KEALAKEHE / LA'I 'OPUA







REGIONAL PLAN

October 2007

DEPARTMENT OF HAWAIIAN HOME LANDS



MICAH A. KANE Chairman Hawaiian Homes Commission

COMMISSIONERS

Perry O. Artates (Maui) Billie Baclig (East Hawai'i) Donald S. M. Chang (O'ahu) Stuart Keahiahi Hanchett (Kaua'i) Malia Patrice Kamaka (West Hawai'i) Francis Kahoku Lum (O'ahu) Trisha Morikawa (O'ahu) Milton Pa (Moloka'i)

> Ben Henderson Deputy to the Chairman

Kaulana H. Park Executive Assistant

DEPARTMENT OF HAWAIIAN HOME LANDS 1099 ALAKEA STREET, 20th floor HONOLULU, HAWAI'I 96813

www.hawaii.gov/dhhl

CHAIRMAN'S OFFICE Telephone: (808) 586-3801 Facsimile: (808) 586-3899

KEALAKEHE/LA'I 'ŌPUA

REGIONAL PLAN

MAILING ADDRESS P.O. Box 1879 Honolulu, Hawai'i 96805 **PLANNING OFFICE** Telephone: (808) 586-3836 Facsimile: (808) 586-3843

CONTENTS

Introduction

Elected Officials & Political Boundaries Community Leaders & Stakeholders DHHL Partnering Benefits & Examples History & Cultural Aspects of the Area Hawaiian Home Lands Area Map **Regional Map & Demographics** Villages of La'i 'Opua **Development Characteristics & Trends** Roads & Transit - Infrastructure & Characteri Water - Infrastructure & Characteristics Wastewater/Sewer - Infrastructure & Charact Utilities - Infrastructure & Characteristics Regional Services, Public Facilities Map & C **Development Projects Map & Characteristics** Priority Project - North Kona Water Source E Priority Project - Ane Keohokalole Highway Priority Project - West Hawai'i Community C Priority Project - Community Center Timeline Matrix of Capital Improvement Pro-



all to a ser collect the say	Nº Call
	alla.
	2
START STREET, SAL	3-4
SAME SEE CONNECT	5-6
and the second second	1
MUDAL SKEENS	7-8
10.20.40.40.409.5 S.S.S.	9
	10
	11-12
	13
	14
istics	15-16
and the second	17-18
eristics	19-20
	21-22
Characteristics	23-24
	25-26
Development & Storage	27-28
Extension to Henry Street	29-30
College	31-32
a aller of the	33-35
jects	36
CONTROLOUS CONTROL	

The Department of Hawaiian Home Lands' (DHHL) mission is to manage effectively the Hawaiian Home Lands Trust and to develop and deliver lands to native Hawaiians. DHHL works in partnership with other government agencies, private sector entrepreneurs, and non-profit organizations to carry out this mission. This work includes a collaborative vision, longrange planning, resource allocation, and project-specific joint ventures. DHHL believes that these partnerships benefit not only its native Hawaiian beneficiaries but the larger community as well.

This report has been prepared to facilitate the work of such partnerships as DHHL and others develop lands in Kealakehe/La'i 'Ōpua. Specifically, this report is intended to:

- Help identify opportunities for partnerships with DHHL in the development of its Kealakehe/La'i 'Opua lands;
- Provide information essential to the planning of projects, services, and entrepreneurial ventures;
- Identify key issues, opportunities, and constraints affecting regional development and area improvements;
- Assist in the efficient allocation of resources by DHHL and its partners; and
- Identify priority projects that are essential to moving development and community improvement projects forward.

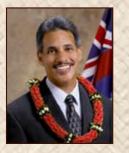
DHHL knows that regional development is a dynamic process with constantly changing opportunities and emerging issues. With that in mind, this document will be regularly updated as development projects progress and priorities change.

ntroduction





Linda Lingle Governor



James "Duke" Aiona Lieutenant Governor



Dan K. Inouve U.S. Senator



Daniel K. Akaka U.S. Senator





Micah A. Kāne DHHL Commissioner Chairman



Paul Whalen State Senatorial District 3



Josh Green State House of Representatives District 6



State, Federal, & County Leaders

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



Harry Kim Hawai'i Mayor



Brenda Ford Council District 7







Mazie Hirono Congressional District 2



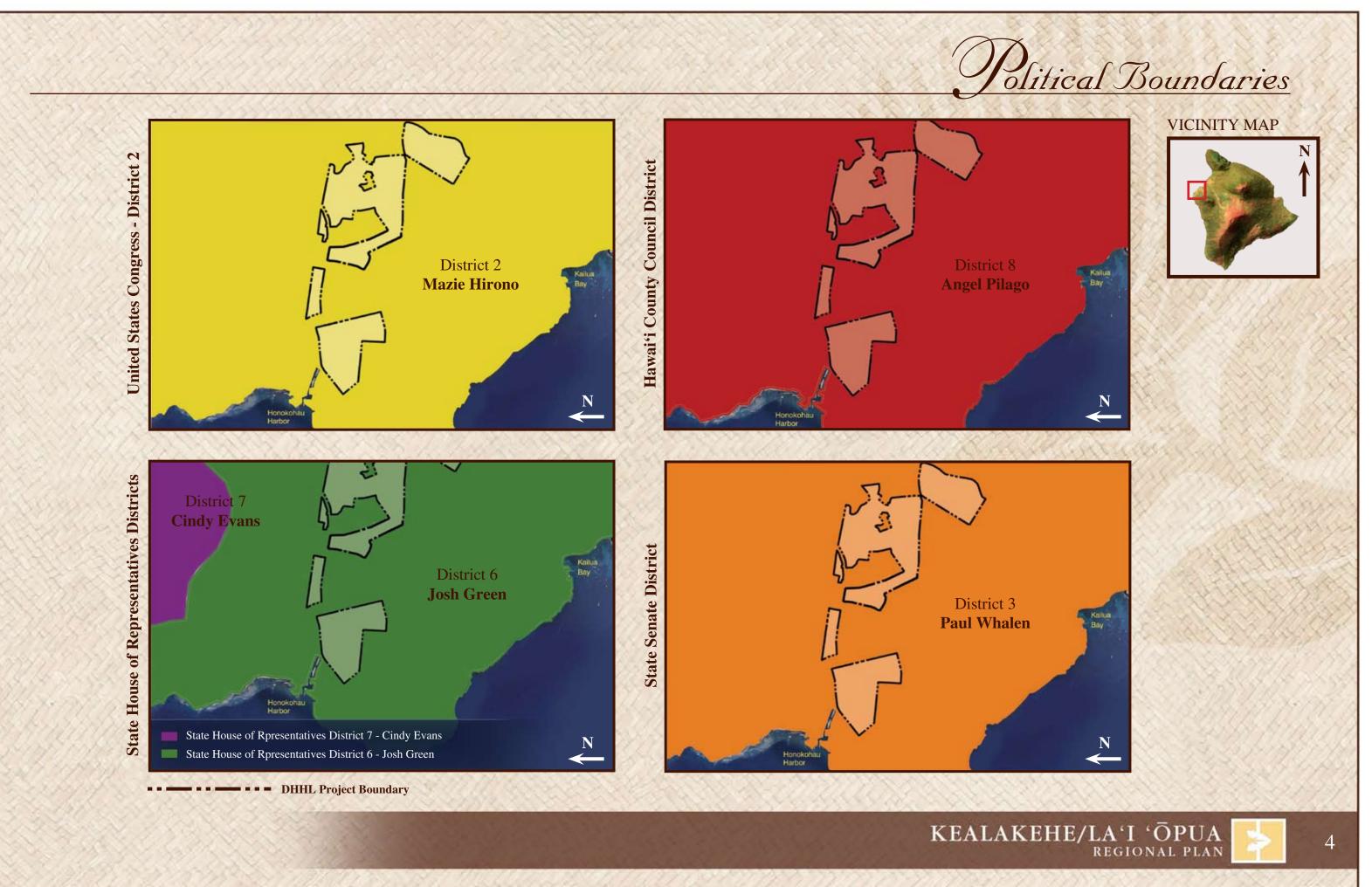
Malia Kamaka DHHL Hawai'i Commissioner



Cindy Evans State House of Representatives District 7



Angel Pilago Council District 8



Community Beaders

Government

Dixie Kaetsu Managing Director Alvin Rho, Complex Superintendent, West Hawai'i Bruce C. McClure, Director Milton Pavao, Manager George A. Wilkens Ted Liu, Director Barbara Bell, Director William Takaba, Director Linda Chinn, Administrator, Land Management Division Russel Tsuji, Land Division Administrator Keith Chun, State Land Planning & Dev. Mgr. Mason Young, Acting Administrator, Div. of Boating & Ocean Recreation Laura Thielen Patricia Engelhard, Director Jane H. Testa, Director Darryl J. Oliveira, Fire Chief Police Chief Lawrence K. Mahuna Thomas Brown, Transit Operations Administrator Haunani Apoliona Robert Lindsey, Hawai'i Trustee Edwin Taira, Housing Administrator Andy Levin, Executive Director Chris Yuen, Department Head Rose Tseng, Ph.D, Chancellor David Davidson

Cultural

Madeleine Ferguson, Ron Hocholee, President Pua Kanahele Leimana Demate, President David Roy Danny Akaka Herb Kane Vern Yamanaka Stephen Morse Herb Lee Fred Cachola Merv Thompson Jack Kelly **Jimmy Medeiros** Harold (Ollie) Olinger Hannah Springer Kenneth Brown Maurice Kealoha **Richard Nelson** Uncle Don Kuali'i

5

County of Hawai'i

State of Hawai'i, Department of Education County of Hawai'i, Department of Public Works County of Hawai'i, Department of Water Supply County of Hawai'i, Department of Water Supply Water Board-Dist. 8 State of Hawai'i, Department of Business & Economic Development & Tourism County of Hawai'i, Department of Environmental Management County of Hawai'i, Department of Finance Department of Hawaiian Home Lands State of Hawai'i, Department of Land & Natural Resources State of Hawai'i, Department of Land & Natural Resources State of Hawai'i, Department of Land & Natural Resources

State of Hawai'i, Department of Land & Natural Resources County of Hawai'i, Department of Parks & Recreation County of Hawai'i, Department of Research & Development Hawai'i County Fire Department Hawai'i County Police Department County of Hawai'i, Mass Transit Agency Office of Hawaiian Affairs, Board of Trustees Office of Hawaiian Affairs, Board of Trustees County of Hawai'i, Office of Housing & Community Development County of Hawai'i, Office of the Mayor County of Hawai'i - Planning Deptartment University of Hawai'i - Hilo HHFDC

Catholic Charities, Kona Office - Na `Ohana Pulama Catholic Charities, Kona Office - Na 'Ohana Pulama Edith Kanaka'ole Foundation Association of Hawaiian Civic Clubs Na Kōkua Kaloko Honokōhau Protect Keopuka 'Ohana Protect Keopuka 'Ohana Royal Order of Kamehameha Cultural Resource Advisor Cultural Resource Advisor Cultural Resource Advisor Cultural Resource Advisor Cultural Resource Advisor

Kospitals

Ira Lynn Walton, Administrator Stan Berry, Administrator

Kona Community Hospital North Hawai'i Community Hospital

Community

Eric von Platten Luder John De Fries Paula Helfrich, Executive Director John Ray Kelly Greenwell Rick Gaffney, Co-Chair Marnie Herkes Pete Hendricks, Managing Director, County of Hawai'i, Sue Aronson Eric von Platten Fred Duerr, General Manager, Kona Village Resort Cha Smith, Executive Director Elaine Watai David Marquez, President Craig "Bo" Kahui Sara Peck - Sea Grant (Holualoa) Gene Leslie - Kona Hawaiian Civic Club Ruby MacDonald - Burial Council Hannah Springer -Planning Commission Heather Cole - Nature Conservancy Sharon Sakai, Administrative Director Angel Pilago Carl Carlson-Westbrook Virginia Isbell Mikahala Roy Kat Brady, Former Director Janet Mandrell Geraldine K. Bell, Superintendent Garv F. Barbano, Park Planner Stanley C. Bond, Jr., Ph.D, Resource Manager/ Archeologist Les Inafuku, Chief Ranger Jeff Smith, Executive Director Thomas Kaulukukui Bob Ozaki Anne Irene Wilcox Skip Cowell Mahelani Pai Marjorie Erway Marnie Herkes Clarence Mills

Leilehua Yuen Etua Lopes T'isa Kalili-Wenzel Ku'uleialoha French Mahealani Lee

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



Chamber of Commerce, Kona-Kohala Friends of the Future Hawai'i Island Economic Development Board Hawai'i Leeward Planning Association Hawaiian Gardens Honokohau Area Advisory Group Honokōhau Area Advisory Group Honokōhau Area Advisory Group Honokōhau Area Advisory Group Honokōhau Area Advisory Group Honokohau Area Advisory Group Kāhea Kealakehe Ahupua'a 2020 Kealakehe Ahupua'a 2020 Kaniohale at the Villages of La'i 'Opua Association Kaupulehu Marine Advisory Committee Kohala Coast Resort Association Kohanaiki Ohana Kūki'o Resorts Kona International Soroptimist Group Kulana Huli Honua Life of the Land Makai Society Na Ala Hele Advisory Council/DLNR National Park Service, U.S. Deptartment of the Interior Queen Lili'uokalani Trust Queen Lili'uokalani Trust The Outdoor Circle TREES West Hawai'i Community Health Center Development Committee West Hawai'i Community Health Center Development Committee West Hawai'i Community Health Center Development Committee West Hawai'i Community Health Center Development Committee

Hula Halau

Hālau Na Pua o Uluhaima

Francis Henry Pohukaina Keana'aina Valencia Nāpua Libarios Kam

Waiohinu Hula Studio/Lorilei's Hula Studio

Hālau Hula Namohala Halaʻi Hālau Hula Na Pua Uʻi o Hawaiʻi Ka Hula o Ka Moana Pakipika Kekoʻolani Hula Hālau Na Hula o Pohukaina Nāpua Hula Studio Polynesian Paradise





David McCain University of Hawai'i President



Rockne Freitas Chancellor, Hawai'i Community College



Chris Yuen Hawai'i County **Planning Director**



Craig "Bo" Kahui Kaniohale Community Association President



Robert Lindsey Hawai'i Island **OHA** Trustee





Lehua Kaulukukui Kamehameha Schools West Hawai'i Coordinator



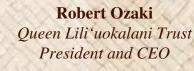
Will Murakami Kealakehe High School Principal



Geraldine Bell Honokōhau Koloko National Park / Pu'uhonua O' Honaunau



Laura Thielen Department of Land and Natural Resources Interim Chair





John Buckstead Kona Community Health Clinic Kealakehe Community

No Picture Available

Richard Choi



Dr. Earl Bakken North Hawai'i Community Hospital

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

Key Community Stakeholders

Jim Jacoby Jacoby Development *Incorporated*



Fred Yamashiro Menehune Development



Wally Lau Hui Laulima





Partnering Benefits



West Hawai'i Community College

MASTER PLANNING & DEVELOPMENT ADVOCACY

- Provides broader based long-term vision for regional development
- Integrates land uses and creates stronger land use relationships
- Reduces risk for large scale community improvement project
- Coordination and prioritization of public sector program initiatives and funding for regional capital improvement projects
- Joint planning and development of the DHHL lands with community and regional land use plans and initiatives for mutual benefit
- Creates greater opportunities to share and benefit from native cultural resources
- Flexibility of development standards, zoning, and design

HARED COSTS & MULTIPLE FINANCING OPTIONS

- Leverage of limited resources to create development synergy
- Potential use of tax exempt financing
- Native American Housing Assistance and Self Determination Act (NAHSDA)
- Legislative Appropriations
- Federal Funding: Housing and Urban Development (HUD), Food and Drug Administration (FDA), United States Department of Agriculture (USDA), and Small **Business Administration (SBA)**
- Private developers meeting afforable housing conditions



West Hawai'i Civic Center

REGIONAL HIGHLIGHTS

- DHHL properties are located in close proximity to Kailua-Kona and the Kona International Airport
- DHHL properties are located along Queen Ka'ahumanu Highway and Kealakehe Parkway
- Master Planned community set within Kona's unique, natural lava landscaping



Kamehameha Schools on DHHL Property



EXAMPLES

- 41 Self-Help homes were built at La'i 'Opua through a partnership with Kokua Housing
- In Waimea, DHHL partnered with Hawai'i County and utility providers to develop the Waimea Irrigation System
- Kamehameha Preschools throughout the State of Hawai'i are located on DHHL lands
- In Hilo, OHA offices, a County park and gymnasium, elementary school, and a Kamehameha preschool are located on DHHL lands. These facilities and resources are an important part of the Keaukaha Homestead community





DHHL Home Construction



History and Cultural Aspects of the Area

he Villages of La'i 'Opua is located in the Kealakehe ahupua'a, along the northwest coast of the Island of Hawai'i, north of Kailua-Kona Town. The 1,015acre 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



Captain Cook's ships dropped anchor in Kealakekua Bay.

Forest. The Keahuolū ahupua'a, property of the Queen Lili'uokalani Trust, is the southern border.

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 Honokohau 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

The grassy pasture lands of North Kohala were intensively cultivated in dryland crops.



This white obelisk was erected by the British government near the spot where Captain Cook fell.





DHHL LANDS

Honokōhau – Honokōhau 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.

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

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, Kealakehe Parkway, Kealakehe 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. Honokoau 2. Keahuolū 3. Villages of La'i 'Ōpua Total=

200 Acres 150 Acres 572 Acres 922 Acres

REGIONAL PLAN

10

Regional Map

DJACENT LANDS

State of Hawai'i, Department of Land and Natural Resources (DLNR) – DLNR owns a 348acre parcel located makai of the DHHL Honokōhau property. This parcel includes the Honokōhau Small Boat Harbor.



3

5

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.

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.

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.

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.

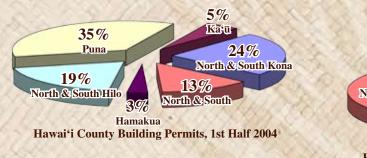




- The area surrounding La'i 'Opua, referred to as the North Kona Coast, occupies the major portion of the Census Districts known as South Kohala and North Kona.
- The North Kona Coast is the principal visitor destination area on the island. With a total of 8,378 hotel rooms, the North Kona Coast has 83 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 grow to 82,700 by the year 2010. 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. The passenger volume is expected to increase approximately 33 percent, from the actual 1997 Airport Activity Statistics of 2,628,157 to 3,489,000 in 2015. This trend is apparent as the airport crossed the three million passenger threshold in 2006







Growth in Hawai'i County has generally been concentrated in the North Kona Coast region. However, recent statistics from the Hawai'i County Department of Planning reflect a change toward a more balanced construction environment islandwide. Economic forecasts from First Hawaiian Bank predict a future slowdown in construction. The recent drop in permit requests from West Hawai'i may reflect the start of the predicted downturn in this sector.

- Employment trends are prime indicators of economic growth of an area. For most sectors of the local economy, an increase in employment generates and dictates the rate at which it will expand. The labor market along the Kona Coast continues to tighten through 2007, with more than 1,000 vacancies reported at area resorts and hotels. Unemployment rates in West Hawai'i are now lower than those statewide.
- 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, for the next six years from Fiscal Year 2005-06 to 2010-11, includes more than \$60,000,000 for roads, water, utilities, parks, and recreational facilities.
- 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.

Regional Demographics

2% Ka'ū 13% 35% North & South Kon lamakua 41% North & S

Hawai'i County Building Permits from January-April 2007

KEALAKEHE/LA'I 'ÕPUA REGIONAL PLAN

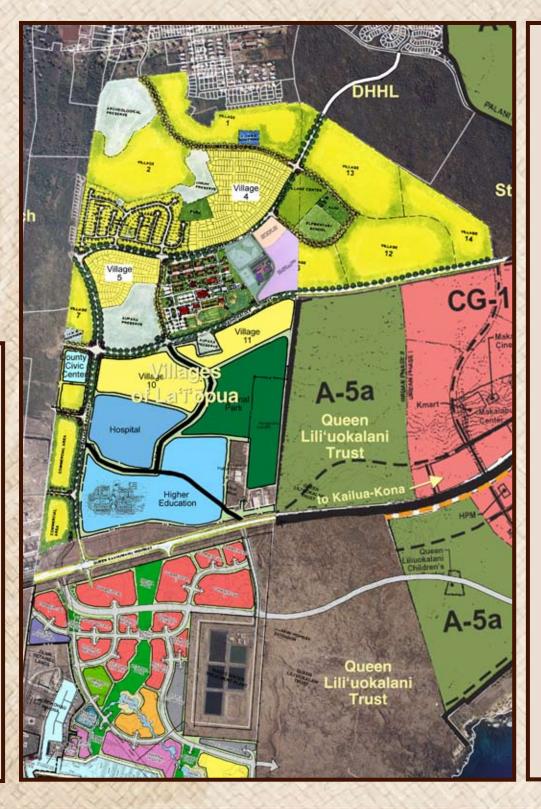
Villages of Ba'i 'Opua

he Villages of La'i 'Ōpua is a master-planned community located in Kealakehe, north of Kailua-Kona. The project consists of 14 different villages, single and multi-family residential units, recreational facilities, community facilities, neighborhoodcommercial complexes, several parks, and several preserve sites.

To date, Village 3 and the Kealakehe High School are complete. Village 3, also known as Kaniohale Residential Subdivision, was completed in 1999. The Kaniohale Residential Subdivision consists of 184 developerbuilt single family dwellings, 41 selfhelp homes, and a community center. The subdivision is being managed by the HHFDC. The remaining areas of the Villages of La'i 'Ōpua are slated for future development.

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	l 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
Subtota	al:		133.28
Net Non-Ced (appro:			50.77



Proposed/Planned Use

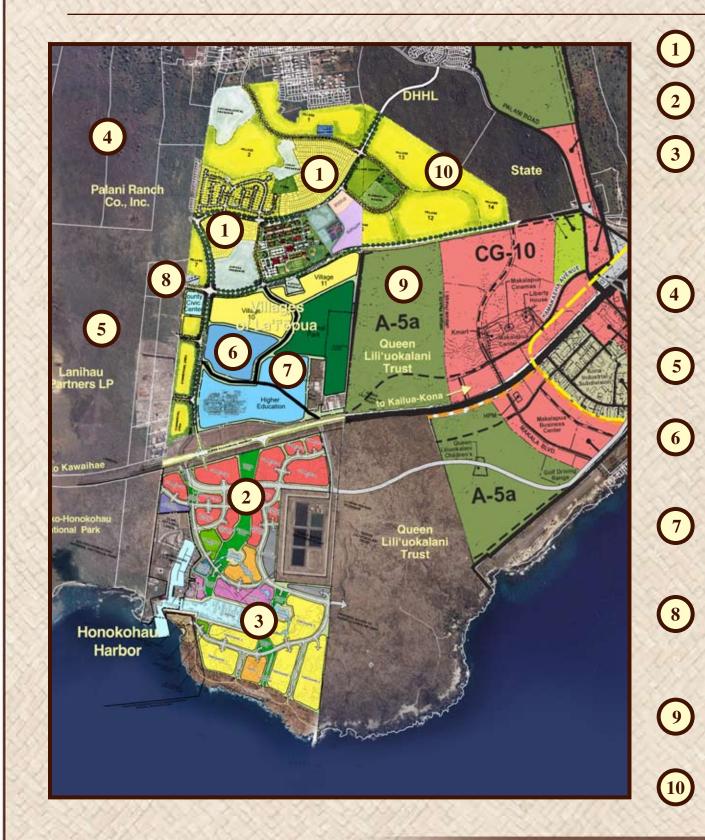
Village 1 Water Tank Site Village 2 Archaeological Preserve Uhi Uhi Preserve Village 3 Village 4 Park Village 7 Water Tank Site Village 5 Aupaka Preserve Kealakehe High School Portion of Village 6 Portion of Village 6 Park Portion of Village Center Portion of Village Center Park Portion of Elementary School Portion of Elementary School Portion of Village 13 Village 13 Village 14 Village 12 Village 11 Archaeological Preserve Golf Course Village 10 Village 9

County Office Building Commercial Area Commercial Area

County Roadways Kealakehe Parkway

Total DHH

Sell.	Carlo a	<u> Seconderia</u>	1.10
			525
			XXX.
	Area	Owner	1000
	49.664 Ac.	DHHL	1223
	2.782 Ac.		66.60
	49.574 Ac.	DHHL	2223
	27.834 Ac.	DHHL	122.2
	11.178 Ac.	DHHL	12.72
	51.324 Ac.	DHHL	1999
	55.433 Ac.	DHHL	10.18
	5.000 Ac.	DHHL	222
	11.600 Ac.	DHHL	2.200
	2.022 Ac.	-	1.6.2
	23.592 Ac.	DHHL	2757
	26.564 Ac.	DHHL	1000
	48.848 Ac.	Dept. of Education	1180
	33.699 Ac.	· · · · · · · · · · · · · · · · · · ·	2012
	Est. 16.000 Ac.	DHHL	22223
	5.000 Ac. Est. 14.000 Ac.	DHHL DHHL	12.20
	7.598 Ac.		00,0
	Est. 4.500 Ac.	DHHL	SOLE
Site	Est. 9.400 Ac.	DHHL	10 8
Site Site	0.198 Ac.	DHHL	15.55
Sile	0.022 Ac.	DHHL	127.1
	Est. 50.800 Ac.	HCDCH	0.338
	Est. 31.400 Ac.	HCDCH	0.000
	Est. 51.100 Ac.	HCDCH	225.2
	24.067 Ac.		6.082
	1.224 Ac.		Lite
	193.547 Ac.	County of Hawai'i	0.25
	21.453 Ac.	HCDCH	2.20
	35.774 Ac.	County of Hawai'i	1888
	7.000 Ac.	County of Hawai'i	3538
	7.863 Ac.	DHHL	Last.
	26.528 Ac.	DHHL	1.18
	Ac.		1.50%
	26.934 Ac.	County of Hawai'i	1779
	46.174 Ac.	Dept. of Transportation	5525
			STALL.
1.5	0.00		61.2
al Est	. 979.696	Acres	1122
I Ee	t. 571.695	Acres	SSKK.
IL LS	. 571.095	Acres	Sheet.



Villages of La'i 'Opua – Villages 4 & 5, the next two phases of development, will create approximately 300 lots on 80 acres of land. The plans include single-family homes. Additional Villages are planned for future development.

DHHL Honokohau – Currently, the entire 200-acre piece is under lease with Jacoby Development. The parcel is planned for an expanded marina and timeshare/hotel development project called Kona Kai Ola.

DLNR Honokohau – Currently, the entire 348-acre piece is under negotiation with Jacoby Development for a long-term lease. The parcel is planned for an expanded marina and resort development project called Kona Kai Ola.

Kona Kai Ola - Kona Kai Ola is a mixed-use and community-focused development on 548 acres of property owned by DLNR and DHHL, located between the Kaloko-Honokohau National Park and Queen Lili 'uokalani Trust. The project includes an expanded small boat harbor and marina, regional and resort retail, a vocational training center, championship golf course, resort and residential uses, and community facilities.

Palani Ranch – Palani Ranch owns approximately 500 acres of land located north of the Villages of La'i 'Ōpua. The mauka lands are currently in conceptual long-range planning for development. There are potential connections to the Villages of La'i 'Opua through this property.

Lanihau Partners L.P. - Lanihau Partners L.P. is developing an industrial commercial development, called West Hawai'i Business Park, on 140 acres of land located north of the Villages of La'i 'Opua. Lanihau Partners L.P. would like to eventually turn all the 337 acres of land in the Kaloko-Honokohau area, including the quarry, into a business park for commercial and light industrial uses.

West Hawai'i Hospital - The non-profit organization, Planned Medical Community 21st Century, is in the process of planning and developing a new hospital for the West Hawai'i community. The new hospital will provide service to the people of North Kona and South Kona, North Kohala, and South Kohala. The hospital is planned to be developed in the Villages of La'i 'Opua, Village 8. Construction on the 35-acre site is expected to take place between 2008 and 2013.

University of Hawai'i Center at West Hawai'i – Established in 1996, the University of Hawai'i Center at West Hawai'i (UHCWH) is currently located in a shopping center in Kealakekua. The Board of Regents has approved the expansion of the UHCWH on a 500-acre State-owned parcel in Kalaoa. The University of Hawai'i Community Colleges has made the planning, design, and construction of the new center at Kalaoa a priority. The campus proposed at Kealakehe is meant as a conceptual alternate site.

West Hawai'i Civic Center - The West Hawai'i Civic Center is the County of Hawai'i's one-stop venue for services to the West Hawai'i community. The facility is located on seven acres of County land in the Villages of La'i 'Opua, Village 8. The new civic center will include meeting rooms and space for motor vehicle registration, driver's licensing, offices for Real Property Tax, Department of Planning, Department of Public Works (Engineering and Building divisions), Office of Aging, the Mayor's Office, the County Council office, Liquor Control, and the Department of Parks and Recreation. Construction for the first phase of the center has commenced.

Queen Lili'uokalani Trust (QLT) – QLT is looking to develop more industrial, commercial, and residential projects in the mauka section of its property. The makai section of property has significant development potential due to its proximity to Kailua-Kona. The Queen Lili'uokalani Children's Center, located on the makai property, is also planning to improve its facilities.

HHFDC Affordable Housing

Development Trends

KEALAKEHE/LA'I 'ŌPUA **REGIONAL PLAN**

Infrastructure - Roads





15

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 'Opua 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: The Keanalehu Drive Extension to Manawale'a Street is included in the County of Hawai'i's regional transportation plan called the Kailua to Keāhole (K-to-K) Plan. The roadway is included in the Hienāloli Road Extension Project. The County of Hawai'i is currently doing the conceptual planning for the road. In 2006, the County of Hawai'i appropriated \$9M for construction. The contract went out to bid in April 2007, and a contractor was announced the following June.

Ane Keohokalole Highway Extension to Henry Street

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 'Opua. 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: No work has been done. DHHL, OLT, and the County of Hawai'i would need to partner together to plan, design, and construct the one-mile road. The Hawai'i State Legislature approved revenue bonds for FY 05-06 (as amended by Act 213, SLH 2007) to fund equipment, design, and construction of an extension for Ane Keohokalole Highway, Keanalehu Drive, Manawale'a Street including supporting water and sewer lines. Construction is projected to commence within a year.

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: The Keanalehu Drive Extension to Palani Road is included in the County's K-to-K Plan. The roadway is a part of the Hienāloli Road Extension Project. The Keanalehu Drive to Palani Road Extension is in the conceptual phase. Phasing of this road should occur when the proposed Keanalehu Drive to Palani Road Waterline starts construction. The County of Hawai'i did not include this item in its capital improvements budget for FY 07-08.

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: DOT is currently working on right-of-way issues and the roadway alignment. The Hawai'i State Legislature appropriated \$1M in matching funding for the acquisition of land and construction of the project totaling \$5M (Act 213, SLH 2007). The governor's office has not released the funds as of July 2007.



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: The planning and design of the Kealakehe Parkway / Queen Ka'ahumanu Highway Intersection is in the conceptual phase. This item was not included in the Governor's executive biennium budget request for 2008 to 2010, or the final budget approved by the legislature (Act 213, SLH 2007).



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 Honokohau 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 is presently doing the conceptual planning for the road. Right-of-way issues with Queen Lili'uokalani Trust (QLT) has been cleared and design will proceed upon getting the necessary entitlements.



8

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 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. The first phase of widening is scheduled for completion by early 2007. The Hawai'i State Legislature appropriated \$8M in matching funding for the construction of the project totaling \$35M (Act 213, SLH 2007). The governor's office has not released the funds as of July 2007.

Kamanu Street Extension to Kealakehe Parkway

Design, acquire right-of-way, and construct approximately 2,700 feet of 60-foot wide road to establish a new major collector road between Hina Lani Street and Kealakehe Parkway, parallel to Queen Ka'ahumanu Highway. Work will include paved shoulders and swales, roadside drainage improvements, and street lights. This new north-south road parallel to Queen Ka'ahumanu will decrease traffic on the highway and improve traffic circulation in this area of Kona.

Status: The Kamanu Street Extension to Kealakehe Parkway is in the final design stage. Funding through appropriations from a special tax fund is also pending from the Hawai'i County Council, with projected approval in the first quarter of fiscal year 2008. Construction should commence shortly thereafter.

Infrastructure - Roads

KEALAKEHE/LA'I 'OPUA **REGIONAL PLAN**







17

- State
- County of Hawaii DWS

ETTATES.

- O Existing Well
- Proposed Well
- Existing Reservoir
- Proposed Reservoir
- Existing Transmission
 - **Proposed Transmission**
- Description on following page



Existing Water System

Water for Kealakehe, Honokohau, and Keahuolu 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 Holualoa, Honokohau, Kalaoa, and Hualalai 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 'Opua 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 'Opua 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 'Opua, which will include the strategy for source development, storage, and transmission to the project.

Funded Water Improvements Projects FY 06-07:

1) Palani Road Transmission Line: \$12,000,000

In order to provide water service to the area between Mamalahoa Highway to the Lili'uokalani Subdivision, the County of Hawai'i has appropriated funds to construct two (2) concrete reservoirs and 12,500 feet of waterline running south of Palani Road in mostly private, undeveloped property.

Funded Water Improvements Projects FY 07-08:

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.

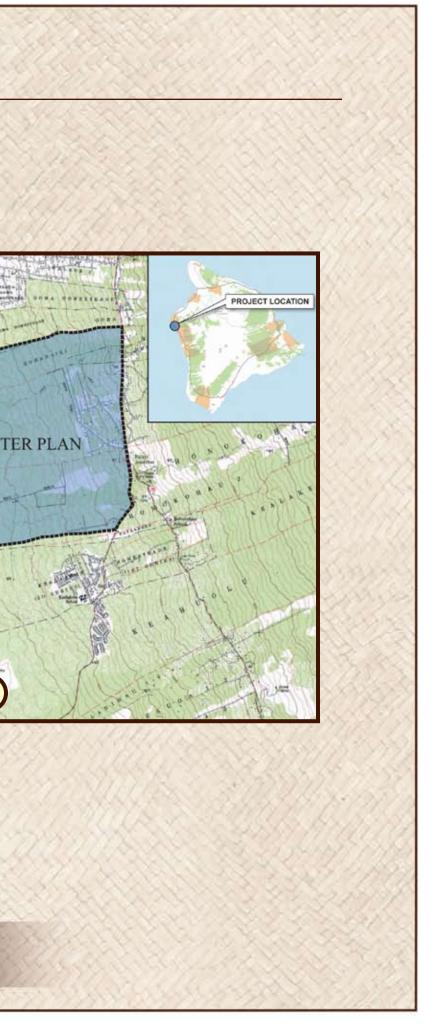
LEGEND

- 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 'Opua 935' Reservoir
- 6. Villages of La'i 'Opua 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 'Opua 325' Reservoir
- 10. Existing Honokohau 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 'Opua 935' Reservoir
- 15. Existing County Villages of La'i 'Opua 595' Reservoir
- 16. Existing County Villages of La'i 'Opua 325' Reservoir

Infrastructure - Water

KEALAKEHE/LA'I 'ŌPUA REGIONAL PLAN

Infrastructure - Sewer DHHL State Palani Ranch Co., Inc. MOBERTRA 3 5 Queen Lili'uokalani Trust NORTH KONA SEWER MASTER PLAN STUDY AREA Lanihau Partners LP 2 to Kawaihae RESTENDS Queen Lill'uokalani Trust 9 Ser. Say **ON** Honokohau Harbor





Existing Sewer System

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).

The proposed golf course within the Villages of La'i 'Opua 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.

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

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.

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.

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



9

1)

3

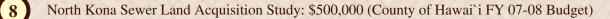
(4)

5

6

Kealakehe Wastewater Treatment Plant Aeration Upgrade: \$1,500,000 (County of Hawai'i FY 07-08 Budget)

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.



This appropriation would aid in the acquisition of land for a new sewage pump station near Kealakehe Parkway. The land acquisition is the first stage of an overall \$21,000,000 project to install sewer infrastructure along Queen Kaahumanu Highway between Kealakehe Parkway and Hina Lani Street in conjunction with the DOT's Queen Kaahumanu Highway widening project.

Design and Surveying for North Kona Sewer Improvement District: \$960,000 (prior appropriation of \$140,000 FY 06-07 & 07-08 Budget)

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.

Infrastructure - Sewer

KEALAKEHE/LA'I 'OPUA **REGIONAL PLAN**

Infrastructure - Utilities



Infrastructure - Utilities

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 ' \overline{O} pua, 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 'Opua is within the Oceanic Time Warner Cable Service area.



Regional Services - Public Facilities (Map)



ailua Bav

Education

The Kealakehe School Complex includes Kealakehe Elementary School, Kealakehe Intermediate School, Kealakehe High School, and Kanu o Ka 'Aina Public Charter School (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 and Hawai'i Montessori are two private schools located near the site. 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	Student / Teacher Ratio
Kealakehe Elementary School*	Public	PK-05	983	1,371	17.9
Kealakehe Intermediate School*	Public	06-08	933	910	18.2
Hualālai Academy	Public	PK-12	200	N/A	15.0
Kealakehe High School**	Public	09-12	1,567	1,555	20.2

* Did not meet No Child Left Behind Act requirements in 2006. Currently implementing restructuring plan, which could include oversight by private education management company, reform by DOE personnel, or targeted help from specialists in specific areas such as reading and math.

** Did not meet No Child Left Behind Act requirements in 2006. The school is currently in its first year of corrective action where they must prepare a reform plan incorporating one of several possible options including replacing school staff, changing curriculum, appointing an outside adviser, and restructuring the school's governance. (A school-by-school look at No Child Left Behind progress, Honolulu Star-Bulletin, July 30, 2006)

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. The County of Hawai'i has appropriated \$6.7M in funds over the past two years to construct a new fire station at Kalaoa in North Kona.

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. A mini-station is located 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

The County of Hawai'i has initiated construction of a Civic Center to service West Hawai'i residents.

Regional - Public Facilities



24

KEALAKEHE/LA'I 'ŌPUA **REGIONAL PLAN**



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 'Opua 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 'Opua to mauka water resources.

Server

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.

Electivcal

Electrical Substation

A new substation would be required within the Villages of La'i 'Opua to alleviate the stress on the existing electrical system.

* - 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 'Opua 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 Extension to Henry Street 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 'Opua. 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.

Development Projects (cont.)

Community

* 1. Villages at La'i 'Ōpua Community Center

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.

Finally, a community college would be an integral part of a new vibrant community. Having a Kealakehe High School and the UHCWH within the Villages promotes the villages concept of self-sustainability and instills in the residents the importance of life-long learning.

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.

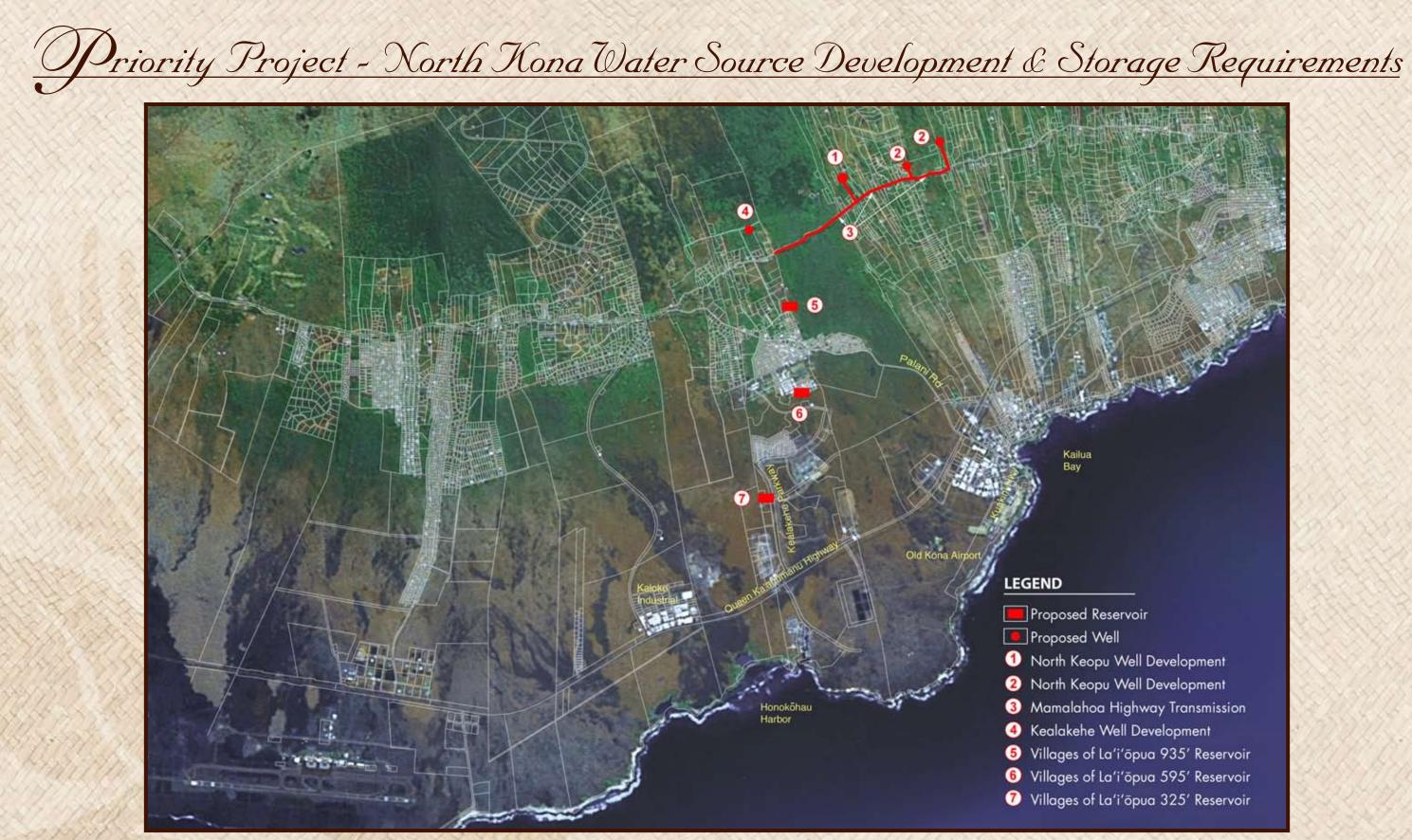
2. Villages 1 and 2

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



* - Priority project.

KEALAKEHE/LA'I 'ŌPUA **REGIONAL PLAN**





Priority Project - North Kona Source Development Water & Storage Requirements

Priority Project: North Kona Water Source Development and Storage

The North Kona Water Source Development and Storage project includes critical source, transmission, storage and other related improvements that will not only benefit the Villages of La'i 'Opua, 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 elevations using pumps, however this system has not produced the quantity and quality of water as 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.

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 projects, county developments and developing affordable housing within the immediate region. Affordable housing is one of the greatest needs of the State and Kona. The lack of affordable workforce housing in the region is evident in the number of workers who commute to Kona to 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 is barely able to meet the current water demands.

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 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 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 'Opua 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 replace the water supply for future growth in the area from the existing Kahalu'u Shaft.

Discussions with DWS identified potential wells DHHL can possibly participate in developing the water required for the planned development. Currently, DHHL is finalizing the Water Master Plan for the Villages of La'i 'Opua, which will include the strategy for source development, storage, and transmission to the project.

Currently, DHHL is finalizing the design of the water master plan for the Villages of La'i 'Opua. The water master plan will include source development, storage, and transmission. The development of the North Kona Water Source

will benefit the entire region of La'i 'Opua including the proposed community center in Village 6, HHFDC's affordable housing developments on Villages 12, 13, and 14, DHHL's affordable housing developments on Villages 1, 2, and 11, the Kona Community Hospital on Village 9, and the Hawai'i County Civic Center on Village 8.

Cost Estimate

Fiscal year 2008: Fiscal Year 2009:

Total:

\$ 2,905,000 \$11,500,000

\$14,405,000

Funding Opportunities

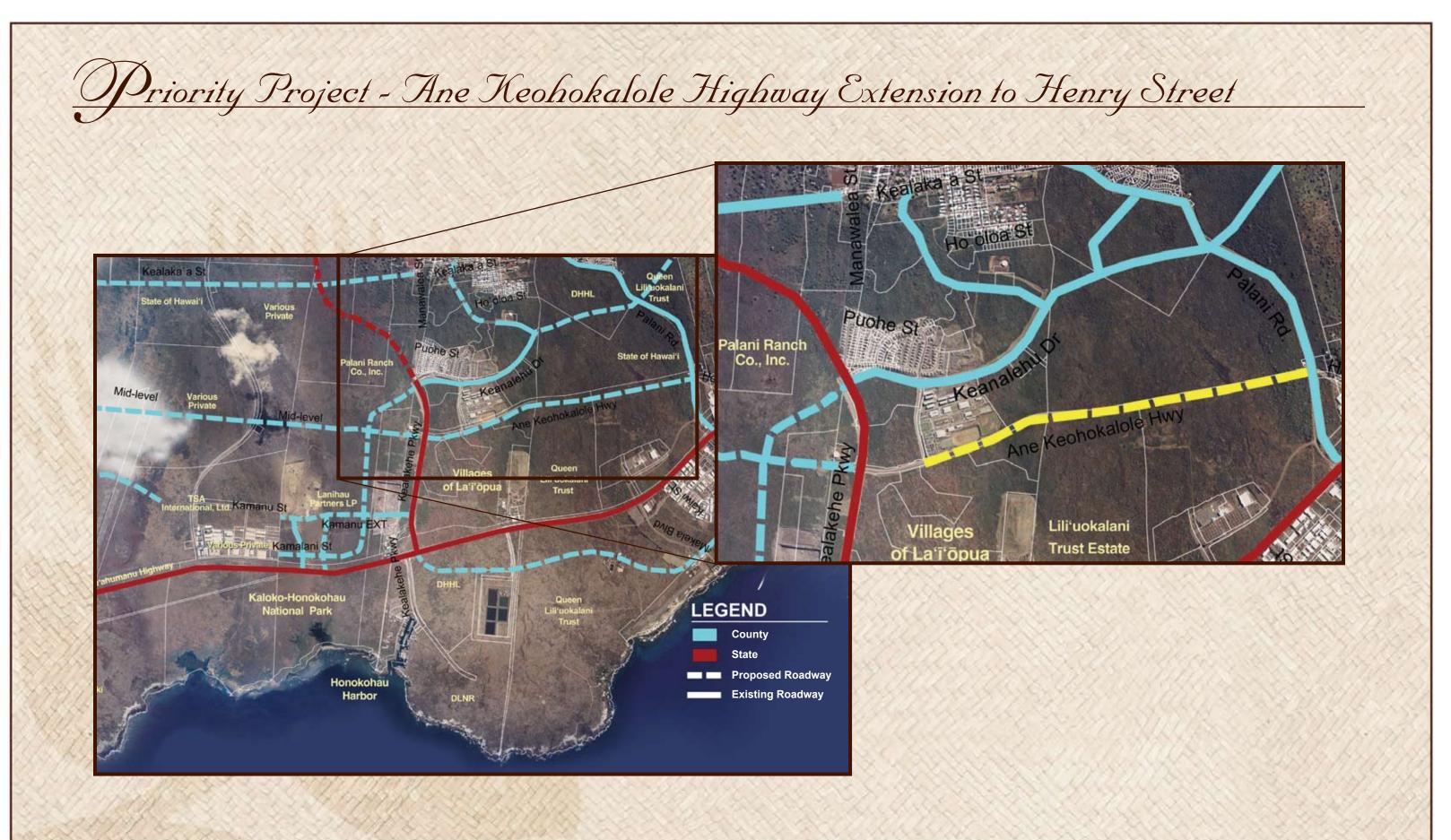
In its 2007 regular session, the Hawai'i State Legislature approved capital improvement funding of \$14,405,000.00 and \$12,000,000.00 for North Kona Water System improvements. However, both approved items are neither derived from general nor revenue bonds. The line items authorize the project but money must be internally allocated by either DHHL, the County of Hawai'i or the Department of Land and Natural Resources - an unlikely scenario. For the project to realistically proceed, the legislature would have to support it through general or revenue bonds.

Critical Path

Discussions with DLNR and DWS should begin early in the planning period for DHHL / HHFDC's interest in becoming part of the MOU and obtaining sufficient water allocation for its lands. A staff person could be assigned as the department's liaison with DLNR (and also Hawai'i County DWS) on water related issues pertinent to DHHL / HHFDC tracts within the master plan area. Upon reaching an agreement with DLNR and Hawai'i County DWS on DHHL / HHFDC's participation in the master plan and MOU, DHHL will work closely with DLNR and Hawai'i County DWS on funding and timing of pertinent master plan improvements to assure timely availability of water supply for the tracts.

The map to the left shows proposed improvements. Proposed improvements include four new wells and three new Village of La'i 'Opua Reservoirs.





Priority Project - Ane Keohokalole Highway Extension to Henry Street

Priority Project: Ane Keohokalole Highway Extension to Henry Street

Design, acquire right-of-way, and construct approximately one mile of 120-foot Right-of-Way 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 'Opua. 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.

The Ane Keohokalole Highway Extension to Henry Street remains unfunded.

The development of Ane Keohokalole Highway Extension to Henry Street will benefit all constituents of North Kona by providing another lateral corridor to alleviate traffic congestion on Queen Ka'ahumanu Highway. The Ane Keohokalole Highway Extension to Henry Street will also benefit the entire Villages of La'i 'Opua including the University of Hawai'i's West Hawai'i Community College Expansion project, Housing and Community Development Corporation of Hawai'i's affordable housing developments on Villages 12, 13, and 14, DHHL's affordable housing developments on Villages 1, 2, 3, 4, 6, 10 and 11, the Kona Community Hospital on Village 9, the Hawai'i County Civic Center on Village 8, the Villages of La'i 'Opua Community Center on Village 6, and the students attending Kealakehe High School.

Cost Estimate

Total Estimated Costs: \$11,000,000

Funding Opportunities

In Hawai'i, State and County governments use Federal highway aid funding to pay for most major road improvements. In most cases, the County will cover 20% of the cost and the Federal government will pay for the 80% of remaining costs. These projects slated for Federal funding are identified in the Statewide Transportation Improvement Program (STIP). The STIP delineates the funding categories and the Federal and local share required for each project. Minor roads do not qualify for Federal funding.

The Ane Keohakalole Highway Extension to Henry Street may qualify as a major road connecting Kealakehe Parkway to Palani Road. If qualified as a major road, this project could then be listed for STIP funding, which would allow up to 80% Federal funding with the County covering 20%.

If the project is considered to be a minor road, it then would need to be funded locally. State Agencies and State Legislators are able to request projects to be placed on the statewide Capital Improvement Project (CIP) listing to obtain funding from the State.

Due to the traffic problems in Kona, the County of Hawai'i has also placed West Hawai'i road projects on the high priority list. Last fiscal year, the County of Hawai'i Council authorized a \$40 million bond for the island-wide road projects with \$23 million earmarked for Kona.

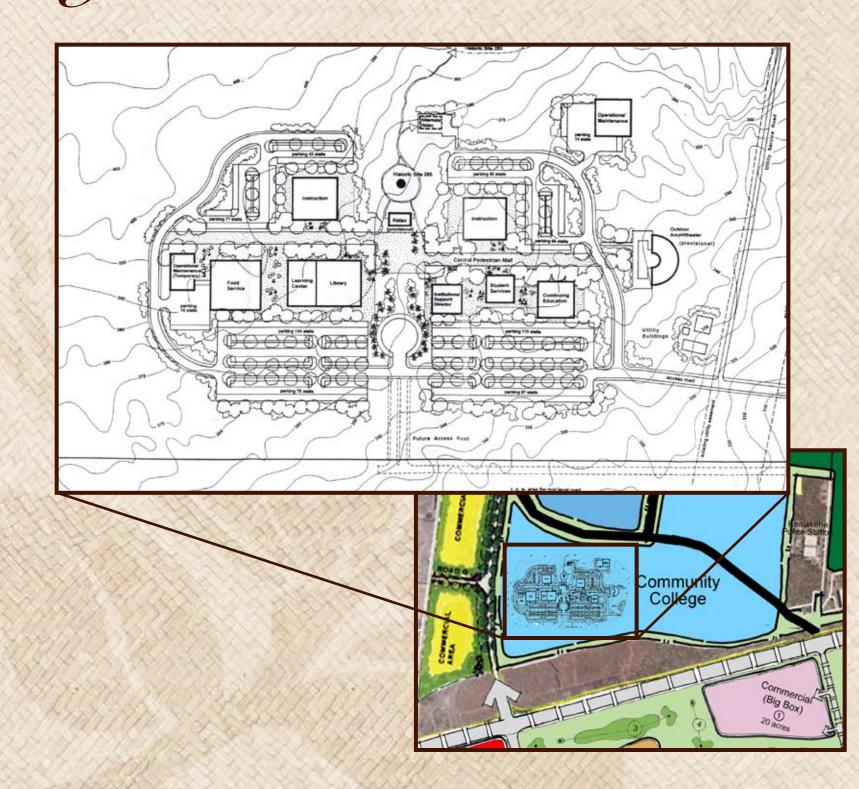
The Hawai'i State Legislature approved \$6M revenue bonds for FY 05-06 (as amended by Act 213, SLH 2007) Ane Keohokalole Highway improvements, including supporting water and sewer lines. Construction is projected to commence within a year. This funding may not be inclusive of the Henry Street portion.

Critical Path

Discussions with the County of Hawai'i Mayor's Office, Planning Department, and Department of Public Works should be made to include the Ane Keohokalole Highway Extension to Henry Street as a priority project for the upcoming fiscal year. Additional State agencies and State legislators should also be contacted to support the request for CIP funding. Right-of-way issues with QLT, DHHL, HHFDC, and costs will need to be cleared prior to starting design. The map to the left shows proposed roadway.

KEALAKEHE/LA'I 'ŌPUA **REGIONAL PLAN**

OPriority Project - West Hawai'i Community College



The University of Hawai'i Center at West Hawai'i (UHCWH) was established in 1996. The UHCWH is housed in a shopping center in Kealakekua. Since the present location allows no room for growth, the Board of Regents chose a 500-acre State-owned parcel at Kalaoa as the site of a permanent facility for UHCWH.

West Hawai'i is the only remaining major geographic area and population center in the Hawaiian Islands that does not have a permanent facility for higher education. Thus, the University of Hawai'i system has made the planning, design, and construction of the new center at Kalaoa a priority. In July of 2005, an RFP was issued to develop two campuses on the Big Island. The first campus is located in Hilo. The second campus is located in Kona. The Kona campus was to be located on the 500-acre Kalaoa parcel. However, the Villages of La'i 'Ōpua presents a better location for the campus.

The Villages of La'i 'Ōpua offers readily available infrastructure, good access, and is in close proximity to a vibrant community. The campus's neighbor will be the County of Hawai'i's proposed civic center and new hospital.

The University of Hawai'i Long Range Development Plan (LRDP) recommends a campus core of 15 to 30 acres. Although the site is 192 acres, which is more then enough space to spread the buildings and physical facilities across the site, it is recommended that the core be kept as tight and cohesive as possible for control, maintenance, ease of pedestrian access, and development costs.

The campus would be phased in to allow the campus to be developed in a rational and orderly manner. The phasing plan allows for continuing development of the UHCWH as enrollment and program requirements increase and funding becomes available. The phases are comprised of four quadrants.

DHHL Is Focusing On The First Phase Of Development

This initial phase will establish the ideal site for the campus, obtain the necessary development agreements and approvals, and complete all other necessary steps in order to secure the site. The following phases will include the planning, design, and construction of the campus.

31

Priority Project - West Hawai'i Community College

Critical Path



Funding Opportunities

In 2005, the University of Hawai'i Board of Regents approved a development partnership with Hawai'i Campus Developers, LLC, to design and construct new facilities for Hawai'i Community College at its proposed sites in Hilo and Kona. That same year, the Hawai'i State Legislature approved funding \$6.95M for planning and design work, and \$11M for the construction of infrastructure. As a temporary site, the Hawai'i County Council required Hiluhilu Development, developers of the adjacent parcel in Kalaoa, to construct a 20,000 square foot building on the 500-acre state parcel.

However, in an October 2006 press release, Governor Linda Lingle raised concerns about the arrangement with both Hawai'i Campus Developers and Hiluhilu Development. The governor has the authority to release or withhold state funds. She has opted not to release either the planning or infrastructure money appropriated by the legislature.

The 500-acre parcel remains in the possession of DLNR. The land transfer to the University of Hawai'i is not fully executed as it requires the signature of the governor, and she has opted not to sign at this time.

Should the development focus switch from the Kalaoa site to the site proposed by DHHL, an appropriation from the legislature for planning, design, and construction would be necessary. The University of Hawai'i has recently engaged in private-public partnerships in order to fund projects at its West O'ahu and Mānoa campuses. DHHL and UH could partner with a private developer as an alternative means of financing the development of the project at La'i 'Ōpua.

Costs

The costs for engineering design fees, architectural design fees, development of off site mutilities, permitting, development and legal fees have not been determined at this time. The University of Hawai'i has projected a total estimated cost of \$236,950,000 for the construction of campuses at both Kalaoa and Komohana in East Hawai'i.

Phase 5 - Vertical Construction

\$14 Million

5 year

- Classrooms
- Offices
- Student Service Center
- · Permanent O & M
- Landscape





proposed community center - office, board room, library, conference room, computer lab, gymnasium, meeting rooms, kitchen, neha kaniohale preschool, playing fields, cultural activity outdoor und - 16.75 acres recreation expansion - tennis courts and other similar types of facilities - 5.36 acres 0 accourt re expansion - vocational inical school, native hawailan ith center - 14.99 acres

Description

The existing Village of La'i 'Opua Community Center is located in Village 3, in a 750-square foot (sf) building with six parking stalls, an uncertified kitchen, and a 225 sf covered lanai. Kaniohale Community Association (KCA) members utilize the one-room community center for kūpuna (seniors) activities, hula, community health programs, and cultural clubs. KCA membership activities (i.e. baby lū'au, anniversaries, weddings, etc.) and annual activities are also held at the community center as long as the groups and activities offer a benefit to the KCA membership.

The existing community center is unable to support the existing 225 units in Village 3 and will be inadequate to support the full build-out of Village 4, Village 5, and future villages. Currently, the Villages of La'i 'Opua community faces a loss of needed services including a keiki (child) day care program, computer lab, afterschool program, and others services due to the lack of community center space.

The KCA Board has addressed this need for a larger facility by proposing a multi-purpose complex to include a gym facility, office space, community rooms, a preschool building, approximately 95 parking stalls, a combination soccer/football field, and a baseball field. The overall cost, including materials, labor, design and other related fees, is currently estimated at \$21,000,000. Proposed programs for the new multi-purpose complex would include uses at the existing community center, and adding outdoor activities such as soccer, football, and baseball, indoor gym activities, a preschool, afterschool child care, office space, and a computer lab.

Master Plan

111

La'i'opua Community Center



Priority Project - Community Center

Funding Opportunities

State agencies and State legislators are able to request projects to be placed on the statewide Capital Improvement Projects (CIP) listing to obtain funding from the State. The first phase of Planning and Design could request for CIP funds. The overall costs for the new community center including site work, construction, materials, design, and other related fees will need to be secured during this initial phase of development. The County of Hawai'i, Kamehameha Schools, the State Office of Hawaiian Affairs, other state agencies, and the Federal Government are potential sources of funding. Securing funds is critical to the development of the new Villages of La'i 'Ōpua Community Center. The 24th Hawai'i State Legislature apprpriated \$125,000.00 for design, construction and development of the regional and community center complex. (Act 213, SLH 2007)

Costs

Phase 2 Design and Permitting: \$1,400,000.00

Critical Path

The development timetable will be determined by the ability to secure required financing through partnerships, government funding, grant awards, fundraising activities, and other activities. The ideal development schedule for the new community center would coincide with the construction of Village 4. The development of the new community center will proceed in phases. The work schedule for the proposed plan shall be coordinated with DHHL. The construction schedule should take an estimated 6 years to complete.

	Phase 1 - Planning and DesignPhase 2 - Design and Permitting(\$165,000 still needed)		Phase 3 - Site Work - Roads, Parking, and Fields		Phase 4 - KS Preschool and Community Center	
VEADG	\$125,000	\$1,400,000	\$2,900	0,000	\$10,200,000	5
YEARS	1 year est. 2007	1 year	1 ye	ear	1 year	S S
	 Develop Schedule Identify Key Players Secure Partnerships and Funding Community Input of Master Plan Site Analysis Background Development Zoning/Permitting Requirements 	 Preparation of: Preliminary Design Schematic Design Pre-final Design Construction Documents Secure Permits 	 Site Preparation Demolition Excavation Grading Utilities Water Sewer Electric Site Work Walls Fire Hydrants 	 A/C Pavement 22' Wide Curbs Sidewalks Striping Lighting Football/ Soccer Field Baseball Field 	 KCA Office A+ Program Sidewalks Striping Lighting KS Preschool Building 	

Phase 5 - Gym

\$4,500,000

1 year

• Gym



Simeline Matrix of Capital Improvement Projects

KEALAKEHE - LAIOPUA PROJECT TRACKING

Project Stat	us	Former Priority Project		Priority Project		Potential Priority Project
Keanalehu Drive Extension to Manawale'a Connector Road	Roads	COH-DPW	\$9M in construction	Bid awarded, construction commences	Construction	Construction
Village 3 - Kaniohale Residential Subdivision	Residential Community	DHHL				
Kalaoa Fire Station	Public Facilities	HFD	\$6.7M appropriated in FYs 06-07 & 07-08 for construction of new fire station	Bid Project/Start Construction	Construction	Project Complete
Palani Road Transmission Line	Water	COH-DWS	\$12M Appropriated for 2 reservoirs and 12,500 feet of waterline south of Palani Road		Bid Project/Start Construction	Construction
Design and Surveying for North Kona Sewer Improvement District	Sewer	COH-DEM		Bid Project/Start Planning	Planning	Planning Complete
North Kona Sewer Land Acquisition	Sewer	COH-DEM			Acquire Land	
Kealakehe Wastewater Treatment Plant Aeration Upgrade	Sewer	COH-DEM		BidProject/Start Construction	Construction	Project Complete
Kealakehe Wastewater Treatment Plant Sludge Removal	Sewer	COH-DEM		Bid Project/Start Construction	Construction	Project Complete
Queen Ka'ahumanu Road Widening/16" Waterline	Roads/Water	HDOT/COH-DWS	Design-Build project. Cost of \$40M (\$8M State, \$27M Federal Match, \$5M for County Waterline)	Bid Project	Start Construction	Construction
Kealakehe Parkway/Queen Ka'ahumanu Highway	Roads	HDOT	Funds not appropriated by legislature in 07-09 biennium			
Kealakehe Parkway to Kealaka'a Street Extension	Roads	HDOT	\$1M in matching funds appropriated by legislature for FY 07-08	Funds Released	Bid awarded, construction begins	Construction
Keanalehu Drive to Palani Road Extension	Roads	DHHL	Budgets Funds not appropriated by COH in FY 07-08			
Kealaka'a Street to Keanalehu Drive Transmission Line	Water	DHHL/COH-DWS	Project not included in DWS FY 06-07 and 07-08 CIP			
Sewer Extension along Keanalehu Drive	Sewer	DHHL/COH-DEM	Funds not appropriated by COH in FY 07-08			
Villages of La [*] i 'Õpua - Electric Substation	Electrical	HELCo	Project ready for construction pending approval from Historic Preservation.	Receive final approvals, permits	Commence construction and installation	Project Complete
Villages of La'i 'Ōpua - Village 1 & 2	Residential	DHHL				
Villages of Laʻi ʻŌpua - Village 4 & 5	Residential	DHHL				
Palani Road to Keanalehu Drive Transmission Line	Water	DHHL	\$12M Appropriated by COH-DWS in FY 06-07. Construction to commence shortly	Commence Construction	Construction	Project Complete
/illages of La'i 'Ōpua - Community Center	Community	DHHL	\$125K in planning funds appropriated for FY 07-08	Funds Released	Phase 1- Planning	Phase 2 - Design & Permitti - \$124M appropriated for co in FY10
Jniversity of Hawaiʻi Center at West Hawaiʻi	Community	University of Hawaii	Funds appropriated for Kalaoa site. Under review by governor's office, appears delayed or stalled.		Phase 1- Site Shifts, Funds Appropriated	Phase 2 - Planning & Design
Ane Keohokalole Highway Extension to Henry Street	Roads	COH-DPW	\$6M in revenue bonds appropriated by county.		Constuction Begins	Construction
North Kona Water Source Transmission, & Storage	Water	DLNR	\$14.4M and \$12M in intergovernmental transfer funds approved by legislature for FY 07-08.		Construction Begins - FY08 \$2.905M - state agencies must transfer funds to DLNR	Construction Ends - FY09 \$ - state agencies must transfe to DLNR

	2010	2011
611.5M er funds		
	Construction	Project Complete
n	Phase 3 - Site Work	Phase 4 - Vertical Construction
ing onstruction	Phase 3 - Site Work, Roads, Parking & Fields- \$124M appropriated for construction in FY10	Phase 4 - KS Preschool & Community Center - \$124M appropriated for construction in FY10
	Construction	Project Complete
	Construction	Project Complete
	Construction	Project Complete
	Project Compete	
		Related Project
LAN.	CALCON CONTRACTOR	Sec. 32 1898121











