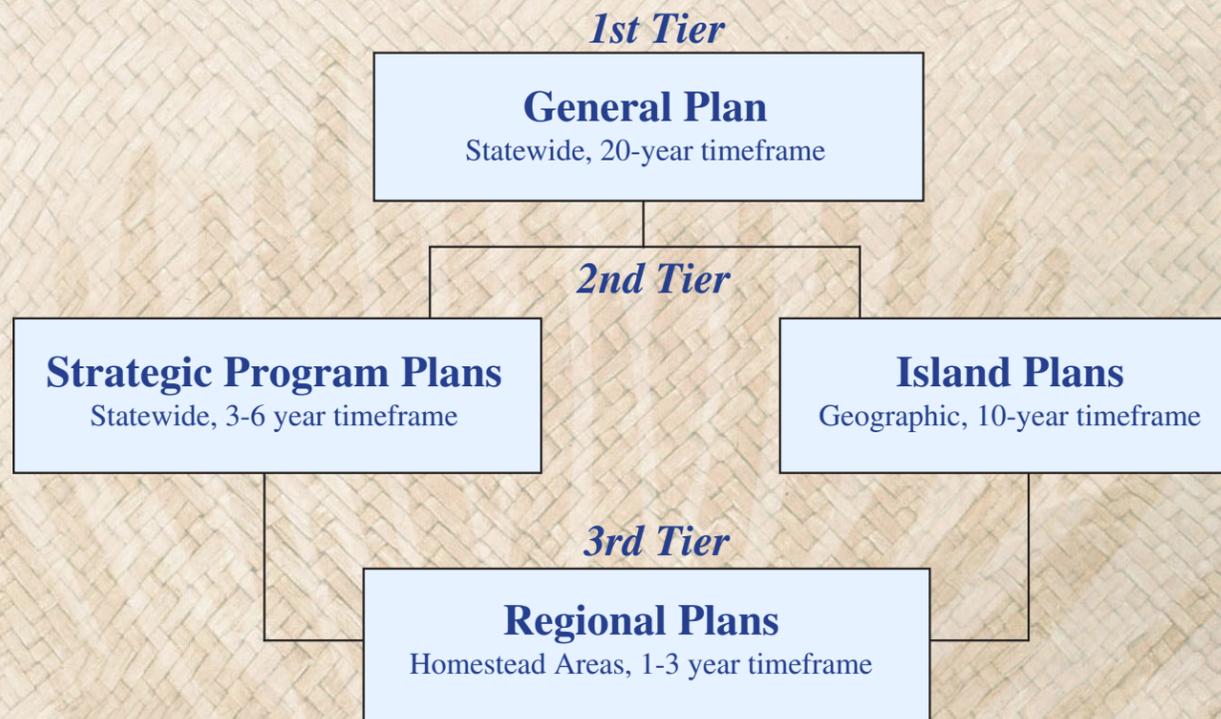
Upon approval, the homestead community, the Department, and other development partners can seek necessary funding and pursue the implementation of the Priority Projects. The Priority Projects is a key component of aligning support and providing focus to efforts to develop the region. Finally, since DHHL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



DHHL's Planning System



The Regional Plan Development and Update Process



Shared Costs & Multiple Financing Options

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 and public residential facilities. This coordination helps individual organizations achieve their goals while bringing long term benefits to the community and region.



La'i 'Ōpua 2020

DHHL brings the following to these partnerships:

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



II. HOMESTEAD REGIONAL PROFILE

Homestead Highlights

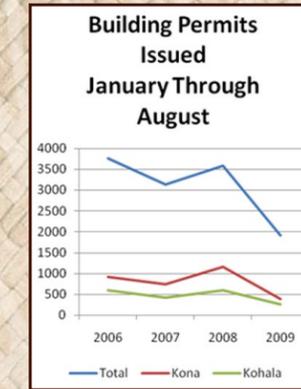
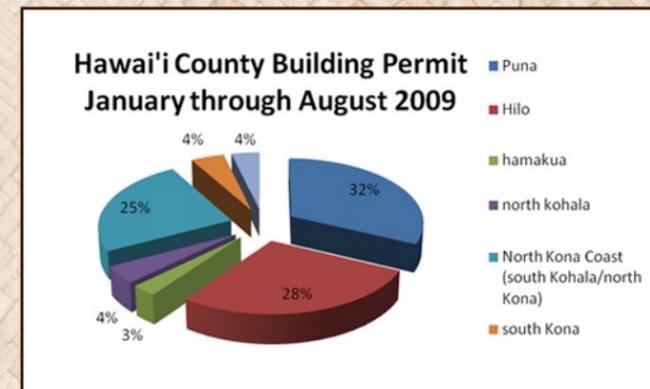
ADJACENT LANDS

- 1 **State of Hawai'i, Department of Land and Natural Resources (DLNR)** – DLNR owns a 348-acre parcel located makai of the DHHL Honokōhau property. This parcel includes the Honokōhau Small Boat Harbor.
- 2 **Palani Ranch Co., Inc.** – Palani Ranch owns approximately 500 acres of land north of the Villages of La'i 'Ōpua. Palani Ranch is a local land management and ranching company.
- 3 **Lanihau Partners L.P.** – Located north of the Villages of La'i 'Ōpua, Lanihau Partners L.P. owns 337 acres of land mauka of Queen Ka'ahumanu Highway. Lanihau Partners L.P. is a local real estate development group.
- 4 **Queen Lili'uokalani Trust (QLT)** – QLT owns approximately 1,200 acres of land located south of the DHHL Honokōhau property and Villages of La'i 'Ōpua. The property extends across both sides of Queen Ka'ahumanu Highway. The Queen Lili'uokalani Trust was established to provide for orphaned children. The Queen Lili'uokalani Children's Center, located on the makai property, is dedicated to providing support and services to orphan and destitute children.
- 5 **Kaloko-Honokōhau Historic National Park** This national park is located north of the DLNR Honokōhau property. The national park encompasses roughly 650 acres of land and 500 acres off shore. The park offers significant natural and cultural resources.
- 6 **HHFDC / Forest City**
The development will include a mix of high density (multi-family) and low-density (single-family) units. A total of approximately 2,400 units will be constructed along with a new elementary school, minor commercial, and park space



- The area surrounding La‘i ‘Ōpua, referred to as the North Kona Coast, occupies the major portion of the Census Districts known as South Kohala and North Kona.
- The Kona Coast is the principal visitor destination area on the island. With a total of 5,369 hotel rooms, Kona has 48 percent of the total hotel rooms on the island.
- Trends in population growth and household growth are principal indicators of potential demand for real estate development. The North Kona Coast has a population of approximately 41,600 and is projected to continue to grow despite the current economic down turn. The population of the North Kona Coast has experienced a 30 percent increase over the last decade.
- The North Kona Coast has the highest median income and per capita income in Hawai‘i County.
- Expansion of the Kona International Airport has created the opportunity for national and international direct flights, increasing the visitor arrivals to West Hawai‘i. However, due to the downturn in the economy, and the loss of Aloha Airlines in March 2008, passenger arrivals dropped 14% from an all time high of 3.2 million in 2007. The annual number of flights arriving and departing from Kona airport has been decreasing since 2005. Airplane operations fell nearly 18% from a high of 155,000 in 2005.

GROWTH CENTERED IN KOHALA, KONA



- There are several indicators of economic growth of an area. Building/construction is one indicator frequently used as gauge. Since 2006 there has been a 40% reduction in building permits issued in Kohala and Kona. Plans for a Circuit City have been scrapped due to the weak economic conditions nationwide. While the number of permits has decreased, the north Kona Coast is still a major growth center in the county. Twenty-five percent of building permits issued from January through August 2009 were for projects along the North Kona Coast. Employment trends is another prime indicator of economic growth of an area. Because the health of West Hawai‘i’s economy is highly incumbent on the health of the State’s tourism industry, the downturn in the economy has started to affect the local job industry. Hawai‘i County’s jobless rate is currently at 10.8% up from 6.6% in September 2008. Major resort hotels like the Hilton Waikoloa Village and the Sheraton Keauhou Resort have laid off employees.
- Hawai‘i County has the most diversified economy among the Neighbor Islands. As one of the most innovative counties in the State, Hawai‘i County leads the way into new fields of industry such as astronomy, renewable energy, diversified agriculture, and aquaculture.
- Hawai‘i County’s Capital Improvements Program projects an investment of approximately \$325,000,000 in the North and South Kona regions over the next five fiscal budget years. Between FY2009-2013, the County will make expenditures to complete its portions of the Mid-Level Road (aka Ane Keohokalole Highway) and make significant upgrades to the Kealakehe Waste Water Treatment Plant.
- The North Kona Coast provides a unique setting as an authentic Hawaiian village with generally unassuming modern facilities and conveniences. The surrounding views display magnificent vistas of seascape with a backdrop of majestic mountains colored by various plant materials. The vast areas of stark, barren lava provide a unique visual experience for all those who visit. With this unique setting, exotic environment, and abundance of leisure activities, the North Kona Coast continues to establish itself as a premier resort destination.
- Vast acres of developable lands are available surrounding DHHL properties. Development of lands surrounding DHHL properties will provide economic, cultural, and recreational benefits. Several areas have development potential due to attractive natural features such as protected inlets and bays, beaches, lagoons, coconut trees, and historical sites.

Characteristics ¹	North Kona CCD*	County of Hawai‘i *	State of Hawai‘i*
POPULATION AND AGE			
Total Population ¹	28,543	175,784	1,288,198
Median age	39.4	38	38
Children under the age of 18 (%)	6,971 (24.4%)	43,977	318,290 (26%)
Population over 65 (%)	3,355 (11.7%)	24,239 (14%)	190,067 (15%)
EDUCATIONAL ATTAINMENT			
% of population over 25 with high school diploma	60%	90%	90%
% of population over 25 with a bachelor's degree	17%	28%	29%
HOUSEHOLD			
Household size	2.71	2.74	2.87
Household median income in 2007 inflation adjusted dollars	\$47,610	\$54,044	\$67,214
Percent of households living below poverty line	9.6%	16.0%	11.0%
Percent of households receiving public assistance	2.20%	10.0%	7.0%
Percent of working residents traveling 30+ minutes to work	10%	29.0%	38.0%
HOUSING MARKET			
Housing units	13,960	79,607	512,881
Population per housing unit	2.04	2.- 21	2.51

GROWTH IN POPULATION BETWEEN 1990 & 2000	
	Change in percentage
Hawai‘i County	23.60%
Puna	50.80%
South Kohala	43.70%
North Kohala	40.70%
Ka‘ū	31.30%
North Kona	28.10%
South Kona	12.20%
North Hilo	11.60%
Hāmākua	10.20%
South Hilo	6.20%

* There is no data for the Kealakehe Homeland in the the Decennial Census due to the areas recent construction. Data only available for the North Kona CCD. The US census provides estimates for both the State of Hawai‘i and Hawai‘i County through July 2008. The latest estimates are utilized within this table. No estimates are available for the North Kona CCD. Data shown for the North Kona CCD was gathered during the 2000 census and does not include any estimates.





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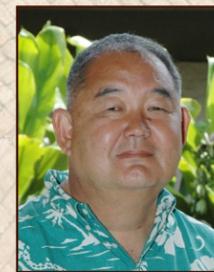
Will Murakami
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John Buckstead
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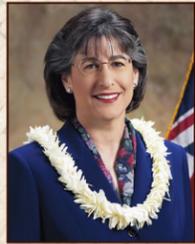
Dr. Earl Bakken
North Hawai'i
Community Hospital

Not Pictured:
Richard Choi - Kealakehe Community

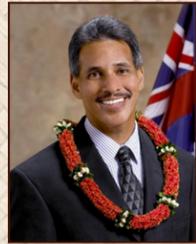
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HOMESTEAD REGIONAL PROFILE

Elected Officials



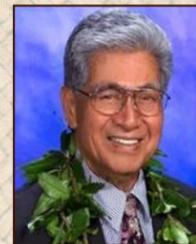
Linda Lingle
Governor



James "Duke" Aiona
Lieutenant Governor



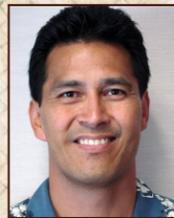
Dan K. Inouye
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Daniel K. Akaka
U.S. Senator



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State House of Representatives
District 6



Cindy Evans
State House of Representatives
District 7



Billy Kenoi
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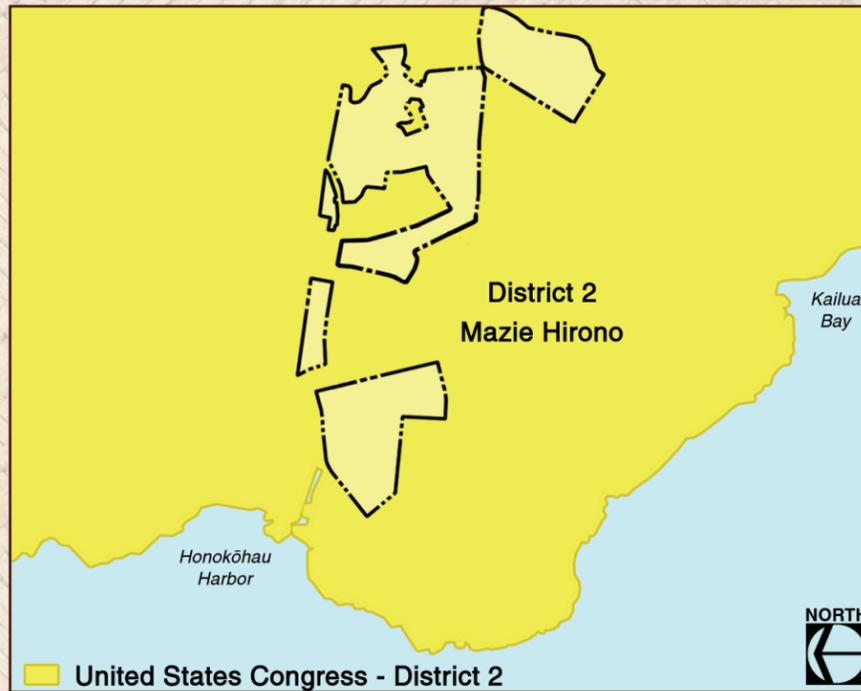
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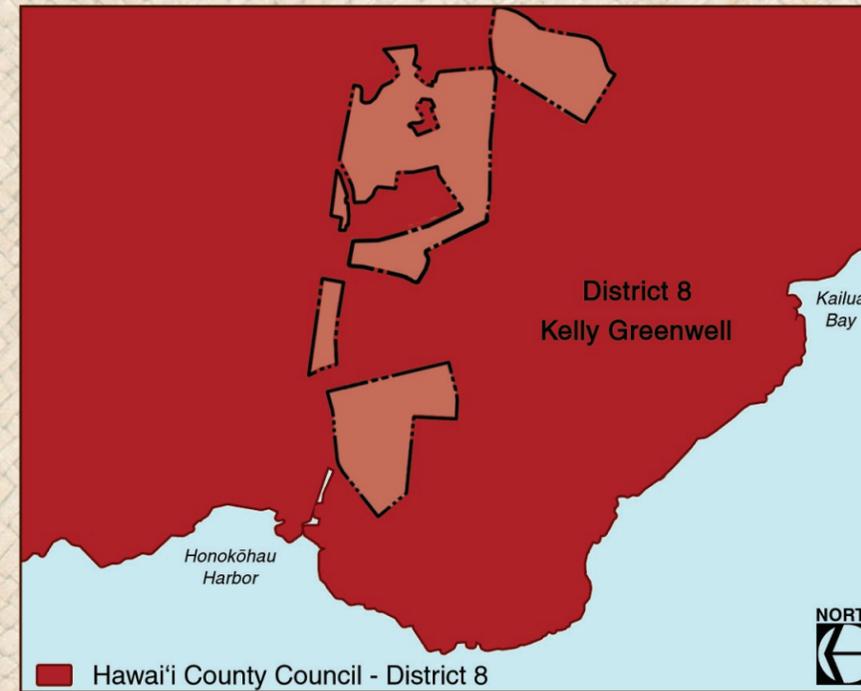
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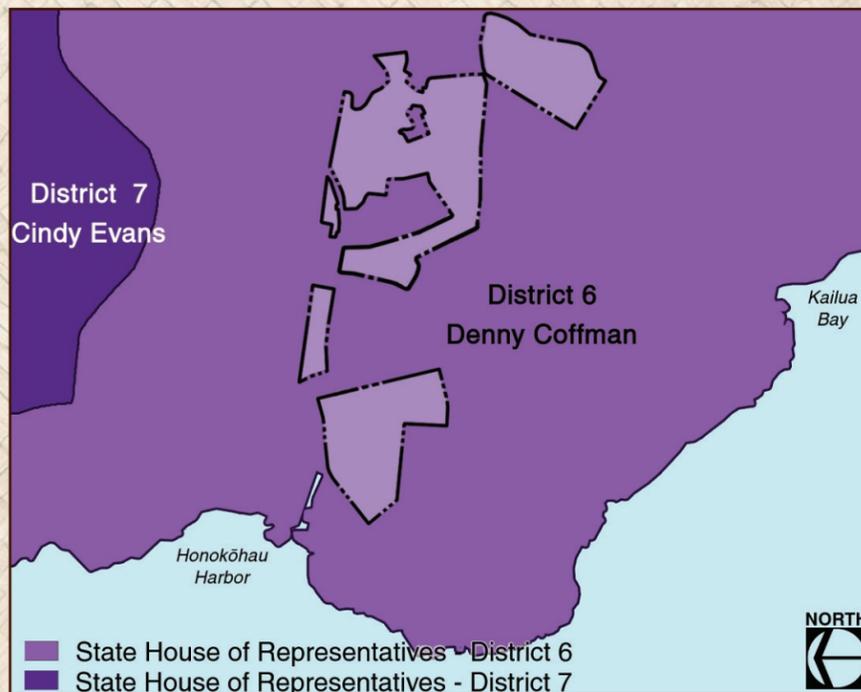
UNITED STATES CONGRESS - DISTRICT



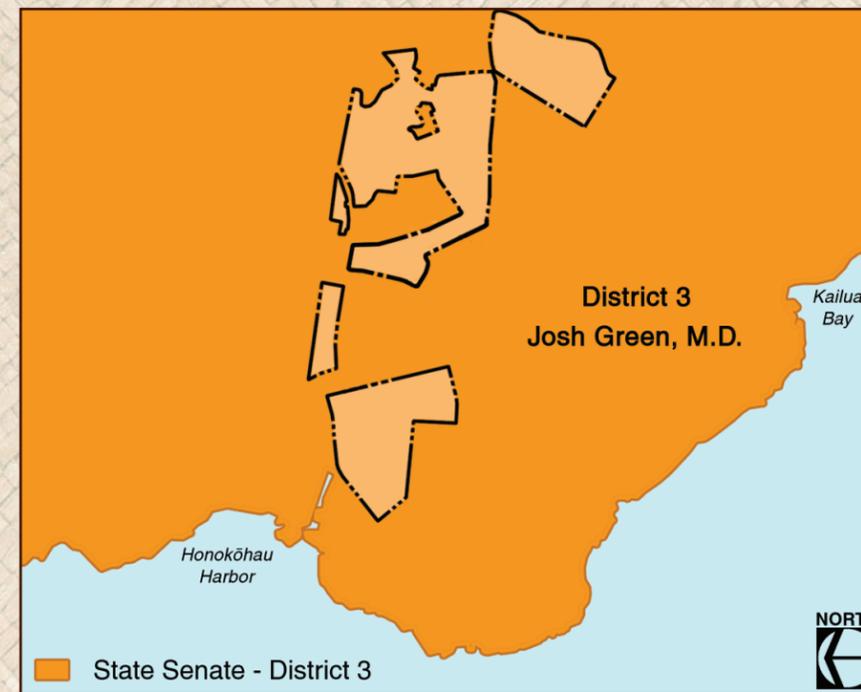
HAWAI'I COUNTY COUNCIL DISTRICT



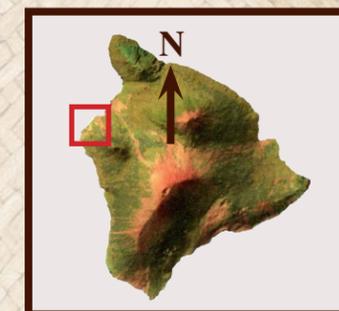
STATE HOUSE OF REPRESENTATIVES DISTRICTS



STATE SENATE DISTRICT



VICINITY MAP



--- DHHL PROJECT BOUNDARY



III. REGIONAL LAND AND DEVELOPMENT

History and Cultural Aspects of the Area

The Villages of La'i 'Ōpua is located in the Kealakehe ahupua'a, along the northwest coast of the Island of Hawai'i, north of Kailua-Kona Town. The 1,015-acre masterplanned community is designed to include 4,082 single-family and multi-family residential units, recreational facilities, and community and neighborhood commercial complexes.

The northern boundary of the Kealakehe ahupua'a is the Honokōhauiki ahupua'a and the Honokōhau ahupua'a. The eastern, mauka boundary is the Honua'ula Forest. The Keahuolū ahupua'a, property of the Queen Lili'uokalani Trust, is the southern border.



Kaloko Fishpond is part of the Kaloko-Honokōhau National Park and is one of the largest Native Hawaiian fishponds in Hawai'i.

The area north of Kailua-Kona Town to Keāhole Point is also known as the Kekaha Lands, historically described as a “dry sun-baked land” (Kelly 1971). Although known for the hot and dry conditions, the area was also noted for its abundance of brackish water ponds along the coast, fresh water springs, and crops near the forest. Kealakehe is literally translated as “the winding path” (Pūku'i 1976). Captain Cook's ships dropped anchor in Kealakekua Bay. This white obelisk was erected by the British government near the spot where Captain Cook fell. The grassy pasture lands of North Kohala were intensively cultivated in dryland crops.

There are no specific references to the Kealakehe ahupua'a in legendary or traditional accounts (Haun & Associates 2001). Archaeological surveys have discovered several heiau, agricultural features, habitation sites, trails, burials, and petroglyphs within the Kealakehe ahupua'a. In the 1800s, activity evidenced by stone walls, corrals, and wire fencing is associated with ranching.

The Honokōhau Harbor is located in the Kealakehe ahupua'a. The harbor was completed in 1970.

The descriptions of the area by historical researchers and government surveyors of the 19th century tend to see the lands as unproductive, with little value. For example, the 1865 roster of government lands described this area as a land “which will do for goat pasture.” In 1882, Nathaniel Emerson discounted the entire ahupua'a as being “of comparatively small value.” These evaluations do not reflect traditional land values of Hawaiians. While the middle, hot and rocky areas may not have supported regular habitation, the archaeological evidence shows that the coastal and uplands area seem to have been cultivated and were able to support small villages. There are remnants of small fishing villages all along the coast and remnants of house sites and agricultural activity in the upland regions.

Source: The Ahupua'a of Kealakehe - Christine Valles & Liko Wellbrock

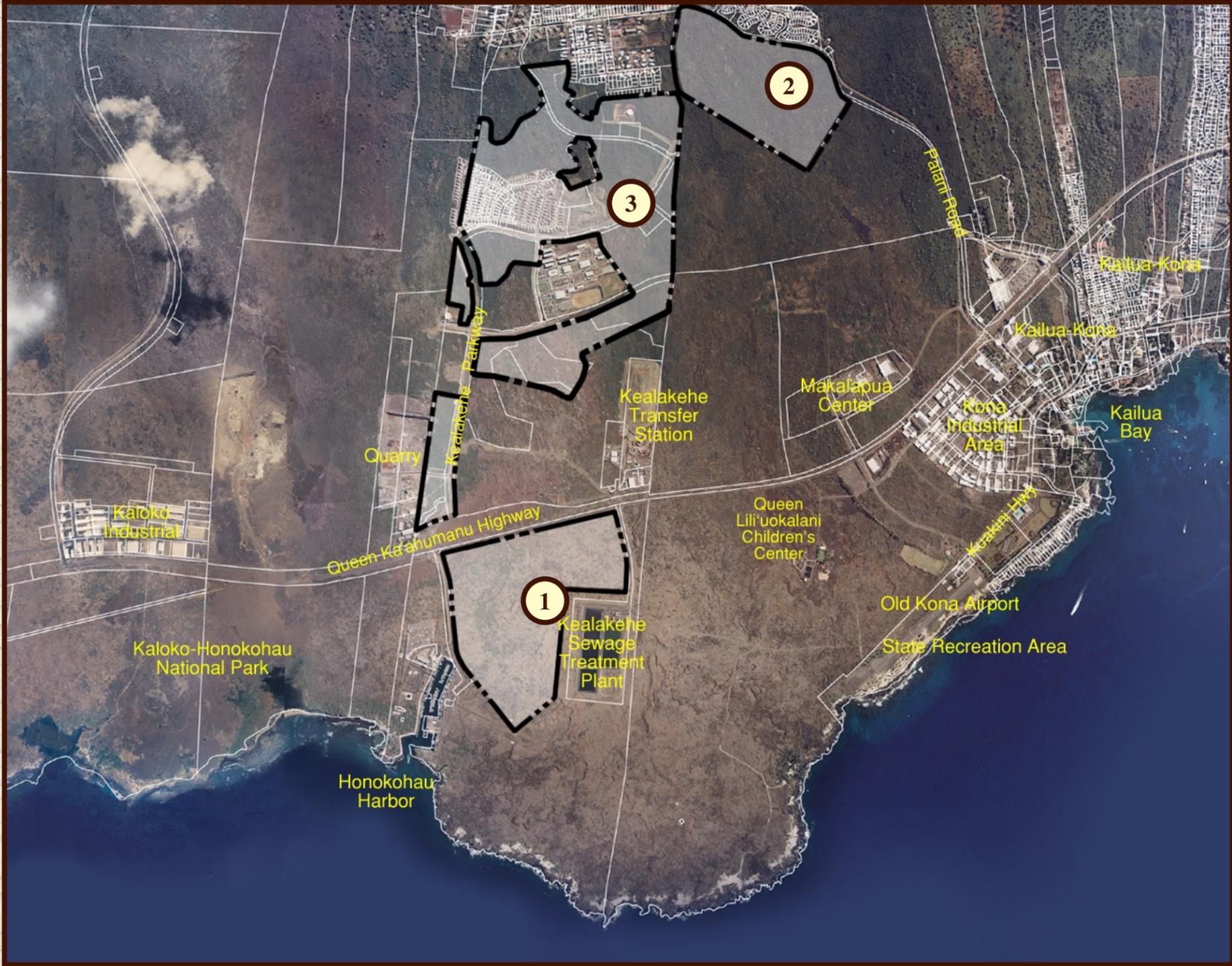


Kaloko-Honokōhau National Park



Kona with Mauna Kea in the background





1 Honokohau – Honokohau is approximately 200 acres in the makai portion of the Kaloko ahupua'a. The parcel is adjacent to the Honokohau Small Boat Harbor and Queen Ka'ahumanu Highway.

2 Keahuolu – Keahuolu is a 150-acre parcel located north of Kailua-Kona. The northern portion is bordered by the Kealahou Houselots subdivision and the Kealahou Elementary and Intermediate Schools on the northwest.

3 Villages of La'i 'Opua – Comprised of over 1,000 acres, the Villages of La'i 'Opua is a masterplanned community located north of Kailua-Kona. DHHL owns approximately 572 acres within the villages. The project consists of 14 different villages, single and multi-family residential units, recreational facilities, community facilities, neighborhood commercial complexes, several parks, and several preserve sites. DHHL owns the entire project except Village 9, Village 10, Village 12, Village 13, Village 14, the Golf Course, County Roadways, Kealahou Parkway, Kealahou High School, and a portion of Village 8. Refer to page 13 for more information on DHHL's lands within the Villages of La'i 'Opua.

Land Summary	
1. Honokohau	200 Acres
2. Keahuolu	150 Acres
3. Villages of La'i 'Opua	572 Acres
Total=	922 Acres



REGIONAL LAND AND DEVELOPMENT

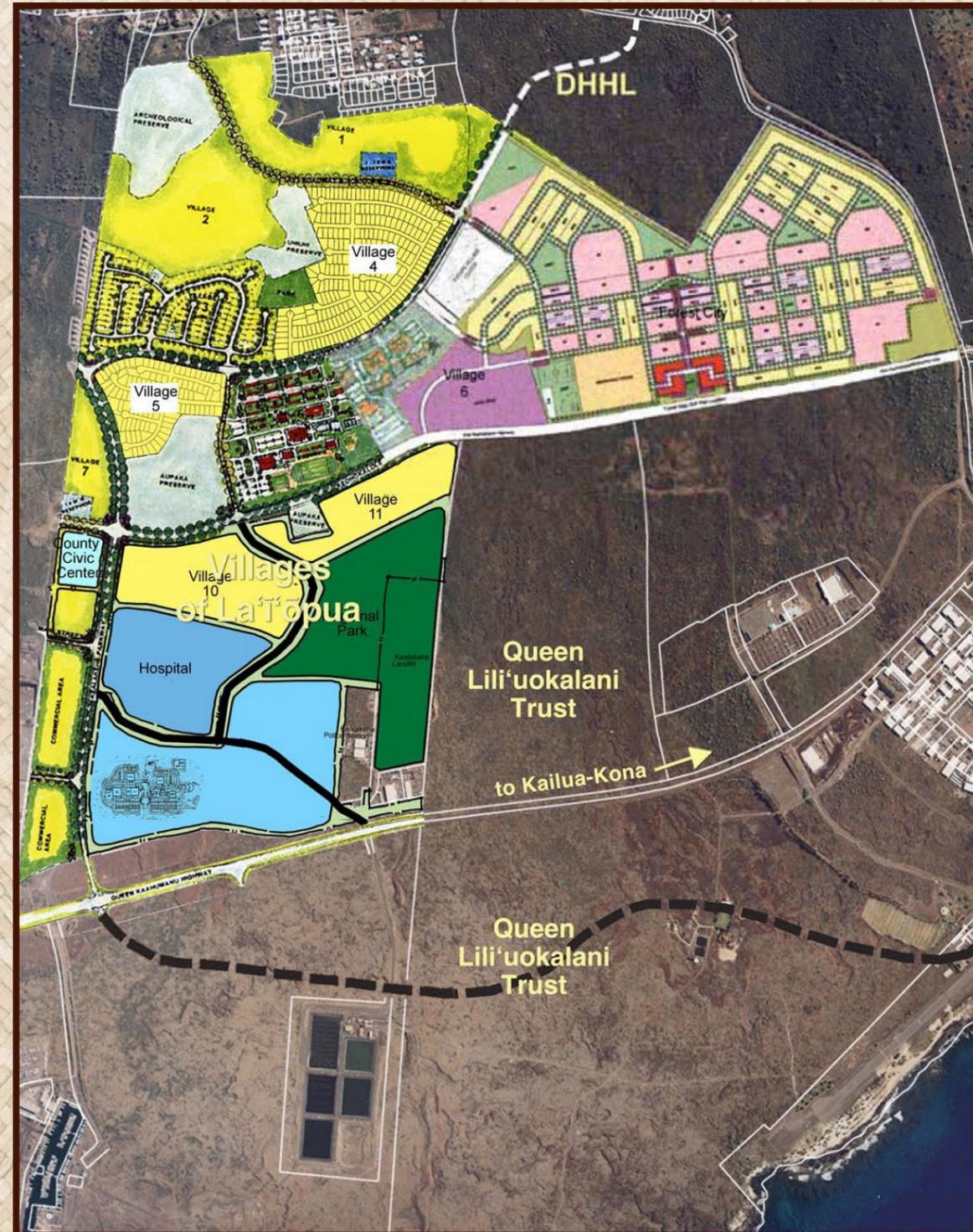
Villages of La'i 'Ōpuua

The Villages of La'i 'Ōpuua is a 980-acre master-planned community located in Kealakehe, north of Kailua-Kona. This project was initially planned by the Housing and Community Development Corporation of Hawai'i (HCDCH) in the early 1990s. The project consists of fourteen villages. Land use for the villages included single and multi-family residential units, recreational facilities, community facilities, neighborhood-commercial complexes, several parks, and several preserve sites. The intent of this project was to develop fee-simple affordable housing using State land.

However, in 1994, OHA sued the State over a dispute regarding the use of ceded lands for public housing. The dispute centered on whether ceded lands should be used for public assistance housing projects. The State was unable to reach a settlement with OHA and eventually transferred 572 acres of ceded and non-ceded land to DHHL for the La'i 'Ōpuua homestead in 1997.

Of La'i 'Ōpuua's 572 acres, 184 or thirty-two percent (32%) are originally non-ceded lands. Approximately 133 acres or seventy-two (72%) of the non-ceded lands are designated for residential use. DHHL transferred the 133-acres of non-ceded lands to the Hawai'i Housing Finance Development Corporation (HHFDC) to develop fee-simple affordable housing. The remaining 51 acres of non-ceded lands in La'i 'Ōpuua have been retained by DHHL to construct additional infrastructure, recreation and commercial facilities.

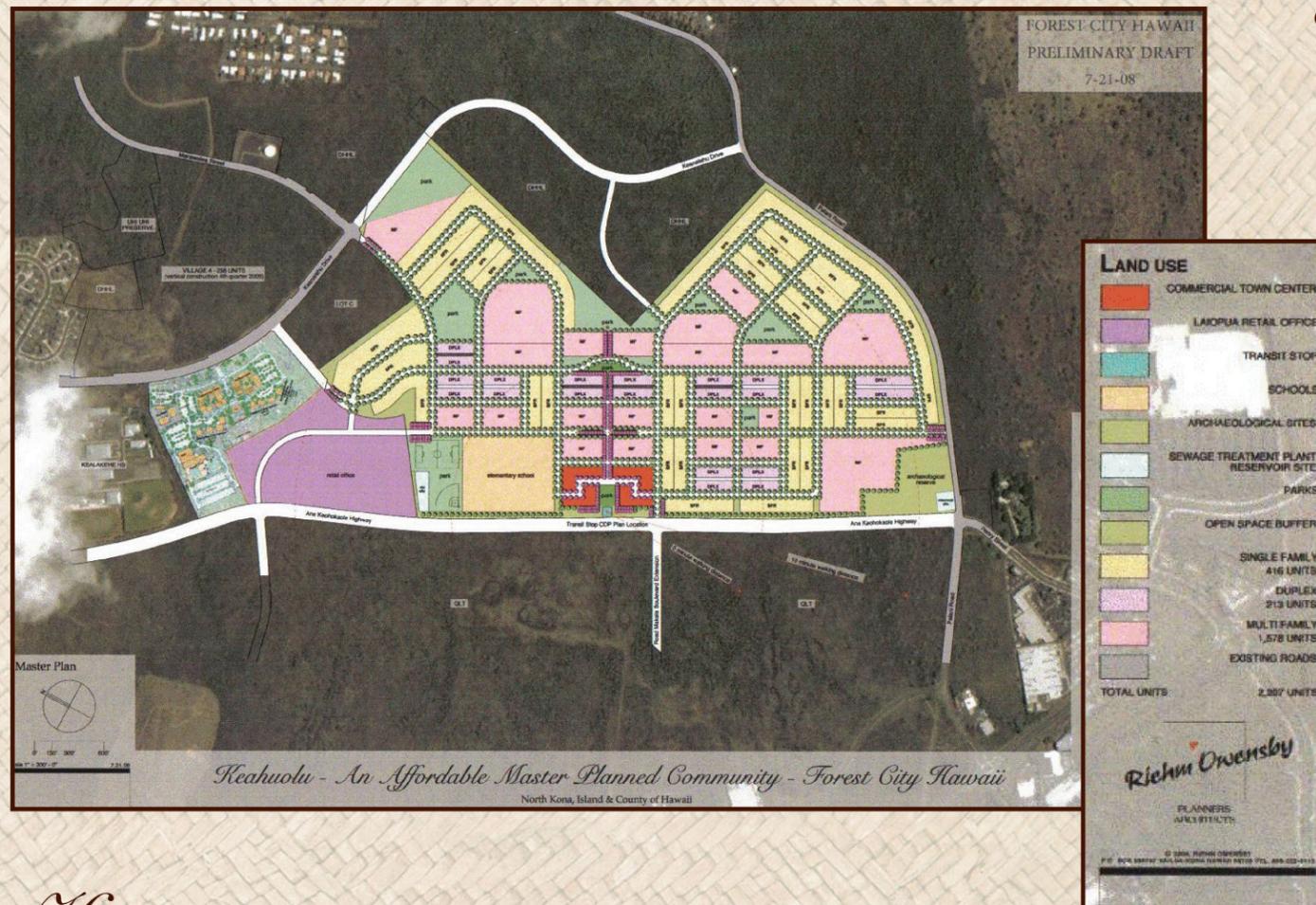
Currently, the construction of Village 3, Kealakehe Elementary School, Kealakehe Intermediate School, and Kealakehe High School have been completed. Village 3, also known as Kaniohale Residential Subdivision was completed in 1999. The Kaniohale Residential Subdivision consists of 184 developer-built single family dwellings, 41 self-help homes and a community center.



Proposed/Planned Use	Area	Owner
Village 1	49.664 Ac.	DHHL
Water Tank Site	2.782 Ac.	Board of Water
Village 2	49.574 Ac.	DHHL
Archaeological Preserve	27.834 Ac.	DHHL
Uhi Uhi Preserve	11.178 Ac.	DHHL
Village 3	51.324 Ac.	DHHL
Village 4	55.433 Ac.	DHHL
Park	5.000 Ac.	DHHL
Village 7	11.600 Ac.	DHHL
Water Tank Site	2.022 Ac.	Board of Water
Village 5	23.592 Ac.	DHHL
Keapaka Preserve	26.564 Ac.	DHHL
Kealakehe High School	48.848 Ac.	Dept. of Education
Portion of Village 6	33.699 Ac.	Community Center
Portion of Village 6	Est. 16.000 Ac.	DHHL
Park	5.000 Ac.	DHHL
Portion of Village Center	Est. 14.000 Ac.	DHHL
Portion of Village Center	7.598 Ac.	HHFDC
Park	Est. 4.500 Ac.	HHFDC
Portion of Elementary School Site	Est. 9.400 Ac.	HHFDC
Portion of Elementary School Site	0.198 Ac.	DHHL
Portion of Village 13	0.022 Ac.	DHHL
Village 13	Est. 50.800 Ac.	HHFDC
Village 14	Est. 31.400 Ac.	HHFDC
Village 12	Est. 51.100 Ac.	HHFDC
Village 11	24.067 Ac.	County of Hawai'i
Archaeological Preserve	1.224 Ac.	DHHL
Golf Course	193.547 Ac.	County of Hawai'i
Village 10	21.453 Ac.	HHFDC
Village 9	35.774 Ac.	County of Hawai'i
County Office Building	7.000 Ac.	County of Hawai'i
Commercial Area	7.863 Ac.	DHHL
Commercial Area	26.528 Ac.	DHHL
	Ac.	
County Roadways	26.934 Ac.	County of Hawai'i
Kealakehe Parkway	46.174 Ac.	Dept. of Transportation
Total Est.		979.696 Acres
Total DHHL Est.		571.695 Acres

Non-Ceded Lands Inventory			
Project Area	Master Plan Area (acres)	Ceded Portion	Non-Ceded Portion
Village 6	49.70	32.20	17.50
Village Center	14.50	7.60	6.90
Elementary School	9.60	0.20	9.40
Park	5.00	0.00	5.00
Village 1	53.50	49.66	3.84
Village 12	51.10	0.00	51.10
Village 13	50.80	0.02	50.78
Village 14	31.40	0.00	31.40
Roadway E	3.70	1.23	2.47
Keanalehu Drive	12.70	7.04	5.66
	282.00	97.95	184.05
If Less:			
Village 12			51.10
Village 13			50.78
Village 14			31.40
Subtotal:			133.28
Net Non-Ceded (approx.)			50.77

Endangered Plant Species Mitigation and Dry Forest Restoration Plan at the Villages of La'i 'Ōpua)



PROJECT BENEFITS

Besides meeting conservation objectives, many of these plants have historical and cultural uses and value to native Hawaiians. The plants depicted on these boards represent native dryland forest plants which currently exist or were known to exist within the project area. The project aims to link a people and a culturally important resource in a setting integrated within this growing Hawaiian community. The Aupaka Preserve is the entryway into the Hawaiian Homestead Community. A monument sign marking the entrance to The Villages of La'i 'Ōpua is being proposed to be placed within the Preserve at the intersection of Kealakehe Parkway and Ane Keohokalole Highway. The area surrounding the sign will be landscaped with dry forest plants.

The preserves are a feature unique among DHHL homesteads and has the added benefits of providing an attractive community open space, maintaining view planes, mitigating urban sprawl, reducing urban heat-island effects and protecting nearby ground water resources.

PROJECT BACKGROUND

The Department of Hawaiian Homelands has created and started implementing a plan to build and manage four Preserves for endangered native plants in the Villages of La'i 'Ōpua. This work will restore the native dry forest and protect individuals of the endangered aupaka (*Isodendron pyriformis*) and uhiuhi (*Caesalpinia kavaiensis*). The last five aupaka plants known to survive in nature are located within the La'i 'Ōpua project area. La'i 'Ōpua is also the site of one of the largest remaining concentrations of uhiuhi, a native hardwood species thought to have about 100 individuals left in the wild. Currently there are 21 species of native Hawaiian plants here, many fighting for survival amidst introduced plants. The indigenous plants include fairly common species such as alahe'e, 'a'ali'i and naio, as well as rare plants such as maiapilo, ko'oko'olau, which were famous for its medicinal properties, and the graceful 'ohe makai.

Keahuolū

The Hawai'i Housing Finance and Development Corporation (HHFDC) has awarded the development rights for approximately 270 acres to Forest City, Inc. Referred to as "Keahuolū," The project area includes 163.9 acres of land formerly part of the Villages of La'i 'Ōpua project. These lands were thought to have been ceded lands. However, because information revealed this area not to be part of the trust, it was transferred to HHFDC for affordable housing development.

The development will include a mix of high-density (multi-family) and low-density (single-family) units. A total of approximately 2,400 units will be constructed along with

a new elementary school, minor commercial, and park space.

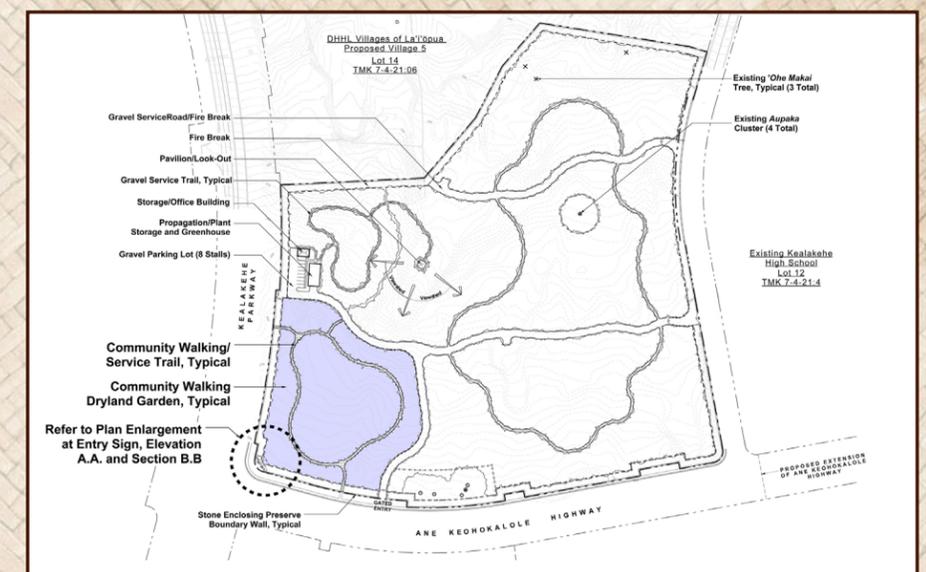
The HHFDC development also sits at a crucial intersection between Ane Keohokalole Highway and Manawale'a Street. At this intersection is envisioned the construction of a transit oriented development combining crucial public services and commercial. The conversion of these multi-modal arterial roadways will allow area residents to reach this commercial and service hub with ease.



Aupaka



Uhiuhi



Water

*1. North Kona Water Source Development, Transmission, and Storage

Currently, there is an inadequate source of water for the full build-out of the Villages of La'i 'Ōpua. Source development, storage, and transmission would be required to develop future villages.

2. Palani Road to Keanalehu Drive Transmission Line

The transmission main located along Keanalehu Drive terminates near Puohulihuli Street. Contingent on the extension of Keanalehu Drive and Palani Road, a new transmission line would connect the Villages of La'i 'Ōpua to mauka water resources.

3. Kealaka'a Street to Keanalehu Drive Transmission Line

The transmission main located along the Uluaoa Road currently ends at Kealaka'a Street. Contingent on the extension of Manawale'a Road from Kealaka'a Street down to Keanalehu Drive, a new transmission line would connect the Villages of La'i 'Ōpua to mauka water resources.

Sewer

Sewer along extension along Keanalehu Drive

In order to construct the proposed community center in Village 6, the existing sewer line in Keanalehu Drive would need to be extended. The existing sewer master plan has Village 6 being served by a new sewer main that would run along the south boundary of the property and eventually connecting to the existing the sewer main below Village 9.

* Priority project.

Roads

1. Keanalehu Drive Extension to Manawale'a Connector Road

Improving Manawale'a Road between Keanalehu Drive and Kealaka'a Street would provide a direct route between the Villages of La'i 'Ōpua and the various schools located in the mauka subdivision. This connection would give the residents of La'i 'Ōpua a better route to the elementary school, rather than driving down to Queen Ka'ahumanu Highway and up Palani Road. DHHL is in discussions with the County about this road connection.

2. Ane Keohokalole Highway Extension

The Ane Keohokalole Highway Extension to Henry Street will also provide another access to the proposed Hawai'i County Civic Center, to be located at the intersection of Ane Keohokalole Highway and Kealakehe Parkway. The Ane Keohokalole Highway Extension to Henry Street would significantly alleviate traffic along Palani Highway and Queen Ka'ahumanu Highway.

3. Keanalehu Drive to Palani Road Extension

Extending Keanalehu Drive to Palani Road would provide an alternate access point into and out of the Villages of La'i 'Ōpua. Currently, the only access point into the Villages is from Queen Ka'ahumanu Highway.

4. Kealakehe Parkway to Kealaka'a Street Extension

The extension of Kealakehe Parkway to the Kealaka'a Street Extension is the first phase of the Kealakehe Parkway Extension project. The Kealakehe Parkway Extension project is a State project listed in the County of Hawai'i's Keāhole to Kailua (K-to-K) roadway master plan.

5. Kealakehe Parkway / Queen Ka'ahumanu Highway Intersection

The State Department of Transportation (DOT) has plans for a major intersection at the crossing of Kealakehe Parkway and Queen Ka'ahumanu Highway. The mauka portion of Kealakehe Parkway will be straightened as part of this project.

Community

*** 1. La'i 'Ōpua 2020**

A community center is planned for Village 6. This community center will have a gym, meeting hall, Kamehameha Schools Preschool, playfields, and adequate parking. This community center will be the piko of the Villages where the residents of La'i 'Ōpua can gather. The community center is a priority project.

Residential

1. Villages 4 and 5

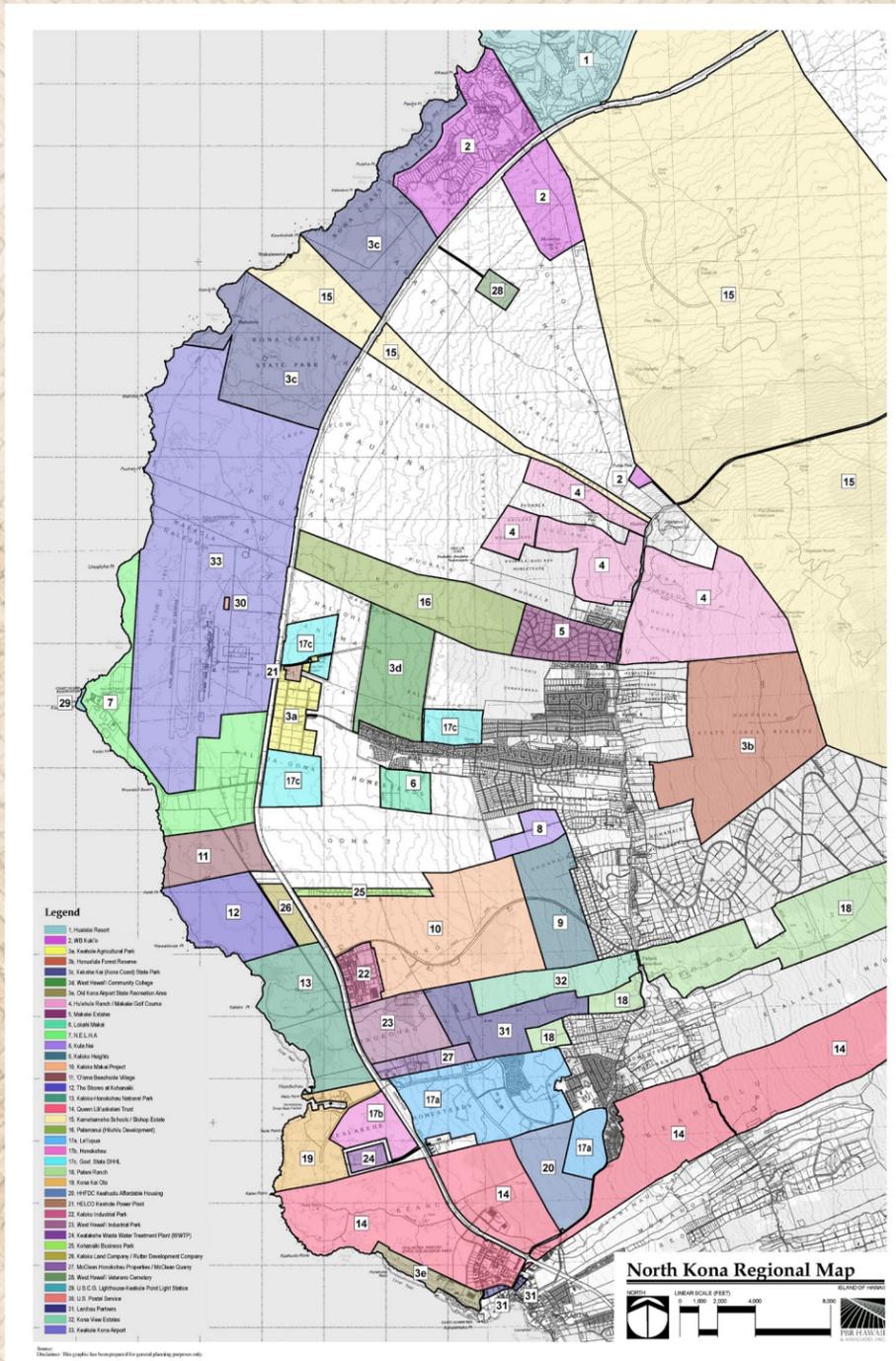
Villages 4 and 5 will provide new homes to native Hawaiians in North Kona. These new villages will be modeled after the successful Village 3, which was completed in 2001.

2. Villages 1 and 2

Villages 1 and 2 are future homesteads and will be planned for homes once Villages 4 and 5 are completed.

* Priority project.





1) Hualālai Resort (8,851 acres)

Located on 8,851 acres on the Kohala Coast, the Hualālai Resort is a residential planned residential/resort community

2) WB Kūki'o (957 acres)

Directly adjacent to the Hualālai Resort is the Kūki'o Beach Club. Kūki'o is a planned residential community with an 18-hole golf course.

3) State of Hawai'i (54,112 acres)

By far the State is the single largest landholder within the immediate area of the Kona International Airport. While a majority of the lands are unencumbered and not in current active use by the state, there are several properties in the immediate vicinity of the Kona International Airport that are actively utilized.

- a) Keāhole Agricultural Park (179 acres)
This 179 acre agricultural park is subdivided into 34 individual lots where tenants are allowed to grow various crops and other agricultural products.
- b) Honua'ula Forest Reserve (2,504 acres)
The Honua'ula Forest Reserve is located mauka of the Kona International Airport. The forest reserve is home to many indigenous plants species such as 'ōhi'a and koa.
- c) Kekaha Kai (Kona Coast) State Park (1,154 acres)
Split in half by a parcel of land owned Bishop Estate, Kekaha Kai State Park can be accessed from Queen Ka'ahumanu Highway via an unpaved road.
- d) West Hawai'i Community College (500 acres)
The proposed 500 acre lot has been earmarked for a West Hawai'i Community College.
- e) Old Kona Airport State Recreation Area (116 acres)
In 1970, the Old Kona Airport was shut down and converted into a state park.

4) Hu'ehu'e Ranch/Makalei Golf Course (1,647 acres)

Originally part of the Hu'ehu'e Ranch, the parcels were sold off with the intention of developing it into an agricultural subdivision with homes, a golf course, cattle ranch, and equestrian facilities.

5) Makalei Estates (246 acres)

Makalei Estates is a 246 acre residential housing west of the Hu'ehu'e Ranch property. All 77 lots are zoned Ag-3.

6) Lokahi Makai (126 acres)

Lokahi Makai is a planned 191 unit residential community located on the makai portion of Kona Palisades.

7) Natural Energy Laboratory of Hawai'i Authority (NELHA)/ Hawai'i Ocean Science Technology (HOST) (548 acres)

NELHA/HOST serves as a science technology park that focuses on research, education, and commercial activities that support sustainable industry development which makes use of deep seawater resources.

8) Kula Nei (128 acres)

In 2006, the Shopoff Group proposed to the State to develop approximately 270 residential units with up to 220 single family home units.

9) Kaloko Heights (394 acres)

Stanford Carr Development purchased the lands in 2005 to begin construction of a 1,500 unit master planned community.

10) Kaloko Makai Project (1,144 acres)

Through a partnership with Stanford Carr Development (SCD), the existing parcels of land are proposed to be converted into a mixed-used planned community with 5,000 units of single-family and multiple-family homes.

11) 'O'oma Beachside Village (303 acres)

'O'oma Beachside Village is a planned community south of the Kona International Airport along the Kohala Coast.

12) The Shores at Kohanaiki (442 acres)

The Shores at Kohanaiki is a 500-unit golf course community under development by Kennedy Wilson and Rutter Development. Existing shoreline, anchialine ponds, and historic areas on site are proposed to be preserved.

13) Kaloko-Honokōhau National Park (1,160)

The 1,160 acre Kaloko-Honokōhau National Park stretches along the Kohala Coast.

DEVELOPMENT PROJECT CHARACTERISTICS AND TRENDS

14) Queen Liliu‘okalani Trust (3,517 acres)

Trust lands in the Kona area include the Makalapua Center which includes cinemas and a Macy’s Department Store, Queen Liliu‘okalani Children’s Center, and Kona Industrial Sub-division.

15) Kamehameha Schools/Bishop Estate (22,120 acres)

Unencumbered lands owned by KSBE are designated as unique resource lands for probable educational/cultural program expansion.

16) Pāalamanui (Hiluhilu Development) (725 acres)

Pāalamanui is a master planned community, which will include single and multiple-family residential units.

17) Department of Hawaiian Home Lands (DHHL) (1,407 acres)

DHHL’s mission is to manage effectively the Hawaiian Home Lands Trust and to develop and deliver lands to native Hawaiians. DHHL manages 1,400 acres in the Kona area.

a) La‘i ‘Ōpua

The La‘i ‘Ōpua homestead lands lay north of Kailua-Kona. La‘i ‘Ōpua itself is comprised of three areas; Honokōhau, Keahuolū, and the Villages of La‘i ‘ōpua

b) Honokōhau

Though part of the La‘i ‘Ōpua homestead, the 200 acre Honokōhau parcel is currently being developed.

c) Other lands (482 acres)

Other DHHL lands nearby the Kona International Airport are currently zoned for residential and industrial use.

18) Palani Ranch (2,521 acres)

Lands closer to Māmalahoa Highway have been identified as areas that have the potential to be transformed into commercial, residential, and farm lot subdivisions. In the southern portion of the Palani Ranch parcels is the Hualālai Academy, a private school for grades K-12.

19) Kona Kai Ola (330 acres)

Kona Kai Ola was a proposed mixed-use commercial project that strives to protect natural resources in the Kealakehe ahupua‘a but is currently on hold.

20) Hawai‘i Housing Finance and Development Corporation (HHFDC) Keahuolū Affordable Housing (272 acres)

The HHFDC was created in 2006 to increase the availability of affordable housing within the State of Hawai‘i.

21) HELCO Keahole Power Plant (15 acres)

The Keāhole Power Plant is located mauka of the Kona International Airport and immediately adjacent to Department of Agriculture Keāhole Agriculture Park farm lots.

22) Kaloko Industrial Park (215 acres)

Kaloko Industrial Park is host to many small commercial enterprises. Average lot size is approximately 2.9 acres.

23) West Hawai‘i Industrial Park (326 acres)

Situated mauka of the Queen Ka‘ahumanu Highway, the West Hawai‘i Industrial Park is currently a quarry site.

24) Kealakehe Waste Water Treatment Plant (WWTP) (53 acres)

The Kealakehe WWTP is managed by the County of Hawai‘i.

25) Kohanaiki Business Park (62 acres)

There are approximately 44 lots that are one acre in size.

26) Kaloko Land Company/Rutter Development Company (93 acres)

Rutter Development, the owner of Kaloko Land Company is also responsible for the development of The Shores of Kohanaiki, an adjacent 500 home golf-course community along the Kona Coast. There are no plans for the current 93 acre Kaloko Land Company Parcel.

27) McClean Honokōhau Properties/McClean Quarry (146 acres)

Auto body, warehousing, and construction operations are some of the various commercial and light industrial tenants.

28) West Hawai‘i Veterans Cemetary (62 acres)

Located mauka of the Queen Ka‘ahumanu Highway and south of Hualālai Resort, the West Hawai‘i Veterans Cemetary is managed by the Office of Veteran Affairs.

29) U.S.C.G. Lighthouse-Keāhole Point Light Station (11 acres)

The USCG Lighthouse at Keāhole Point is the western-most lighthouse on the island of Hawai‘i.

30) U.S. Postal Service (4 acres)

The existing facility assists in the delivery and distribution of out/in-going mail to the Big Island.

31) Lanihau Partners (423 acres)

Lying adjacent to the Villages of La‘i ‘ōpua, consideration was made to developing a residential community on the largest parcel (394 acres) along Kealakehe Parkway. Currently no decision has been made to move ahead with any further development on Lanihau Partners Land.

32) Kona View Estates (293 acres)

Kona View Estates is a planned community that allows residents to enjoy an agricultural environment while being close in proximity to Kona. Currently, the whole 293 acres is not developed. Phase I of Kona View Estates incorporates 29 one acre units. Phase I is lies makai of Māmalahoa Highway. Phase II of Kona View Estates is going through a planning and design phase.

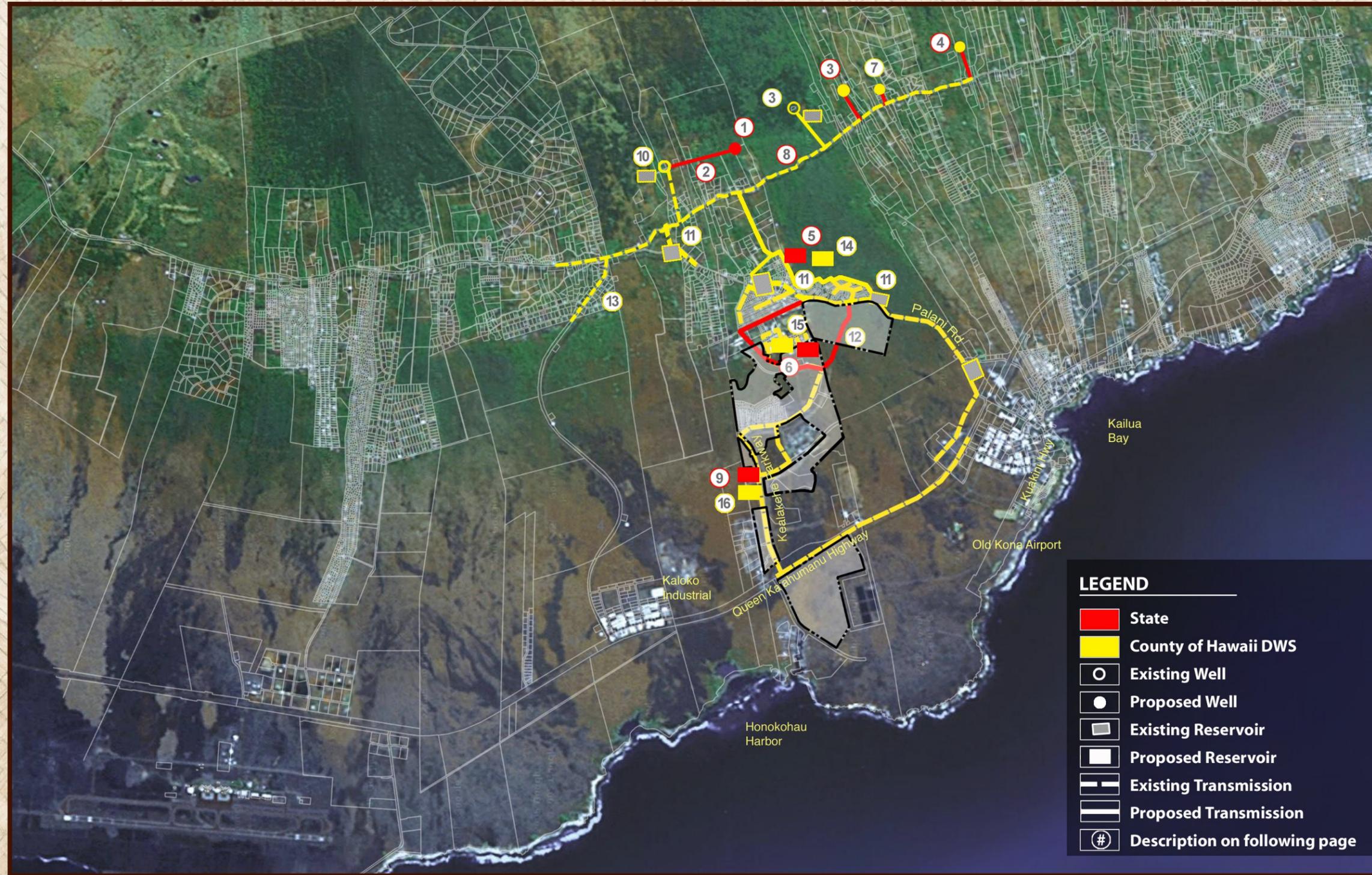
33) Kona International Airport (1,920 acres)

The Kona International Airport (KOA) is the primary airport hub of West Hawai‘i. 2006 DBEDT tourism statistics indicate over 1.3 million visitors arrived in the Kona region. Recent State Legislature appropriations earmarked over \$17 million in upgrades and terminal construction.



Aerial View of Natural Energy Lab of Hawai‘i Authority (NELHA)





Existing Water System

Water for Kealakehe, Honokōhau, and Keahuolū are within the North Kona Water System. Water for the North Kona Water System is conveyed by gravity flow from the mauka Kahalu‘u sources through 20-inch and 24-inch transmission mains on Kuakini Highway and Queen Ka‘ahumanu Highway to the distribution systems. The primary water sources are four deep wells and one shaft in the Kahalu‘u well field with a combined pumping capacity of 10.50 million gallons per day (mgd). These sources are supplemented with water from the recently completed Hōlualoa, Honokōhau, Kalaoa, and Hualālai wells that add 4.50 mgd to the system’s pumping capacity. The pumpage during 2000 of all wells in the system averaged 8.375 mgd. To meet the water demand for future development, the County of Hawai‘i Department of Water Supply (DWS) has a goal to develop high level water sources, transmission, and storage facilities.

Village 3 of the Villages of La‘i ‘Ōpua is served from a water line that extends down from Kealaka‘a Street in the existing Kealakehe House Lot Subdivision. The water is stored in a 1.0 mgd, 595-foot elevation storage tank located above Village 4. Existing water lines run down Manawaea Road and along Keanalehu Drive serving Village 3 and the Kealakehe High School. In 2003, the State Department of Land and Natural Resources (DLNR) prepared a water master plan to accommodate the water needs of several State agencies that have interest in the North Kona area. The affected agencies have entered into a memorandum of understanding (MOU) to receive water allocations for their facilities, and in return, to share in the cost of the master plan improvements. The master plan is currently being implemented by DLNR. Upon completion of each proposed improvement, it is dedicated to DWS for operation and maintenance.

Only a portion of the Villages of La‘i ‘Ōpua has water allocation under the existing MOU. The existing water allocation will allow the development of Villages 4 & 5. Future development of the project will require source development of four (4) wells assuming that the production capacity of each well is at least one million gallons per day. The development of high level wells is a part of the North Kona Water System strategy in replacing the water supply for future growth in the area from the existing Kahalu‘u Shaft.

Discussions with DWS have identified the potential wells DHHL could possibly share in the development of water required of planned development. Currently, DHHL is finalizing the Water Master Plan for the Villages of La‘i ‘Ōpua, which will include the strategy for source development, storage, and transmission to the project.

Funded Water Improvements Project Ongoing :

2) Queen Ka‘ahumanu Highway Widening – Kealakehe to Keahole 16” Waterline Installation: \$5,000,000

A sixteen-inch waterline from Kealakehe Parkway to Keahole Reservoir is proposed for installation beneath Queen Ka‘ahumanu Highway. The waterline would also tie into an existing line running along Hina Lani Street. The project is part of an overall design-build project managed by the DOT.

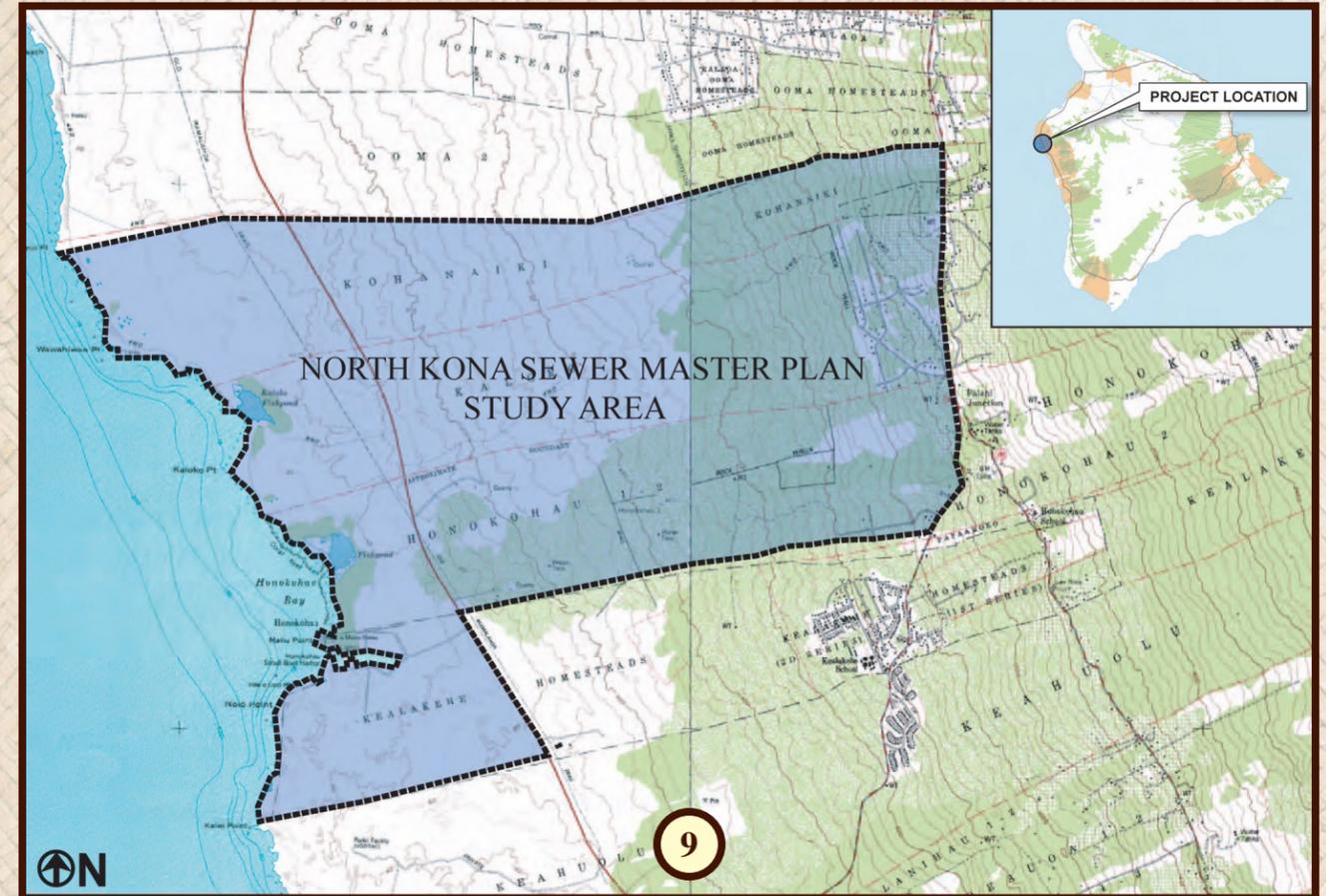
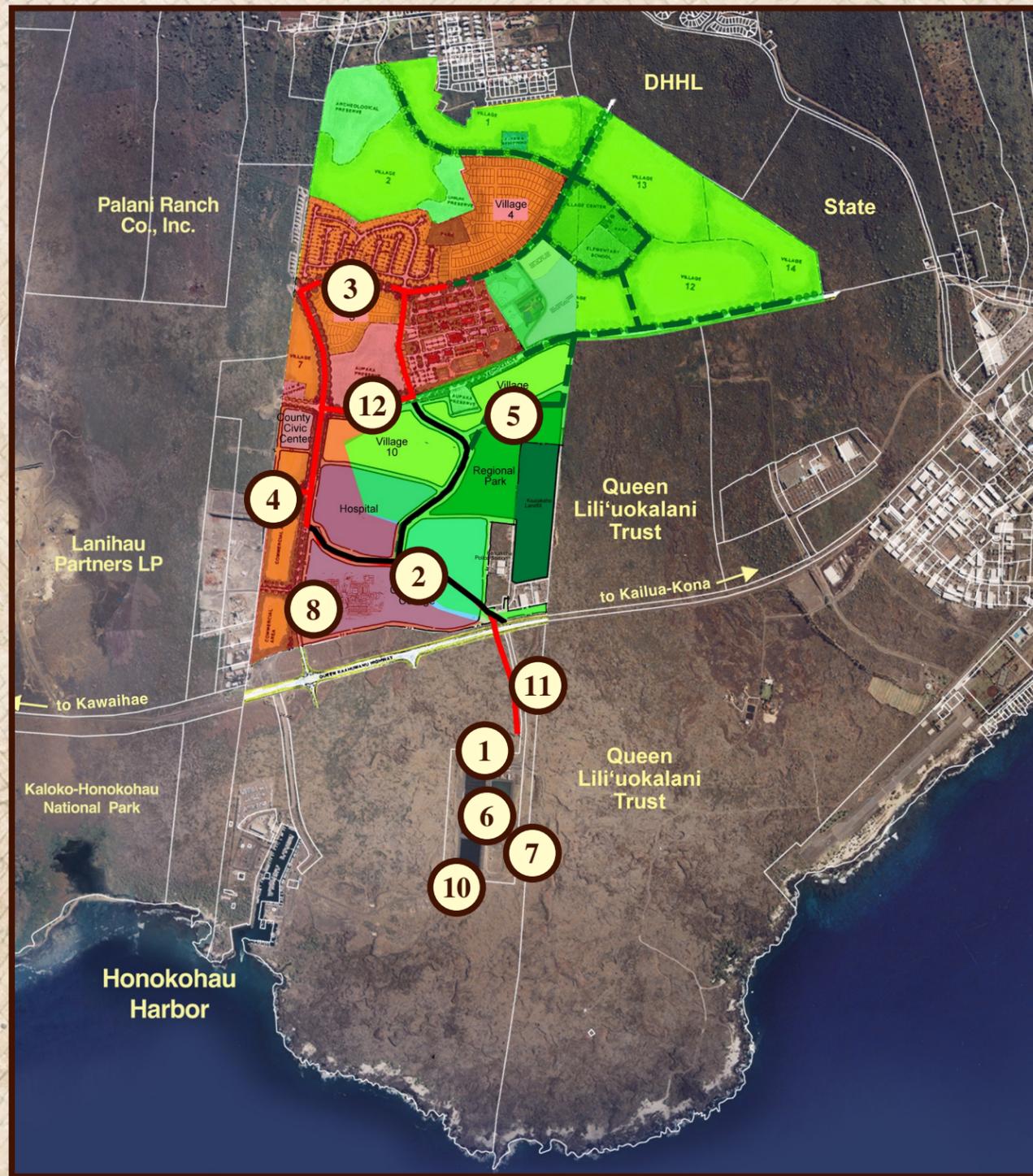
Proposed Water System

The map to the left shows the existing and proposed water lines, reservoirs, and wells. Other projects proposed for development, and not included in the map are the exploration of various wells by DWS and private developers, a mid-level road pipeline, Queen Ka‘ahumanu Road Pipeline, and non-MOU project storage.

LEGEND

- 1. Kealakehe Well Development**
- 2. Kealakehe Transmission**
- 3. North Keopū Well Field-DWS owned & recommended for development partnership with DHHL**
- 4. Keopū Well Field-DWS owned & recommended for development partnership with DHHL**
- 5. Villages of La‘i ‘Ōpua 935’ Reservoir**
- 6. Villages of La‘i ‘Ōpua 595’ Reservoir**
- 7. North Keopū Well Field-DWS owned & recommended for development partnership with DHHL**
- 8. Transmission Main Māmalahoa Highway**
- 9. Villages of La‘i ‘Ōpua 325’ Reservoir**
- 10. Existing Honokōhau Well & 1.0 mg Tank**
- 11. Palani Road Transmission Main & Reservoirs**
- 12. Keanalehu Drive Transmission Main**
- 13. Hinalani Drive Transmission**
- 14. Existing County Villages of La‘i ‘Ōpua 935’ Reservoir**
- 15. Existing County Villages of La‘i ‘Ōpua 595’ Reservoir**
- 16. Existing County Villages of La‘i ‘Ōpua 325’ Reservoir**





SEWER - INFRASTRUCTURE & CHARACTERISTICS

Existing Sewer System

- 1 Wastewater is presently disposed of at the municipal sewage treatment plant (STP) located makai of Queen Ka'ahumanu Highway. This STP, completed in 1992, has a design capacity of 2.89 mgd. The plant occupies approximately 50 acres with an effluent disposal area of approximately 150 acres. The Kealakehe STP's design capacity must be increased about 2.0 mgd to service the entire Villages of the La'i 'Ōpua at full build-out. This increase in capacity would require an additional 10 acres of land and an appropriate increase in size of the leaching area (effluent disposal area).
- 2 The proposed golf course within the Villages of La'i 'Ōpua serves as an effluent disposal area for the STP. The 195-acre golf course is of sufficient size to accommodate the existing 2.89 mgd plant as well as the 2.0 mgd expansion.
- 3 The existing wastewater system includes a 12-inch gravity main serving Villages 1 to 7, and 11, as well as the proposed elementary school and high school. The system is linked to a 21-inch gravity trunk line extending along the length of the Villages' southern boundary and across Queen Ka'ahumanu Highway to the Kealakehe STP.

Proposed Sewer System Improvements

- 4 Villages 8 to 11 are serviced by 12-inch and 8-inch gravity mains flowing to a main trunk sewer along the southern boundary. A sewage pump station discharging via 8-inch force main to the 21-inch truck line will be required to serve the proposed community shopping center at the northwest corner of the project area.
- 5 Villages 12 to 14 will be served by 12-inch force mains linked to the sewage pump station near Palani Road. The mains will utilize an 8-inch force main to pump the wastewater north to the 21-inch gravity trunk line.
- 6 Kealakehe Wastewater Treatment Plant Sludge Removal: \$4,600,000 (County of Hawai'i FY 07-08 Budget)
Recent sludge depth readings indicate the lagoons at the Kealakehe Wastewater Treatment Plant are at or near capacity. The high amount of sludge could result in the clogging of the seepage pit, and jeopardize the effluent disposal system. Removal of the sludge would prevent a shutdown of the overall disposal system
- 7 Kealakehe Wastewater Treatment Plant Aeration Upgrade: \$1,500,000 (County of Hawai'i FY 07-08 Budget) Additional \$5.1M has been appropriated by the County for FY '08 -'09.
In order to accommodate the nearby increase in residential population, additional capacity at the Kealakehe Wastewater Treatment Plant is needed. The current plant was not designed to handle the levels of biological oxygen demand and total suspended solids. In order to increase capacity, additional aeration is required.
- 8 North Kona Sewer Land Acquisition , Infrastructure Improvement: \$14,118,000 (County of Hawai'i FY 09-10) An additional \$10.3 million was previously appropriated for this project. - Ongoing
- 9 Design and Surveying for North Kona Sewer Improvement District: \$960,000 (prior appropriation of \$140,000 FY 06-07 & 07-08 Budget) - Ongoing
The county intends to further extend its sewer system to the area north of the Kealakehe Wastewater Treatment Plant. The area currently has no public sewer system. Although design and surveying would commence in this fiscal year, the county's Department of Environmental Management does not intend to request \$20,000,000 in construction funds until the 2013 fiscal year.
- 10 Kealakehe Wastewater Treatment Plant Photovoltaic System \$7,000,000 (County of Hawai'i FY09-10 Budget)
Installation of a photovoltaic system would reduce the county's dependence on oil while protecting the environment through the use of green technologies. Ultimately the project will minimize cost to customers.
- 11 North Kona Effluent Reuse Upgrade \$5,129,000 (County of Hawai'i FY09-10 Budget) An additional \$9,696,000 was previously appropriated for this project by the County.
Reuse of treated effluent from the wastewater plant for non-potable requirements will minimize the strain on limited potable water resources in the region. The project would provide funding to design and construct infrastructure to allow the reuse of treated wastewater between Kealakehe Wastewater Treatment Plant and Kealakehe Parkway. It will connect reuse infrastructure installed between Kealakehe Parkway to Kohanaiiki Industrial to the wastewater treatment plant. Approval of an addition \$10.3 million (FY 2010-2011) will be required to complete the project.
- 12 Keahuolū Reuse Infrastructure, Phase I: \$2.9 million (County of Hawai'i FY09-10 Budget)
Reuse of treated effluent from the wastewater plant for non-potable requirements will minimize the strain on limited potable water resources in the region. The project will provide funding to design and construct infrastructure in the Keahuolū Area. The project will include reuse infrastructure for landscape irrigation of Ane Keohokalole Highway and a one million gallon storage tank at 750 ft elevation. Approval of an addition \$6.95 million will be required to complete the project.





ROADS - INFRASTRUCTURE & CHARACTERISTICS

1 Keanalehu Drive Extension to Manawale'a Street

Design and construct approximately 5,000 feet of 40-foot wide road to establish a direct connection between the Villages of La'i 'Ōpua and the mauka Kealakehe Houselots subdivision. Kealakehe Elementary School, Kealakehe Intermediate School, Kamehameha Preschool, and the Hualālai Academy are all located in the mauka Kealakehe Houselots subdivision. This new roadway between Keanalehu Drive and Manawale'a Street will provide a connection from the residential subdivisions to the nearby schools. This road will provide an alternate mauka/makai connection, decrease traffic on Palani Road, decrease traffic on Queen Ka'ahumanu Highway, and improve traffic circulation in this area of Kona.

Status: Construction of this extension is complete.

2 Ane Keohokalole Highway Extension

Design, acquire right-of-way, and construct approximately one mile of 60-foot wide road to extend Ane Keohokalole Highway from its present terminus to Henry Street. The Ane Keohokalole Highway Extension to Henry Street is a part of the Hawai'i County Transportation General Plan and the County's K-to-K Plan. The complete highway extension, referred to as the Mid-Level Road in the County's plans, will create a north-south arterial roadway from Palani Road to the proposed University Drive, north of the Kona International Airport. The Ane Keohokalole Highway Extension to Henry Street will be parallel to Queen Ka'ahumanu Highway and will provide a secondary access to the Villages of La'i 'Ōpua. The Ane Keohokalole Highway Extension to Henry Street will also provide another access to the proposed Hawai'i County Civic Center, proposed at the intersection of Ane Keohokalole Highway and Kealakehe Parkway. The Ane Keohokalole Highway Extension to Henry Street would significantly alleviate traffic along Palani Highway and Queen Ka'ahumanu Highway.

Status: Entitlements and Public Comment Process Ongoing.

3 Keanalehu Drive Extension to Palani Road

Design and extend Keanalehu Drive to Palani Road. This connection would alleviate traffic along Palani Road and Queen Ka'ahumanu Highway and offer an alternate mauka/makai connection by way of Kealakehe Parkway.

Status: COH has not included this item in its FY 2008-2009 CIP Budget

4 Kealakehe Parkway to Kealaka'a Street Extension

Design, acquire right-of way, and construct approximately one mile of road between the existing Kealakehe Parkway Terminus and an extension of Kealaka'a Street. The Kealakehe Parkway is currently under the State Department of Transportation (DOT) jurisdiction. The first section of Kealakehe Parkway was completed by the State and runs from Queen Ka'ahumanu Highway to Keanalehu Drive. Previously, the State called for the balance of the road project, extending to Palani Road, to be completed as a single phase. Later, the State agreed to split this remaining length of roadway into two phases. The first phase will extend Kealakehe Parkway from its terminus at Keanalehu Drive to the elevation of the Kealaka'a Street Extension. The second phase will extend Kealakehe Parkway from that point to Palani Road and create a continuous mauka/makai collector roadway. This first phase of roadway will offer a mauka/makai connection via local streets and significantly alleviate traffic on Palani Road and Queen Ka'ahumanu Highway.

Kealaka'a Street will also need to be extended to connect to Kealakehe Parkway. The Kealaka'a Street Extension would be classified as a local County road. The Kealaka'a Street Extension is part of the Hawai'i County Transportation General Plan to create a north-south collector roadway extending further north.

Status: Funds for design and construction will not be requested until the 2009-2011 biennium according to the latest version of the DOT STIP

5 Kealakehe Parkway / Queen Ka'ahumanu Highway Intersection

A major intersection is planned at the intersection of Kealakehe Parkway and Queen Ka'ahumanu Highway. The mauka portion of Kealakehe Parkway will be straightened as part of this project. A traffic study needs to be completed to determine the size of the intersection.

Status: Funds for intersection improvements are not listed on the DOT STIP.

6 Kealakehe Parkway Extension to Kuakini Highway

Jacoby Development (JDI) is planning to construct approximately 1.4 miles of 120-foot wide road to establish a new collector road between Honokōhau Harbor and Kailua-Kona. This new coastal roadway will run parallel to Queen Ka'ahumanu Highway. The Kealakehe Parkway Extension to Kuakini Highway will significantly decrease traffic on the Queen Ka'ahumanu Highway. The roadway will also provide access to lands makai of the highway and improve overall traffic circulation in this area of Kona.

Status: JDI's Kona Kai Ola project has stalled, and it does not appear the road construction will proceed in the near future.

7 Queen Ka'ahumanu Road Widening

The State Department of Transportation (DOT) commenced design and construction work to widen the Queen Ka'ahumanu Highway in the Spring of 2005. The work will increase the existing two lanes to four lanes, create designated turning pockets, and create pedestrian walkways. The project is estimated at \$90 million will be completed in two phases. The first phase will widen seven and a half miles of highway from Henry Street to Kealakehe Parkway. The first phase is estimated at \$23 million, with \$18.4 million in Federal funds. The second phase will run from Kealakehe Parkway to the Keāhole Airport Access Road. Phase 2 received \$8.1 million in State funds for design and construction and is currently listed as one of the highest priority projects for the County of Hawai'i. Queen Ka'ahumanu Highway is the only major road through Kona's Gold Coast. Approximately 20 new resort and residential developments have been proposed for this region. The average daily traffic traveling on the highway is 15,000 vehicles per day. By the year 2010, the traffic is expected to increase to 90,000 vehicles per day.

Status: The contract to design and build the project's first phase was awarded on March 5, 2004 and has been completed. The second phase will be open for bid in the spring of 2010. Construction is expected to begin late in 2010.

8 Kamanu Street Extension

A new 3,900 foot long roadway would be constructed to connect Hina Lani Street and Kealakehe Parkway. I would include concrete sidewalks for pedestrians. The Kamanu Street extension would improve connectivity in the region and reduce congestion on the Queen Ka'ahumanu Highway.

Status: The design is complete. \$5 million dollars in county funds were appropriated during fiscal year 09-10.

9 Palani Road/Kamaka'eha Avenue Intersection Improvement

This County of Hawai'i project would include the construction of an additional through lane and a left turn pocket lane on Palani Road at Kamaka'eha Avenue. In addition, the project will provide concrete sidewalks for pedestrians and bike lane on the south side of Palani Road. This project will improve public safety.

Status: Three million dollars were previously appropriated to this project. The design is 95% complete and all land easements have been secured. An additional \$1 million dollars was appropriated during FY 09-10 for construction.





Electrical Service

The distribution system basically consists of overhead pole lines and underground systems. Because of the vastness of the Big Island, the majority of the distribution system consists of overhead pole lines.

Underground systems have been used more extensively in West Hawai'i in the newer subdivisions and developments. Hawaiian Electric Company, Inc. (HELCO) currently operates major switching stations at critical locations around the island.

Distribution substations, which transform voltages to distribution voltages, are also located island-wide in proximity to communities and other developments. The Villages of La'i 'Ōpua receives power from the Kealakehe Substation and Kaloko Substation. Expansion of the Kealakehe Substation would provide additional power necessary for the Villages of La'i 'Ōpua. HELCO also proposes to have the Palani Substation, located near the intersection of Henry Street and Palani Road, energized in the near future. HELCO may consider extending circuits from this substation to serve the upper phases of the development.

The Kealakehe Substation was recently upgraded with a larger transformer. HELCO currently has no immediate plans to add additional capacity at the site. However, should expansion of the substation be necessary to accommodate the Villages of La'i 'Ōpua, DHHL can submit a service request to HELCO. HELCO has also completed design and obtained the necessary equipment for the new Palani Substation sited at the intersection of Henry Street and Palani Road. The electric company is currently awaiting a historical preservation review of the site – a necessary review before obtaining a grading permit allowing the construction.

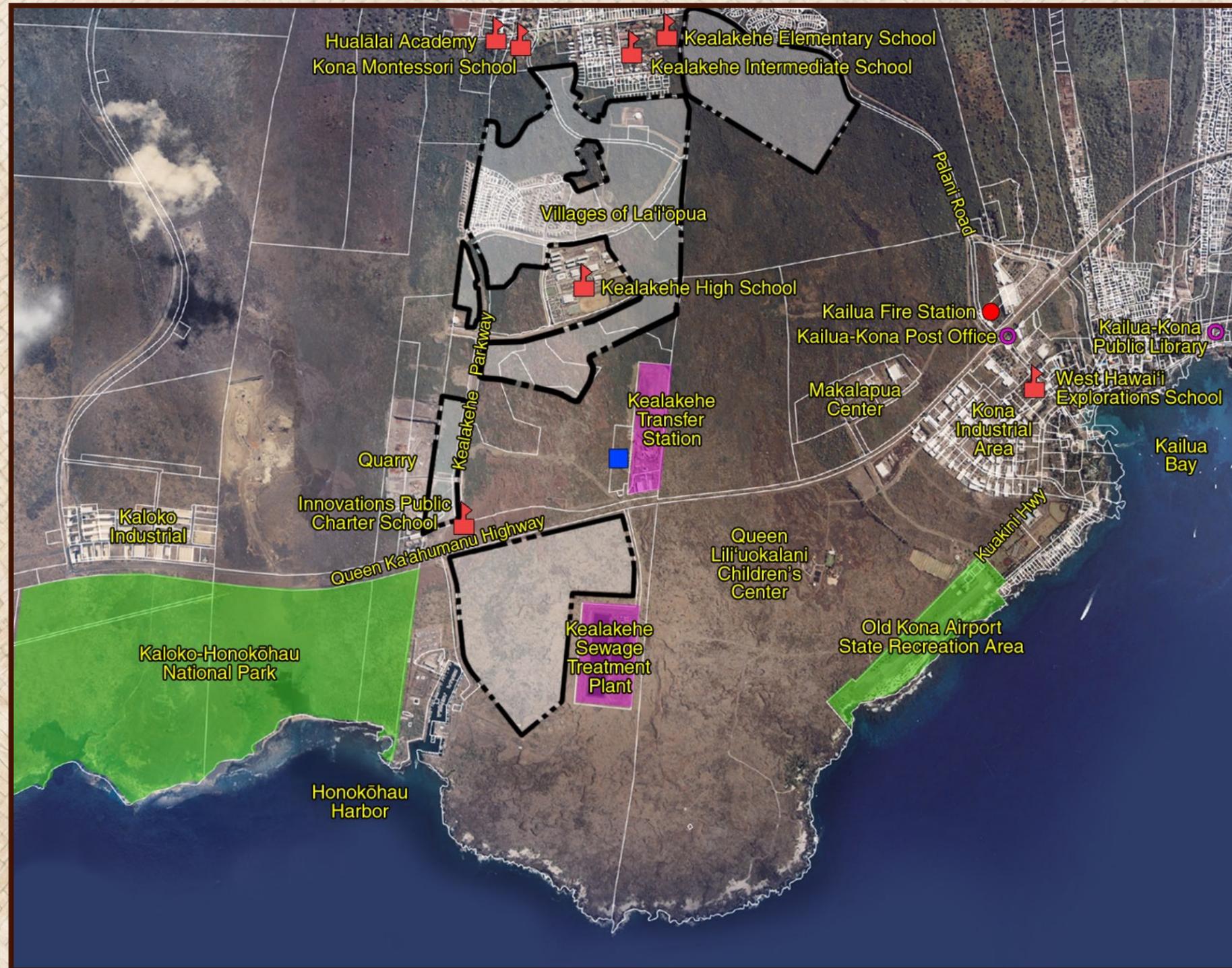
Telephone Service

Sandwich Isles Communications will provide fiber optic telephone service to DHHL's lands. Hawaiian Telcom will provide telephone service to the non-DHHL lands.

Cable Television Service

The Villages of La'i 'Ōpua is within the Oceanic Time Warner Cable Service area.





PUBLIC FACILITIES - INFRASTRUCTURE & CHARACTERISTICS

Education

The Kealakehe School Complex includes Kealakehe Elementary School, Kealakehe Intermediate School, Kealakehe High School, and three Public Charter Schools, Innovations, West Hawai'i Explorations Academy and Kanu o Ka 'Āina (located in Waimea). The Kealakehe complex continues to experience an overcrowded enrollment, developing separate facilities for the kindergarten through sixth grade level and seventh through eighth grades. Hualālai Academy is a private school located in the area. There is a Kamehameha Schools Early Childhood Education site in the nearby vicinity and several preschools in the area.

The Kailua-Kona branch Library, located in Kailua-Kona town, has a collection of 13,019 volumes. The Kailua-Kona Library is inadequate in size to serve the needs of the area. The Kona bookmobile operates from the Kealakekua library.



	Private / Public	Grades	Actual Enrollment	Projected Enrollment 2012
Kealakehe Elementary School*	Public	Pre-K-05	946	1,051
Kealakehe Intermediate School*	Public	06-08	850	892
Hualālai Academy	Public	Pre-K-12	200	N / A
Kealakehe High School*	Public	09-12	1,610	1,646
Innovations Public Charter School	Public Charter	1-8	17	N / A
West Hawai'i Explorations Academy Public Charter School	Public Charter	6-12	180	175

* Public schools within the Kealakehe Complex continue to struggle to meet the requirements of the No Child Left Behind Act. Kealakehe Elementary, Intermediate and High schools are currently in restructuring.

Fire / EMT Services

The Hawai'i County Fire Department has 20 full-time fire/medic stations, and 20 volunteer fire stations. The Kailua Fire Station is equipped with an engine, ladder, medic, search and rescue, rescue boat, and tanker. Improving the west Hawai'i fire and emergency response service capabilities has been a focus of the county of Hawai'i over the last few years. They have appropriated \$6.7M in funds to construct a new fire station at Kalaoa in North Kona. The County has also appropriated \$9,568,000 through FY 09-10 to build a new fire station at Makalei. The station will also serve as the West Hawai'i Hazardous Materials Response Center. An additional \$3.8 million dollars has been appropriated to construct a support facilities for the West Hawaiian Fire Battalion. This facility would house the West Hawai'i Command Headquarters and the Emergency Operations Center (EOC). The Command headquarter/EOC would utilize green technologies like PV energy generation and solar water heating to reduce long term costs.

Police

The Hawai'i County Police Department is charged with enforcing all Federal, State, and local laws in Hawai'i County, the State's largest county in terms of land mass. The main police station in West Hawai'i is the Kealakehe Station. The county of Hawai'i has appropriated \$500,000 to construct a new evidence warehouse at the Kealakehe Station. An additional \$700,000 will need to be appropriated in FY10-11 to complete the project. There is also a mini-station in Kailua Village. No correctional facilities are located on west side of the Big Island. Three correctional facilities are located on the east side.

Hospital Services

There are no hospital facilities located in the immediate vicinity. Kona Hospital is located in Kealakekua, Kohala Hospital in Kohala, and the Life Care Center of Kona is located in Keauhou. Preliminary plans revealed in 2003 by a consortium of area health care providers call for the development of a \$156M, 142 bed hospital facility on state land along Kealakehe Parkway above Honokohau Harbor. However, the project appears stalled. Plans are also stalled on proposals to construct another hospital in West Hawai'i.

Civic Center

On November 2008, groundbreaking ceremonies took place for the construction of the new West Hawai'i Civic Center. The \$50 million facility will house 22 County and 1 State agency that are currently scattered throughout West Hawai'i. The facility will also include four conference rooms in addition to a pavilion. The West Hawai'i Civic Center will be opened by 2011.



- 1. Energy** - The dependence on imported fossil fuels for electricity generation impacts native Hawaiians both through higher utility cost and the increased cost of goods and services. Support and development of local green energy sources is not only good for the local economy through job generation, but also can reduce energy costs.
- 2. La'i 'Ōpua 2020** - This visionary non-profit organization is working on multiple fronts to facilitate the development of a social infrastructure and sustainable community for residents of Kaniohale and Kealakehe Ahupua'a.
- 3. Water Quality and Availability** - The current North Kona water system is unable to produce the necessary amount of water (at acceptable quality) required to meet the development requirements of the region.
- 4. Sewer Conveyance** - Within the Villages of La'i 'Ōpua, the sewer conveyance infrastructure has not been completed. In addition, the wastewater treatment plant requires upgrades to affectively treat sewage generated at full build-out. As the sewage conveyance and treatment system is built and modified, there are opportunities for partnerships between facilities currently connected, and those being built. The Department of Education has entered into a Memorandums of Understanding (MOU) and finalized a Right of Entry agreement that would allow Kamehameha Schools to temporarily connect and receive sewage conveyance service from the Kealakehe High School system. Similar MOU should be utilized were possible to provide temporary service to new facilities.
- 5. Proper Treatment of Iwi Kūpuna** - Numerous construction projects that will disturb the ground are scheduled to begin over the next year. As Kealakehe Ahupua'a is developed there is the potential to inadvertently disturb burial site(s). These iwi represent the history of this area and an appropriate plan to properly care for the iwi has not been developed.
- 6. Regional Traffic Circulation** - An increase in population provides new opportunities for the development of new goods and services in the local area. It also translates into additional traffic. A regional circulation plan that addresses/prevents traffic congestion is necessary.
- 7. Income Generation** - Village 6 (26 acres-commercial). La'i 'Ōpua 2020 acts as a conduit to develop area. Forest City moved their commercial area adjacent to DHHL land. a detailed plan has been developed. A market study (land appraisal) is being developed to determine earning potential.
- 8. Regional Park** - During the district park development charrette in May, the recreational activities leaders of the community gathered to participate in the planning of a district park. As a result of the charrette, the community realized that a regional park was needed in addition to a district park



North Kona Water*

Currently, there is an inadequate source of water for the full build-out of the Villages of La'i 'Ōpua. Source development, storage and transmission would be required to develop future villages. The development of four source wells is proposed.

La'i 'Ōpua 2020- Community Sustainability Projects*

A community center is planned for Village 6. This community center will have a gym, meeting hall, Kamehameha Schools Preschool, playfields and parking. Adjacent to the community center, along Ane Keohokalole Highway is a 26 acre parcel that has been identified as a potential income generation site for the community. Capitalization on the income generation site provides an opportunity for the community center to be truly self-sustainable. Support of La'i 'Ōpua 2020 sustainability projects is recommended.

Energy Initiative*

High energy costs impact every aspect of residents of Hawai'i county's lives, from the high price of gas and utility bills for Kaniohale residents, to the higher cost of goods and services. Support of green energy initiatives in the Kona region not only diversifies the economy through the development of new high tech jobs, it also reduces energy costs and dependence on imported fuel. Support of 'O'oma Development Corporation Renewable Energy Initiative at O'oma Homestead Ahupua'a project is recommended.

Kealakehe Ahupua'a Burial Treatment Plan*

Projects that include ground disturbing activities such as grading, boring, tunneling, digging, etc.; have the potential to disturb the final resting place of nā iwi kupuna (the bones of our ancestors). Queen Lili'uokalani Trust (QLT) located makai of the Villages of La'i 'Ōpua has developed a burial treatment plan to provide culturally appropriate re-internment of iwi found within the Keahuolū Ahupua'a. A

similar plan should be developed to provide protection for the iwi kupuna of Kealakehe Ahupua'a

Kona Regional Park*

As the area continues to grow, it has become apparent that the current recreational facilities are not adequate. A regional park is necessary. The County of Hawaii is requesting that land currently set aside for use as the North Kona Golf Course by Executive Order 3665 instead be used as regional park. Support of an amendment to EO #3665 changing the use from golf to regional park is recommended.

Regional Traffic Circulation

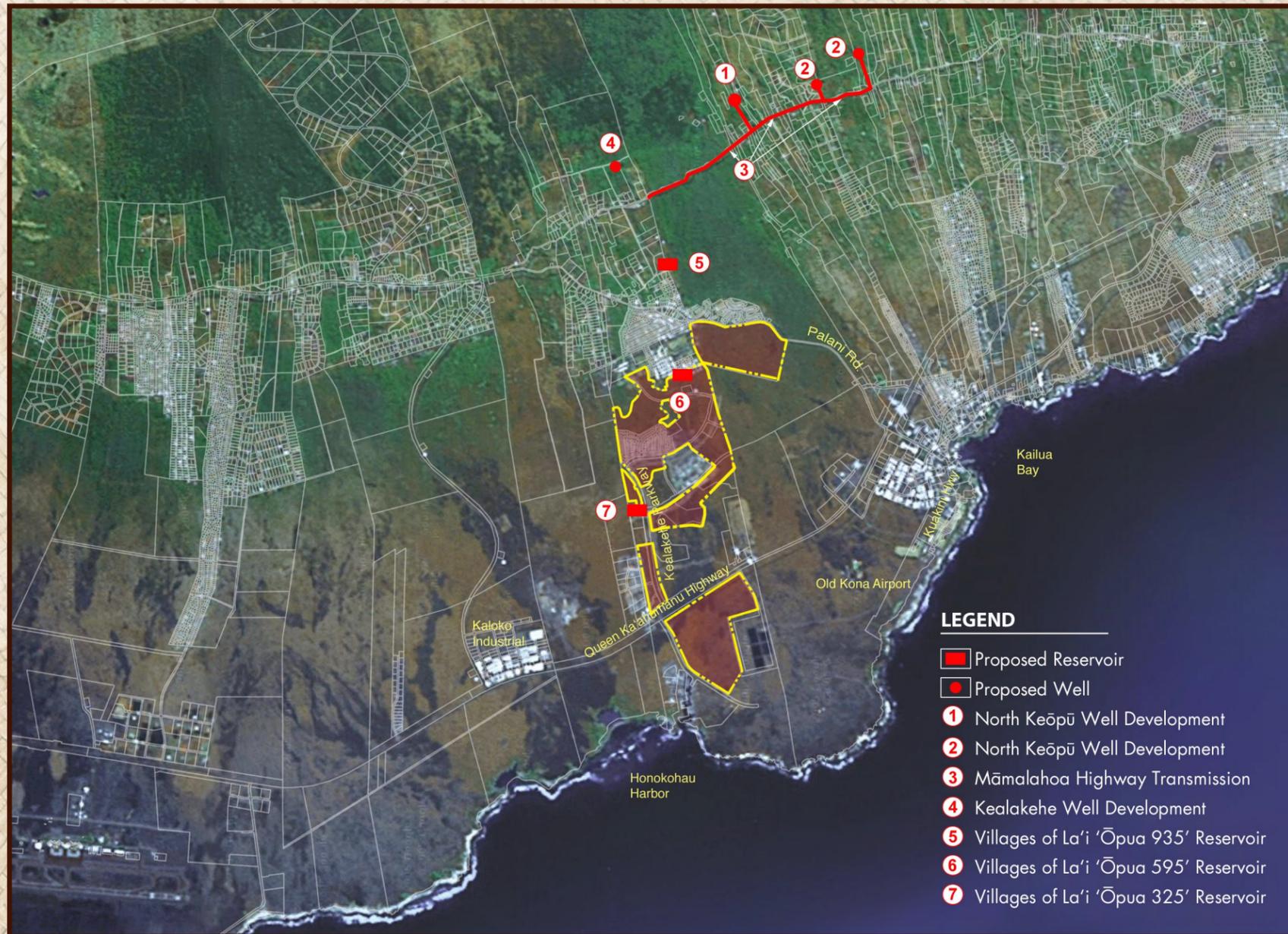
An increase in population provides new opportunities for the development of new goods and services in the local area. It also translates into additional traffic. As major land owners develop the region, roadways should be planned collaboratively to ensure the overall system and connections make sense. A regional circulation plan should reduce duplication of effort, and create a system that provides sensible inter-connection between projects.

Residential

Villages 4 and 5 will provide new homes to native Hawaiians in North Kona. These new villages will be modeled after the successful Village 3, Kaniohale, completed in 2001. Villages 1 and 2 will be planned for residential development once Villages 4 and 5 are complete.

** Priority Project*





The North Kona Water Source Development and Storage/Transmission project includes a critical source, storage, transmission and other related improvements that will not only benefit the Villages of La'i 'Ōpua, but improves the reliability of the existing water system that services the entire Kealakehe region.

The original water system in North Kona was designed to transport low-level water to higher elevation using pumps; however, this system has not produced the quantity and quality of water originally estimated. Since then, better quality water has been discovered at higher elevations above the Old Māmalahoa Highway. These higher-level sources appear to be the solution to providing the region with adequate high quality potable water. The development of high level wells is a part of the North Kona Water System strategy to move away from reliance on the existing Kahalu'u Shaft water source.

Besides the need to provide higher quality water, there is the need to meet the increased water demands for the Kealakehe region. The demand for additional water is being driven by the new and proposed State and County Development projects, as well as the need for development of affordable housing within the immediate region. Affordable housing is one of the greatest needs in the State and in Kona. The lack of affordable workforce housing in the region is evident in the number of workers commuting to Kona for work, from as far away as Hilo. The proposed improvements will provide the potable water for these developments and alleviate the stress on the existing water system which just meets the current demand.

In 2003, the State Department of Land and Natural Resources (DLNR) updated the water master plan to accommodate the water needs of several State agencies that have interest in the North Kona area. The affected agencies entered into a memorandum of understanding (MOU) to receive water allocations for their facilities and in return, to share in the cost of the master plan improvements. The master plan is currently being implemented by DLNR. Upon completion of each proposed improvement, it will be dedicated to the County of Hawai'i Department of Water Supply (DWS) for operation and maintenance.

Only a portion of the Villages of La'i 'Ōpua have water allocations under the existing MOU. The current DHHL allocation is adequate for development of Villages 4 & 5. The Kamehameha preschool located within Village 6 will temporarily have access to water allocated to Villages 4 and 5.

Source development of four (4) wells producing a million gallons a day is necessary to provide adequate water supply to the La'i 'Ōpua 2020 community center project, future affordable housing projects including the DHHL Villages 1, 2, 6, 7, 10 and 11 and the HHFDC affordable housing project at Keahuolū. Development of these new source wells will also increase the reliability of service and quality of water to the entire Kealakehe region.

North Kona Water Source Development and Storage

Location

Various TMKs along the old Māmalahoa Highway.

Status

DHHL completed water master plan for the Villages of La'i 'Ōpua in 2006. The plan included description of source, storage and transmission deficiencies and recommendations. Capital improvement funding of \$14,405,00 and \$12,000,000 for the North Kona Water project were approved during the 2007 State legislative session. However, funds were not allocated to support the project.

Inclusion in the 2009-2011 biennium budget with a funding source designated (such as general funds, or revenue bonds) is necessary for this project to proceed.

Potential Partners

The development of the North Kona Water Source will benefit the entire region of La'i 'Ōpua. This provides an opportunity to develop partnerships with numerous public and private organizations including: Department of Land and Natural Resources, Hawai'i Housing Finance and Development Corporation, Department of Water Supply, Forest City, Inc., and La'i 'Ōpua 2020, Kona Community Hospital, Hawai'i County Civic Center.

Phasing

The project will be conducted in 4 phases. Phase one will include establishing an MOU with the various stakeholders from the region and seeking funding commitments, Phase two will include planning and designing the system. Phase three and four will include construction starting with source development followed by the installation of the reservoirs and the transmission system.

Phase I	Phase II	Phase III Source Development	Phase IV Storage/Transmission
<ul style="list-style-type: none"> Identify Key Players and Establish MOU Obtain State, Federal, County, and private funding commitments 	<ul style="list-style-type: none"> Planning and Design Project Entitlement 	<ul style="list-style-type: none"> Site Preparation Well / Pump Installation Well Development and Testing 	<ul style="list-style-type: none"> Site Preparation Installation of Reservoir Installation of Transmission Lines Connection to DWS System

Cost

Year #1	\$2,905,000
Year #2	\$11,500,000
TOTAL	\$14,405,000



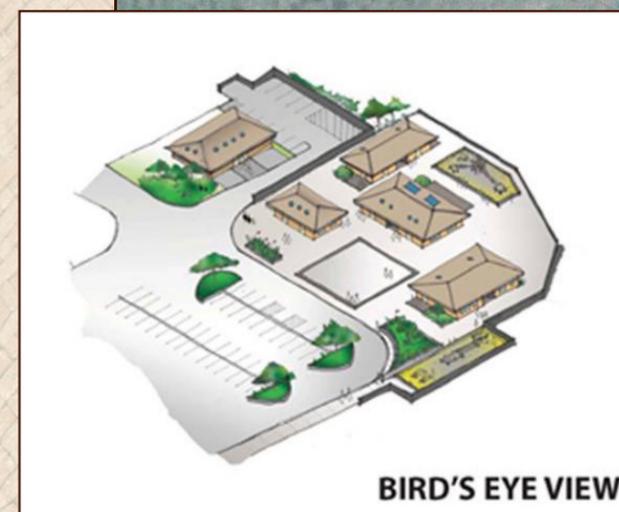
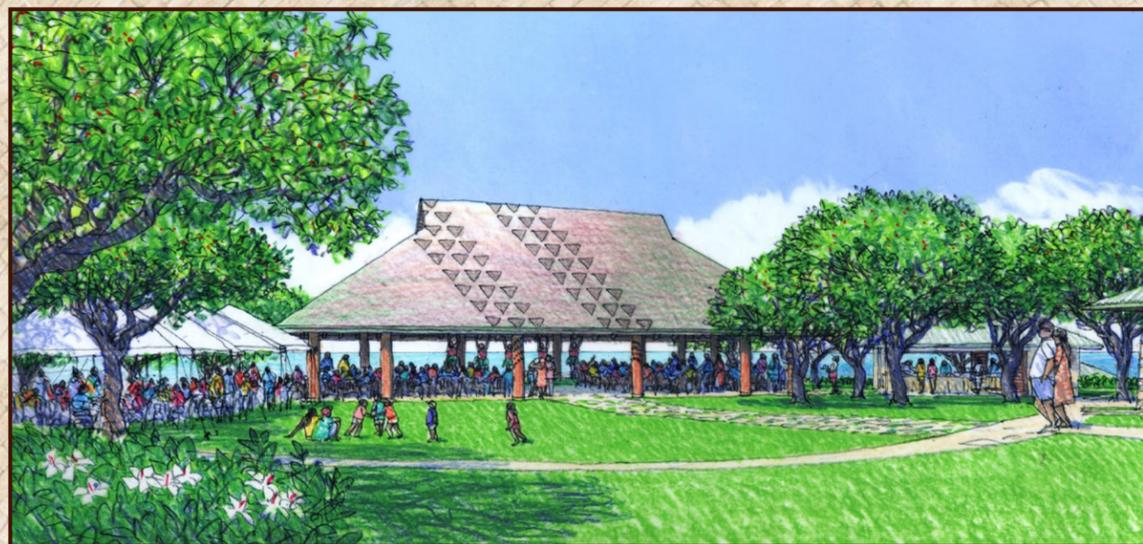
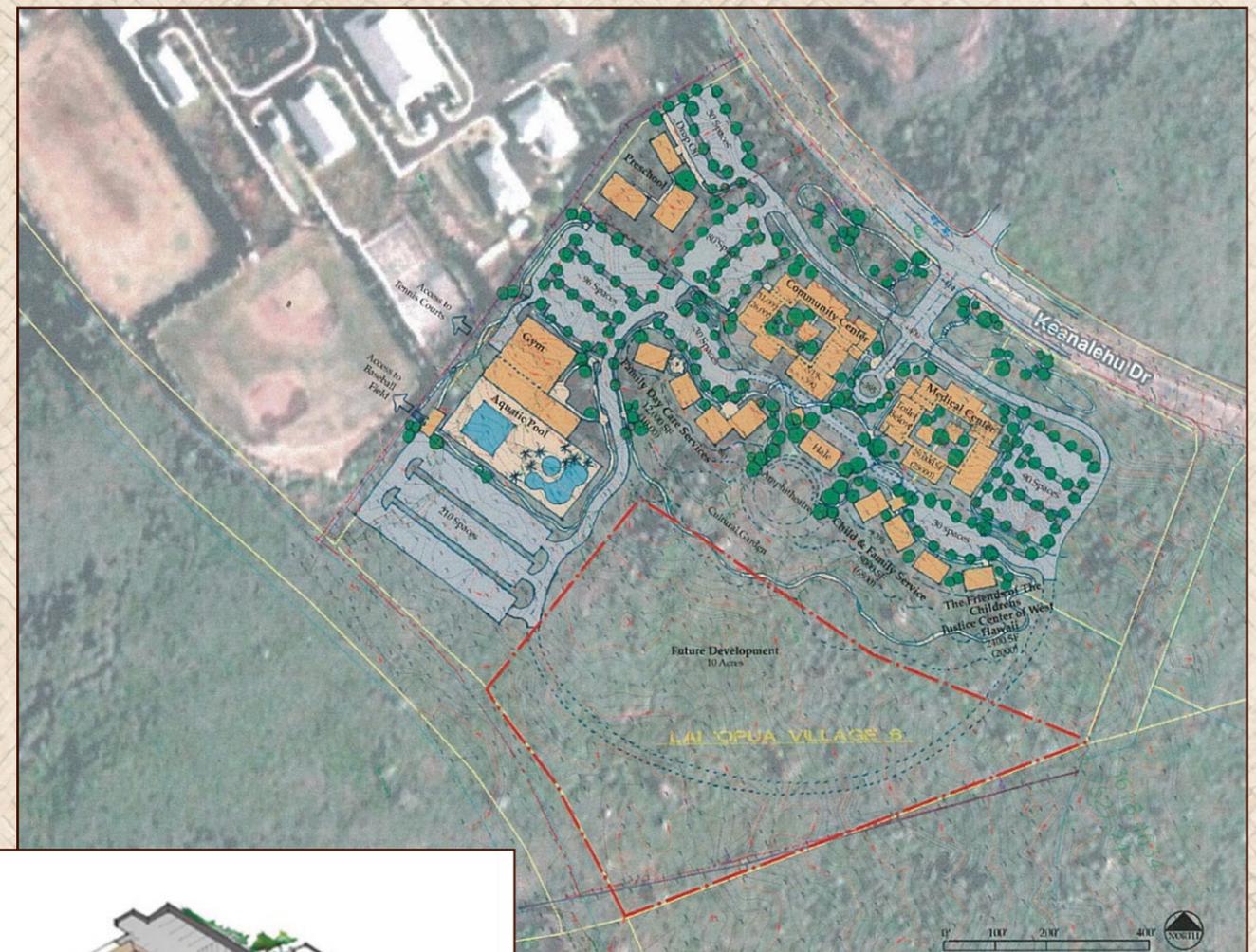
HOMESTEAD ISSUES AND PRIORITIES

CONTINUED SUPPORT OF LA'I 'ŌPUA 2020 COMMUNITY SUSTAINABLE PROJECTS

La'i 'Ōpua 2020 was created as a non-profit 501(c)(3) to serve the existing community and future communities within the Villages of La'i 'Ōpua and the broader Kealakehe Ahupua'a. The goal of the La'i 'Ōpua 2020 is to develop a social infrastructure to create self-sustainable community where residents can live, work, learn and play. The organization's focus has been on the development of a Community Complex that will include a preschool, Community Center, Medical Center, Hale, Recreational Facilities, and Social Services located on approximately 26 acres of Village 6.

To sustain the community complex financially, it is necessary for La'i 'Ōpua 2020 to develop a program for income generation. This is an issue that homesteads throughout the State are facing. How do homesteads build the social infrastructure that includes community centers and parks, and pay for the continued maintenance and operation of these facilities? DHHL responded to this issue by allocating land to the homesteads for the purpose of generating income. This innovative approach empowers the homestead with a valuable resource that generates revenue would be re-invested into the community to support social infrastructure. This method will create a self-sustainable community!

A 26 acre parcel owned by DHHL along the proposed Ane Keohokalole Highway and adjacent to the Community Complex was identified as a potential income generation parcel for the community. This parcel is envisioned to be Transit Oriented Development (TOD) along the proposed the County of Hawai'i's mass transit system that will operate along Ane Keohokalole Highway. The TOD will have a transit stop with commercial uses surrounding it. Retail, restaurants and grocery stores are envisioned to be built at this TOD, providing an exciting new commercial area located within walking distance from homes within Villages of La'i 'Ōpua and providing both employment and retail opportunities to residents. The revenue from this TOD will go back to the community to sustain the community complex and other future social infrastructure that this community pursues. La'i 'Ōpua 2020 intends to work with DHHL and its partners to develop this parcel into a TOD. The development will benefit the entire region by supporting the Community Complex, while making this community truly sustainable.



Continued Support of La‘i ‘Ōpua 2020 Community Sustainable Projects

Status

Phase 1 of the Community Center Complex at Village 6 is moving forward.

- Necessary memorandums of understanding have been/are being developed. With MOUs in place, for the medical clinic and preschool, planning can proceed.
- Kamehameha Schools is moving forward on the development of a preschool currently scheduled to open in the March of 2012.
- A \$12 million dollar grant has been awarded for the development of the Health Clinic.
- Federal grants have been awarded for several components of the project. As a result of the federal funding source, the entitlement process required a National Environmental Policy Act (NEPA) environmental assessment. The NEPA EA process is underway and scheduled for completion at the end of 2009.
- La‘i ‘Ōpua team aggressively continues to pursue grant funding.

Acquisition and development of the Income Generation Complex have begun:

- Participation and compliance with Kūlia i ka Nu‘u capacity building and training program is underway .
- General Lease of 26 acre commercial property is pending DHHL approval, and
- Project developer, Forest City, Inc. has been engaged.

Potential Partners

Department of Hawaiian Home Lands, Department of Education- Kealakehe High School, Office of Hawaiian Affairs, County of Hawai‘i, Kamehameha Schools, Forest City, Inc., and La‘i ‘Ōpua 2020, Kona Community Hospital, Friends of the Children’s Justice Center, Hawai‘i County Civic Center, Forest City.

Phasing

The La‘i ‘Ōpua project can be broken into two components that can be phased concurrently, the Community Center Complex and the Income Generation Complex. Both components will proceed in phased with a work schedule coordinated with DHHL.

Component 1: Community Center Complex

Phase I (ETC 2009)	Phase II (ETC 2010-2011)	Phase III (ETC 2012-2013)	Phase IV (ETC 2014-2015)
Site Preparation	Establish Anchors <ul style="list-style-type: none"> • Preschool • Community Center • Medical Center Hale 	Establish Recreation Facilities	Establish Social Services <ul style="list-style-type: none"> • Family Day Care • Child/Family Center • Children’s Justice Center

Component 2: Income Generation Complex

Phase I (ETC 2009)	Phase II (ETC 2010-2011)	Phase III (ETC 2012-2013)	Phase IV (ETC 2014-2015)
Site Control	Preliminary Planning and Engineering	Design and Permitting	Site Work <ul style="list-style-type: none"> • Site Preparation • Infrastructure Construction • Vertical Construction

ETC - *estimated time of completion*

Cost

Component 1: Community Center Complex

Phase I	\$38.0 Million
Phase II	\$32.0 Million
Phase III	\$14.3 Million
Phase IV	\$7.5 Million
TOTAL	\$91.8 Million

Component 2: Income Generation Complex

Phase I	\$0 Million
Phase II	\$0.5 Million
Phase III	\$1 Million
Phase IV	NA
TOTAL	\$1.5 Million



Hawai'i produces virtually all of its electricity from imported fossil fuels. As a result, Hawai'i has the highest electricity rates in the nation. The Island of Hawai'i pays more than 30 cents per kWh compared to U.S. average of 10 cents per kWh. Generous federal and state tax incentives make switching to renewable sources of energy like solar a viable option when compared to the high price of carbon-based electricity.

As a by-product, the conversion to renewable energy will generate more jobs. Researchers found that solar photovoltaic create more jobs than fossil fuels per unit of energy produced. So as Hawai'i's renewable energy industry grows, the local economy diversifies and more high-quality, high-tech jobs are created.

Being proactive on the energy front, the Department of Hawaiian Home Lands (DHHL) recently adopted an Energy Policy. The goal of this policy is to enable native Hawaiians and the broader community to work together and lead Hawai'i's effort in achieving energy self sufficiency and sustainability. An objective of this policy is to facilitate the use of diverse renewable energy sources.

Hawai'i's renewable energy growth coupled with DHHL's energy policy was the impetus for an innovative project being proposed in Kona. The objective of this initiative is to not only generate renewable energy, but also create educational and employment opportunities and re-invest a portion of the project's revenue back into the community for "green upgrades".

The 100-acre parcel at Kalaoa is located in North Kona along the Queen Ka'ahumanu Highway Mauka of the Natural Energy Laboratory of Hawai'i Authority (NELHA). The parcel is designated for Industrial use in DHHL's Hawai'i Island Plan. According to the Hawai'i Statewide GIS Program Solar Radiation map, the site could yield 500 calories/sq.cm/day making it an optimal site for a solar farm.

The solar farm component of the initiative could be built in four phases with each increment producing 4.5 MW. At full build out a solar farm could produce up to 18 MW.

Critical to this success of this initiative is a proposed PV panel fabrication facility. The PV panels that harvest solar energy will be produced at this facility at Kalaoa. Preliminary estimates indicate that PV panels assembled locally can be produced below current market prices of PV panels produced overseas. This fabrication facility will introduce a new high tech industry to the State, thus creating new career opportunities and jobs for the residents of island and aid in helping grow the renewable energy industry in the State.



Renewable Energy Initiative

Location

Kalaoa, North Kona
 TMK (3) 7-3-010:007
 100 acres

Status

The Kaniohale Community Association at the Villages of La'i 'Ōpua has adopted a resolution supporting ODC's Renewable Energy Initiative at O'oma Homestead Ahupua'a project. ODC is in the preliminary stages of executing a preliminary license on the Kalaoa parcel from DHHL.

Potential Partners

DHHL, O'oma Development Corporation, Forest City, Spire Incorporated, La'i 'Ōpua Community Development Corporation, EM Rivera & Sons, FHG Architects, Consol, Sentech, WSB Hawai'i, NREL

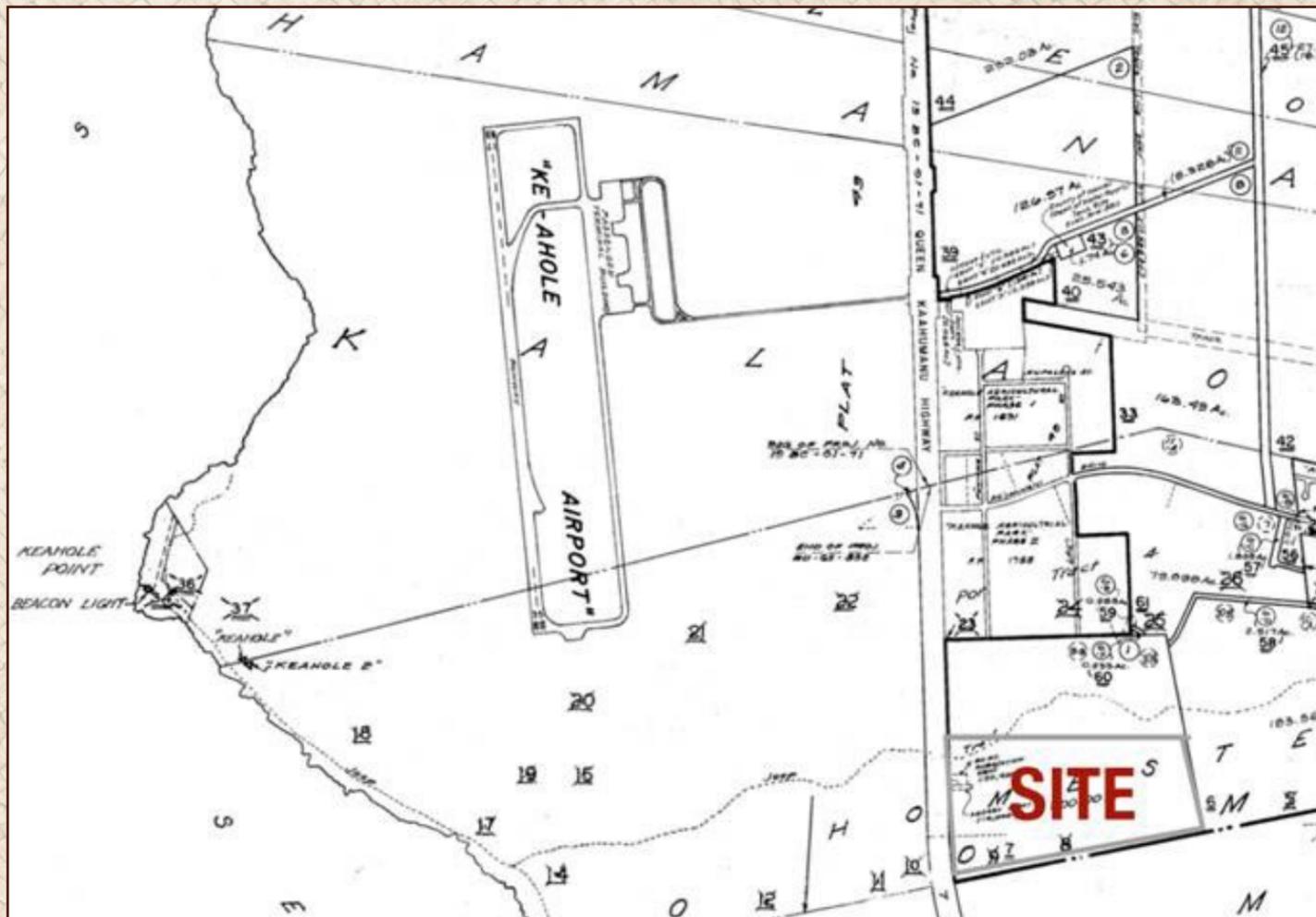
Phasing

1. Complete Business Plan
2. Secure Land Lease from DHHL for 100 acres
3. Engage in discussion with HELCO & HECO
4. Obtain Entitlements (Environmental/Zoning/Subdivision)
5. Complete the Planning and Design Process
6. Begin Construction – December 2010
7. Energize 2nd Quarter 2012
8. Produce 15-18 MW of PV generated electrical power by 2017

Cost

\$10,000

** DHHL will be supporting this project primarily through the development of a land lease. The cost shown is an estimate for the preparation of reports that may be developed in support of this project. Actual cost is subject to change based on the in-house resources of DHHL and the type of reports required.*





The tremendous growth of North Kona is putting stress on the parks and recreational facilities in the region. The deficiency in park space was reiterated in the recently adopted Kona Community Development Plan (CDP) where one of the guiding principles of the plan was to provide more recreation opportunities in the region. An objective to meeting this guiding principal was to provide a range of recreational opportunities in the region and more specifically to develop a regional park in Kealakehe. This issue was also raised during a three day District Park planning charrette to plan the “Old Airport” shoreline beach park. It became immediately apparent that there was a tremendous need for more space for additional ball fields and hard surface courts for “spectator sports” beyond what is being planned at the proposed district park at the “Old Airport.” A separate regional park was needed.

The County of Hawai‘i General Plan describes a “Regional Park” as a major recreational area serving several districts and providing indoor and outdoor activities; a major center for spectator sports and cultural activities; and may include features of historic, geological, and horticultural interests; and has a minimum size of 50 acres, thus providing a wider variety of recreational opportunities for the people of the region.

Responding to this issue the County of Hawai‘i passed resolution 421-06, approved in September 2006, requesting the Mayor to enter into negotiation with the governor and the Board of Land and Natural Resources to amend Executive Order NO. 3665 to reflect a change in public purpose for State lands set aside at Kealakehe from Kealakehe Wastewater reclamation field and North Kona Golf Course to a Kealakehe wastewater reclamation field and Kona Regional Park.

Executive Order No. 3665, dated July 18, 1995, set aside certain land at Kealakehe, North Kona to the County of Hawai‘i for a “Kealakehe Wastewater Reclamation Field and North Kona Golf Course.” The development of the site as a golf course was intended not only to provide a municipal course to West Hawai‘i residents, but also as a means for disposing of effluent from the County’s Kailua-Kona wastewater treatment facility. The County of Hawai‘i made attempts to develop the municipal golf course in accordance with the purpose of Executive Order No. 3665, however only one developer responded to its original Requests for Proposal. The contractor, Kealakehe Associates, never built the golf course and subsequent Requests for Proposals to build the golf course have not attracted any respondents.

With the need for a regional park in Kona, the County of Hawai‘i is requesting that land set aside for use as the North Kona Golf Course, instead be developed as an active park in order to provide a variety of recreational opportunities for the people of West Hawai‘i.

During the district park development charrette in May, the recreational activities leaders of the community gathered to participate in the planning of a district park. As a result of the charrette, the community realized that a regional park was needed in addition to a district park being planned for the “Old Airport” shoreline park.

Through the Kealakehe/La‘i ‘Ōpua Regional Plan Update process, the stakeholders voted in favor of supporting the amendment to Executive Order No. 3665 requesting that the portion of land set aside to be used as the North Kona Golf Course, instead be used as a Regional Park.

Kona Regional Park

Location

Lot 25 of the Villages of La'i 'Ōpua containing approximately 193,547 acres

Status

Amendment to Executive Order No. 3665 requesting that the portion of land set aside to be used as the North Kona Golf Course, instead be used as an Regional Park is awaiting approval by the State of Hawai'i.

The county has approved \$750,000 in capital improvement program (CIP) funding to be utilized in the development of a regional park. Disbursement is on hold until an appropriate site becomes available.

Community members began a petition campaign with a goal of acquiring 6,000 signatures in support of the amendment of Executive Order No. 3665.

Potential Partners

County of Hawai'i, Department of Land and Natural Resources, Board of Land and Natural Resources, State of Hawai'i Governor's Office, The Department of Hawaiian Home Lands

Phasing

Not Applicable

Cost

Not Applicable



Burial Treatment Plan for Inadvertent Discovery of Iwi Kūpuna

There is tremendous growth of North Kona region. Numerous infrastructure projects have been approved and funded. Construction on several projects including roadway improvements to Ane Keohokalole and Queen Ka'ahumanu Highways, construction of La'i 'Ōpua Village 5 and development of wastewater reuse infrastructure are scheduled to begin during 2010. These projects will include ground disturbance activities.

Projects that include ground disturbing activities such as grading, boring, tunneling, digging, etc.; have the potential to disturb the final resting place of nā iwi kūpuna (the bones of our ancestors). Across the expanse of time, societies and cultures around the world have honored their dead in their own way. It is this treatment of our departed ones that we find common threads throughout humanity, reverence and respect as well as expression of sorrow and a deep sense of loss. (SHPD, 2009).

Chapter 6E of the Hawai'i Revised Statutes requires that if human remains are encountered, all work in the immediate area is stopped and the police are notified as well as the Department of Land and Natural Resources. A qualified archaeologist then examines the burial context to assist in determining jurisdiction. DLNR, in consultation with the affected landowner, the Hawai'i island burial council and identified descendants, will work to determine whether the iwi can safely remain in place or if relocation is necessary.

Chapter 6E provides a certain level of assurance that the iwi buried within Kealakehe ahupua'a will be handled appropriately. However, the statute does not require that proper cultural protocols occur if re-internment is necessary. It also does not require re-internment within the ahupua'a.

Queen Lili'uokalani Trust (QLT) located makai of the Villages of La'i 'Ōpua has developed a burial treatment plan to provide culturally appropriate re-internment of iwi found within the Keahuolū Ahupua'a. Ahupua'a is adjacent and south of Kealakehe Ahupua'a and will also be affected by many of the same development projects. The QLT burial treatment plan ensures that inadvertent discoveries of iwi kūpuna within the ahupua'a will remain within Keahuolū ahupua'a.

The community of La'i 'Ōpua is hopeful that the projects will not disturb any iwi, but wants to be prepared to treat iwi discovered during construction appropriately. By majority consensus during the Kealakehe -La'i 'Ōpua Regional Plan Update process, the stakeholders recommended that a burial treatment plan be developed that provides similar protection for iwi kūpuna of Kealakehe, that QLT provides for iwi kūpuna discovered in Keahuolū. The treatment plan should include provisions to ensure re-internment within the ahupua'a that is safe from development in perpetuity without revealing the exact location of internment. The treatment plan should also insure that appropriate cultural protocol is followed when re-internment is required. Thresholds should be established to address the discovery of significant burial(s) encountered during construction.





Burial Treatment Plan for Inadvertent Discovery of Iwi Kūpuna

Location

The archaeological preserve of the Villages of La'i 'Ōpua containing approximately 27.8 acres.

Status

Construction projects in Kealakehe ahupua'a are scheduled to begin as early as January 2010. Presently there is no Burial Treatment Plan for the discovery of iwi kūpuna encountered during construction in Kealakehe.

Potential Partners

Department of Land and Natural Resources, Hawai'i Burial Council, The Department of Hawaiian Home Lands, Department of Transportation, County of Hawai'i, Hawai'i County Department of Environmental Management

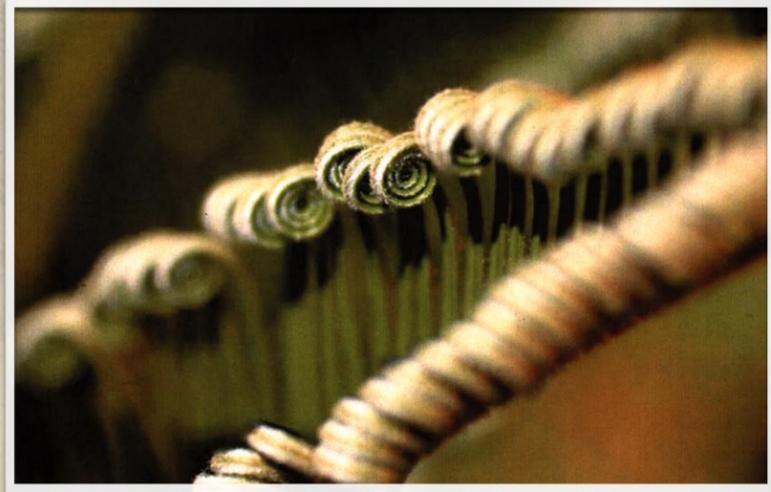
Phasing

Not Applicable

Cost

\$20,000

The cost shown is an estimate for the development a burial treatment plan and is subject to change based on the in-house resources of DHHL.



DEPARTMENT OF HAWAIIAN HOME LANDS

Prepared by:



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& ASSOCIATES, INC.