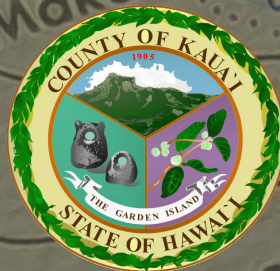


WEST KAUA'I COMMUNITY PLAN

ADOPTED DECEMBER 2020



1778 **Captain James Cook lands in Waimea.**

1790 Kaumuali'i is born to Chief Ka'eo and Queen Kamakahelei.

1810 Kaumuali'i cedes Kaua'i to his cousin, Kamehameha, to avoid bloodshed.

1814 Kaumuali'i orders the ma-ka'ainana to cut 'iliahi trees, haul the wood to shore, and load it aboard ships for trade with China. Roughly between 1814 and 1821, large forests of 'iliahi were felled and uprooted, and many commoners, having no time to tend to their own farms, starved and died.

1816 Kaumuali'i places Kaua'i under protection of the Russian Czar Alexander (from Kamehameha I) through Georg Anton Schäffer of the Russian-American Company.

1817 Fort Elizabeth is built by the Russian-American Company on the site of Kaumuali'i's residence.

Kamehameha forces Kaumuali'i to order the Russian-American Company to leave.

1820 Missionaries (Samuel and Mercy Ruggles, and Samuel and Mary Whitney) arrive on Kaua'i accompanied by George Kaumuali'i (a.k.a. Humehume).

1821 Kaumuali'i is taken prisoner by Liholiho (Kamehameha II) and exiled to O'ahu.

1824 Kaumuali'i dies on O'ahu. George Humehume stages an unsuccessful rebellion against Kamehameha ("Ai Pua'a").

1826 Whaling ships use Waimea Landing to dock. Whaling commerce lasts from 1826-1870.

1840 Charles Wilkes, a naval officer of the U.S. Exploring Expedition, arrives at 'Ele'ele Landing.

1842 Olokele Sugar Plantation starts (operated by C. Brewer).

1848 The Great Māhele.

Reverend George Rowell of the Waimea Mission Station is granted land by Queen Deborah Kapule to pasture his cows for his family and other missions. He expands Waimea Dairy for commercial purposes in the 1850s.

1850 Waimea is designated as a government port, which was opened to foreign commerce.

Kuleana Act establishes system for private land ownership.

1852 First Chinese immigrants settle on Kaua'i.

1853 Fort Elizabeth is abandoned.

1861 **Rice cultivation begins in Waimea.**

1862 The Kingdom of Hawai'i tasks Valdemar Knudsen with an inventory of the abandoned Fort Elizabeth.

1864 Elizabeth Sinclair purchases Ni'ihau from the Kingdom of Hawai'i.

1865 **Waimea Pier (originally a wharf) is built to accommodate whaling ships.**

1868 Japanese immigrants first arrive on Kaua'i.

1875 Reciprocity Treaty between the U.S. and Hawaiian Kingdom allows for duty-free import/export of certain items, including rice. Impetus for expansion of sugar operations on the island.

1878 **Portuguese immigrants first settle on Kaua'i.**

1880 Kekaha Mill Company established.

'Ele'ele Plantation established.

1881 Waimea High School is first established as an elementary school.

1882 U.S. Chinese Exclusion Act suspends Chinese immigration.

1884 Waimea Sugar Mill Company established.

1885 Gay & Robinson Plantation opens.

C.B. Hofgaard and Company Store opens where Waimea Big Save is located today. It was the largest privately-owned store on Kaua'i.

1886 H.P. Faye Plantation established in Mānā.

1889 **Makaweli Plantation begins (operated by Hawaiian Sugar Company).**

1890 Makaweli Post Office opens.

1893 The Kingdom of Hawai'i is overthrown on January 17, 1893 and the Provisional Government of Hawai'i is established.

1894 Republic of Hawai'i, July 4, 1894 to August 12, 1898.

1896 The Law of the Republic, Act 57, Section 30 mandates that the English language be the only medium of instruction in both public and private schools.

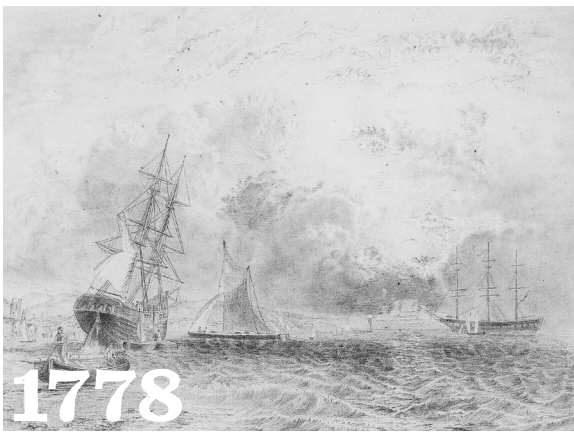
1898 Hawai'i is annexed as a territory of the U.S.

Kekaha Sugar annexes Mānā Plantation (also known as H.P. Faye Company) and Kekaha Mill Company.

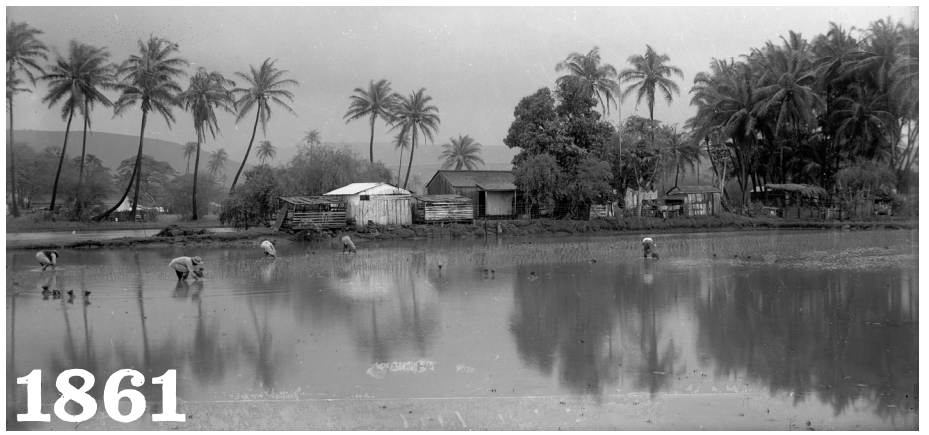
1899 **McBryde Sugar Plantation replaces 'Ele'ele Plantation.**

1900 Hawai'i becomes a territory of the U.S. Labor contracts become illegal because they violated the U.S. Constitution, which prohibits slavery and involuntary servitude. Hawai'i also becomes subject to the Chinese Exclusion Act, which halted importation of Chinese laborers.

McBryde Sugar Company begins constructing ditches and reservoirs (1900-1907).



1778



1861



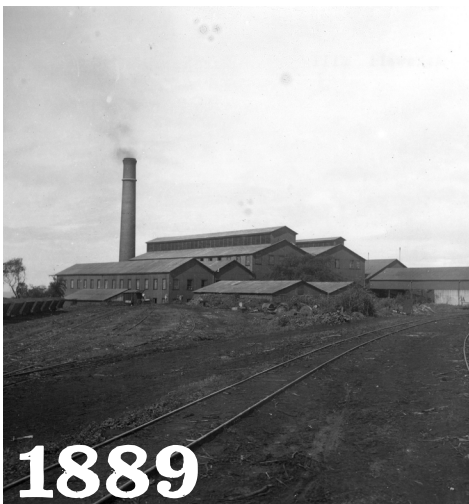
1885



1865



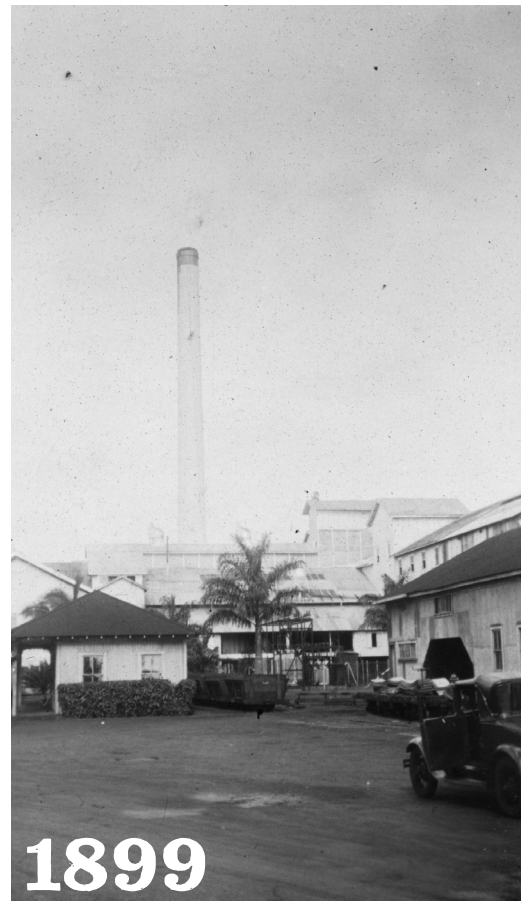
1878



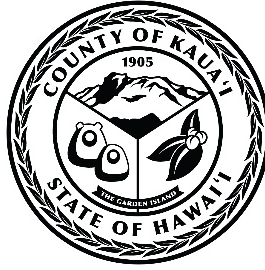
1889



1889



1899



MESSAGE FROM THE MAYOR

DEREK S.K. KAWAKAMI



Aloha!

I am honored and excited to present the West Kaua'i Community Plan. After years of hard work and collaboration, the West Kaua'i Community Plan represents our West Side's desire to build vibrant communities while protecting and preserving its rural character and agricultural heritage.

I am grateful that so many residents and stakeholders from the West Side community participated in the process to help form this plan. The plan provides the framework for how we, as government and the community, can celebrate the West Side's unique heritage, ensure affordable housing for families, and prepare to face climate change and its rising impacts.

The West Kaua'i Community Plan is a user-friendly document, providing clear and consistent policies and goals to help guide government staff and elected officials when making decisions about West Kaua'i's future.

There's no question that the West Kaua'i community has overcome great challenges in the past, from plantation closures to natural disasters. And while we have faced the most unprecedented challenge of our time this year – the COVID-19 pandemic – I am proud that our County has also made important strides. The West Kaua'i Community Plan is an extraordinary accomplishment, and I extend my sincere mahalo and appreciation to the County of Kaua'i Planning Department, the Kaua'i County Council, past administrations, the members of the plan's Focus Group, and of course, our West Side community for sharing your mana'o with us all.

I am confident that this plan, propelled by West Kaua'i's inherent resiliency and community cohesion, will result in a brighter and more equitable future for our keiki and many generations to come.

With Warmest Aloha,

Derek S.K. Kawakami
Mayor, County of Kaua'i

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November 2020

Aloha!

On behalf of the Kaua'i County Council, I would like to express the Council's appreciation to all who have made possible the completion of the West Kaua'i Community Plan.

The West Kaua'i Community Plan process has been impressive and innovative, whereby the Planning Department served as the in-house primary lead, rather than delegating lead consultant duties to an outside firm. This commitment not only saved substantial taxpayer funds, it also allowed for the Plan's facilitators and authors to be Kaua'i residents.

Mahalo to the dedicated members of the Citizen Advisory Committee, who were instrumental in forming the Plan's foundation by distilling public input into specific goals and policies. The Council would also like to recognize the numerous community groups and individuals who took the time to submit testimony and request specific amendments, many of which were integrated into the final version of the Plan.

As we look forward to the Plan's implementation and its "feedback loop" process to enable continual public input, we extend our best wishes to Mayor Derek S.K. Kawakami, his Administration, and the future leaders of Kaua'i for faithfully upholding their solemn duty to protect and preserve West Kaua'i now and for the future.

Mahalo nui loa for your participation and collaboration!

Sincerely,

ARRYL KANESHIRO
Council Chair, Kaua'i County Council

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Hukilau in Waimea, 1940. Courtesy of Larry Sakoda.

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West Kaua‘i Community Plan Acronyms and Abbreviations

ADA	Americans with Disabilities Act
CERT	Community Emergency Response Team
CRS	Community Rating System
CZO	Comprehensive Zoning Ordinance
DHHL	Department of Hawaiian Home Lands
DLNR	Department of Land and Natural Resources
DOE	Hawai‘i Department of Education
FBC	Form-Based Code
FEMA	Federal Emergency Management Agency
GHG	Greenhouse Gas
GP	Kaua‘i County General Plan
HDOT	Hawai‘i Department of Transportation
HHARP	Hawai‘i Hazards Awareness and Resilience Program
HRS	Hawai‘i Revised Statutes
IAL	Important Agricultural Lands
KIUC	Kaua‘i Island Utility Cooperative
KVMH	Kaua‘i Veterans Memorial Hospital
NFIP	National Flood Insurance Program
PMRF	The Pacific Missile Range Facility
RRFB	Rectangular Rapid Flashing Beacon
SLR	Sea Level Rise
SLR-XA	Sea Level Rise Exposure Area
SPA	Special Planning Area
ST-CE	Special Treatment Coastal Edge District
WKCP	West Kaua‘i Community Plan

User Guide

Community Members and Organizations

The West Kaua‘i Community Plan (WKCP) articulates a community-based vision for how West Kaua‘i should evolve and manage change in the coming years. The stated vision, goals, and priorities will stimulate the partnerships needed to ignite community efforts, direct funding (i.e., grants), and make community-led strategies feasible. The plan is a powerful tool to inform and educate policymakers, boards and commissions, and new organizations as to what policies and decisions may best serve the West Kaua‘i community.

County Agencies

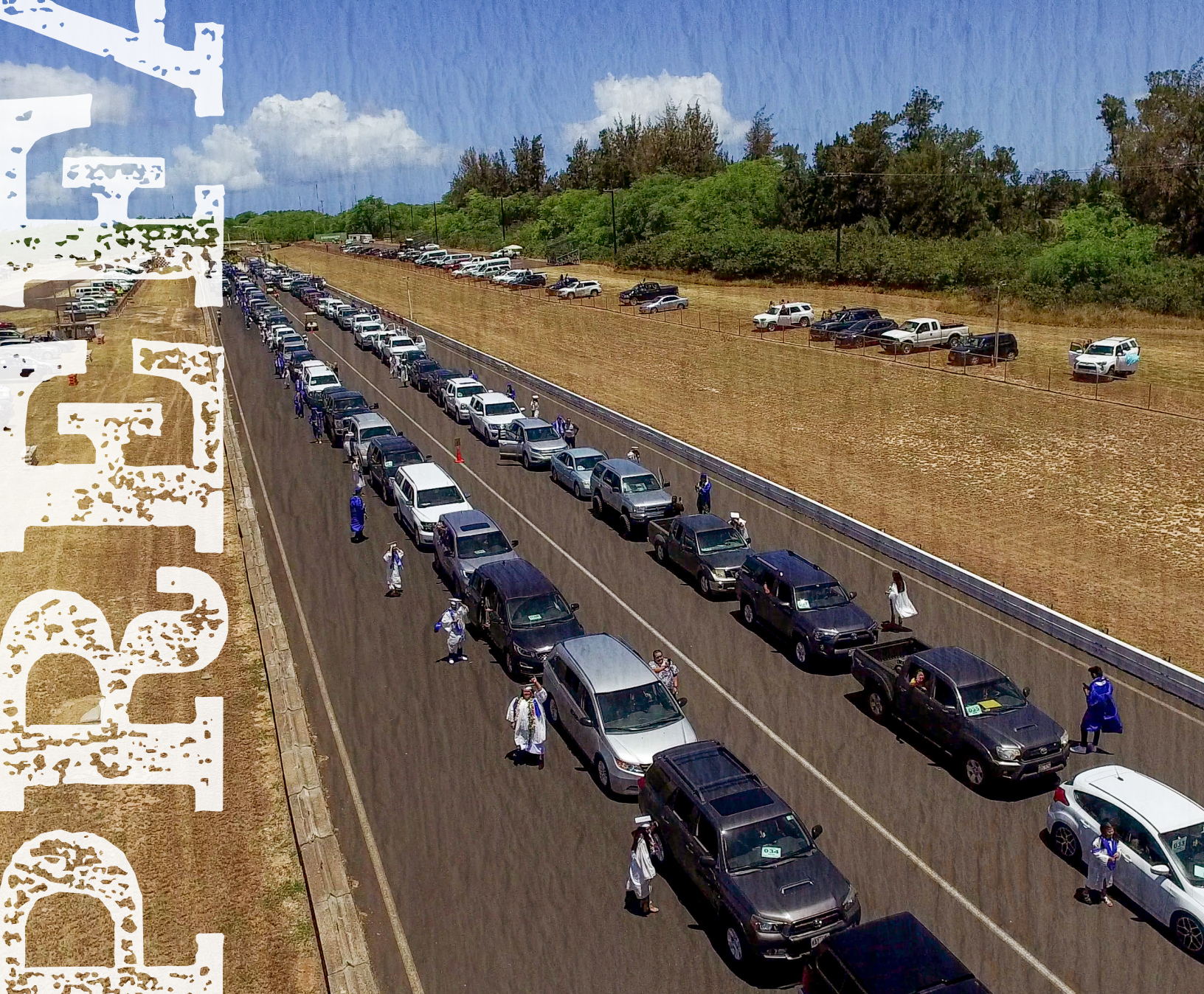
The WKCP demonstrates the commitment of the County of Kaua‘i (County) to consider the vision, goals, and objectives of the plan in deciding matters pertinent to West Kaua‘i. Implementation will be undertaken by County staff, administration, and both appointed and elected officials. The plan supports capital projects that are tied to a consensus-driven growth strategy. Boards, commissions, and County staff will seek guidance from the plan when considering proposals that impact West Kaua‘i’s communities, such as zoning amendments, development approvals, capital improvement funding and programming, and operational budgets. County implementation actions are further described in Part V, Implementation.

State and Federal Agencies

Regional coordination across the various levels of government will be improved by the plan. The plan will help state and federal agencies evaluate and shape their planning and policy efforts, as well as guide agency mid-range capital programming. This includes the Hawai‘i State Department of Transportation (HDOT). State-level boards and commissions, such as the State Land Use Commission, will rely on the WKCP for guidance in decision-making.

Landowners and Developers

The vision articulated in the plan may attract the private investment and competitive public grant moneys needed to further West Kaua‘i’s goals. The plan is also a design reference that shapes private development in a manner that best serves the entire community and prevents ad hoc growth and development that may diminish West Kaua‘i’s cherished rural character. Not only does this benefit the community, but it provides clear direction and certainty in permitting matters for landowners and developers.



Preface

Before the sun can work its way over the mountain, the air is cold. As if the Alaka‘i is exhaling, the cool breath moves slowly down the Waimea Canyon and Hanapēpē Valley, bringing life from the slopes of Wai‘ale‘ale down into West Kaua‘i’s coastal towns. From Numila to Polihale, the air whispers through, fortifying the land and the people for the day to come. The sun eventually rises above the mountain in its race upwards, pushing the last of the breeze out into the ocean as the communities come to life. The dust settles on a dirt road in Mānā behind a lone truck. A man pulls weeds in his yard in Kekaha across the street from the mill that he worked for decades. A farmer steps into the cool mud of a lo‘i in Makaweli that his ancestors tended for a millennium. School children walk to their desks at Waimea Canyon Elementary. A surfer drops into the world’s best left at Pākalā. A tractor in Kaumakani begins to plow. A lifeguard unlocks his tower at Salt Pond just as a salt maker packs up his tools before the day gets too hot to work. An art gallery owner in Hanapēpē sweeps the sidewalk in front of her shop. A pair of friends stop to talk outside of Big Save in ‘Ele‘ele, planning their upcoming 50th high school reunion. A tour boat goes around a group of canoe paddlers coming into Port Allen.

This is the Westside. A community where the people are deeply rooted to the land and to each other. A community where the memories of Kaua‘i’s past stand strong against the passage of time, both in the hearts of the people and in the physical remnants of previous eras. Most importantly, this is a community knit together by the bonds of ‘ohana and guided by the values of hana kākou.

Over forty years have passed since community plans for Waimea–Kekaha and Hanapēpē–‘Ele‘ele were last adopted. Today, West Kaua‘i faces new

challenges—from a lack of housing, to the growing effects of climate change, and the impact of the worldwide COVID-19 pandemic. As of this writing, COVID-19 has halted Kaua‘i’s economy, leaving thousands without income. Within the first six weeks of the disease’s arrival on Kaua‘i, a staggering 14,000 residents (one third of Kaua‘i’s workforce) lost their jobs due to the social isolation orders necessary to reduce its spread. COVID-19 has affected everyone, but the economic toll falls unevenly. Impoverished households who live paycheck-to-paycheck bear the greatest burden. Real property tax and other revenues face significant declines, straining government’s ability to maintain operations at previous levels.

COVID-19 reminds us that no community is insulated from threats—not just pandemics, but hurricanes, sea level rise (SLR), wildfires, hotter temperatures, and tsunamis. Each of these crises will negatively impact vulnerable households disproportionately. We cannot only focus on crisis response; we must proactively strengthen West Kaua‘i’s communities.

Moving towards resilience beforehand is the best way to respond to crisis. The West Kaua‘i Community Plan acknowledges that we are in the midst of an existing crisis: climate change, and its accompanying impacts of SLR, passive flooding, and increased storm events. Added to that is a severely deficient housing supply matched by a growing burden of aging infrastructure.

Growth and development must be directed in a way to increase resilience across all spectrums of the community.

West Kaua‘i has overcome disruptions such as plantation closures and life-threatening events like Hurricane ‘Iniki and Hurricane ‘Iwa. The plan builds on the community’s long track record of resiliency and community cohesion in the face of change. On a foundation of community-driven planning, the West Kaua‘i Community Plan provides a long-range strategy to strengthen towns and build the future. We must ensure West Kaua‘i doesn’t just “bounce back,” but will bounce forward and towards shared goals.

Top Left: County food distribution event during the COVID-19 pandemic.

Top Right: Community members distribute food in Kekaha. Bottom: Waimea High School’s drive-through graduation ceremony in 2020 followed COVID-19 social distancing protocols. Courtesy of R30k Productions.



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Part I: Introduction and Plan Framework

A. Plan Purpose

The West Kaua‘i Community Plan (WKCP) represents the County’s land use policy at the regional level. It is a long-range plan that considers a 20-year planning timeframe to the year 2040. The WKCP is one of five community plans that guide the County’s land use decisions and infrastructure investment priorities, while also advancing the goals of the Kaua‘i County General Plan (GP). This document updates the Hanapēpē-‘Ele‘ele Development Plan (1974) and the Waimea-Kekaha Regional Development Plan (1977).

Many of the goals and objectives outlined in the original development plans were implemented and used to guide growth within the region. The WKCP builds on these relevant themes and sets forth an updated land use policy to accommodate future growth on the Westside.

One of the plan’s key purposes is to identify desired land uses that will improve the quality of life for West Kaua‘i’s people, while ensuring that the Westside retains its authentic rural character. Therefore, although the plan covers the entire region, its focus is on towns and communities—the places where people live, work, and play. Through a community vision, the plan addresses each town’s need for physical and economic revitalization. New zoning and building design standards will encourage quality and resilient development in keeping with the community’s historic character. These updated standards will guide both private and public new development.

Kekaha Beach with rock revetment.

Outside of the main towns, partnership actions are provided for areas such as Ni‘ihau, Lehua, Ka‘ula, Mānā, Waimea Canyon, Polihale, Waimea Valley, Makaweli, Hanapēpē Valley, Wahiawa, and Numila. Action in these areas require partnerships and consultation with state and federal agencies and nongovernmental entities.

B. Plan Framework and Organization

Plan Framework

The WKCP builds upon the direction set forth in the GP. The community plan focuses on region-specific policies, objectives, and goals that include future actions such as capital improvement projects and zoning amendments. Several land use changes in this plan update the 2018 GP Future Land Use Map. A summary of the zoning amendments is provided in Part V, Implementation. In addition to land use and development policy, the plan addresses the overlapping topics of transportation, resiliency, shared spaces, economic development, heritage resources, housing, and infrastructure.

The plan also identifies various actions, programs, and partnerships required to achieve the vision, goals, and objectives for West Kaua‘i. Actions include projects for construction of public facilities and infrastructure. Programs represent County or County-facilitated efforts that serve the community at-large. Partnership needs are those state, federal, or community group (nonprofit, neighborhood association, etc.) actions that align with the plan’s goals but are not necessarily driven by the County. Permitting actions facilitate and guide private development, and are under the purview of the

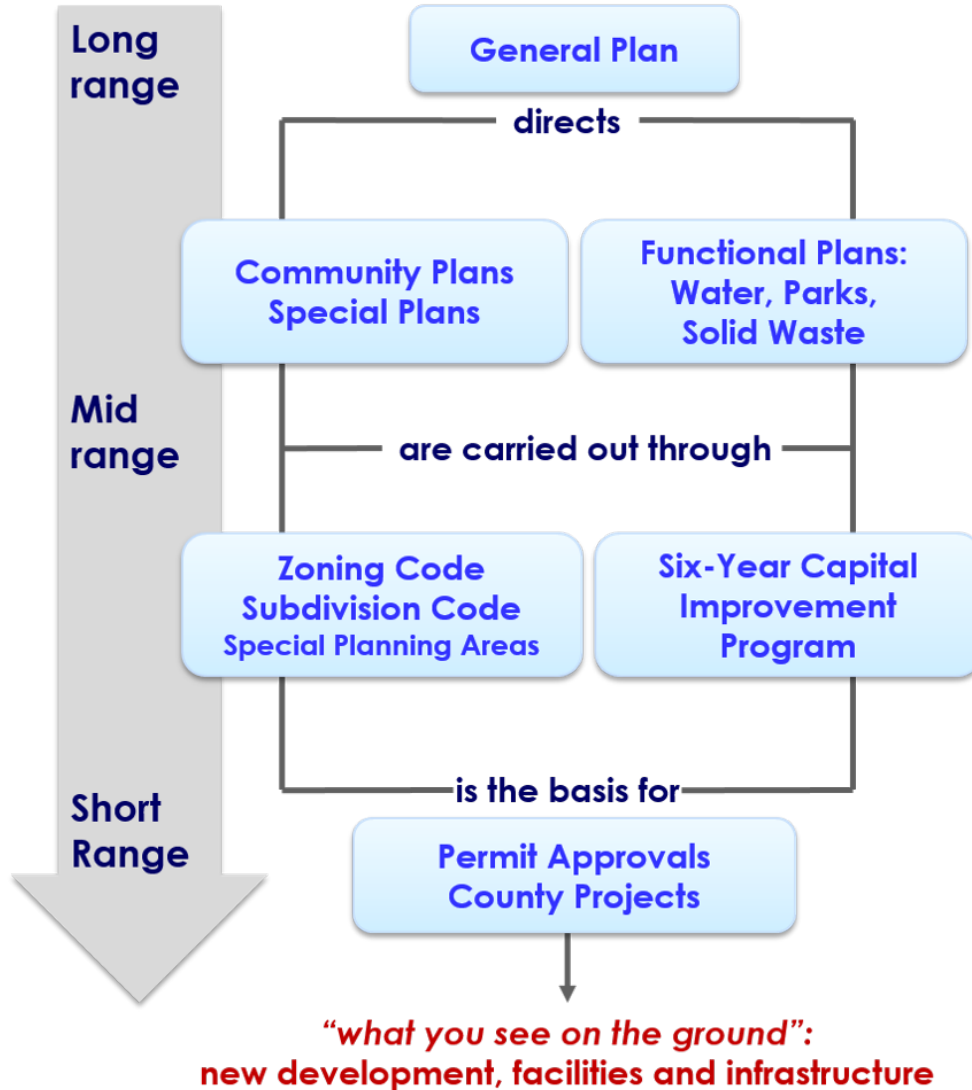


FIGURE 1 | Kaua'i Planning System

Planning Department, Planning Commission, and State Land Use Commission. Several actions are implemented through the establishment of special planning areas (SPAs) and town-specific land use regulations via a form-based code (FBC) that functions in conjunction with the WKCP.

Plan Organization

Part I of the plan is an introduction to the plan’s framework and the County’s planning system and context.

Part II of the plan states region-wide policies by priority area: town design, land transportation, heritage resources, resiliency and infrastructure, shared spaces, and economic development.

Part III identifies the visions, goals, objectives, and actions for West Kaua‘i’s historic town cores. Goals describe the desired outcomes while objectives outline the course of action to be followed by the County. Objectives are short- to medium-term steps. Actions will be undertaken by County staff, administration, and elected officials.

Part IV includes the broad goals and actions for agricultural communities and other areas outside of existing town cores.

Part V focuses on implementation. Implementation will take several forms, including land use regulations, capital expenditures, and coordination with other public and private entities.

Part VI provides all maps, including regional and town plan maps and the maps for West Kaua'i's heritage resources (natural landscape and cultural landscape), shared spaces, hazards exposure, wildfire ignition, public facilities and infrastructure, and land transportation and circulation.

C. Planning Area

Physical Description

The West Kaua'i region encompasses approximately 225 square miles in the western portion of the island of Kaua'i. From the western boundary of the Pacific Ocean, the region's border follows Kalāheo Gulch to Kapalaoa Peak and the summit of Wai'ale'ale. It then follows the Alaka'i Swamp Wilderness Preserve to Honopū Ridge. Administratively, the area is divided into the Waimea-Kekaha and Hanapēpē-'Ele'ele Planning Districts. During the 2018 GP process, the County Council amended the eastern portion of the Hanapēpē-'Ele'ele Planning District boundary from the Wahiawa Gulch to the Kalāheo Gulch. Included are Tax Map Key Zone 1 and a portion of Zone 2. For the remainder of the Plan, these two districts are jointly referred to as West Kaua'i. The major geographic features include Waimea Canyon, Hanapēpē Valley, Mānā Plain, and the sand dunes of Polihale. The natural resources in the area include the major rivers of Waimea and Hanapēpē, the Nā Pali-Kona Forest Reserve, the Alaka'i Swamp, the Kawai'ele Wetland Habitat, and the Ku'ia Natural Area Reserve.

Most of the region's 12,000 residents live in the

communities of Hanapēpē, 'Ele'ele, Waimea, and Kekaha—all connected by a 10-mile stretch of Kaumuali'i Highway. Smaller plantation camp communities, such as Kaumakani, Pākalā Village, and Ka'awanui Village are nestled within the Makaweli area between Waimea and Hanapēpē. Numila is also a smaller plantation camp located in Wahiawa. In addition, Waimea Valley and Hanapēpē Valley are smaller agricultural communities where some residents live. The Pacific Missile Range Facility (PMRF) inhabits the western end of the region and serves as a major employment facility.

Historic and Socio-Economic Context

West Kaua'i's history has shaped its demographics, culture, and development patterns. The Cultural and Historic Assessment Technical Study for West Kaua'i (Cultural Surveys Hawai'i, Inc.) provides a comprehensive historic overview and is adapted here.

Pre-Contact

West Kaua'i has been inhabited for over one thousand years. The first settlers to Kaua'i were seafaring people of Polynesia who became nā kanaka maoli ("the original people" or Native Hawaiians). Prior to Western contact, nā kanaka sustained themselves through carefully engineered land, water, and agricultural systems that provided food and resources, including fish and medicine. Their ahupua'a management system exemplified their sustainable and resourceful living from mauka to makai.

Western Influence

In 1778, Captain James Cook landed at the mouth of Waimea River and became known as the first European to make contact with Kaua'i. In the following decades, the neighboring settlement of Waimea grew into a thriving trading post fueled by whaling and sandalwood activity.

In 1820, the first American missionaries arrived in



McBryde Sugar Mill, circa early 1900s. Courtesy of Kaua‘i Historical Society.

Waimea. They were accompanied by Humehume, who was returning home from schooling in New England. When Humehume’s father, King Kaumuali‘i, died in 1824, a chief from Hawai‘i Island assumed control of Kaua‘i. Humehume and his supporters protested the power transfer, which led to the “Kaua‘i Rebellion.” The short-lived uprising was crushed during a battle in Wahiawa. The site became known as ‘Ai Pua‘a (“pig eating”) as the dead fighters were left exposed to predation from wild boars.

In the following decades, the Native Hawaiian population declined due to diseases such as smallpox and influenza. Traditional notions of land stewardship were upended by the Great Māhele (1848) and Kuleana Act (1850), which allowed private land ownership. Use of the Hawaiian language declined and was further discouraged by a law mandating English instruction in schools (Act 57, Section 30, Laws of the Republic of Hawai‘i). Several buildings from this era remain, such as the

Gulick–Rowell House and Waimea United Church of Christ (a stone church constructed by missionary George Rowell).

The Rise of Sugar

West Kaua‘i’s fertile lands and abundant water attracted agricultural enterprise. In 1856, Vlademar Knudsen established the Kekaha Sugar Plantation and planted the area’s first commercial cane near Pōki‘i. Extensive sugar cultivation required cheap labor from abroad. The Chinese were the first to arrive in 1852, followed by the Japanese in 1868, and Portuguese workers in 1878. They lived in housing “camps” segregated by ethnic group.

By 1900, several companies operated in West Kaua‘i, such as the Waimea Sugar Mill Company and ‘Ele‘ele Plantation. Sugar production dominated the landscape with cane fields, ditches, and mills. Railroads transported cane from the field to mills and ship landings. Production expanded with large-scale engineering projects such as the draining of the Mānā Plain in 1922 by H.P. Faye.

West Kaua‘i’s towns were active hubs with theaters, restaurants, bars, grocers, shops, and barbers. Company-run stores were located in the camps of Pākalā Village, Kā‘awanui Village, Kaumakani, and Numila. Unlike Waimea and Kekaha, Hanapēpē was not a plantation town and became a haven for entrepreneurs. In 1924, a strike against the sugar companies led to violence resulting in the death of sixteen Filipino workers and four policemen. This event, known as the “Hanapēpē Massacre,” shed light on the working conditions of migrant workers.

World War II

World War II brought new facilities and population growth to West Kaua‘i. Hanapēpē became an important war-time center with a military hospital, training center, and landing strip. In 1940, Mānā became home to a military reservation that is now called the PMRF. Remnants from this era, such as bunkers and quonset huts, are still seen today.

The Kaua‘i Belt Road, known today as Kaumuali‘i Highway, was completed during this time. The highway connected West Kaua‘i to other parts of the island and developed key connections such as the bridges over Waimea and Hanapēpē rivers. Other important projects included improvement of the levees protecting the Waimea and Hanapēpē town cores.

The Decline of Sugar

The post-war period brought statehood to Hawai‘i and ushered in new forces such as technology, tourism, and globalization. The sugar industry downsized its workforce as operations became less labor-intensive due to mechanization. As the economy transitioned away from plantation agriculture, several plantation camps were phased out. By the 1970s, PMRF was West Kaua‘i’s largest employer. With tourism on the rise, visitors began to flock to West Kaua‘i’s state parks.

New residential subdivisions in ‘Ele‘ele and Hanapēpē brought affordable housing to the area. Federal programs such as the GI Bill facilitated

mortgages and home ownership. By the 1980s, Hanapēpē and ‘Ele‘ele had expanded mauka with residential development, while the populations of Waimea and Kekaha held steady. DHHL projects in Hanapēpē and Kekaha also provided housing to the Native Hawaiian population.

Some companies pivoted to other crops such as McBryde Sugar Company’s transition to Kaua‘i Coffee Company—now the largest coffee producer in the United States. When Kekaha Sugar Company closed in 2000, their fields converted to management under the State’s Agribusiness Development Corporation. Gay and Robinson’s sugar operations in Makaweli were shut down in 2009—ending large-scale sugar production on Kaua‘i.

Present Context

Agriculture no longer dominates West Kaua‘i’s economy. Today less than 500 people are employed in agriculture research, coffee, cattle, and other small operations. Newer industries such as tourism, military, and healthcare support most of the Westside workforce. Major employers include the Kaua‘i Veterans Memorial Hospital (KVMH), PMRF, and the State Department of Education (DOE). There are more workers than jobs in the region and many residents bear the financial burden of commuting elsewhere. The lack of economic opportunities on the Westside—and Kaua‘i in general—has perpetuated the outmigration of young adults.

Today, West Kaua‘i is slowly increasing in population while also undergoing demographic shifts. The most recent population estimate for West Kaua‘i is 12,547, according to the 2018 American Community Survey 5-Year Estimate. The GP projects that West Kaua‘i will gain approximately 1,000 residents by 2035. The median age across West Kaua‘i continues to rise as well, indicating that the population is aging.

D. State and County Planning System

State Planning Act

Planning in Kaua‘i County is part of a comprehensive statewide planning system established by the State Planning Act. The Act, adopted in 1978, sets up a coordinated state and county system, with each level informing the actions of the other. Hawai‘i Revised Statutes (HRS) Chapter 205 describes the four State Land Use Districts—Conservation, Agricultural, Rural, and Urban—in which all lands in the state are classified. This chapter also sets out the characteristics and permitted uses within each district. The State Land Use Commission decides on district boundary amendments and special permits relating to parcels over 15 acres in size, as well as important agricultural lands (IAL) designations. The State of Hawai‘i (State) has sole jurisdiction over the regulation of uses within the Conservation District.

Kaua‘i County Planning System

Chapter 8 of the Kaua‘i County Code, also known as the Comprehensive Zoning Ordinance (CZO), describes the allowable uses for all land under county zoning authority. The CZO identifies the various zoning districts, the uses allowed within each district, and the applicable development standards and procedures. Kaua‘i County Code Chapter 10, Special Development Districts, supplements the CZO by providing for SPAs that tailor zoning standards for specific areas, such as a planning district, town, or neighborhood. All development must be approved under one of four zoning permits (from Class I to Class IV). Several zoning amendments are proposed under the WKCP.

Kaua‘i County General Plan

HRS Chapter 205 connects county zoning authority to a comprehensive general plan. The Kaua‘i

County General Plan (GP) is a high-level plan that guides government action and decision-making. The GP sets forth goals, policies, and objectives for meeting the long-term growth and development needs of the County. Sustainability, Unique Character, Healthy People, and Equity are the four county-wide goals identified in the GP. Supporting the goals are 19 policies that are implemented through actions identified in 10 sectors. In the case of direct conflicts between a community plan and the GP, the GP is controlling. Therefore, in order to bring both plans into alignment, the WKCP proposes several amendments to the GP.

In recent decades, the West Kaua‘i economy has evolved with the closure of the sugar mills, growth in tourism, and the introduction of seed research companies. Currently, agriculture, retail, and health care industries provide most of the region’s jobs, according to West Kaua‘i Regional Economic Analysis (2020). Large employers, such as PMRF, KVMH, and the DOE, help anchor the local economy.

Still, there are more workers than jobs in the region, and most West Kaua‘i residents endure long commutes to their workplaces. This contributes to traffic congestion and financial strain on households. The lack of local jobs on the Westside has perpetuated an exodus of younger generations who may search elsewhere for economic opportunity.

The Kaua‘i General Plan Update: Socioeconomic Analysis and Forecasts (2014), projects that job growth in West Kaua‘i will not keep pace with its population growth. This indicates a worsening shortage in local jobs unless the status quo changes. Fostering economic development and diverse job opportunities will create new jobs—and help retain local youth, support community goals, and ameliorate vehicular congestion.

E. Planning Process

The WKCP is driven by the input of residents and stakeholders. The Planning Department facilitated a public process to generate discussion concerning land use and growth in West Kaua'i. The public process launched on August 4, 2018 and was guided by a focus group of 17 community leaders and stakeholders.

Phase I of the process, entitled “Discovery,” included a series of informational open houses and many small group meetings. The purpose was to inform the public of the plan update, build community capacity, raise awareness, and identify issues. The Planning Department used feedback from the Discovery Phase to design a public process that would adequately address the community’s concerns and priorities as related to land use and growth.



FIGURE 2 | West Kaua'i Community Plan Planning Process

Phase II of the process, entitled “Dialogue,” included a week-long public design charrette and 10 workshops focused on the following topics: shared spaces and recreation, housing and infrastructure, heritage resources, transportation, and economic development. Subject-matter experts, such as consultants and agency officials, participated in the community discussion.

In the third phase of the process, “Plan Development,” the public reviewed draft policies, goals, objectives, and maps over a six-week review process. The Discussion Draft was released in August 2019 online at westkauaiplan.org and a story map was made available via the County’s social media outlets. Four open house events were held, which drew over 400 attendees. A total of 828 separate comments were collected via 409 submissions to the Planning Department. The Discussion Draft comments were then incorporated into the Departmental Draft, which was submitted to the Planning Commission in January 2020.

In the fourth phase (Plan Review/Approval), the Planning Commission began review of the Departmental Draft in February 2020. Public hearings were held and the Planning Commission amendments were approved and codified in the Planning Commission Draft on May 26, 2020. This draft was then transmitted to the County Council for public hearing as well as the Council’s review and approval. A summary of the entire public process is documented in Appendix A.

The public process was informed by several studies and reports. The existing adopted plans for the area include the Waimea-Kekaha Regional Development Plan (1977) and the Hanapēpē-‘Ele‘ele Development Plan (1974). Much has changed since their adoptions in the 1970s, warranting a thorough reexamination of the region.

In order to achieve clarity on the conditions and trends facing West Kaua‘i, the following analyses were prepared for the WKCP:

- Demographic Trends Report (Planning Department)
- Regional Economic Analysis (SMS Research)
- Cultural and Historic Assessment (Cultural Surveys Hawai‘i)
- West Kaua‘i Regional Transportation Analysis (Fehr & Peers)
- West Kaua‘i Community Vulnerability Assessment (University of Hawai‘i Sea Grant College Program and Department of Urban and Regional Planning).

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Part II: Regional Policies

Regional policies are organized according to the priorities identified through the public process. They are: (A) Town Design, (B) Land Transportation, (C) Heritage Resources, (D) Resiliency and Infrastructure, (E) Shared Spaces, and (F) Economic Development. Each priority includes a value statement, while policies include a justification and strategy. Policies are implemented on the community level through the town plans and policy maps. In addition to the public process, policies were developed to align with the direction and guidance of the GP.

A. Town Design

Value Statement | West Kaua‘i’s towns embody the region’s rich and storied past. Each town’s historic buildings and built environment lay the groundwork for future development. By retaining the character and well-defined edges of each small town, we also protect the region’s open spaces and rural heritage.

Town Design Policy #1. Focus development in existing towns to protect West Kaua‘i’s rural qualities and agricultural resources.

Why: Focusing development in compact and defined areas will not only maintain the area’s rural character and open space, it also enhances a sense of community, increases the efficiency of infrastructure, and improves conditions for

multimodal transportation. Agricultural resources in the built environment include the mill sites, many of which are vacant or underutilized. Through thoughtful redevelopment and reuse, these former nodes of industry can be resurrected as all-purpose activity centers. Furthermore, compact design reduces energy consumption and associated greenhouse gas (GHG) emissions, and it helps reduce the region’s dependence on imported energy resources.

How: The GP acknowledges that spreading outwards is neither environmentally nor economically feasible. The regional land use map minimizes sprawl by implementing an efficient land use pattern in new communities and encouraging housing within and near existing town centers. The town plans define clear growth boundaries and separation between the existing communities of Kekaha, Waimea, Hanapēpē, and Port Allen-‘Ele‘ele. Zoning changes will encourage infill in order to protect agriculture and open spaces. Any greenfield development should be located adjacent to existing communities and designed compactly to support the efficient delivery of infrastructure and services.

Top: Local produce is sold at a farmer’s market in Hanapēpē Town Park.

Left (Vertical): Community members gather to cook for an event. Courtesy of Adela Ochinang.

Middle-Right: Residents participate in a community work day to remove silt from the Waimea River.

Bottom-Right: Youth gather at an arcade in Waimea Town.



Street-front buildings line Hanapēpē Road.

Town Design Policy #2. Strengthen and activate town centers through development that supports the unique character of each town.

Why: West Kaua‘i’s town centers tell the story of the area’s history and are cherished places where people gather to celebrate community and ‘ohana. However, many of the historic buildings are non-conforming under the existing zoning ordinance, which can make redevelopment and improvement difficult. It is important to protect the existing character of the built environment, and also enhance it with housing, jobs, safer street intersections and traffic calming, restroom facilities, and improved parking areas and signage. The small scale of these historic town centers is embodied in their historic buildings and walkable design. This scale, along with small to medium building types, should be promoted in zoning and design standards. Walkability should be a priority in all town centers especially Kekaha, Waimea,

and Hanapēpē. In order to be sustainable, new neighborhoods should be walkable places—meaning they are well-connected with convenient access to parks, schools, services, and commercial uses. In addition to reducing GHG emissions through mode shift, these places can better facilitate positive health outcomes and local economic activity.

How: Update the CZO to ensure West Kaua‘i’s historic town cores are vibrant, mixed-use, and resilient places. Enhance the character of existing commercial areas to accommodate more housing and a compatible mix of locally serving uses. Preserve historic town cores by updating zoning standards to recognize the historic shopfronts and their importance to the rural fabric. Complement building types with design guidelines for site frontages, parking, pedestrian facilities, and building intensity.



Cottage in Kaumakani.

Town Design Policy #3. **Meet the housing needs of West Kaua‘i’s residents by expanding mixed-use communities that are walkable, bikeable, and resilient.**

Why: The ability to afford a home close to work, services, and recreation fosters independence and allows income to be spent in other ways besides transportation costs. However, access to affordable housing is a challenge across Kaua‘i. Although the GP prioritizes the infill of existing communities, some greenfield development is necessary to meet West Kaua‘i’s projected housing demand.

How: The 20-year housing needs of the region should be accommodated in communities designated as “walkable neighborhoods.” These communities should be designated as town center and walkable neighborhoods. Given infrastructure availability and

SLR considerations, the two areas with the greatest potential for new “walkable neighborhoods” are ‘Ele‘ele and Waimea.

In addition to infill development, future development should be located close to existing communities and job centers to mitigate commute times and traffic congestion. The area east of ‘Ele‘ele includes the County’s Lima Ola affordable housing project which will add nearly 500 housing units to the region’s inventory. The area south of Lima Ola (adjacent to Halewili and Waialo Roads) is suitable for residential and mixed-use expansion. As Hanapēpē-‘Ele‘ele grows, it’s important to ensure Hanapēpē Town, Hanapēpē Heights, future Department of Hawaiian Home Lands (DHHL) projects, ‘Ele‘ele, Port Allen, and the new Lima Ola development are connected through safe and accessible facilities.

The area designated as “Provisional Agriculture” in the 2018 GP should remain in agriculture.

Town Design Policy #4. Protect and support the unique Plantation Camps.

Why: During the Sugar Plantation era, companies provided housing to the migrant workers who labored in the fields and mills. The housing was established in communities known as “camps” and were organized around the workers’ national origin. The region of Makaweli contains active plantation camp communities, such as Kaumakani, Pākalā Village, and Kā‘awanui. These communities are cherished

vestiges of plantation life and Kaua‘i’s history. Although the plantation camps are privately owned and maintained, many structures are dilapidated and in need of repairs. These communities should be improved and supported, especially since they provide important workforce housing for the immediate agricultural lands.

How: A new Plantation Camp Zoning District should be established that will ensure the historic use of these sites can continue in perpetuity. Respecting the scale and historic character of the plantation camp, this District should also consider accommodating additional uses that can serve the existing camp community.



Kaumakani Plantation Camp.

B. Land Transportation

Value Statement | The land transportation strategy is to address congestion, improve safety and efficiency for all roadway users, increase accessibility to transit, improve resiliency of regional connectivity, and develop multimodal transportation networks that support the land use, environmental impact, and economic development goals of this plan. This strategy is addressed through the regional policies outlined below, as well as through circulation maps and recommendations for each town. This section focuses on land transportation only. Other aspects of transportation, such as airports and harbors, are addressed elsewhere in this plan.

Land Transportation Policy #1. **Work with the Hawai‘i Department of Transportation (HDOT) to identify congestion relief measures along Kaumuali‘i Highway.**

Why: Congestion along the Kaumuali‘i Highway between the Westside, South Shore, and Līhu‘e affects West Kaua‘i residents on a daily basis.

How: Identify potential short-term and long-term modifications to the Kaumuali‘i Highway/Pāpālina Road intersection. Short term modifications may include signal timing improvements. Long-term modifications include intersection reconfigurations that may require property acquisition, such as a roundabout or intersection realignment.

Identify striping and signage improvements to improve merging at key intersections between Kalāheo and Līhu‘e, such as the Kaumuali‘i Highway/Maluhia Road intersection, and the Kaumuali‘i

Highway intersection at Kaua‘i Nursery and Landscaping. Identify intersection improvements at several intersections to increase safety and reduce congestion. These improvements may include signalization, improved signal timing at intersections with existing signals, or roundabouts.

Land Transportation Policy #2. **Improve bus service by implementing the West Kaua‘i components of the Kaua‘i Short-Range Transit Plan.**

Why: Improving bus service provides better access to jobs, education, and services for those who cannot drive, and makes transit a more viable choice for those who do drive, thereby reducing single-occupancy vehicle trips that contribute to congestion.

How: Implement the Kaua‘i Short Range Transit Plan in order to provide hourly weekend service, extend weekend and weekday service to later in the day and improve frequency of peak-hour mainline service. Implement a new Westside Shuttle providing service



Youth wait at a bus shelter in Hanapēpē.

to underserved areas in Hanapēpē and ‘Ele‘ele and connect these areas to the mainline service in Kalāheo. Other amenity improvements include improving route maps and schedules to be more user-friendly.

Land Transportation Policy #3.

In each community, establish “safe routes” —primarily street networks that safely accommodate pedestrians and bicyclists to get from homes to schools, parks, shops, jobs, and services.

Why: Short trips, such as trips to schools, neighborhood parks, and local shopping and services, can be accommodated by walking and bicycling, if people feel safe doing so. Increasing walking and biking for short trips can also reduce local, and even

regional, congestion. As an example, one of the largest contributors to congestion on Kaua‘i is school pick-up and drop-off. Currently, the biggest impediment to walking and biking are the lack of safe walking and biking facilities on many of our roadways.

How:

- Use “context-sensitive design” in planning safe routes. Different streets, and even different segments of the same street, may require different design solutions based on several factors, including vehicle volume, vehicle speed, crash history, surrounding land uses, and community character.
- Establish priorities for safe routes implementation and incorporate priorities into the County’s Capital Improvement Program. Priorities should be determined based on the “performance-based evaluation process” described in the GP (Kaua‘i County General Plan, page 129).
- Identify multiple funding sources for safe routes implementation, including County General Excise Tax surcharge for transportation, State Transportation Improvement Program, grants, and other funding sources.
- Where feasible, integrate safe routes improvements into resurfacing projects.
- Work with HDOT to include safe routes improvements on state highways when appropriate.
- Evaluate illumination levels on Kaumuali‘i Highway, especially at pedestrian crossings, to enhance safety.

Land Transportation Policy #4.

Establish shared-use paths for bicyclists and pedestrians that connect Westside towns.

Why: Shared-use paths are desired to create connections between towns where the only current option may be to walk or bike on the existing highway shoulder. Shared-use paths, separated from vehicular traffic, are also often preferred by beginning cyclists of all ages who are not comfortable sharing the road with vehicles. Separated facilities can also reduce crashes between vehicles and bicyclists or pedestrians. Bicycling trips of short and medium length is an affordable transportation mode that can reduce personal transportation costs.

How:

- With community input, finalize alignments for Westside shared-use paths.
- Work with HDOT to fund construction of shared-use paths within HDOT rights-of-way where appropriate.
- When considering potential alignments, where shared-use paths may cross agricultural lands, consider the potential impact of a path on agricultural operations.
- Consider shared-use paths as part of an overall resilience strategy, where certain paths may serve as evacuation routes in an emergency. If appropriate, design the path for this purpose.
- Consider emergency vehicle access in the design of shared-use paths.
- If Kaumuali'i Highway through Kekaha is relocated, consider maintaining the existing right-of-way as a shared-use path.

C. Heritage Resources

Value Statement | Heritage is important in understanding the story of West Kaua‘i—its history, identity, and people. Heritage resources include scenic corridors, storied sites, buildings, parks and streets, and even people, especially our kūpuna. They are both tangible and ethereal.

There are currently twenty-seven properties in the West Kaua‘i region listed on the Hawai‘i Register of Historic Places. Three of these places (indicated below with an asterisk) are also listed on the National Register of Historic Places.

1. Ahulo‘ulu Heiau Complex (Pu‘ukapele)
2. Hauola Heiau
3. Ho‘one‘enu‘u Heiau
4. Gulick–Rowell House*
5. Civilian Conservation Corps Camp, Kōke‘e
6. Camp Sloggett, Kōke‘e
7. Lewa‘ula Heiau
8. Taro Terraces (lo‘i kalo)
9. Kīkīaola (Menehune Ditch)
10. Waimea Valley Complex
11. Charles Gay House
12. Cook Landing Site
13. Bishop National Bank of Hawai‘i (First Hawaiian Bank)
14. Masuda Building
15. Yamase Building
16. Waimea Educational Center
17. Waimea Elementary & Jr. High (Homemaking Building)
18. Russian Fort Elizabeth State Park (Pā‘ula‘ula)*
19. Hanapēpē Complex 50
20. Hanapēpē Salt Beds
21. Hanapēpē Burial Caves
22. Hanapēpē Lot No. 18*
23. Obatake’s Lot No. 21A
24. Hanapēpē Lot No. 11B
25. Hanapēpē Lot No. 49
26. Hanapēpē Road Bridge
27. Wahiawa Petroglyphs



Descriptive placard at Menehune Ditch.



Water flowing in the Menehune Ditch.

Heritage Resources Policy #1.

Preserve and protect the integrity of sacred heritage resources for current and future generations.

Why: From mauka to makai, West Kaua‘i’s physical landscape embodies the history of the region. Both natural and cultural resources tell the story of our ancestors—of diversity and survival, of economy and family, of religion and migration.

Sacred places, or wahi pana, are sensitive heritage resources that are threatened by overuse access conflicts, natural hazards, and invasive species, such as kiawe and wild pigs. Wahi pana include storied places and features (such as pōhaku and ki‘i pōhaku) from myths and historical events. Wahi pana also consist of burials, heiau, religious sites, springs, caves, streams, and ridges. They include traditional areas still used for subsistence cultivation and gatherings as well as spiritual and religious practices. Many wahi pana are privately held in the State Land Use Conservation and Agriculture Districts. While limited access to these areas help to protect sensitive historic sites and features, it also limits access by those who traditionally gather or who are traditionally connected to these areas.

How: Protection of sacred sites through improved management is critical and must involve all stakeholders. Wahi pana must be protected from abuse, destruction, and development while still allowing safe, appropriate access to those who are familiar with and connected to these places. Sacred and sensitive wahi pana should be prioritized for preservation efforts.

Heritage Resources Policy #2.

Celebrate the cultural and historic features that represent West Kaua‘i’s diverse cultural influences.

Why: The preservation and management of historic resources has an important role to play in protecting the environment, creating vibrant communities, and sustaining local economies. In addition, heritage resources contribute to the quality of life and cultural identity of our communities. Many important places, parks, beaches, community centers, and even cemeteries, are the focal point for community and family gatherings. Reuse and revitalization of historic properties and buildings can also assist economic development.

How: Engage in and facilitate preservation efforts within West Kaua‘i communities. Heritage resources should be integrally linked to discussions of managing and promoting shared spaces (parks, public, and civic spaces), economic development, and opportunities for all (relating to health and education) as well as land use. Celebrate West Kaua‘i’s unique heritage from its beginnings through the present, recognizing and acknowledging the traditional mo‘olelo (stories) and the significant events through time. An example of this is celebrating and promoting the significance of Hawaiian place names. Heritage resources should also be catalogued by the County and added to the Hawai‘i and/or National Register of Historic Places.

Heritage Resources Policy #3.

Uphold traditional and customary rights.

Why: Traditional and customary rights of Native Hawaiians were established at the time of the Hawaiian Kingdom and reaffirmed during the Constitutional Convention of 1978 as well as through several Hawai‘i Supreme Court cases over the years.

Many West Kaua‘i families are still actively engaged in traditional customary practices. Some of these practices include cultivating pa‘akai at Pū‘olo in Hanapēpē, hunting and gathering in Kōke‘e and Mānā, visiting and maintaining burial sites along ridges and sand dunes, fishing for ‘ōpae in rivers and streams, and cultivating kalo. Ensuring that traditional and customary practices continue also ensures that sacred heritage resources are maintained and protected for future generations.

How: Require identification and mitigation of potential impacts to subsistence activities and resources when reviewing development permits. Work with agencies, non-governmental entities, and community experts to develop protocol for consultation, mitigation, and remediation of exposed, potentially exposed, or damaged sites containing iwi kūpuna. Establish a comprehensive consultation protocol and cultural resource management plan with Native Hawaiians and knowledgeable community members. Consult with Native Hawaiian Practitioners and knowledgeable community members of West Kaua‘i to establish interpretive signage at sensitive sites that are easily accessed by the public, such as Kukui-o-Lono and the sand dunes of Kekaha, Mānā, Nohili, Po‘oahonu, and Polihale.

Heritage Resources Policy #4. Preserve West Kaua‘i’s historic structures and perpetuate its unique architecture.

Why: West Kaua‘i’s historic structures and architecture tell a story of its history, identity, and people. The different architectural styles—from western-style plantation to art deco—contribute to each town’s unique character. The upkeep of historic buildings, such as traditional storefronts and plantation-era bungalows, enhances rural character, economic development, and the housing inventory. Some buildings and structures are dilapidated and need repair and maintenance. West Kaua‘i has several historic buildings and sites that are listed on the National and/or State Register of Historic Places, and other buildings are eligible for nomination.

How: Government, landowners, businesses, and residents should coordinate efforts to preserve historic buildings and perpetuate local architecture. As a National Park Service Certified Local Government, the County supports preservation through the Kaua‘i Historic Preservation Review Committee. The Committee should update its inventory of eligible places to be nominated to the State of Hawai‘i and/or National Register of Historic Places.

Update zoning standards to support historic building styles in the town centers. Zoning should also support the adaptive reuse and rehabilitation of historic structures. Other ideas include community programming (i.e., storytelling, farmers markets, tours, and placemaking) that educate residents and visitors about the historical significance of the building and local architecture.



Waimea Swinging Bridge.

D. Resiliency

Value Statement | As a coastal community, West Kaua‘i must prepare for climate change, such as higher temperatures, SLR, and changing precipitation patterns. These impacts threaten residents by affecting housing, infrastructure, jobs, and arable land. Through proactive measures and solutions grounded in resiliency, sustainability, and the Hawaiian concept of ‘āina aloha (beloved homeland), West Kaua‘i’s people can strengthen their ability to withstand and recover from hazards and the impacts of climate change.

Resiliency Policy #1. **Adapt West Kaua‘i’s low-lying neighborhoods for climate change impacts and lay the groundwork for managed retreat.**

Why: SLR will rapidly accelerate the coastal erosion already impacting certain neighborhoods. The Hawai‘i Sea Level Rise Vulnerability and Adaptation Report’s maps of exposure areas illustrate that the combined impacts of coastal erosion, passive flooding, and wave overwash will infiltrate many neighborhoods. While SLR projections have a degree of uncertainty, one foot of SLR is expected within the planning horizon of this plan and 3.2 feet is projected in the mid to late century. While the planning horizon of this plan is only 20 years, the structures and built environment created in the next 20 years will have a building lifespan of 70–100 years. Given the long life of buildings and infrastructure, it is important to anticipate these impacts today.

How: To increase neighborhood resiliency, improved development standards and managed retreat strategies should be employed. Identify areas that are highly vulnerable to coastal hazards, including but

not limited to SLR, coastal erosion, high wave run-up, passive flooding, and an increased frequency and intensity of storms. Ensure that if development occurs within these areas, the development is constructed in a manner that safely mitigates those impacts.

Managed Retreat must shift new greenfield development inland while discouraging development in vulnerable and exposed residential areas. Managed retreat also means planning for the gradual relocation of homes and infrastructure to safer locations.

Resiliency Policy #2. **Increase the resiliency of flood-prone neighborhoods through flood mitigation, drainage improvements, green infrastructure, and updated building standards.**

Why: Many West Kaua‘i communities are either low-lying or at sea level. Many areas have flooded historically, such as Kekaha, which is located on a drained wetland; and Waimea and Hanapēpē Town, which are situated on river floodplains. Today, both natural and man-made features help to mitigate riverine and marine flooding. This includes drainage



A king tide inundates the Port Allen Small Boat Harbor.

outlets, ditches, pumps, levees, dunes, and accreting beaches. However, communities are plagued with nuisance flooding and increasing concerns about the adequacy of the drainage infrastructure.

Additionally, two critical pieces of flood protection—the Waimea River levee and Hanapēpē River levee—remain decertified by the U.S. Army Corps of Engineers. As a result, the Federal Emergency Management Agency (FEMA) is revising the Flood Insurance Rate Maps for the Hanapēpē and Waimea valley areas. Many homes that were previously outside the 100-year floodplain due to levee protection will require a higher level of flood insurance. There is also concern that sediment build-up on both rivers and malfunctioning flap gates in Waimea have further reduced the effectiveness of the levees.

How: The County should bolster its floodplain management program by updating its floodplain ordinance to include SLR and freeboard standards, as well as other innovative flood mitigation tools like low impact development (LID) for new construction and substantial improvements. “Freeboard” is a standard that elevates a structure’s lowest inhabited floor above predicted flood elevations, thus exceeding National Flood Insurance Program (NFIP) requirements. LID refers to a system of small, on-site storm water control measures designed to mimic natural processes that infiltrate, transpire or reuse stormwater on the site where it is generated. These new standards would impact development countywide in order to improve resiliency and will require additional community, technical, and public agency input.

In taking these actions, the County will be better poised to participate in the Community Rating System (CRS). The NFIP’s CRS is a voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum NFIP requirements.

In exchange for a community’s proactive efforts to reduce flood risk, policyholders receive reduced flood

insurance premiums. CRS floodplain management practices improve public safety, reduce damage to property and public infrastructure, help minimize economic loss, and ensure better protection of the environment.

In the mid-term, the County will reconstruct and recertify the Waimea and Hanapēpē levees. This should be accompanied by increased dredging of both rivers and replacement of faulty flap and sluice gates on the Waimea levee. It is also unknown how SLR will impact the levee systems. There is a need to study their capacity for flood protection with 3.2 feet of SLR. Other important studies include Sea Level Rise Exposure Area (SLR-XA) updates, localized ground water inundation studies due to SLR, and drainage ditch capacity studies with SLR.

Resiliency Policy #3. **Strengthen the resiliency of the region’s critical infrastructure and public facilities.**

Why: In addition to the road network and flood protection infrastructure, critical infrastructure includes water, wastewater, and energy systems. According to the GP, there is adequate capacity in the County’s wastewater and water systems to meet projected demand in existing service areas to the year 2035. However, components of these systems are vulnerable to climate change and SLR, as evidenced in the West Kaua’i Community Vulnerability Assessment.

The County systems include the following:

- Waimea-Kekaha Water System
- Hanapēpē-‘Ele‘ele Water System
- Waimea Wastewater Treatment Plant
- Hanapēpē-‘Ele‘ele Wastewater Treatment Plant

At PMRF and the Makaweli area, the landowners manage their respective water and wastewater services. Kaua'i Island Utility Cooperative (KIUC) delivers electricity to most Westside residents.

Public facilities include airports, harbors, fire and police stations, schools, libraries, post offices, and neighborhood centers. Critical infrastructure and public facilities are identified on maps in Part VI. As evidenced in the West Kaua'i Community Vulnerability Assessment, a significant amount of West Kaua'i's infrastructure and public facilities are vulnerable to SLR (i.e., erosion, passive flooding, and wave inundation), heavy rainfall, and storm events.

How: Infrastructure improvements should increase capacity as needed, especially for new service areas identified in the town plans, and they should also support community resiliency with respect to the growing threats of SLR and climate change hazards. Infrastructure agencies should conduct focused assessments of all climate impacts to their systems and use the results to schedule future adaptation actions. There is a critical need to evaluate the capacity of West Kaua'i's drainage system to handle climate impacts such as changes to precipitation patterns and SLR. Major capital improvements should be directed away from the 3.2' SLR-XA.

Resiliency Policy #4. **Build on West Kaua'i's close-knit community networks to promote regional resiliency and grassroots disaster planning and preparedness.**

Why: Economically independent communities are resilient because they can sustain themselves in the aftermath of a disaster when isolated from outside aid or supplies. Resilient communities should have their own local food source, services, alternate access routes, and plan for disaster recovery.

How: The County and State should continue coordinating with West Kaua'i residents and community organizations to provide opportunities for disaster preparation and recovery assistance.

Community resiliency can be expanded through the Hawai'i Hazards Awareness and Resilience Program (HHARP) and Community Emergency Response Team (CERT) programs. HHARP helps communities prepare to be self-reliant during and after natural hazard events, while CERT trains volunteers in basic disaster response skills. West Kaua'i should also develop a region-specific disaster recovery plan to guide re-development in the wake of the next major disaster. This includes identifying pathways to support future resiliency in the recovery and reconstruction efforts.

Resiliency Policy #5. **Ensure the long-term resiliency of the land transportation network.**

Why: Due to its limited road network, West Kaua'i neighborhoods could become cut off and isolated in the event of a natural disaster or SLR. Several roadway choke points along West Kaua'i are particularly vulnerable and deserve specific study with regard to SLR impacts and identifying alternative options. These include Kaumuali'i Highway between Kekaha and MacArthur Park, Kekaha Road, Kaumuali'i Highway in Waimea Town, local County roads makai of the highway, Waimea and Hanapēpē Bridges, and Waimea Valley roads.

How: Long-term options for roadways include relocation, raising, and armoring, each with its own set of impacts and feasibility issues. Detailed feasibility studies of these options are needed. Other projects include addressing nuisance flooding on roads and highways and the development of alternative access or evacuation routes.

Resiliency Policy #6. Improve West Kaua‘i’s long-term food security and sustain vital self-reliant community food systems.

Why: The well-being of our ‘āina, water sources, oceans, skies, and biodiversity are integral to the well-being of our West Kaua‘i community and it is vital that we recognize the long-held understanding that the ‘āina is our ali‘i and we are its servants.

How: Organize and support collaborations in which producers, retailers, community members, and government entities partner to create vibrant local food economies, including subsistence systems, that enhance and sustain environmental and community well-being and reduce dependence on imported food.



A working farm located on the Mānā Plain.

E. Shared Spaces

Value Statement | Shared spaces, also known as “civic spaces,” are areas that are enjoyed by community members and visitors of all ages and abilities. Shared space can be specific locations, such as a town centers, government buildings and schools, shopping areas, or parks. They can also be corridors like shared-use paths or public streets. Shared spaces not only connect people but create accessways that connect public places throughout the region—east to west, mauka to makai. Placemaking inspires people to collectively reimagine and reinvent public spaces as the heart of every community, strengthening the connection between people and the places they share.

Shared Spaces Policy #1. Support community-led design, programming, and stewardship of shared spaces.

Why: Shared spaces, where people gather and socialize, cultivate a sense of community. Activating shared spaces considers not only physical improvements, but the uses, activities, and events that attract people and bring them together.

The Westside is known for hosting annual events that draw people far and wide. These include Waimea Town Celebration, the Fourth of July Celebrations at Faye Park and PMRF, Bon Dances, and the Waimea Town Christmas Parade. These events, organized by long-time residents, activate parks, streets, churches, and other spaces. In addition, football games, softball tournaments, and Hanapēpē Art Night are examples of reoccurring events that activate the parks and town centers seasonally or throughout the year.

West Kaua‘i has a rich tradition of community stewardship, including main streets, parks, and

cemeteries. Residents are passionate about their shared spaces. They desire to revitalize and bring to life historical landmarks and other important places that have fallen into disrepair. These places should be operable for community use and support economic development. The more a community participates in the design and programming of shared spaces, the more there is a sense of community ownership and responsibility.

How: The Department of Parks and Recreation manages 17 parks and facilities on the Westside. The County should continue to maintain and improve its parks and also emphasize community-led design and programming. The focus should be on underutilized places and uses that can benefit youth and multiple age groups. Once these places are improved, community groups can become stewards through the County’s Stewardship Agreement Program.

The County can also support activation of parks and streets with County-permitted special events and uses to promote economic vitality, community pride, and social cohesion. New funding sources for programming and maintenance may include Business Improvement Districts.



Bon dance at the West Kaua‘i Hongwanji Mission in Hanapēpē.

Shared Spaces Policy #2. Protect the community’s natural and recreational resources in perpetuity.

Why: West Kaua‘i’s defining recreational resources, such as its beaches and mountains, are heavily used by locals and visitors alike. Recreational uses include fishing, swimming, hiking, hunting, and paddling. The access to and recreational use of these areas should be protected. The State is responsible for many of these resources, such as hunting units and trails in Kōke‘e and Waimea State Parks. Maintenance and needed improvements to the state parks are greatly underfunded.

Acquisition and expansion of coastal shared spaces may also be necessary, due to SLR impacts and new development.

How: Public access must be considered when development occurs on or adjacent to shared spaces. For example, coastal development should protect and improve access to fishing spots and surf breaks. Coastal buffers, public access easements, dedicated trails, and land trusts are all tools to help accomplish this.

The State can improve the condition and quality of its recreational facilities by funding planned improvements identified in the Kōke‘e and Waimea Canyon State Parks Master Plan. Operation and maintenance could be better funded through user fees for visitors.

Acquisition of private land adjacent to existing County and State parks should be considered where shared spaces are threatened by SLR hazards. One potential candidate for expansion is Salt Pond Beach Park which experiences erosion and high wave overwash. County funding, such as the Open Space Fund, may be leveraged by state and federal grants to support acquisition and needed capital improvements.

F. Economic Development

Value Statement | West Kaua‘i’s economy should not only create jobs but build prosperity and opportunity for all its communities. Public investment and infrastructure must support the region’s existing economic drivers: agriculture, tourism, and government services. Technological innovation is key to building these existing industries and unlocking new ones. This will require expanding entrepreneurial skills and the development of a STREAM workforce with expertise and vocational skills. (As of the original adoption date and for purposes of this plan, STREAM is intended to stand for science, technology, resilience, engineering, arts, and mathematics; however, this acronym has expanded in recent years, may further change, and sometimes features different definitions in pursuit of the laudable concept of encouraging educational achievement in various fields of study.)

Economic Development Policy #1. **Uphold Agriculture as an anchor industry.**

Why: Agriculture is the foundation of West Kaua‘i’s economy and identity—from ancient times to today. Fields that are still in operation exist in the same locations as former sugar plantation fields, and those sugar plantation fields were established on the fields and water systems that were built and used by Ka Po‘e Kahiko (The People of Old).

Abundant agricultural land (comprising one-third of Kaua‘i’s State Land Use Agricultural District) and agricultural infrastructure are the region’s greatest competitive advantages. Agriculture remains the region’s leading industry with over 1,000 full-time and seasonal workers. In recent decades seed companies, coffee farming, cattle production, and

aquaculture have comprised the bulk of West Kaua‘i’s agricultural jobs. The public process revealed interest in community-based farming and the piloting of new crops like hemp.

How: There is ample opportunity to grow the industry and build on existing agriculture operations. This includes maintaining and upgrading agricultural infrastructure; expanding cooperatives and technical support for farmers; and the development of agriculture career pathways for youth.

Active fields rely on existing irrigation ditch and road systems. Maintenance of these systems is costly and require up-grades necessary for Federal and State environmental compliance. Low-lying land with drainage issues will need assistance with nonpoint source compliance through NRCS conservation plans and water quality monitoring. Supportive infrastructure also includes agricultural processing facilities, storage, and other industrial uses. Industrial zoned land adjacent to existing operations will help site these facilities.



Cover of a “Kaua’i Shrimp” product. © Kaua’i Shrimp.

Agricultural cooperatives enable sharing of processing, distribution, and storage facilities. This allows small farms to collectively gain the economies of scale that larger operations have. Partnerships also facilitate convergence with other industries such as tourism. This coordinates marketing, food safety protocols, farmers markets, and farm-to-table initiatives with restaurants, resorts, and schools.

Agribusiness and schools should coordinate efforts to “grow” the next generation of farmers by building vocational skills and training in agricultural sciences. Entrepreneurial training is also needed: new ventures require financial and technical support. During the community process, residents expressed interest in the establishment of an agricultural park (or parks). Āina Ho‘okupu (AHK) in Kilauea can serve as a model agricultural park for small-scale community-based farming for West Kaua‘i.

Economic Development Policy #2.

Provide supportive environments for business success.

Why: West Kaua‘i has a wealth of small businesses engaged in diverse sectors such as retail, accommodation, food service, arts, and entertainment. While most businesses are in Waimea and Hanapēpē Towns, Port Allen in ‘Ele‘ele has steadily grown as a center for services, retail, and visitor attractions.

West Kaua‘i’s historic small-town character appeals to many small businesses. Both residents and visitors are attracted to the nostalgic plantation character of West Kaua‘i’s towns, all of which are within minutes of public beaches and parks. Friday Art Nights in Hanapēpē Town and annual events like the Waimea



Entrance to the Kaua'i Coffee Visitor Center.



Rice fields in Waimea, 1916. Courtesy of W.J. Senda and the Kaua'i Historical Society.

Town Celebration, Kekaha Fourth of July Celebration, and summer Bon Dance festivals grow in attendance each year.

How: Town revitalization can support small businesses by cultivating attractive environments for shops, workers, and patrons. As their popularity increases, West Kaua‘i will require coordinated planning. The Town Plans for Kekaha, Waimea, Hanapēpē, and ‘Ele‘ele-Port Allen should provide ample space for commercial activity and workforce housing to exist side-by-side. Zoning must provide for new development and uses that support and strengthen the existing town’s character. This will also mean addressing parking, circulation, signage, public bathrooms, streetscape, and park improvements. By providing the necessary infrastructure, West Kaua‘i’s towns will continue to maintain small business and attract private development.

Business start-up services and workforce readiness programs are also essential tools for a successful regional economy. Business and workforce support programs should serve both entrepreneurial and established business owners. Services should include assistance in business and financial literacy, obtaining loans, developing online businesses, and student internships. Workforce readiness to further support West Kaua‘i’s impressive food service, arts, entertainment, and cultural activities requires incorporating all elements of STREAM learning in school curricula.

Economic Development Policy #3.

Grow science literacy and invest in a STREAM-ready workforce.

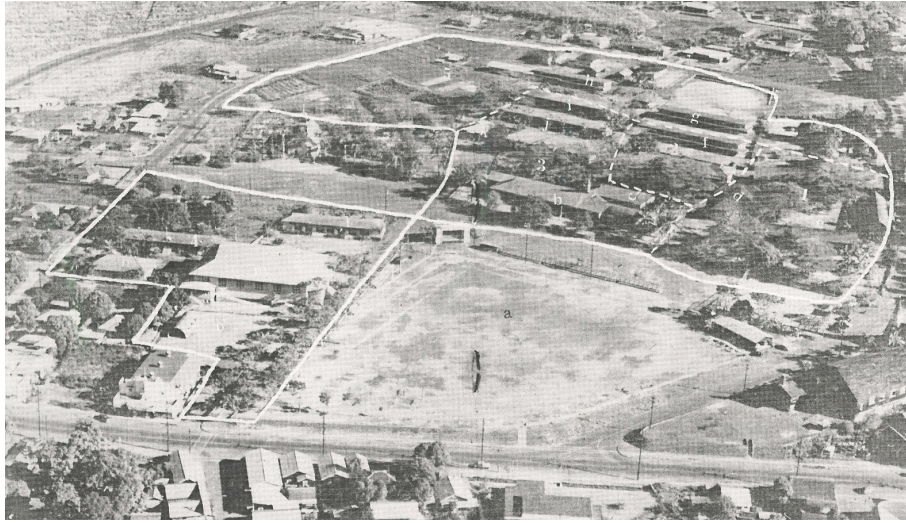
Why: A workforce skilled in science and technology fosters home-grown innovation and support for regional economic development. This strengthens

existing industries and provides the innovation and technological skills needed to open new sectors and start-ups. West Kaua‘i is home to valuable STREAM partners, such as KVMH, PMRF, and multiple agricultural companies. Cultivating partnerships between these entities and schools will prepare youth for promising career opportunities. For example, the United States Space Force program expanding at PMRF and health services are two growing fields on West Kaua‘i with above-average earnings. Another promising STREAM field in West Kaua‘i is conservation and environmental science. West Kaua‘i’s wetlands, forests, and natural area reserves employ botanists, biologists, environmental technicians, and natural resource managers.

How: A STREAM-ready workforce requires STREAM education and career development. Schools should focus on science literacy and expose students to careers in science, technology, resiliency, engineering, art, and mathematics. Career-connected learning and continuing education will foster programs and strong partnerships between schools, businesses, and nonprofit groups.

To accomplish this, West Kaua‘i needs to build upon existing networks and resources in science, technology, resilience, engineering, arts, and mathematics, such as through PMRF, agricultural companies, and the University of Hawai‘i. Existing non-profits such as the Kaua‘i Community Science Center, Kumano I Ka Ala, IWI Kua, and others with missions supporting these initiatives, can facilitate this work and provide access to peer teaching, certification, and grant funding. Available space, such as the West Kaua‘i Technology Center, Makana Training Center, and Kumano I Ke Ala can provide centers for hands-on learning and vocational skills.

Waimea School History



Waimea High School, 1952. Courtesy of Kaua'i Historical Society.

When Waimea School began as a public elementary school in January 1882, during the days of the Hawaiian monarchy, its 38 students were taught in the English language by Mrs. Stolz, who received her salary from tuition collected from her students.

By 1895, the school's enrollment had increased to 174 divided as follows: Hawaiian 82, part-Hawaiian 27, German 6, Portuguese 34, Norwegian 7, Chinese 8, and Japanese 10.

And during the following year, three teachers taught in its two-room schoolhouse, one of whom was Mrs. Lucy Wright (1873-1931), the first Native Hawaiian schoolteacher to teach in an English-speaking school, and for whom Waimea's Lucy Wright Park is named.

Also of note are Thomas Gibson, the school's principal from 1884 to 1897, who would become territorial superintendent of education in 1913, and Henry Wishard, Waimea School principal during 1899. Wishard later served as chairman of the Kaua'i Board of Supervisors from 1905 until 1930.

Waimea School became the first junior high school in the territory of Hawai'i in 1921, when a ninth grade was added, followed by a 10th grade in 1923.

And in 1935, Kaua'i Rep. Clem Gomes (1892-1948) introduced House Joint Resolution 12 in the territorial legislature for the establishment of a high school at Waimea, which Gov. Poin-dexter signed on April 16, 1935.

On June 6, 1937, when commencement exercises for the 60 students of Waimea High School's first graduating class were held, enrollment for Waimea High and Elementary School had reached 1,051 with 37 teachers, and its campus had expanded since its founding to include 4 ½ acres, four new buildings, eight bungalows and additional classroom units.

Officers of Waimea High School's first graduating class were Jose Tablada, president; Edward Miyake and Sakae Takahashi, vice-presidents; Shigeru Fujikawa, secretary; Shizuko Nakano, treasurer.

By Hank Soboleski,
published in the TGI newspaper June 11, 2010



Part III: Town Plans

West Kaua‘i cherishes its historic towns. They are the heart of the community and preservation of their distinct character is critical to the perpetuation of the West Kaua‘i way of life. The following section provides individualized town plans for Kekaha, Waimea, Hanapēpē, ‘Ele‘ele, and Port Allen. Each town plan contains a unique vision statement and identifies issues and opportunities, goals and objectives, town plan design concepts as well as economic development and circulation concepts in order to support their success in the future.

Please also reference the Town Plan maps in Part VI and the West Kaua‘i FBC for Kekaha, Waimea, Hanapēpē, and ‘Ele‘ele-Port Allen.

Top: Rainbow over Hanapēpē Swinging Bridge. Courtesy of Jan Brookshier.

Middle-Left: Waimea Theater is located in Waimea’s town core.

Middle-Right: The iconic smokestack at Kekaha Mill rises above the town.

Bottom: The one-lane Hanapēpē Bridge was constructed in 1911.



KEKAHA TOWN PLAN

Community Vision

The mill area will be revitalized as the heart of Kekaha. A strong town center, supported by walkable neighborhoods and small businesses, will meet community needs such as affordable housing and local jobs. Kekaha will build on its agricultural identity and small business culture.

Aerial view of Kekaha Town. © EagleView Technologies, 2020.

Issues and Opportunities

Kaua'i's most westerly town is Kekaha, a linear community hugging the coast from Kīkīaola Small Boat Harbor to Kekaha Beach Park. Kekaha is primarily a bedroom community with limited commercial activity, its length and flat, gridded street network set Kekaha apart from other Westside communities. Although Kekaha lacks a bustling town core, the distance from amenities and services also gives the community a laid-back, tranquil atmosphere.

A sandy and transient beach runs the length of the town and highway, which is protected by a rock revetment approximately two miles long. Beach access occurs along the highway and at MacArthur Beach Park. Kekaha also provides a direct link to Waimea Canyon State Park and Polihale State Park. High-speed traffic on both the Highway and Kekaha Road is a community concern. In general, the area is dominated by vehicular travel and is not inviting to pedestrians.

Kekaha’s built landscape is dominated by the visually imposing but inactive Kekaha Mill. When Kekaha was founded as a plantation town, the mill was its center of economic and community life. The death of the plantation industry led to the mill’s closure, but its iconic smokestack remains an important landmark. Today, Kekaha’s town center, located in the vicinity of Kekaha Road and Kōke’e Road, is more of a crossroads dotted by the post office, small commercial uses, and schools. It is also characterized by inactive shop fronts, vacant parcels, and a lack of multimodal infrastructure. Existing buildings need structural and aesthetic rehabilitation. Nearby PMRF provides employment to some, but many residents endure long commutes to their jobs on other parts of the island. There are several churches and three cemeteries within the town as well.

Kekaha is a close-knit community with ‘ohana who have lived there for several generations. Despite the lack of in-town employment and services, residents stay connected through involvement in schools, churches, and community events. Beaches and parks are actively used. The Kekaha Community Association meetings are venues for community-wide discussion on issues.

With no sewer system, residences and businesses rely on individual wastewater treatment systems.

Unfortunately, there are many cesspools which are environmentally problematic and cannot handle additional density. In 2017, the Hawai‘i State Legislature passed Act 125, which requires that all cesspools be replaced by 2050. This has limited infill housing development even with available density. It will likely take a significant project, such as the revitalization of the mill, for a sewer trunk line to be developed.

Kekaha is also currently vulnerable to flooding and has a high groundwater table. It is also vulnerable to projected hazards associated with SLR. It is hemmed in on three sides by low-lying agricultural land that is at risk of chronic and passive flooding. Currently, the agricultural fields north of Kekaha is kept arable by the use of pumps which remove water from the area.

Kekaha Landfill continues to be an issue of concern for the Kekaha community. Although a new County landfill at Mā‘alo is a possible option, landfill development is expensive and subject to many regulatory barriers. The County is exploring alternatives to siting a new landfill, such as technological advancements, shipment of waste off island, landfill mining feasibility, and increased waste diversion. Some of these options may extend operations at the Kekaha Landfill beyond the 7 years of anticipated capacity.

Goals and Objectives

Community Design

1. Revitalize the mill site to provide economic activity and be a node of community activity.
 - a. Support transformative change in the area and treat the mill as a significant opportunity for reuse. Update zoning to facilitate compatible uses.
 - b. Support community-based master planning for the Kekaha Mill properties.
 - c. Preserve the smokestack as an iconic structure and where feasible rehabilitate mill structures in order to preserve the character of the Mill.
 - d. Ensure a drainage master plan is prepared for future projects that utilize low-impact development practices to minimize stormwater runoff.
2. Create a “main street” environment on Kekaha Road.

- a. Provide gathering spaces and facilities for residents of all ages.
- b. Encourage pedestrian and bicycle activity on Kekaha Road through safe routes, sidewalk improvements, bicycle lanes, and traffic calming.
- c. Intensify the area mauka of the mill with housing or civic uses.

Heritage Resources

1. Celebrate Kekaha’s cultural and natural heritage.
 - a. Protect caves and rock features, near and along ridges, such as at Pōki‘i-Kauna and Kaunalewa, where concentrations of cultural and natural resources exist.
 - b. Develop educational material, such as through signage, public art, and school programs with kūpuna and local cultural experts that provide information about the history of Kekaha and its sensitive cultural and natural landscape.
 - c. Address lack of cemetery space, such as through identification of new cemeteries and places for internment outside of the SLR-XA.
2. Protect and maintain Kekaha’s cemeteries through community-based stewardship and management:
 - Kekaha Hawaiian Cemetery
 - Kekaha Public Cemetery (also known as St. Theresa Church Cemetery)
 - Park Hook Tong Chinese Cemetery (also the location of a Japanese cemetery).

3. Through future planning efforts, address the lack of cemetery space and the vulnerability of existing cemeteries to SLR impacts (such as the Park Hook Tong Chinese Cemetery).

Resiliency and Infrastructure

1. Improve the resiliency of vulnerable and exposed neighborhoods.
 - a. Identify exposed neighborhoods along the coast highly vulnerable to SLR hazards, and adopt building and zoning standards to address and mitigate these hazards. Use the best available science to regularly evaluate vulnerable areas.
 - b. Provide public education regarding regulatory mechanisms that affect development in areas threatened by SLR.
2. Protect community access to and from Kekaha.
 - a. Maintain the existing revetment along Kaumuali‘i Highway in front of Kekaha Town for as long as feasible while exploring solutions that reduce beach erosion and protect natural shoreline processes.
 - b. Develop an overall strategy to protect Kekaha Town and its sandy beaches from the impacts of SLR using the best available science and accounting for natural shoreline processes and drainage issues.
 - c. Collaborate with scientists and stakeholders to conduct a focused hydrological assessment of Kekaha and Mānā, including groundwater and the effectiveness of pumps, ditches, canals, pipes, and outfalls to manage projected SLR. Use the results to inform future adaptation actions.



Water pumping station in Kekaha.

- d. If a shared-use path is developed between Kekaha and Waimea mauka of Kaumuali'i Highway, design it to also serve as a secondary vehicular evacuation route in the event of an emergency disaster.
 - e. Work with landowners to open cane haul roads as alternative access routes for emergency evacuation.
3. Reduce flooding, maintain, and improve existing drainage systems, especially along public roadways and driveways in Kekaha.
 - a. Improve and maintain grass swales, ditches, and culverts along highways, streets, intersections, and driveways.
 - b. Investigate opportunities to reuse and/or redirect stormwater runoff in constructive ways such as for landscaping, urban forestry, agriculture, or industrial use in order to conserve water resources.
 - c. Implement flood accommodation measures for existing development or redevelopment in Kekaha. These include elevation of buildings, LID design standards such as permeable surfaces, and adding "freeboard" standards to the floodplain ordinance.
4. Reduce the health hazards and environmental contamination caused by inadequate wastewater disposal such as cesspools.
 - a. Phase out all cesspools, ahead of the State's 2050 deadline, by converting all cesspools to an individual wastewater system or through connection to a regional or package wastewater system.
 - b. Determine the feasibility of developing a sewer trunk line to Kekaha and expanding the Waimea WWTP system to include coverage in Kekaha.

- c. Require major new development, such as new resort or industrial development, to meet wastewater needs by either contributing to the development of a sewer trunk line (from Waimea to Kekaha) or a package wastewater treatment plant that can service neighboring parcels as well.
 - d. Conduct a pre-disaster assessment to determine whether reconstruction might include upgrades of current cesspools to alternative onsite sewage disposal systems.
 - e. Ensure all new sewer line development or onsite disposal systems are resilient to SLR impacts, such as passive flooding due to the area’s high water table
5. Manage the Kekaha landfill and impacts to the Kekaha community.
- a. Implement the lateral expansion and finalize plans for the future of the landfill.
 - b. Continue providing funding to the Kekaha Host Benefits Community Fund and allow a Citizens Advisory Committee to distribute funds.
- School and the Kekaha Neighborhood Center crossing to the beach.
- c. Designate a school zone along the highway adjacent to St. Theresa School consistent with County standards.
 - d. Consider other locations for traffic-calming measures and improved highway pedestrian crossings such as at Davidson’s Beach.
2. Improve and expand recreational facilities.
- a. Construct permanent restrooms at MacArthur Beach Park.
 - b. Identify a location for a public or private swimming pool or splash pad.
 - c. Improve the neighborhood center and design it to serve as a cooling center during heat waves.
 - d. Add shade trees and landscaping at public places that are low maintenance, do not create security problems, with a focus on native plants where feasible.
 - e. Support existing and low-impact activities at the Kaua‘i Raceway Park, including continued use by the Garden Isle Racing Association.
 - f. Generate more diversified economic activity within the existing Kaua‘i Raceway Park footprint by supporting other opportunities for organized community events and activities, including but not limited to pop-up swap meets and farmers markets, drive-in movies, outdoor concerts and shows, and go-kart racing.
 - g. Leverage the increased economic activity and revenue streams to ensure

Shared Spaces

- 1. Reduce traffic speeds along Kaumuali‘i Highway to provide safe pedestrian access for all ages, especially between the coast and mauka areas including Kekaha Town.
 - a. Implement safety improvements at the Kaumuali‘i Highway intersection with the Kikīaola Small Boat Harbor entrance road.
 - b. Install rectangular rapid flashing beacon (RRFB) crossings at St. Theresa



Kekaha Town Fourth of July Celebration, 2019.

the future resiliency of the Kaua'i Raceway Park.

3. Improve Kikīaola Small Boat Harbor for resiliency purposes and recreational access.
 - a. Evaluate the long-term viability of Kikīaola Harbor with SLR and its impact on along shore-transport of sediment on Waimea Beach.
 - b. Evaluate and improve the effectiveness of the existing sand bypass program.
 - c. Maintain existing harbor protection features.
 - d. Re-engineer breakwaters, ramps, and piers as needed to address SLR.

Economic Development

1. Support agriculture in Kekaha.
 - a. Consider use of Kekaha Mill for the production and sales of locally grown produce and value-added products.

- b. Work with the State and other landowners to promote available land leases to small farmers.
 - c. Support the expansion of aquaculture (i.e., shrimp).
2. Strengthen Kekaha Town as a center for neighborhood businesses.
 - a. Support the creation of a Kekaha Business Association and provide training and resources for small businesses.
 - b. Consider grant programs to support small businesses and property owners such as historic preservation and facade improvement programs.
 - c. Create a town entry feature and signage at the intersection of Kaumuali'i Highway and Kekaha Road.



Kekaha residents and supporters participate in a Walk-to-School event.

Town Plan Concepts

The Kekaha Town Plan Map is provided in Part VI as Figure 13.

Kekaha Town Core

The Kekaha Town Core consists of community uses including the food mart, the public elementary school, the neighborhood center, and the park. Other facilities include St. Theresa School and Hawaiian immersion charter schools. The spine of this area is Kekaha Road, a long, automobile-oriented thoroughfare that lacks streetscape and multimodal facilities. The only commercial activity, limited as it is, occurs in the area currently zoned Neighborhood Commercial (C-N). This area serves as a gateway to Kōke'e State Park and is marked by a convenience store and vacant/underutilized parcels. With upgraded infrastructure, there is an opportunity to accommodate more housing and economic activity in the town core.

Kekaha Mill Site

The focal point of the town core is the inactive but historically significant mill site. There is an opportunity to reclaim the area for the entire community through thoughtful master planning that involves all stakeholders. Once improved, it is envisioned to revitalize the town core. The 20-acre mill site consists of two parcels, with the western parcel holding most of the remaining structures. It is also the community's desire to preserve the historical character of the smokestack and the exterior structure of the mill. Portions of the Kekaha Mill contain contaminants, some of which can become airborne and cause hazards for the surrounding community. Remediation and environmental compliance will add substantial costs to redevelopment. Improvements to Kekaha Road could link the mill site to the rest of the community via a safe route. There is also an opportunity to create a compatible mixed-use area across the street from the mill.



FIGURE 3 | Conceptual vision of Kekaha Town revitalization September 2018 design workshops. Courtesy of Opticos Design.

Mamo Street Area

The area makai of the highway along Mamo Street (the homes west of Kīkīāola Harbor) feature small Open-zoned lots and a pocket of Residential R-4 and R-2 zoning. This area is not protected by a revetment and experiences wave overwash and severe coastal erosion. It is therefore designated as Coastal Edge on the Kekaha Town Plan Map.

Kaumuali'i Highway Revetment Area

Parts of Kekaha within the Walkable Neighborhood and Residential Neighborhood designations are vulnerable to future SLR as outlined in the West Kaua'i Community Vulnerability Assessment. This area is currently protected by a revetment protecting Kau-muali'i Highway, although this wall does not prevent groundwater rise with SLR. Development in this area is dependent in part on the existence and maintenance of that revetment. Over time, the revetment will be more vulnerable to SLR impacts.

Economic Development Concepts

With ample agriculture land and forest reserves, Kekaha could grow its own food and building materials for self-sufficiency and export. One opportunity is a Westside version of the Kīlauea Agricultural Park to generate jobs, provide agriculture education, and increase access to healthy foods. Food grown in the community could be sold in town through small businesses and local restaurants or manufactured and processed at Kekaha Mill for the creation of value-added products. Kekaha could also benefit from additional neighborhood-serving businesses such as a laundromat, gym, restaurant, and hardware store.

Kekaha Mill could become a community gathering place with retail shops, food trucks, seating areas,

and a stage to host music festivals. Through adaptive reuse, revitalization efforts could focus on interior re-configurations for retail activity while preserving the exterior structure. The example of “Warehouse 3540” in Lāwa‘i can serve as a model for the community’s vision.

Kekaha is also home to the Kaua‘i Raceway Park (also known as the Mānā Dragstrip), which hosts well-attended, family-oriented motor sports events. The facility has the potential to attract other types of events that could generate economic activity. Future improvements to the site should address coastal erosion and mitigate impacts to native flora and fauna.

Land Transportation and Circulation Concepts

The Circulation Map for Kekaha is provided in Figure 41. In Kekaha, safe routes connect neighborhoods with the Kekaha Neighborhood Center and ball fields, the schools, and the commercial development along Kekaha Road. A new street is proposed to provide additional ingress and egress to the Kekaha Gardens neighborhood. To slow traffic and improve safety, a school zone is proposed along Kaumuali‘i Highway in the vicinity of St. Theresa School. Should Kaumuali‘i Highway through Kekaha be relocated mauka, the existing alignment may be converted to a coastal shared-use path.

Kekaha Road should be designed as a main street to support commercial development, including redevelopment of the Kekaha Mill site.

There are many options for the modification of ‘Elepaio Road to be a safe route. The design may vary by block, and there may be short-term and long-term solutions. One short-term solution would be to allow parking on both sides of the street, which would create a “queuing street,” where cars yield to cars coming in the opposite direction and pull off between parked cars. This encourages drivers to slow down. In the long term, sidewalks may be desirable on both sides of the street. In addition, traffic-calming devices noted in the toolkit may be applied at intersections.

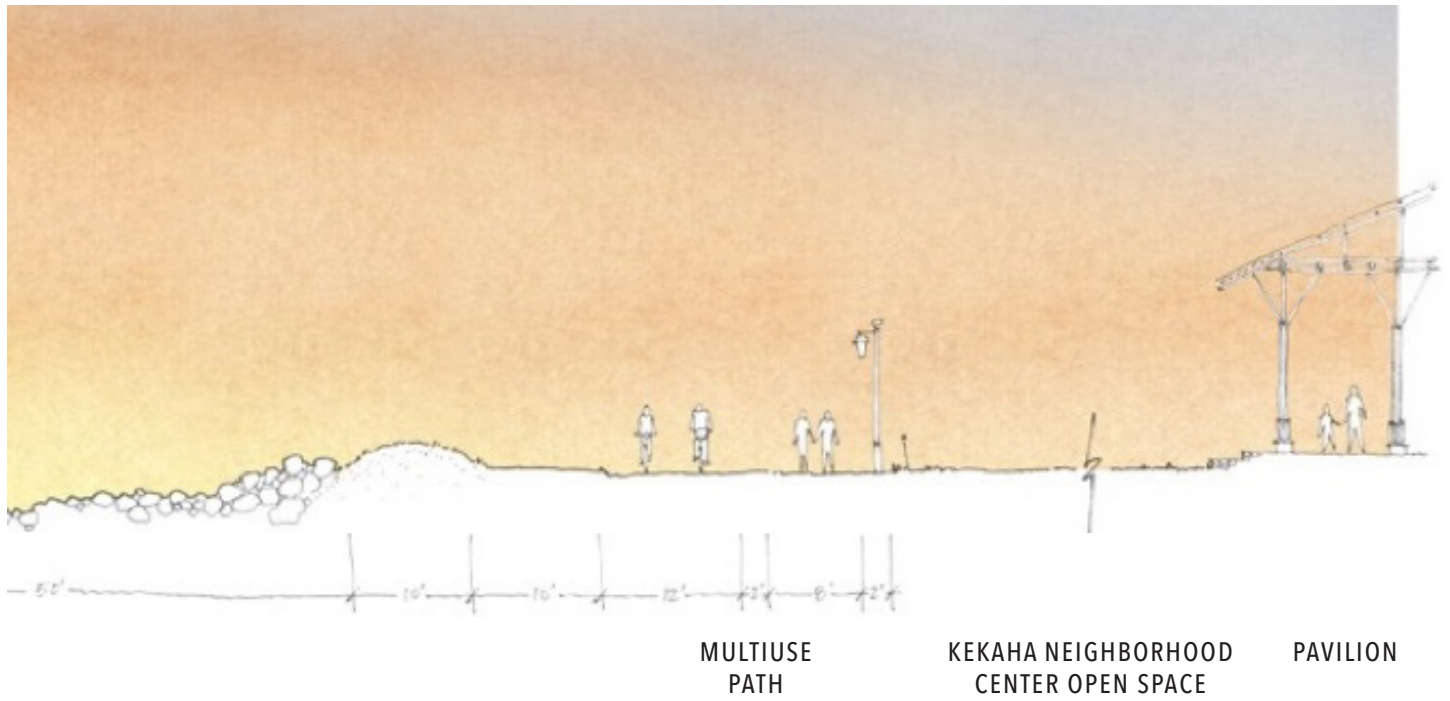


FIGURE 4 | Kekaha Neighborhood Center Concept

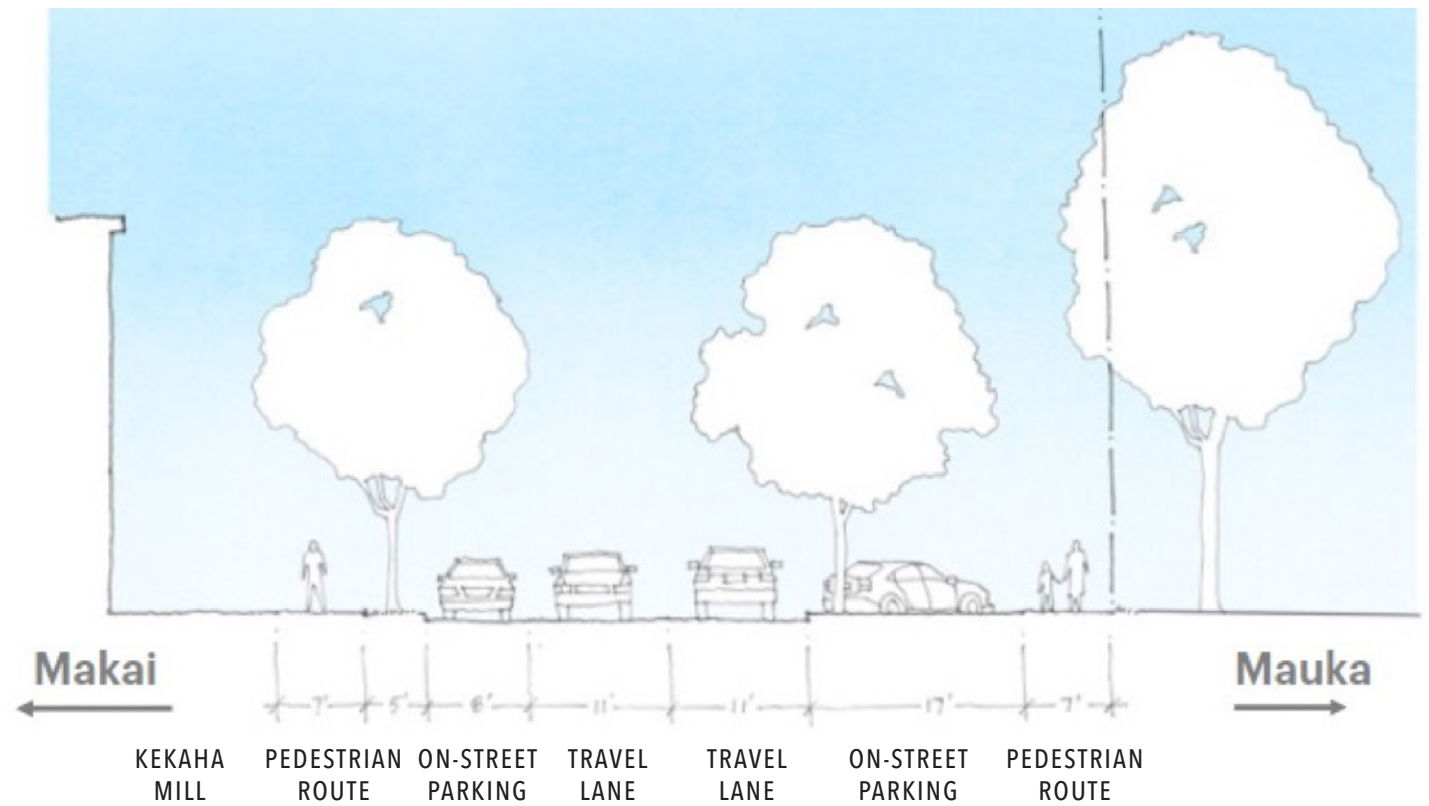


FIGURE 5 | Kekaha Mill and Kekaha Road Concept

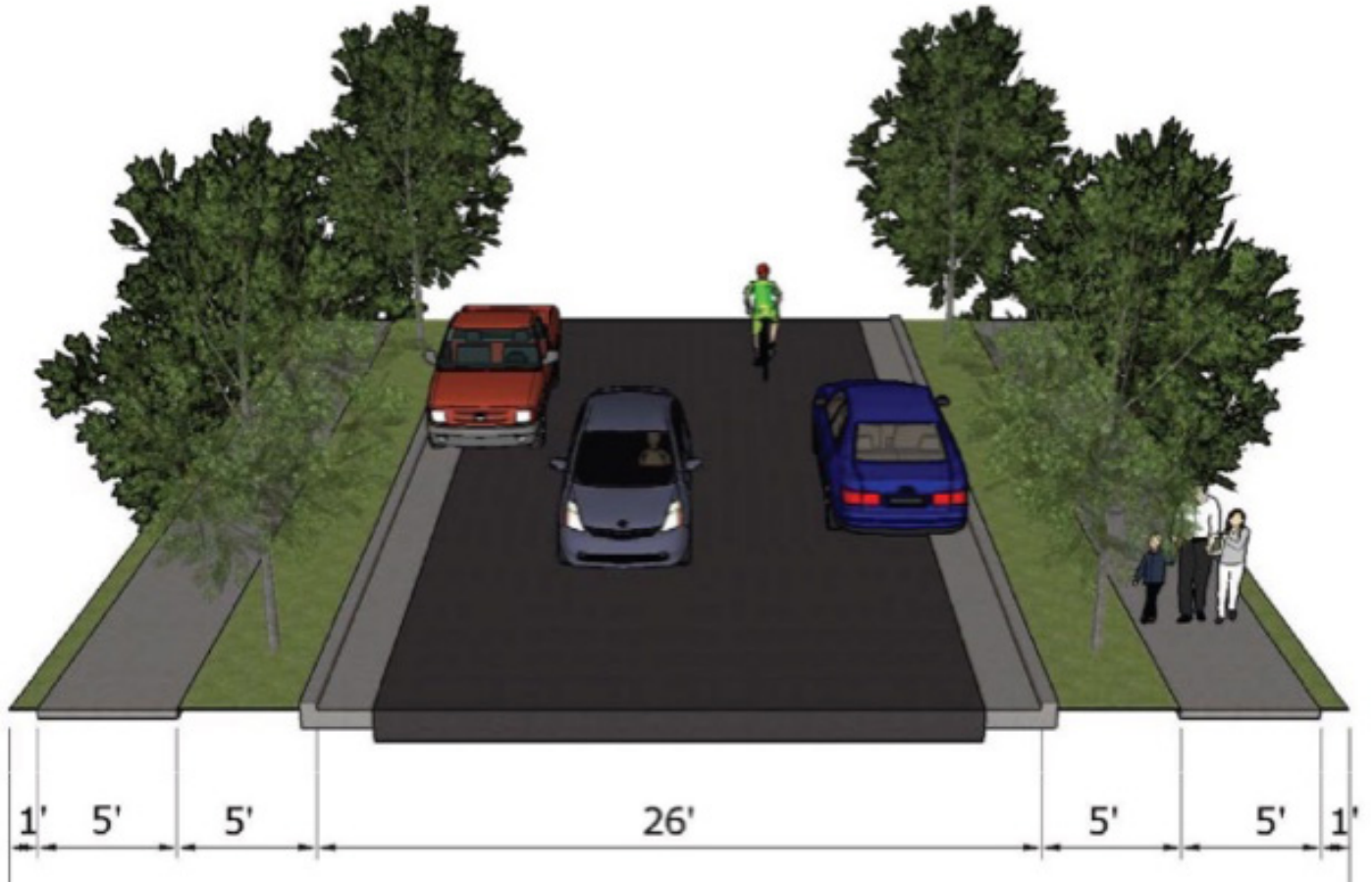


FIGURE 6 | 'Elepaio Road Concept

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WAIMEA TOWN PLAN

Community Vision

Waimea is a walking town. Historic buildings will be fully rehabilitated and occupied by offices, housing, and other needed uses. The town will support healthy lifestyles and attract locals and visitors with small businesses, services, and community celebrations.

Aerial view of Waimea Town. © Google Earth, 2020.

Issues and Opportunities

Waimea is a thriving community proud to call itself “a walking town.” The community is physically defined by natural features: the Waimea River, mountains, and ocean. Waimea’s visual character is established by the plantation-era buildings and parks fronting the highway—a half-mile corridor that also serves as the main street. The town’s historic features are all highly valued assets.

Of all West Kaua’i’s towns, Waimea is the most “complete”—meaning it has the widest range of community amenities within a 20-minute walk of each other. Despite its small size, it features a high school, middle school, fishing pier, library, hospital, banks, movie theater, churches, and grocery stores. Other activities within the town center include a mix of boutique retail and food establishments. Most businesses serve residents but also rely on the visitor traffic on their way to or from destinations



H.S. Kawakami's Waimea Big Save, 1950-1960. Courtesy of Kaua'i Historical Society.

like Waimea Canyon and Polihale State Park. The gathering places within Waimea Town include Hofgaard Park, Lucy Wright Park, and Waimea State Recreational Pier. These spaces have important landmarks and historic value.

The town's western boundary is marked by a large sports field mauka of the highway and the Waimea Plantation Cottages makai of the highway. The biggest

threats to Waimea Town include the increased vulnerability to climate change-induced hazards, SLR, and flooding. This includes passive flooding, erosion, and high wave runup, as well as possible extreme heavy rainfall and riverine flooding events. The combined effects of which create serious drainage issues for the town. Other areas of concern include the undeveloped, agriculture lands mauka of the highway that are located in between Waimea and Kekaha.

Goals and Objectives

Community Design

1. Meet the housing needs of the Waimea community, including those who are homeless or at risk of becoming homeless.
 - a. Allow new residential growth to infill outside of the Coastal Edge and within the Town Center and Walkable Neighborhood designations.
 - b. Allow multifamily development in the Town Center designation area mauka of the Waimea Kaua'i Technology and Visitor Center.
 - c. In the Menehune Road neighborhood, where protected by the levee, encourage freeboard standards for new infill development.

- d. Support a master-planned new community mauka within the Walkable Neighborhood designation to accommodate workforce housing, planned growth, and a potential SLR managed retreat area.
 - e. Provide opportunities for additional infill housing types.
 - f. Support development of transitional housing for those experiencing homelessness, with a focus on local families who are homeless or at risk of becoming homeless.
2. Protect and enhance the historic main street.
- a. Update zoning standards to encourage appropriate uses and preservation of desired historic character.
 - b. Rezone to enable community-envisioned development on the Waimea Mill Site.
 - c. Encourage programming of more activities and events at Hofgaard Park. Provide additional facility improvements, improved advertising, and more cultural activities.
 - d. Increase signage and print materials that identify public restrooms throughout Waimea Town.
 - e. If needed, install a new small-footprint public restroom in a central location. The exact location should be determined by consulting with residents and business owners.
3. Reduce congestion and improve safety for all roadway users.
- a. Improve traffic control at the intersection of Kaumuali'i Highway at Waimea Canyon Road.
 - b. Provide or implement safe roadway solutions to maintain safe traffic conditions during peak traffic times (e.g., 2:30 p.m. to 4:30 p.m., community events).
 - c. Develop a connected walking route through the town.
 - d. Enhance the current walking route (sidewalk) in Waimea by enhancing the surrounding landscape (e.g., plants, sprinklers).
 - e. Consider additional pedestrian safety improvements along Kaumuali'i Highway, such as improved lighting and sidewalk bulb-outs. Adjust timing of RRFB crossings to encourage vehicles to stop when pedestrians are crossing.
 - f. Provide bicycle and pedestrian facilities on Kahakai and Menehune Roads.
 - g. Provide traffic-calming solutions, such as signs, signals, markings, and other devices for bicyclists and pedestrians, on Kahakai and Menehune Roads.

Heritage Resources

- 1. Promote Waimea as a historic town.
 - a. Promote historic tours and provide informational displays in town.
 - b. Support the restoration and adaptive reuse of the Historic Waimea Theater, Gulick-Rowell House, and other historic properties in Waimea.
 - c. Update and maintain the inventory of historic properties, including churches, cemeteries, and bridges, and identify



Waimea town, looking across the river to Fort Elizabeth, 1976. Courtesy of Kaua'i Historical Society.

- properties for nomination to the Hawai'i and National Registers of Historic Places.
 - d. Establish a historic district from Pā'ula'ula to the Waimea River Estuary.
 - e. Support efforts to restore Pā'ula'ula and to provide education about its many periods of historic significance.
2. Protect and maintain the historic Waimea United Church of Christ Cemetery.
3. Acknowledge the Waimea River and its associated cultural uses as important heritage resources for the Waimea community.
 - a. Protect in-stream flow by supporting the development of instream flow standards that analyze hydrologic conditions and non-stream uses.
 - b. Address decreasing water levels in the Waimea River and support equity in water management through a non-adversarial process involving all stakeholders.
 - c. Support mediated agreements to restore streamflows to meet public trust purposes, while avoiding costly litigation.
 - d. Address silt buildup at the river mouth.
 - e. Support community efforts to steward the river.
 - f. Support mauka-to-makai streamflow, which is essential to the survival of native stream life, and the management and protection of the upper watershed areas to reduce runoff and non-point source water pollution.

Resiliency and Infrastructure

1. Improve the resiliency of the coastal neighborhood makai of Kaumuali'i Highway.
 - a. Identify exposed neighborhoods along the coast highly vulnerable to SLR hazards, and adopt building and zoning standards to address and mitigate these hazards. Use the best available science to regularly evaluate vulnerable areas.
 - b. Require flood accommodation measures to be implemented for new development approved within the 3.2' SLR-XA and FEMA flood zones.
 - c. If damaged by storm events, encourage current slab-on-grade homes to elevate and implement freeboard standards.
 - d. Provide a higher elevation area for property owners with vulnerable homes to retreat to in the future via transfer of development rights or land swap opportunities.
 - e. Should retreat of buildings and infrastructure occur, ensure beach access is maintained and that the evacuated land serves as a buffer against future coastal hazards.
 - f. Consider beach nourishment strategies to preserve the sandy shoreline along Waimea Beach.
 - g. Consider protection strategies in the long term to preserve Waimea Town center in place.
 - h. Enforce regulatory mechanisms, such as the Shoreline Setback Area, to prevent new development in proximity of the vulnerable coastline.
 - i. Provide public education regarding regulatory mechanisms that affect development in areas threatened by SLR.
2. Address concerns pertaining to the Waimea River, levee maintenance, and nuisance flooding.
 - a. Improve and recertify the Waimea River levee and ensure the improvements will also accommodate SLR projections.
 - b. Maintain and dredge the Waimea River mouth to ensure sufficient flow, transport, and expulsion of river sediment.
 - c. Improve and maintain grass swales and ditches along highways, streets, intersections, and driveways.



1940 flood, Waimea. Courtesy of Kaua'i Historical Society.



Waimea High School Homecoming Football Game, 2019.



A young paniolo competing at a rodeo during the Waimea Town Celebration. Courtesy of Keala Yorkman.

- d. Evaluate and address flooding hazards related to Menehune Ditch.
- e. Consider a konohiki system whereby landowners abutting Menehune Ditch maintain waterflow regularly.
- f. Repair and maintain flap and sluice gates and maintain drainage ditches to prevent flooding in surrounding neighborhoods.
- g. Address flooding in Waimea Valley by exploring feasibility of designating areas to channel water to undeveloped areas, unused drainage canals, or a constructed flood storage/wetland area.
- h. Provide incentives to elevate homes and infrastructure.

3. Reduce environmental threats related to aging wastewater infrastructure and SLR impacts.
 - a. Phase out all cesspools.
 - b. Extend sewer service to all of Waimea and incentivize property owners to connect to the sewer system.
 - c. Address vulnerable wastewater systems in the Coastal Edge designation.

Shared Spaces

1. Improve and expand recreational facilities.
 - a. Prohibit camping at Lucy Wright Park and program other recreational activities so it is a safe place for families and canoe club activities.

- b. Provide access to the levee with a walkable berm from Lucy Wright Park to the crossing and swinging bridge.
 - c. Support use of Waimea State Recreational Pier by enhancing and improving public restrooms and installing barbecue grills and pavilions. Encourage use of the parking lot to support a “park-once-and-walk” environment in town.
 - d. Provide additional activities and facilities for children and youth.
 - e. Plant and maintain more trees on streets and in parks.
 - f. Add a pavilion at Ching Park.
2. Activate and improve existing neighborhood parks such as Ching Park and Captain Cook Memorial Park through a community public outreach process that will determine which amenities and uses the parks will include, as well as funding options for designing the existing and any new parks.
- a. Support community-led projects and plans to consider various uses and facilities that can be installed and implemented at Ching Park, including but not limited to a keiki playground, fenced dog park, landscaping with native and ornamental plants and fruit trees, walking paths and exercise facilities, community botanical garden, and community vegetable garden.
- the West Kaua‘i Medical Center and KVMH as the hub.
- b. Provide a diversity of housing types and services for kūpuna.
 - c. Encourage the growth of healthcare jobs on the Westside including nurse practitioners, dentists, chiropractors, psychologists, and optometrists, physical therapists, and elderly caregivers.
 - d. Amend the zoning code to allow for healthcare home-based businesses in residential and commercial zoned areas.
 - e. Encourage a community college satellite campus in Waimea, potentially using a portion of the West Kaua‘i Technology and Visitor Center.
2. Carefully manage visitor impacts to Waimea Town so its unique, small town character is protected.
- a. Allow limited resort expansion in the area designated “resort” west of the Waimea Plantation Cottages. To ensure future development is consistent with the scale and character of the Waimea Plantation Cottages, any future zoning action on the property shall be limited to a density not exceeding RR-1 and high-rise or multi-story hotels or building accommodations shall not be allowed. Additionally, the resort designation shall allow for continued agricultural and rural mixed uses along with transient accommodations, including but not limited to farming, ranching, animal husbandry, rodeos, horseback riding, camping, and botanical gardens.
 - b. Resort expansion outside the designated resort area is not desired.

Economic Development

- 1. Advance Waimea Town as a healthcare, wellness, and education hub.
 - a. Support a healthcare master plan servicing all Westside communities with

- c. Support and promote the West Kaua'i Visitor Center as a full-service visitor center.
 - d. Encourage and promote appropriate and culturally meaningful experiences through small tours, existing historic walking tours, museums, and opportunities for visitors to engage in volunteer work.
3. Support small businesses by strengthening Waimea Town as a destination serving residents and visitors.
 - a. Support current local, small businesses that serve residents and visitors.
 - b. Improve current restroom facilities throughout Waimea Town, and increase signage identifying public restroom facilities and locations.
 4. Consider sports and recreation as a complementary economic development strategy.
 - a. Support development of a Waimea sports complex.
 - b. Encourage businesses that support sports facility users, including restaurants, sports equipment shops, and affordable overnight accommodations.

Town Plan Concepts

The Waimea Town Plan Map is provided in Figure 14.

Waimea Town Core – East

The area from Waimea River to Ola Road is the oldest section of town. Originally, Waimea Road was the main artery into the town until the old bridge was replaced with the current highway and bridge in 1940. The area features historic landmarks like the 1875 Wing Sing Kee Building, the 1929 First Hawaiian Bank Building, and the 1865 Hawaiian Church. Hofgaard Park, an important shared space, is a unique pocket park with seating and historic displays. Several mature trees and landscaping create a pleasant, walkable atmosphere. Waimea Town Core – East is also the location of Big Save and Ishihara Market: both are popular destinations that are frequented by residents and visitors alike. The area is very low-lying and historically prone to flooding, which occurred regularly before the construction of the levee. Other

important facilities are the fire and police substation. The area behind the Waimea Fire station provides a safe stairway path that connects the high school and the adjacent neighborhoods to Big Save, Ishihara Market, and other businesses in Waimea town as well as residences in Waimea Valley.

Waimea Town Core – West

The western portion of Waimea Town features the Historic Waimea Theater, West Kaua'i Technology and Visitors Center, and the remnants of the historic mill, originally constructed in 1884. Waimea Canyon Drive is a busy intersection that visitors use to access the State Parks. It is a key opportunity area to establish pedestrian-oriented, civic and retail space. The County's Waimea Athletic Field currently serves as a soft edge to the western side of town, but the area will ultimately provide a key connection to new development mauka of the highway.

Waimea River Mouth and Kahakai Road

This beachfront area is characterized by small lots and single-family homes close to the sandy shoreline. Kahakai Road is easily accessible from the highway and provides access to the Waimea State Recreational Pier. The river is an important feature and marks the eastern edge of town. The river mouth also marks a pivotal place in Hawai'i's history—it is the location where Captain James Cook landed in 1778. Lucy Wright Park also serves the local community, and it houses equipment for the Kilohana Canoe Club. However, there are sometimes conflicts with the unpermitted and long-term campers in the area. There are also concerns about sediment buildup at the river mouth and the impact to water flow and flooding in Waimea Valley.

The residential neighborhood located makai of the highway, especially the homes along Kahakai Road, are prone to coastal hazards that will be intensified by SLR. The beach in Waimea is currently accreting and fairly stable. However, the SLR-XA data shows that by

the latter half of the century the beach will become more erosional. The sand at the river mouth is also an asset that can be used to help build up the dune system at Keoneluhi Beach to further stabilize the shoreline. However, wave overtopping and erosion is projected to be a serious risk. Existing homes should be elevated with strengthened footings to withstand more wave overtopping events. Conversion of slab on grade construction to post and pier, elevated with additional freeboard, should be required.

Menehune Road/Levee Protected Neighborhood

This historic neighborhood runs up Menehune Road along the levee to Waimea Valley. There are many important landmarks and historical assets in this area, such as Menehune Ditch, the swinging bridge, and the Waimea Shingon Mission with its 88 Buddha monuments. There is potential in the residential area directly behind the Big Save shopping complex for the addition of small to medium-sized multifamily residential buildings as well as placemaking opportunities,



FIGURE 7 | Conceptual vision of Waimea Town revitalization September 2018 design workshops. Courtesy of Opticos Design.



Pā'ula'ula brochure and Pā'ula'ula site.

including but not limited to an urban garden, neighborhood park, or dog park. Conversion of single-family residences to multifamily uses is encouraged, along with improvements to increase flood resiliency. New construction should be required to add additional freeboard above base flood elevations throughout this neighborhood and upper Waimea Valley, where the levee has been decertified. This would account for additional flood risk from SLR. Such actions would help the County join FEMA's CRS, which in turn would result in flood insurance discounts for residents.

Waimea Plantation Cottages and New Resort

This area encompasses the existing Waimea Plantation Cottages resort, and it is an area designated as "Provisional Resort" in the 2018 GP Future Land Use Map. During the 2018 GP process, this area was designated "Provisional Resort" as a placeholder for the community to voice its preference through the West Kaua'i Community Plan process. Based on the community input received to date, this area has been changed from "Provisional Resort" to "Resort."

However, to ensure the future resort development maintains the rural character of the area, any new construction will be required to remain consistent with the size and scale of the existing Waimea Plantation Cottages. This includes small, elevated cottage structures arranged in plantation-style clusters. Although the area is located on an accreting beach and is not projected to be impacted by 3.2 feet of SLR, a generous setback from the shoreline consistent with the existing structures and in conformance to County regulations should be maintained. Coastal access via a potential shared-use path is encouraged.

Pā'ula'ula/Russian Fort Elizabeth State Historical Park

This park is a national landmark and a significant wahi pana since ancient times. It is best known for its brief occupancy by the Russian-American Company in 1817 and the 1824 rebellion against Kamehameha I by Prince George Humehume. In recent years, there has been discussion on how to better acknowledge its traditional name—Pā'ula'ula—and significance in Native Hawaiian history and culture.

County Acquisition—“Waimea 400”

The County’s Waimea Athletic Field currently serves as a soft edge to the western side of town. In the near future this park could be expanded to the west as part of a new sports complex. In 2019, the County purchased 417 acres of land from Kikīaola Land Company. This area (referred to as the “Waimea 400”) is located mauka of the highway and adjacent to the

Waimea Athletic Field between Waimea and Kekaha. There has been ongoing interest by the community and the previous landowner in developing a sports complex in a portion of the Waimea 400 area, and a few conceptual plans have been developed. However, the ultimate use and design of the Waimea 400 will depend on the results of the community master plan process for this area.

Economic Development Concepts

Waimea can build on its existing strengths in the healthcare, tourism, and education sectors. Business in these sectors could expand through additional services and improvements. Waimea could function as a comprehensive healthcare hub with KVMH as the anchor surrounded by a diverse range of healthcare services and housing types. To support kupuna and aging in place, elderly housing, assisted living, adult day care services, senior exercise classes, and nutrition programs should be strengthened.

As the gateway to Waimea Canyon and Kōke‘e State Parks, residents believe there are better opportunities to capture visitor spending. Adding signage and installing public restrooms in central locations such as Lucy Wright Park and Hofgaard Park will improve the overall visitor experience. Another opportunity is a new resort similar in form and character to the Waimea Plantation Cottages. Additional overnight accommodations will increase visitor spending at local businesses.

Waimea could position itself as an educational hub strengthened by satellite community college classes in town. Locating college classes and training programs in Waimea will better serve Westside students, especially with Keiki-to-Career and workforce development programs. Higher education institutions could collaborate with high school and community partners to offer courses in agriculture, healthcare, education, and trade skills.

Residents envision the mill site as a place for community celebrations such as the annual Waimea Town Celebration and a central place of commerce for farmers markets, local vendors, and food trucks. While the Westside prides itself in sports and recreation, its feasibility as an economic driver may depend on the success of other businesses such as the resorts and additional restaurants.

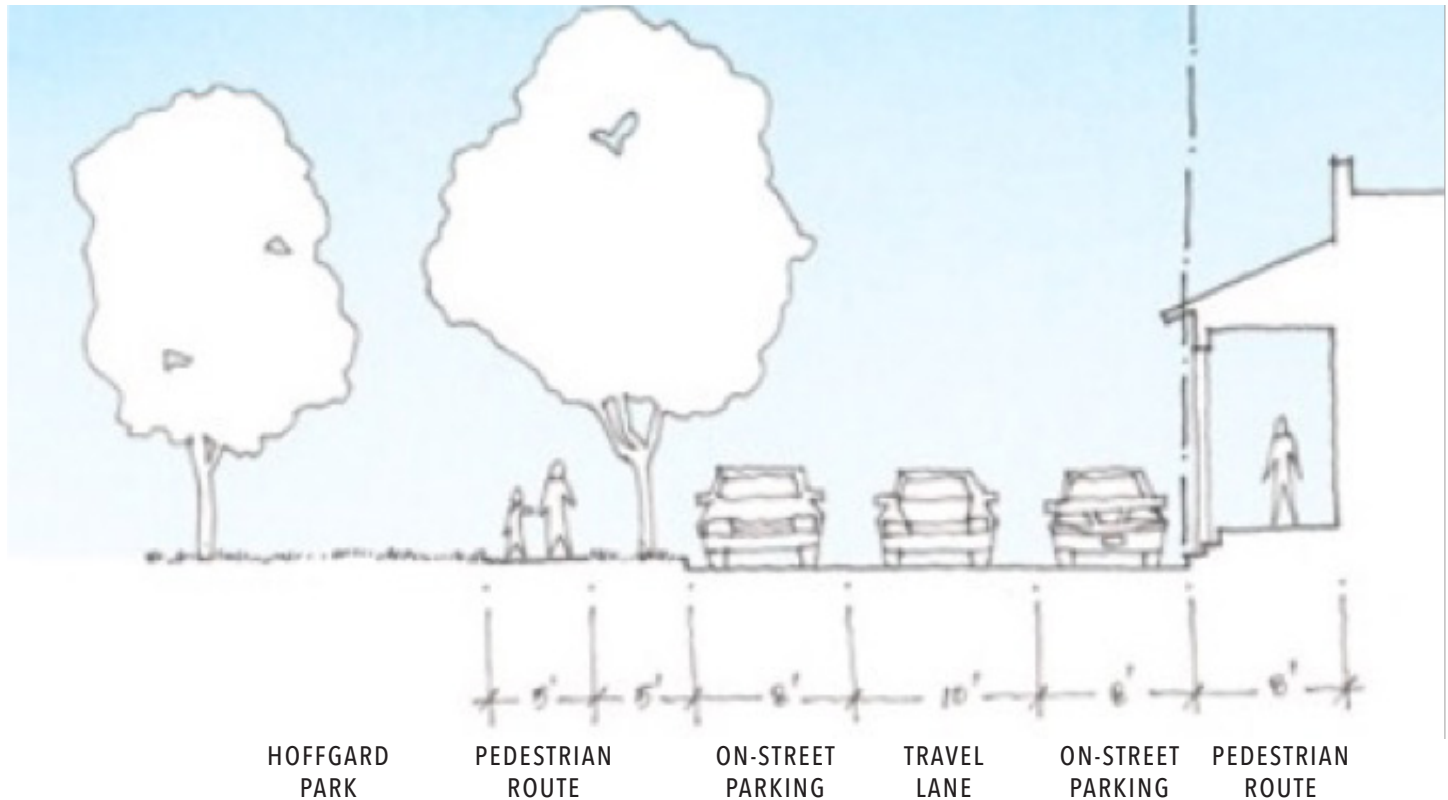


FIGURE 8 | Waimea Road Festival Street Concept.

Transportation and Circulation Concepts

The Circulation Map for Waimea (Figure 42) shows safe routes and shared-use paths connecting neighborhoods with schools, parks, West Kaua‘i Medical Center, and the commercial areas of Kaumuali‘i Highway and Waimea Road. Congestion and safety are addressed initially through signalization of the intersection of Kaumuali‘i Highway and Waimea Canyon Road. In the long term, depending on adjacent land uses, a roundabout may be a preferred solution. Shared-use paths on both ends of town connect neighboring towns to Waimea and may also serve as secondary emergency evacuation routes.

Waimea Road may be designed as a “festival street” that serves commercial activity but could also be closed to vehicle traffic for community celebrations. Kahakai Road may be designed as a one-way or two-way shared street with space for bicyclists and pedestrians.



HANAPĒPĒ TOWN PLAN

Community Vision

The vision for Hanapēpē is to protect the existing historic buildings, develop supportive infrastructure and facilities to enhance the commercial environment, and improve the livability of the residential neighborhoods. Small-scale development, along with additional shared spaces, will produce a more walkable, mixed-use environment.

Aerial view of Hanapēpē Town. © EagleView Technologies, 2020.

Issues and Opportunities

Hanapēpē is a small town framed by steep cliffs, with the deep shadows of Hanapēpē Valley beckoning in the distance. Its location at the base of the river valley bestows its scenic beauty and unique character. A small number of homes are located in and around Hanapēpē Town, but the majority of the area's residents live upland in the single-family subdivisions of Hanapēpē Heights or 'Ele'ele. Between 1960 and 2010, Hanapēpē-'Ele'ele experienced the

highest rate of growth in West Kaua'i, primarily due to new subdivision development. These upland neighborhoods have stunning views but are physically separated from the town core.

Hanapēpē Town is known for its historic buildings, quirky charm, and unique features like the swinging pedestrian bridge built in 1911. The town's primary activity area is located to the east of the bridge, behind

the levee-protected south bank of the Hanapēpē River. The area also hosts Friday Art Night, a successful weekly street fair popular with locals and tourists.

Today, Hanapēpē Art Night and the ongoing restoration of several buildings, including the Aloha Theatre, have helped breathe life back into Hanapēpē Town. The Art Night has attracted many visitors and residents but has increased traffic and caused tensions between business owners and sidewalk vendors. Business owners in the town have complained about the lack of parking and clean restrooms needed to stimulate economic development on Friday nights.

Residents have also mentioned the poor connectivity within the area and the dangerous intersection at Kona Road next to the Hanapēpē Fire Station. In addition to the activity in the historic town core, family businesses continue to operate along Kaumuali'i

Highway. During football season, Hanapēpē Stadium provides economic activity for surrounding businesses. In addition, Hanapēpē Town hosts events such as the annual orchid show and Kaua'i Chocolate and Coffee Festival, which generate income for the town.

An upcoming DHHL project will allow Hanapēpē to expand westward and better serve Native Hawaiian housing needs while generating economic activity. DHHL is a major landowner in the area, controlling a large commercial lot within the town core and the greenfield area to the west of Hanapēpē Heights. DHHL's Hanapēpē Homestead Community Master Plan (undergoing environmental review in 2020) will provide residential and subsistence agriculture homesteading lots to Native Hawaiians on DHHL's waitlist. The project will become DHHL's largest residential and agricultural community on the westside.



Woman standing on Hanapēpē Bridge, 1940. Courtesy of Harry Sakoda.

Goals and Objectives

Community Design

1. Maintain the historic character of Hanapēpē Town as a thriving center for residents, artists, craftspeople, farmers, and small businesses.
 - a. Preserve the character of the historic shopfronts.
 - b. Amend zoning standards to allow for preservation and rehabilitation of historic structures and storefronts.
 - c. Implement the Hanapēpē Road improvements developed through a community process.
 - d. Encourage incremental residential infill in the town center.
 - e. Encourage mixed-uses in the town core.
2. Revitalize the Western Portion of Hanapēpē Town.
 - a. Encourage the State to develop its vacant and underutilized properties in the area.
 - b. Provide public parking lot in town with safe access to the 1911 Hanapēpē Bridge.
3. Support additional housing in Hanapēpē Heights and improve safe connections between the neighborhood and town.
 - a. Encourage additional housing on existing lots.
 - b. Discourage speeding on Moi Road by installing traffic-calming features.
 - c. Provide safe pedestrian and bicycle access from Hanapēpē Heights to both Hanapēpē Town and Salt Pond Beach Park.
 - d. Provide sewer connections to unserved homes in Hanapēpē Heights.

Heritage Resources

1. Maintain the historic character of Hanapēpē Town as a thriving center for residents, artists, craftspeople, farmers, and small businesses.
 - a. Promote historic tours and provide informational displays in town.
 - b. Update and maintain the inventory of historic properties, including churches and bridges, and identify properties for nomination to the Hawai'i and/or National Registers of Historic Places.
 - c. Support efforts to memorialize the "Hanapēpē Town Massacre," also known as the "Filipino Sugar Workers Strike," of 1924.
2. Acknowledge and protect the abundant cultural and natural resources in and around Hanapēpē.
 - a. Protect and preserve the tradition of hana pa'akai at Pū'olo.
 - i. Request that HDOT close the Port Allen Airport and decommission the runway. Until that occurs, ensure all airport uses are evaluated to mitigate impacts to cultural resources.

- ii. Improve signage at the access to salt beds.
 - iii. Support continued studies, such as hydrology studies, to mitigate impacts on salt production.
 - iv. Create a cultural and environmental management plan for Pū'olo led by cultural practitioners of the ahupua'a.
 - v. Explore the potential designation of the salt beds area as a cultural preserve.
 - vi. In consultation with Hui Hana Pa'akai o Hanapēpē and the community, assess suitable solutions to Ka'alani Road that will prevent or mitigate negative impacts to the salt beds.
 - vii. Support restoration of sand dunes and coastal biodiversity.
- b. Enforce the laws and regulations which prohibit driving on the beach.
 - c. Acknowledge the Hanapēpē Town Massacre, 'Ai Pua'a, and other significant historic events in Hanapēpē.
 - d. Restore the natural and cultural resources of the Hanapēpē Valley.
3. Protect and maintain Hanapēpē's cemeteries through community-based stewardship and management:
 - Hawaiian Cemetery (also called "Filipino Cemetery")
 - Japanese Cemetery (at Pū'olo Road)
 - Kaua'i Veterans Cemetery
 - Filipino Cemetery (located on same parcel as the Chinese Cemetery)

- Chinese Cemetery (also called "Catholic/Chinese Cemetery")
- Japanese Cemetery (also called "Hanapēpē Heights Japanese Cemetery")
- First United Church Cemetery

Resiliency and Infrastructure

1. Address concerns pertaining to Hanapēpē River flooding and levee maintenance.
 - a. Recertify the Hanapēpē River levee and ensure the improvements will also accommodate SLR projections.
 - b. Encourage stewardship agreements to improve maintenance of waterways and natural drainage systems.
 - c. Maintain and regularly dredge the Hanapēpē River to ensure sufficient flow, transport, and expulsion of river sediment.
2. Increase the resiliency of vulnerable neighborhoods makai of Kaumuali'i Highway and in the floodplain.
 - a. Identify exposed neighborhoods along the coast highly vulnerable to SLR hazards, and adopt building and zoning standards to address and mitigate these hazards. Use the best available science to regularly evaluate vulnerable areas.
 - b. Implement flood accommodation measures for existing development or redevelopment. These include elevation of buildings, LID design standards such as permeable surfaces, and adding "freeboard" standards to the floodplain ordinance.

- c. Maintain the hardened and rocky shoreline immediately west of the Hanapēpē River.
 - d. Provide public education regarding regulatory mechanisms that affect development in areas threatened by SLR.
3. Support community-level resiliency and preparedness efforts.
 - a. Support and strengthen the community’s active participation in the HHARP, so it serves as a model for other West Kaua‘i communities.
 - b. Work with the HDOT and private landowners to make available alternative routes, including river ford crossings, for emergency evacuation purposes.
 4. Construct a new multi-purpose facility in Hanapēpē to serve as an emergency/evacuation shelter, disaster preparedness and recovery hub, and neighborhood center outside of an inundation area located on State-owned lands west of Hanapēpē River and the Hawaiian cemetery, makai of Kaumuali‘i Highway.

Shared Spaces

1. Improve Hanapēpē’s shared spaces to support community life, recreation, and economic development.
 - a. Improve Hanapēpē Town Park so it can continue to serve as a multi-use facility with facilities for youth, such as a skate park.
 - b. Reconstruct the restroom at Hanapēpē Town Park and locate it closer to Hanapēpē Road.



Hanapēpē Art Night. Courtesy of Jan Brookshier.

- c. Provide public and semi-public spaces for activities such as markets, festivals, and Friday Art Night.
 - d. Maintain the historic swinging bridge as an important pedestrian link and visitor attraction.
 - e. Reconstruct or replace the historic Hanapēpē Road Bridge (1911 Bridge) for safety, ADA access, and a variety of public uses such as fishing and crabbing.
 - f. Reserve additional land adjacent to and located mauka and westward of Salt Pond Beach Park for future park expansion.
2. Encourage safe and accessible local recreation along the levee.
 - a. Provide a shared-use path on the levee with access to the river for uses such as fishing, crabbing, and paddling.
 - b. Develop the State parcel along Iona Road as a pocket park to enhance green space along the levee.
- a. Support tours at art galleries, food processing operations, and manufacturing shops.
 - b. Encourage community-driven economic events in Hanapēpē.
 - c. Install public restrooms in Hanapēpē Town for residents and visitors and ensure proper maintenance.
 - d. Create additional parking stalls and identify overflow parking areas within Hanapēpē Town for event parking.
3. Support the creation of a contemporary Hawaiian space where community, culture, and commerce intersect.

Economic Development

1. Strengthen Hanapēpē Town as a creative hub with art, entertainment, and light manufacturing.
 - a. Promote adaptive reuse and the rehabilitation of historic buildings in Hanapēpē Town.
 - b. Create spaces within or adjacent to Hanapēpē Town for light industrial businesses such as upholstery, auto repair, woodworking, and welding.
2. Promote Hanapēpē Town's unique character and support its small businesses.



FIGURE 9 | Conceptual vision of Hanapēpē Town revitalization September 2018 design workshops. Courtesy of Opticos Design.

Town Plan Concepts

The Hanapēpē Town Plan Map is provided in Figure 16.

Hanapēpē Town Center – East

Activation of the town center will be encouraged by physical improvements to Hanapēpē Town, especially those identified in the Hanapēpē Road Design Charrette. The proposed parking and streetscape improvements (including Main Street style street lighting) are intended to make the area safer and more attractive to

mixed-use development. Important historic buildings, such as the Aloha Theatre, should be revitalized and improved.

This area will benefit from updated zoning standards to encourage additional housing along with more shops and services. Such infill is already occurring behind existing storefronts and can be done unobtrusively, preserving the town's character. The levee can be improved to facilitate public and recreational use.

Hanapēpē Town Center – West

Historically, the west end of Hanapēpē Road was a retail environment similar to what is found today on Hanapēpē Road to the east. Today, there is less pedestrian traffic and several vacant buildings, many of which are owned by the State. There is also a community desire to extend revitalization efforts along the western portion of Hanapēpē Road across of the 1911 bridge. Rehabilitation of these older buildings, in conjunction with the road improvements—and attractive, downcast street lighting—can create an environment that will attract retail and pedestrian activity. The creation of a parking lot on the State-owned property and a connecting walkway using the bridge will provide a critical link east to Hanapēpē Road. Expanded parking, improved signage, enhanced pedestrian connections, and nighttime visibility will benefit high traffic events like Art Night.

DHHL Hanapēpē Homestead Community

DHHL has prepared a master plan for a residential and subsistence agriculture homestead community on 365 acres to the west of Hanapēpē Town and Hanapēpē Heights. The purpose of the project is to provide residential and subsistence agriculture homesteading opportunities to Native Hawaiians on DHHL's waitlist. The project will include a mix of land uses such as subsistence agricultural, residential, commercial, and community use. A new commercial

node will be established along Kaumuali'i Highway to the west of the existing town core, along with a park and community center. Vehicular access to the interior parcels will be provided through Hanapēpē Heights and a mauka extension of Lele Road.

Pū'olo

Pa'akai is highly valued and has been harvested at the salt beds at Pū'olo for centuries. During summer months, recognized practitioners cultivate pa'akai for use in cooking, medicine, and ceremonies. The salt beds are vulnerable to development, flooding, and wave overwash, which impact the salt-making process. This area is also the site of Burns Field airstrip, which initially opened in 1929 as a military airfield. Today, the HDOT's Airports Division leases space and use of the airport to recreational aviation companies.

The community has expressed concern and frustration over the airport's environmental and cultural impacts to the salt beds. There is a desire to prioritize the cultural significance of the area and eliminate the impact of continued commercial aviation activities to hana pa'akai (the making of salt). Due to the incompatible airport use, the facility should no longer serve as an airport and the runway should be decommissioned. In the meantime, all commercial aviation activity should be carefully scrutinized to mitigate impacts to hana pa'akai.

Economic Development Concepts

Hanapēpē Town should continue to be promoted as a creative hub for artists, entertainers, craft makers, and entrepreneurs to collaborate and sell their goods to residents and visitors. Weekly events, such as the Friday Art Night and the farmer's market at the park, as well as annual festivals, such as the Kaua'i Chocolate and Coffee Festival, have helped to generate econom-

ic activity within the town. These events and partnerships could be strengthened through a campaign of regional or town branding. The restoration of historic buildings, including the Aloha Theatre, can provide more space for retail, restaurants, and light industrial manufacturing uses (i.e., wood working shops, automobile repair shops, etc.). Commercial activity could

also be expanded in the western portion of Hanapēpē Town along Kaumuali‘i Highway. This area can be activated with more restaurants and local food pro-

cessing companies, such as Kaua‘i Kookie and Salty Wahine, which manufacture and sell their value-added products on site.

Transportation and Circulation Concepts

From a circulation perspective, Hanapēpē, ‘Ele‘ele, and Port Allen are closely connected. The Circulation Map for Hanapēpē-‘Ele‘ele (Figure 43) shows safe routes connecting the neighborhoods of Hanapēpē Heights and ‘Ele‘ele Nani, as well as the existing and future neighborhoods makai of Kaumuali‘i Highway with Hanapēpē Town, ‘Ele‘ele Shopping Center, Port Allen, ‘Ele‘ele School, Hanapēpē Library, Hanapēpē Neighborhood Center, Hanapēpē Stadium, and Salt Pond Park.

Transit access will be improved through a local shuttle connecting Hanapēpē Heights and Port Allen to the mainline route along Kaumuali‘i Highway and to Kōloa.

The Hanapēpē Road design improvements should be completed, along with parking and sidewalk improvements on Kona Road, to support safety and economic development in Hanapēpē Town, as envisioned in the Hanapēpē Road community design workshop.

Traffic flow along Kaumuali‘i Highway through Hanapēpē is congested during the afternoon hours. Pedestrian safety and congestion management along Kaumuali‘i Highway through Hanapēpē should be carefully considered and a pedestrian safety and congestion management plan developed in collaboration with HDOT. Elements of the plan may include the following:

- Removal of the marked crosswalk on Kaumuali‘i Highway at the eastern intersection of Hanapēpē Road.
- Installation of a RRFB crosswalk or pedestrian hybrid beacon at the intersection of Kaumuali‘i Highway and Kona Road.
- Installation of bulb-outs and/or other traffic calming devices near crosswalks.
- Addition of a left turn lane for vehicles turning left from Kaumuali‘i Highway to Kona Road and/or a merge lane for vehicles turning left from Kona Road onto Kaumuali‘i Highway.



FIGURE 10 | Hanapēpē Road Design Concepts

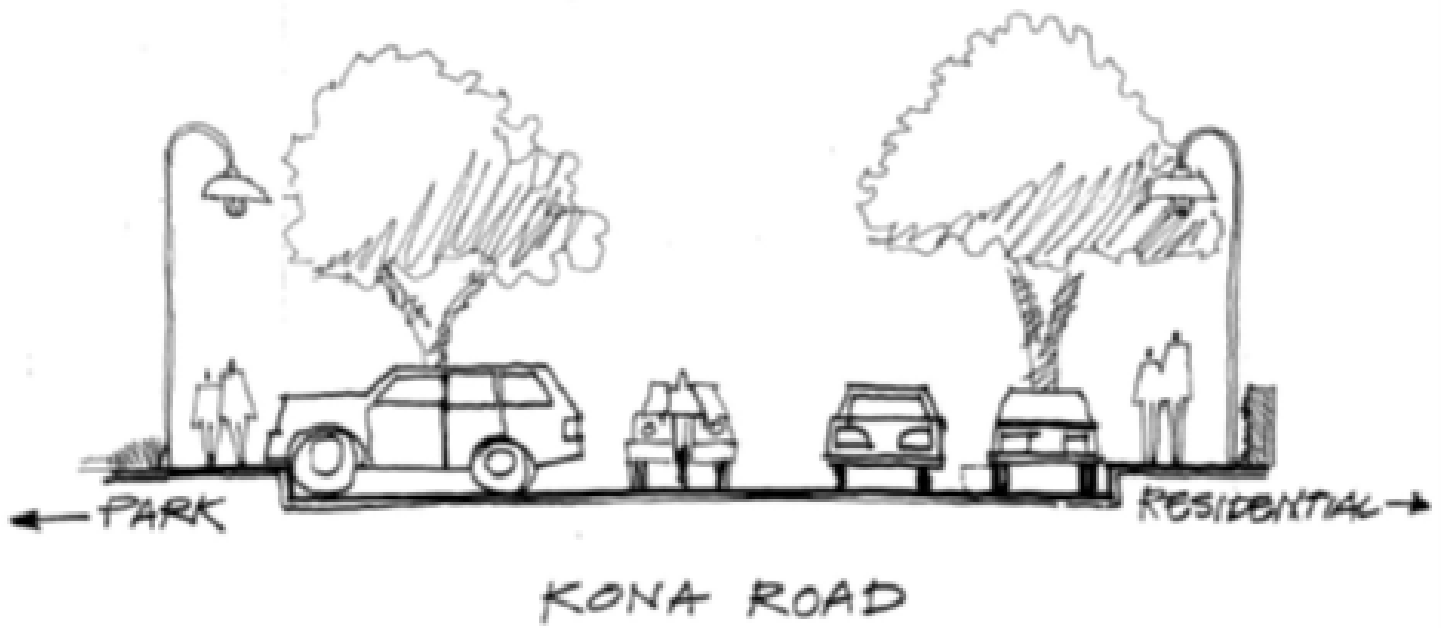


FIGURE 11 | Kona Road Design Concept



'ELE'ELE AND PORT ALLEN TOWN PLAN

Community Vision

'Ele'ele is a growing residential community that is connected to the thriving commercial and industrial hub of Port Allen. The eastward expansion of the community is done in thoughtful increments and provides amenities which contribute to the entire community's quality of life. New planned development is compact, affordable, and meets the Westside's housing demand in a variety of housing types. Public access to the shoreline is maintained as are safe connections to shopping areas and schools.

Aerial view of 'Ele'ele and Port Allen Town. © EagleView Technologies, 2020.

Issues and Opportunities

The community of 'Ele'ele, known for its sweeping views of the ocean and Ni'ihau, is the gateway to the Westside. In all of West Kaua'i, this area has the greatest potential for transformative change due to existing zoning, approved projects, and available infrastructure. It is the region's only major industrial center and includes the County's largest affordable housing development—Lima Ola. Most of the area is at a higher elevation, which makes it well-primed

for future growth by locating new development away from SLR impacts.

The 'Ele'ele Shopping Center is located at the intersection of Kaumuali'i Highway and Waialo Road. This area holds important local businesses such as Big Save and a hardware store. Improvements to coastal trails, pocket parks, and sidewalks along Waialo Road



Street-front buildings with quonset huts in rear, Port Allen, 1945. Courtesy of Kaua'i Historic Society.

could give residents and visitors the opportunity to enjoy scenic views while also increasing connectivity.

Adjacent to 'Ele'ele at the bottom of Waialo Road is Port Allen—an active harbor and industrial hub located makai of the highway. Port Allen includes a mix of waterfront industrial operations, visitor tour activities, and residential development. Port Allen maintains industrial uses near the harbor for utility companies and is home to a large solar farm. New development east of Kaumuali'i Highway and makai of Halewili Road can provide needed housing for the Westside, but there is currently limited multimodal connection to the existing activity centers of Port Allen and Hanapēpē.

Goals and Objectives

Community Design

1. Connect neighborhoods to town centers.
 - a. Create additional safe routes between residential areas to the 'Ele'ele Elementary School.
 - b. Repair the historic pedestrian bridge between the 'Ele'ele Nani neighborhood and 'Ele'ele Shopping Center.
2. Ensure new development is phased and occurs in compact increments.
 - a. Plan for a series of interconnected neighborhoods that are compact and walkable.
 - b. Ensure infrastructure is adequate to support planned development.
 - c. Consider roundabouts at key intersections, such as at Waialo Road, to improve safety, reduce congestion, and slow traffic speeds while maintaining traffic flow.
 - d. Phase development in adjacent increments to ensure connectivity is maintained.
3. Develop Waialo Road as a pedestrian-friendly corridor
 - a. Redevelopment of 'Ele'ele Shopping Center should take advantage of scenic views and include shared spaces with seating.
 - b. Future development makai of Halewili Road should maintain public access to the shoreline with connections to

businesses, services and facilities along Waialo Road.

4. Support expansion of industrial zoning, if additional space for industrial uses is needed.

Heritage Resources

1. Celebrate the cultural and natural resources of 'Ele'ele, including the areas of Port Allen, Numila, and Wahiawa.
 - a. Provide access to coastal resources for recreation and traditional practices.
 - b. Preserve Numila as a Historic Plantation Town.
 - c. Identify and protect the area's historic and plantation-era cemeteries.
2. Acknowledge and protect the McBryde Sugar Plantation Cemetery, also known as the Port Allen Cemetery.

Resiliency and Infrastructure

1. Protect Port Allen's critical facilities.
 - a. Ensure new development and renovations at Port Allen Harbor are elevated above base flood elevations with additional freeboard to account for SLR.
 - b. Develop an emergency action plan for Port Allen Harbor in coordination with HDOT in the event of a disaster.
 - c. Ensure renovations to breakwaters, ramps, and piers address SLR.



Boats head out at the start of the annual Port Allen Fishing Tournament held in June.

Shared Spaces

1. Protect coastal open space and access from Port Allen to Kalāheo Gulch.
 - a. Require a coastal buffer of at least one hundred feet for any new development.
 - b. Support safe public access while protecting the coastal area's natural and cultural resources.
 - c. Consider options for coastal easements or the acquisition of property for public access and management of protected areas.
2. Build upon and protect the scenic quality of the area.
 - a. Establish a scenic overlook and mini parks along the area's ridges and cliffs.
 - b. Remove invasive shrubs from roadsides and revegetate with native plants.
 - c. Increase public access to mauka areas.
 - d. Redevelop the Hanapēpē Lookout as a gateway for West Kaua'i. Create a memorial and/or educational display that provides information about the historic 'Ai Pua'a.
 - e. Protect mauka and makai views along the scenic corridor.

Economic Development

1. Promote Port Allen and 'Ele'ele as a node of industrial, recreational, and visitor activity.
 - a. Strengthen links between boat tour activities, Kaua'i Coffee, and visitor-serving businesses, with Port Allen serving as a central staging area for agritourism.
 - b. Work with the Kaua'i Visitors Bureau to promote visitor activities in Port Allen.
 - c. Attract related businesses such as boat repairs and product manufacturing.

Town Plan Concepts

The 'Ele'ele-Port Allen Town Plan Map is provided in Figure 17.

Waialo Road and Port Allen

Waialo Road provides access to recreational, commercial, and industrial activities in Port Allen. The streetscape is a mix of auto- and pedestrian-oriented frontages, but there is poor connectivity between residential areas, the shopping center, and the harbor. Redevelopment at 'Ele'ele Shopping Center, along with new development along Waialo Road, could improve conditions to create a main street spine that establishes a pedestrian-friendly center of activity.

Port Allen has the potential to accommodate more mixed uses including commercial activity, affordable housing, and light industrial operations within



Single-family neighborhood in 'Ele'ele.

walking distance of Lima Ola and future development. There are opportunities for infill development and sidewalks along Waialo Road, as well as commercial activity in the eastern, undeveloped portion of land near Kaumuali'i Highway. Future development in this area should maintain scenic corridors and ocean views from the highway.

'Ele'ele Nani and Lima Ola

Development should respect the community's wishes to protect the area's scenic quality and coastal open spaces. Additional shared spaces that allow people to sit and enjoy the views would enhance community life. Unlike Hanapēpē Heights, 'Ele'ele Nani has direct pedestrian access to Hanapēpē Town via a path carved down the cliff face. This is also a safe route to school for students attending 'Ele'ele Elementary School. Adjacent to the school is 'Ele'ele Nani Park, which is an underutilized passive park. As new residential neighborhoods are added along 'Ele'ele's eastern edge, there is concern about the highway's high traffic volumes and speed. Lima Ola should be served by improved highway crossings and an alternate pedestrian/bicycle route paralleling the highway.

Of particular concern is safe access for students walking to 'Ele'ele Elementary School and ensuring future residents can access businesses in Port Allen and 'Ele'ele by foot or bicycle to minimize vehicle trips. Existing pedestrian infrastructure such as the pedestrian bridge to 'Ele'ele Shopping Center and the hillside path between Hanapēpē Road and 'Ele'ele School need repair and maintenance in order to provide better connections. There is also concern about the Hanapēpē Valley lookout, located on the highway's extended shoulder, which feels unsafe due to high speed traffic along the highway.

Economic Development Concepts

Port Allen and 'Ele'ele are dependent on tourism and agriculture but are supported by other industries such as small businesses and industrial uses. Although Port Allen receives its share of visitor traffic, there is potential to improve visitor spending in Port Allen with opportunities that take advantage of the fishing and tour boat industry. A fish market in Port Allen could supply restaurants and retail stores, who would then benefit from serving local fish and selling value-added products. Industrial lands near the harbor could accommodate boat repair services and fishing retail stores to support the fishing and boat industries. A main street environment along Waialo Road could create a pedestrian-friendly area where visitors spend their time exploring souvenir shops, restaurants, and retail stores. The Hanapēpē shuttle could also facilitate economic activity by connecting Hanapēpē,

Port Allen, and 'Ele'ele between town centers and transporting visitors and residents along Waialo Road from the harbor to the shops.

'Ele'ele's commercial area will continue to primarily serve residents and some visitors. Linking Port Allen and 'Ele'ele Shopping Center will encourage more visitor traffic to support 'Ele'ele Shopping Center. New commercial development east of Waialo Road should build upon the existing commercial corridor to serve future residential and visitor needs in this area. Kaua'i Coffee, the nation's largest coffee farm, is a major employer in 'Ele'ele and Numila. Along with its agricultural production, Kaua'i Coffee conducts farm tours, offers tasting experiences, and provides a small retail shop for visitors to purchase coffee and other souvenirs.

Transportation and Circulation Concepts

From a circulation perspective, Hanapēpē, Port Allen, and 'Ele'ele are closely connected. The Circulation Map (Figure 25) for the area shows safe routes and shared-use paths connecting the neighborhoods of Hanapēpē Heights, 'Ele'ele Nani, and existing and future neighborhoods makai of Kaumuali'i Highway with Hanapēpē Town, 'Ele'ele Shopping Center, Port Allen, 'Ele'ele Elementary School, Hanapēpē Library, Hanapēpē Neighborhood Center, Hanapēpē Stadium, and Salt Pond Park.

In 'Ele'ele, traffic calming improvements along Kaumuali'i Highway between both ends of Laule'a Street is critical to the success of this network. Safety improvements at the intersection of Māheha Road and Kaumuali'i Highway are especially important for safe access from 'Ele'ele makai neighborhoods to 'Ele'ele

Elementary School. A signalized at-grade pedestrian crossing is a high-priority short-term improvement, but in the long term, a grade-separated pedestrian crossing should be investigated. Grade-separated crossings need to consider ADA access, security, and cost. Given the steep topography entering 'Ele'ele and heading westbound on Kaumuali'i Highway, traffic calming is needed to reduce speeds approaching the Māheha Road intersection, and may include speed sensors, signage, advance signal lighting, lane markings, or other devices. Since Kaumuali'i Highway is within State jurisdiction, these options need to be coordinated with HDOT.

As an alternative to a grade-separated crossing, another solution would be to reclassify this portion of the highway to a local County road and to divert



Port Allen or Waialo Road.

regional traffic from Kaumuali‘i Highway to Halewili Road (Route 540). A new highway connection could be provided north of Lima Ola subdivision to Halewili Road without crossing Wahiawa Gulch. Another alternative would be to divert Kaumuali‘i Highway through Halewili Road from Kalāheo. Further discussions with HDOT are needed to determine the best circulation alternative for this corridor and to move forward with an implementation plan if found to be feasible.

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Part IV: Other Communities and Significant Areas

This section addresses West Kaua‘i’s agricultural communities and other significant areas which are predominantly in the State Land Use Agricultural or Conservation District. Some of these areas are under control of a single entity (such as a large private landowner) or are directly managed by the State or Federal government. There is typically limited County infrastructure in these areas. Additionally, land use policy and permitting within the State Land Use Conservation District is under the jurisdiction of the State Board and Department of Land and Natural Resources.

Successful management of West Kaua‘i’s conservation and large-tract agricultural areas are dependent on well-coordinated partnerships between multiple State and Federal agencies, with input from the County. For example, it is the State that coordinates management of Kōke‘e, Waimea Canyon, and Polihale. The West Kaua‘i Community Plan, along with the GP are primary mechanisms for County input into State and Federally-managed plans and areas. Implementation for the areas in this section will primarily occur through the coordinated actions of government agencies and large landowners.



Island of Ni'ihau. Photo taken from Wikipedia.



View of Lehua.

A. Ni'ihau, Lehua, and Ka'ula

Description

Ni'ihau lies approximately seventeen miles west of Kekaha across the Kaulakahi Channel. The island is seventy square miles and within the State Land Use Agricultural District. It was purchased during the reign of King Kamehameha IV, Alexander Liholiho 'Iolani, in 1864 by Elizabeth McHutchinson Sinclair. The island is privately owned by the Robinson Family. 'Ohana living on the island make and sell shell lei in order to supplement their income. The population of Ni'ihau was 170 people during the 2010 U.S. Census.

Both Ka'ula and Lehua islets are in the State Land Use Conservation District. Ka'ula was used as a military bombing range from 1952 to 1978. After this time, management was assumed by the State Department

of Land and Natural Resources (DLNR) as a State Seabird Sanctuary. There is still risk of unexploded ordinances on the isle; therefore, permission is needed before landing on the island, although fishermen and divers do occasionally frequent the area. Lehua is also a Seabird Sanctuary managed by DLNR.

Issues and Opportunities

The Island of Ni'ihau has remained relatively unchanged for the last 150 years. Tourism, however, has altered Ni'ihau's ranching economy by adding private tours and recreational ocean activities. This change does not come without impacts to a traditional community even if Ni'ihau is still generally closed to non-residents. Many of the island's residents are also relocating to Kekaha and Waimea. Continued access to Ka'ula and Lehua for fishing and diving are also concerns for West Kaua'i community members.

Partnership Actions

1. Support the perpetuation of Ni'ihau language and traditions.
2. Encourage continued communication between the community, public agencies, and landowners regarding commercial and recreational fishing, access, management, and safety in the Kaulakahi Channel.



Mānā Airport. Courtesy of Kauaʻi Historic Society.

B. Mānā

Description

Before sugar was extensively cultivated in this region, the Mānā Plain featured expansive wetlands, ponds, sand dunes, and beaches. Forests covered the lower ridges and down into the valleys that included running streams draining into the wetlands of the area (Handy 1972). Mānā is known traditionally for its mirages (Kawailiʻulā o Mānā), said to be caused by the “peculiar action of the sun” (ʻŌlelo Noʻeau 18, Pukui) and rolling mists of the area. One of the many ahupuaʻa in this area was named for the god of mirages, Limaloa, who was the brother of Mānā, and Kaunalewa, whose name is given to an adjacent ahupuaʻa that was famous for its coconut grove. Under certain moons of the year, a village appears where a tall man, said to be Limaloa, can be seen walking about. This village can only be seen by the light of the moon and quickly vanishes from sight. In 1885, an eyewitness account of this mirage was published in a local newspaper.

Area Descriptions

Polihale

Polihale is the place where spirits leap into Pō. It is also known as “The House of the Dead”—a final resting place. Mānā is also known for its makahiki ceremony, where chiefs from across Polynesia would come by canoe, lined up along the stretch of beach from Polihale to Nohili, to find prospective wives. The hula platform at Polihale was used as part of this ceremony up until the 1920s (Flores and Kaʻohi, 1992; personal communication with Tutu Margaret Kilauano ʻAipoʻalani).

Nohili

Nohili is known for its scenic coastal views and resources, and especially its sand dunes. Traditional house sites were once located on the mauka side of the dunes. Nohili is more commonly known as Barking Sands because of the sound that is made when the wind blows or when a person slides on the sand, which sounds like a dog barking (Flores and Kaʻohi, 1992). Access to Nohili is limited, as it is within PMRF. However, heritage resources such as iwi kūpuna and native flora and fauna are still under threat from coastal hazards and erosion as well as invasive species such as kiawe.



Aerial view of Mānā Raceway Park near Kekaha. Courtesy of R30k Productions.

During the 2019 summer solstice, a new crypt was dedicated at PMRF to provide a resting place for iwi kūpuna inadvertently exposed due to erosion at Nohili. The Navy consulted with lineal descendants of Nohili to develop protocol for the reinternment of nā iwi. From this time forward, the crypt will be open each summer solstice for family members to place iwi in the crypt. The Navy is also consulting with lineal descendants on the Nohili dune restoration project. These projects exemplify how a landowner can work with lineal descendants and traditional practitioners to manage and protect heritage resources and provide access.

Pacific Missile Range Facility

The Pacific Missile Range Facility—PMRF (also known as “the Base” or “Naval Base”)—is the world’s largest testing and training missile range. PMRF

occupies roughly 2,385 acres along 8 miles of beach from Nohili to Kekaha. It is the only facility of its kind that can simultaneously track submarines, surface ships, aircraft and space vehicles. It includes a runway, housing, and facilities for its workers. PMRF operations include support facilities at Port Allen, Mākaha Ridge, Kōke‘e State Park, and a portion of Ni‘ihau.

The occupation of Nohili for air and marine activity began in 1921 when a portion of the area was reserved by Kekaha Sugar Company for use by private planes. In 1940 the United States Army took over the area and renamed it the Mānā Airport. The runway was expanded a year later and was heavily used by the military during World War II. In 1954 Mānā Airport was renamed Bonham Airforce Base. Naval operations began in 1956 with the testing of the

The 165th Infantry on Kaua'i



The 165th Infantry. Wikipedia.

A U.S. Army unit with roots dating back to the Revolutionary War, the 165th Infantry Regiment—originally designated the 69th Infantry Regiment and nicknamed “The Fighting 69th”—was one of the several Army units stationed on Kaua'i during WWII.

Other Army units based on the Garden Isle during the war were the 298th and 299th Infantry regiments, elements of the 27th Div., of which the 165th was a part, the 33rd Div., the 40th Div., and two regiments of the 98th Div.

On March 16, 1942, the 165th arrived on Kaua'i at Port Allen and was immediately trucked to Barking Sands, where it built and manned beach defenses in the vicinity of Barking Sands Airfield against a possible invasion by Japan.

Beginning in May 1943, this training included exercises in amphibious operations in which the regiment spent weeks disembarking from troop transports at sea onto landing craft that formed into waves and assaulted Kaua'i, O'ahu and Maui beaches.

The regiment's baptism of fire took place on Makin Atoll in Nov. 1943 when the 165th and other Army units captured the atoll by squeezing the Japanese garrison into a pocket and destroying it.

Its next combat occurred during the battle for Saipan in June-July 1944, where it was involved in brutal and bitter fighting. The 165th eliminated the last resistance on Saipan, thus ending the battle.

In fighting on Okinawa from April to June 1945, the 165th took heavy casualties battling a fanatical enemy occupying rugged terrain in formidable defenses, yet it always achieved its objectives.

Longtime Kaua'i resident C.P. “Duke” Curran (1921-2011) was stationed on Kaua'i with the 165th Infantry Regt during WWII.

By Hank Soboleski,
published in the TGI newspaper June 3, 2012

Regulus I Missile. The Base was again renamed in 1958 as the Pacific Missile Range Facility. In 1964, PMRF and Bonham were transferred to the Navy.

Most of the land surrounding PMRF remains in the State Land Use Agricultural District although the facility is not subject to State or County land use regulations. In 2004, the Navy dedicated a 5,860-acre easement as part of their Agriculture Preservation Initiative. The easement provides a buffer between the Base and potential incompatible uses that may encroach upon operations.

Over the decades PMRF has increased its connection with Kekaha and the West Kaua'i Community, such as development of the Junior Professional Program for high school students, restoration of the Kawai'ele Bird Sanctuary, establishment of protocols for the care and internment of inadvertently uncovered iwi, and support and partnership with local businesses and nonprofits.

Kawai'ele Waterbird Sanctuary

This area provides habitat for native and migratory water birds and shorebirds. The sanctuary is managed by the State DLNR Division of Forestry and Wildlife. Public facilities such as wildlife watching trails, covered viewing platforms, and informational displays are planned. There is also interest in expanding the sanctuary, although this may interfere with air operations at PMRF.

DHHL Pu'u 'Ōpae Kuleana Homestead Settlement Plan

DHHL has prepared a master plan for a portion of their land in the mountains above Mānā. The Pu'u 'Ōpae Kuleana Homestead Settlement Plan covers an area of 1,421 acres surrounding Pu'u 'Ōpae Reservoir. The plan includes an environmental assessment and will undergo review and approval in 2021. The project will include subsistence agriculture, supplemental agriculture, and community use. Two hundred forty (240) lots will be developed. The project boundaries are identified on the Regional Town Plan Map (Figure 12).

Issues and Opportunities

Mānā features Polihale State Park, a recreational destination known all over the world for its scenic views and long stretch of sandy beach. This area is also known for high concentrations of sensitive cultural and natural resources. Mānā is managed and leased by a variety of state and federal agencies. Improved coordination between the public agencies, cultural descendants, and community organizations is critical to preserve, protect, and enhance this precious area for future generations.

Mānā's wahi pana are frequently accessed by traditional practitioners and 'ohana. Practitioners and 'ohana visit areas in order to maintain them, to be spiritually renewed, as well as to spend time together. An important area for many practitioners and 'ohana is Pu'u ka Pele, which is particularly important during the summer solstice. A hula platform at Polihale is another location.

Mānā is also rich in natural resources. Native flora and fauna include the maiapilo, 'ōhai, pōpolo, and pueo. These resources are threatened by over access, driving on beaches (as well as sand dunes and berms), pillaging of burial sites, invasive species (predominately kiawe), coastal hazards, and wildfire.



The coral-fringed Po'ohonu, also known as Queen's Pond, at Polihale State Park.

Partnership Actions

1. Protect the natural resources and wahi pana of Mānā.
 - a. Work with the State DLNR, senators, and representatives to prioritize funding for the development of a master plan for Polihale State Park.
 - b. Support additional staffing and program changes to enforce laws and regulations that prohibit driving on the beaches.
 - c. Protect and restore sand dune systems, such as removing kiawe, in a manner that mitigates negative impacts to traditional burials, natural systems, and native flora and fauna.
 - d. Develop protocol and programs for protection and preservation of iwi kūpuna at Po'oahonu.
 - e. Support studies of nearshore and coastal resources throughout Polihale to determine extent of negative impacts, causes, and potential mitigation of impacts.
 - f. Encourage school curriculum that study the nearshore and coastal resources at Polihale.
 - g. Protect and preserve, and where feasible, restore cultural and natural resources at Polihale State Park and surrounding areas in Mānā.
 - h. Work with the State Department of Agriculture, State DLNR, PMRF, and other stakeholders to identify areas for wetland restoration and flood mitigation design to address flooding and polluted runoff issues impacting Mānā and Kekaha.
 - i. Acknowledge and protect the Mānā Japanese Cemetery.
2. Encourage local employment at PMRF.
 - a. Recognize PMRF as an important employment center for West Kaua'i and key partner in STREAM education.
 - b. Support programs at PMRF that provide educational opportunities and job advancement for local students and residents.
 - c. Support efforts to inventory resources at PMRF, including historic buildings, burials, and cultural practices (surfing, fishing, etc.).



A young hunter poses with a goat. Courtesy of Lono Brady.

C. Kōke‘e and Waimea Canyon

Description

Kōke‘e State Park is spread over a 4,350-acre plateau about 4,200 feet above sea level. Lookouts, hiking trails, rest stops, cabin accommodations, and fishing and hunting access in Kōke‘e make it a popular destination of both residents and visitors. The natural history museum at Kōke‘e is operated by Hui o Laka, a nonprofit organization with a vision to “connect people with the spirit of Kōke‘e” (www.kokee.org). The museum hosts annual festivals at the park’s picnic grounds, including the Banana Poka Round-Up Festival and Eō Emalani (Queen Emma) Festival. Waimea Canyon State Park is located below Kōke‘e State Park. Two hiking trails, Iliau Nature Loop and Kukui Trail, are accessible at the Waimea Canyon Lookout. Waimea Canyon is approximately 10 miles long and 3,000 feet above sea level.

Issues and Opportunities

Kōke‘e and Waimea Canyon face high visitor use and degradation from invasive species, erosion, natural hazards, and wildfire. These impacts can be mitigated through implementation of the Kōke‘e and Waimea Canyon State Park Master Plan. The vision for the Master Plan is to protect the area’s native ecosystems, scenic views, historic and cultural landscape, and recreational resources. The plan identifies multiple projects and programs to improve the visitor experience, reduce visitor impact, and maintain local access and use of these valued parks. Specific projects include the thinning of tree stands and removal of underbrush for fire mitigation. Recognizing the comprehensive scope of the master plan, implementation can be a collaborative effort with the community, visitor industry, and other agencies.

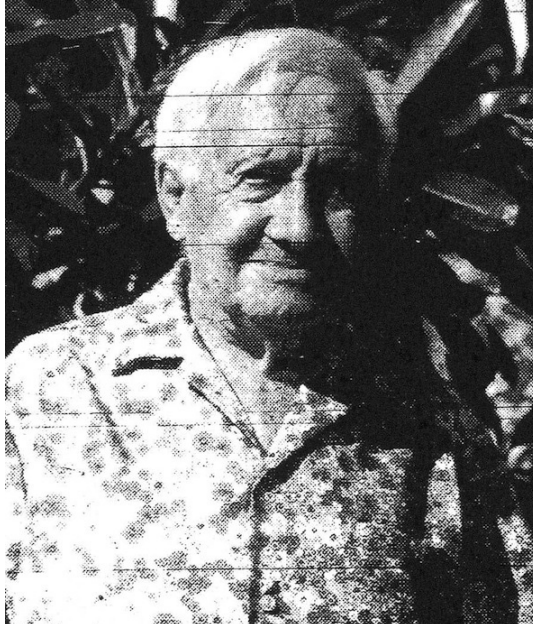


View of Waimea Canyon.

Partnership Actions

1. Actively and collaboratively manage Kōke'e and Waimea Canyon State Parks to protect the natural and cultural environments and improve the visitor experience.
 - a. Encourage shuttles and small tours to reduce traffic and overcrowding at parking lots.
 - b. Enhance visitor education on trail safety and the protection of sensitive resources.
2. Improve parking enforcement.

George Cliff, Kaua'i's 'Johnny Plumseed'



George Cliff. Garden Island Newspaper.

For 48 years, American pioneer John Chapman (1774-1845) planted untold numbers of apple trees along the Ohio and Indiana frontier and became known in folklore as "Johnny Appleseed."

Chapman's counterpart on Kaua'i is George Cliff (1896-1973)—nicknamed "Johnny Plumseed"—who for many years beginning in the late 1920s planted thousands of Methley plum trees in Kōke'e, with over 5,000 planted in the Halemanu area alone.

The Methley plum George Cliff planted was first cultivated in China, then in Japan, and from there it spread throughout the world. In Kōke'e, its juicy, sweet fruit ripens and is picked during summer from George Cliff's trees and from their progeny.

Born in New York near the Canadian border, Cliff was stationed by the Army in Hawai'i in 1922. He recalled "My first impression of Hawai'i was vividly marked by our participation in the funeral parade and services of Prince Jonah Kūhiō. The color, pageantry and wailing of women mourners impressed me greatly. I will never forget it."

In 1927, he moved to Kaua'i where he lived and worked in Kōke'e as a mountain guide, museum caretaker and tree planter for nearly 40 years. "In those days, I wanted to see more fruit on the island," he said, and Kōke'e forest ranger Al Duval initiated the transformation of that vision into reality by giving him a couple of plum trees. When Cliff learned he could propagate plum trees by cutting shoots from their branches and planting them, "Johnny Plumseed" set to work.

George Cliff also knew Kōke'e's history. To cite just one example, he discovered that the site of the Kōke'e tracking station was once the location of a rest house for Hawaiians traveling on the old trail from Waimea to Kalalau Valley.

By Hank Soboleski,
published in the TGI newspaper July 11, 2008

D. Waimea Valley

Description

Waimea Valley is a rural community flanked by the rising cliffs of Waimea Canyon. Several dozen agriculturally zoned lots hug the banks of the Waimea and Makaweli Rivers. Vehicle access is provided on unimproved roads and river ford crossings.

The area is famous for the Menehune Ditch, a stone-lined 'auwai that still channels water to the plains below. According to legend, the ditch was built in one night by the Menehune. Other heritage resources include the swinging bridge and kalo terraces.

Issues and Opportunities

The agricultural parcels are vulnerable to flooding. New construction should be required to add freeboard above base flood elevations throughout upper Waimea Valley, especially where there is no levee or where the levee has been decertified. This would account for additional flood risk from SLR. Such actions would help the County join FEMA's CRS, which in turn would result in flood insurance discounts for residents.

The ford crossings and swinging bridge require regular maintenance for safety and evacuation purposes. Silt islands have accumulated in the river, which has impacted agriculture, paddling, and swimming activities. The community has organized work days to remove silt build up from the river. Another concern is rockfalls from the steep cliffs that frame the valley.



Several dozen agriculturally-zoned lots hug the banks of the Waimea and Makaweli Rivers.

Partnership Actions

1. Support evacuation planning among landowners and lessees in the valley.
2. Support agriculture, including traditional crops such as kalo, in Waimea Valley.
3. Preserve Kikīaola (Menehune Ditch) and other significant historic sites and infrastructure in Waimea Valley.
4. Rehabilitate the Waimea Swinging Bridge and maintain the historic character.
5. Support community efforts to steward the Waimea River.
6. Mitigate rock falls along Waimea Valley.



Aerial of Makaweli. Makaweli can accommodate large-scale agricultural activities and has the potential to increase regional food security and generate local jobs.

E. Makaweli

Description

Agriculture is the economic driver for Makaweli. During the plantation era, Makaweli was home to two of the highest-performing sugar plantations in Hawai‘i: (1) Makaweli Plantation of the Hawaiian Sugar Co. (1889–1941), which later became Olokele Sugar Co. (1942–1994); and (2) Gay and Robinson Plantation (1885–2010), which bought Olokele Sugar Co. and its assets in 1994 (Dorrance and Morgan, 2001; Faye). When the sugarcane fields were in active production, Makaweli was a thriving agricultural community that generated jobs and established plantation camp housing for its employees.

Today, Makaweli continues to perpetuate agriculture in a post-plantation economy. Gay and Robinson

manages activities and leases such as diversified operations in pasture and livestock, slaughterhouse operations, and seed companies.

During the Sugar Plantation era, migrant labor and their families lived in communities known as “camps.” Makaweli has existing plantation camp communities, including Kaumakani, Pākalā Village, and Kā‘awanui Village. Many of these vibrant communities’ residential and commercial structures have fallen into a state of disrepair and dilapidation. There is a clear need to protect and preserve these historical structures while accommodating future uses compatible with those that have historically occurred at these camps for over a century.

Issues and Opportunities

Makaweli can accommodate large-scale agricultural activities and has the potential to increase regional food security and generate local



Makaweli Post Office.



A tree-lined avenue in Kaumakani.

jobs. Future agricultural activities may also increase the demand for more industrial lands near Olokele Sugar Mill, an area that was designated as Industrial in the 2018 GP. See the Makaweli Town Plan Map in Figure 15.

The commercial area in Kaumakani can expand with neighborhood serving uses (i.e., laundromat, farmers market, meat market, etc.) that respect the existing plantation camp character.

The historic character of the plantation camps will be perpetuated. The villages of Kaumakani are envisioned to be restored and expanded. Pākalā and Kā'awanui villages continue to provide workforce housing. Makaweli's agricultural economy is supported by commercial and industrial activities.

Kapalawai, the approved resort project for this region, can also increase tourism in this area and

generate jobs for the Westside. Other tourism opportunities for Makaweli include Ni'ihau tours and helicopter tours along with eco-tourism and agritourism ventures.



Kaumakani Store.

Partnership Actions

1. Preserve and advance agriculture as the economic driver for Makaweli.
 - a. Develop employee housing in Makaweli, including housing types with communal facilities (i.e., kitchens, laundromats).
 - b. Support the industrial rezoning of the Olokele Mill area and encourage the adaptive reuse of the mill, warehouse buildings, and former office buildings.
 - c. Support large-scale agriculture.
2. Support the expansion of the small commercial node in Kaumakani.
 - a. Allow flexible neighborhood-serving uses and preserve the building types that reflect the existing character. Market local value-added products (i.e., Makaweli Meat) and other Westside businesses.
 - b. Increase the resiliency of Pākalā Village to SLR impacts.
3. Identify the vulnerable and exposed sections of Pākalā Village and prevent intensification from occurring.
 - a. Provide a higher elevation area for vulnerable homes to retreat to in the future via a transfer of development rights or land swap opportunities.
 - b. Once retreat occurs, evacuated land should be publicly held as a buffer against future coastal hazards while also maintaining shoreline access.



Hanapēpē Valley from highway overlook.

E. Hanapēpē Valley

Description

Hanapēpē Valley is rich in cultural and natural resources and has been cultivated by kalo farmers from ancient times until the present day. The Hanapēpē Lookout affords sweeping views of the valley and mountain ranges. An abundance of water resources, including ‘ōpae, exists in the valley from the mountains to the sea. Access to the upper portions of the valley and mountains is limited and managed by Gay and Robinson. However, smaller properties still exist, which are mostly held by descendants of original tenants of the valley.

Issues and Opportunities

Community members expressed concern over the impact of invasive species, lack of access to Native Hawaiian practitioners, support for continuance of kalo cultivation, lack of sewer connection, and impacts of increased hazards to the valley. The need for hazard evacuation planning was also mentioned during the public process. Acquisition of the valley is listed as a consideration for open space funding, although the price and means to accomplish this feat may be far above the resources currently available.

Partnership Actions

1. Support the continuance of agriculture in the valley.
2. Encourage evacuation planning and coordination.
3. Encourage landowners to work with the community to protect and preserve the valley.
4. Explore the feasibility of providing sewer connection to the unserved homes in the Hanapēpē Valley residential neighborhood.



Aerial view of Wahiawa.



A row of cottages in Numila.

F. Numila/Wahiawa

Description

On the edge of the West Kaua‘i region are Numila and Wahiawa. Numila is located to the east of Port Allen where Kaua‘i Coffee Company operations occur today. Numila or the “New Mill” plantation camp was developed around the former McBryde Sugar Mill. During the plantation days, agriculture production supported by reservoirs, irrigation ditches, and a railroad. Nine camps surrounded the mill, each with their own special qualities and characteristics. Some of the larger camps were complete communities with stores, a community hall, and places of worship.

The sugar mill was converted into a Kaua‘i Coffee facility, which processes the raw coffee beans, has its own roasting facility, and sells the processed product at its visitor center. Camp 9, located adjacent to the mill, still houses seasonal workers and retirees from the McBryde Sugar Company. The other camps have since been razed and are now used for coffee cultivation and pastures.

There is an ongoing reclamation project at the former rock quarry together with an asphalt batching plant operation situated just north of Wahiawa Bay. Kaua‘i Aggregate is conducting the reclamation work and Grace Pacific owns and operates the asphalt batching plant. If operations cease in the future, the area may be reserved for recreational purposes. Kalāheo Gulch forms the community plan boundary between the West Kaua‘i and South Kaua‘i planning districts.

Issues and Opportunities

During the community outreach process, continued access to the shoreline for fishing and recreation as well as preservation and access to Glass Beach were identified as priorities. Numila was mentioned as a plantation camp that should be preserved. Although not within the West Kaua‘i region, Kukuilono (in the South Kaua‘i Planning District) was discussed extensively because of its sweeping views of West Kaua‘i. Preservation of this scenic corridor and its protection from development are concerns of the community.

Partnership Actions

1. Preserve access to coastline for fishing and gathering by the community.
2. Ensure redevelopment and renovation projects reflect the historic character of Numila.
3. Ensure that proposed development does not impede the views of West Kaua'i from Kukuiohono.
4. Support continued agricultural production in the Numila area.



Part V: Implementation

A. Overview

The WKCP will guide development and help coordinate capital infrastructure over the long term. Therefore, implementation is neither a single nor linear process; it occurs through a broad range of public and private action. Moreover, it is subject to County budgetary cycles and private landowner decision making.

The WKCP User Guide details implementation opportunities for all users of the plan. This section focuses on the adoption and implementation of the WKCP with a focus on County actions and jurisdiction. There are several short-term actions that will be implemented concurrently with plan adoption. These are described in the “Zoning Amendment Overview” below. Infrastructure and facility planning are primarily mid- to long-range actions, including those capital improvement projects that will require additional planning and funding.

The GP (2018) implemented a feedback loop where community input is continually used in the planning process. In concert with the GP, the WKCP is adaptable and responsive through an outreach program that empowers the community to evaluate policies and needed changes. Therefore, the County shall immediately develop an outreach program to work with existing community organizations and interested individuals to provide awareness of the plan and recommend needed amendments as desired by the community. These community groups include but are not limited to: E Ola Mau, Kū Kona A Ola, Hanapēpē-‘Ele‘ele Community Association, Hui Hana Pa‘akai o Hanapēpē, Kaunalewa, Kekaha Hawaiian Homestead Association, West Kaua‘i Homestead Association, Hanapēpē Economic Alliance, and West Kaua‘i Professionals Association. The Planning Department shall report on the outreach program, as well as desired amendments and policy refinement, to the Planning Commission on an annual basis.

Top-Left: Roadway and utility construction in Hanapēpē.

Top-Right: An affordable housing development under construction in Waimea.

Bottom: A historic shopfront building in Hanapēpē sits next to the Aloha Theatre (undergoing rehabilitation).

B. Short-Term Implementation

As part of Plan adoption, the Planning Department has initiated zoning map and development code amendments to align with the WKCP, including several GP amendments. The amendments will ensure that development occurring after plan adoption will be consistent with the WKCP. Projects and development seeking zoning or other land use permits will be evaluated on conformance

to the GP and WKCP policies. This will assist the Planning Department in their recommendations to the Planning Commission (recommending approval with modifications, or denial). For example, private land development proposals and Master Plans within the West Kaua‘i region are expected to demonstrate consistency with the policies, goals, and objectives in this Plan. The proposed zoning amendments are summarized in the table below. More details are provided in Part VI, Maps.

TABLE 1 | Zoning Amendment Overview

KAUA‘I COUNTY CODE AMENDMENTS	DESCRIPTION OF AMENDMENT
Chapter 10, Special Development Plans	<ul style="list-style-type: none"> • Repeals Articles 3 and 4, and replaces them with a new article to adopt the WKCP and appendices (including the FBC) and establishes SPAs. • Amends zoning maps: ZM-K100 (Kekaha), ZM-W100 (Waimea), and ZM-H200 (Hanapēpē). • See “Walkable and Mixed-Use Special Planning Areas” in Map Descriptions, Part VI: Maps.
Chapter 7, General Plan	<ul style="list-style-type: none"> • Amendments to the 2018 GP concerning the policies for Plantation Camp and “provisional” designations. • Update to the preliminary community planning sections for Waimea-Kekaha and Hanapēpē-‘Ele‘ele.
Chapter 8, Comprehensive Zoning Ordinance	<ul style="list-style-type: none"> • Establishes a new Special Treatment Coastal Edge District (ST-CE). • Amends zoning maps: ZM-K100 (Kekaha), ZM-W100 (Waimea), ZM-H200 (Hanapēpē), and ZM-200. • See “Coastal Edge and Managed Retreat” in Map Descriptions, Part VI: Maps.
Chapter 8, Comprehensive Zoning Ordinance	<ul style="list-style-type: none"> • Establishes a new Plantation Camp Zoning District • Amends zoning maps: ZM-200 and ZM-H200 (Hanapēpē). • See “Plantation Camp” in Map Descriptions, Part IV: Maps.
Chapter 8, Comprehensive Zoning Ordinance	<ul style="list-style-type: none"> • Amends Special Treatment Public Facilities District over a portion of the Port Allen Airport. • Amends zoning map: ZM-H200 (Hanapēpē). • See “Public Facilities” in Map Descriptions, Part IV: Maps.
Chapter 8, Comprehensive Zoning Ordinance	<ul style="list-style-type: none"> • Establishes Industrial Zoning District over the former Olokele Mill site. • Amends zoning map: ZM-200.



Small group discussion during the public process for the West Kauaʻi Community Plan.

C. Mid- to Long-Range Implementation

Over the mid- to long-range timeframe, the County will need to ensure public investment supports the WKCP. The Regional Policies and Town Plan Chapters describe projects and design criteria for major Capital Improvement Projects. In addition to hard infrastructure, the WKCP recommends revitalization programs and initiatives. County agencies will utilize the WKCP as a guide when undertaking planning for infrastructure systems and facilities, parks, and housing.

Infrastructure and Facility Planning

Public facility plans will need to utilize the WKCP. County facilities and programs, such as County roads, drainage, and wastewater systems, require individual facility and master plans. These plans typically include service and design standards, including level of service standards for determining adequacy. System and facility plans set form costs and priorities. Most of these plans will be updated in the coming years. It is important that where West

Kauaʻi is concerned these system and facility plan updates consider the policies, goals, and objectives in the plan. Roadway projects will need to utilize the Design Toolbox in Appendix B.

Capital Improvement Program and Funding

The County will be hard-pressed to fund all the needed projects and improvements in the WKCP. The County should develop an overall strategy for setting priorities and financing capital improvements. This strategy should be the basis for the Capital Improvement Program.

In addition to existing County funds, new revenue sources should be explored. For example, the County relies heavily on developer contributions to support the development of public facilities. The County should also consider using finance options such as improvement districts and community facility districts. Improvement districts can be used to generate financing for needed road and drainage improvements. Community facility districts can be used in conjunction with new development.

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Part VI: Maps

A. Introduction

The WKCP maps include Town Plans, Heritage Resources (Natural Landscape and Cultural Landscape), Shared Spaces, Hazards Exposure, Wildfire Ignition, Public Facilities and Infrastructure, and Land Transportation and Circulation. There is a total of thirty-four (34) maps. The maps depict current conditions and proposed land uses throughout West Kaua'i as described in this plan. As mentioned, the purpose of a community plan is to provide policies that will direct County-level capital improvement projects and programs for towns and surrounding communities, particularly within the State Land Use Urban District.

Each set of maps has a unique purpose described below. The Town Plan maps are visual descriptions of the policies within the community plan that designate desired future land uses for each town area. The Town Plan maps, in concert with the Shared Spaces and Circulation maps, are policy maps that are consistent with each town's goals and objectives and designate the desired land use and built environment.

Unlike the Town Plan, Shared Spaces, and Land Transportation and Circulation maps, other maps provided in the WKCP are not policy maps. They provide important spatial information that inform the planning process. They are meant to identify natural and built features throughout the West Kaua'i region. They are tools that guide land use analysis, show relationships, frequencies, and distributions of attributes (such as resources, roadways, and parks) in West Kaua'i. Information in these maps were used to develop the Town Plan maps during the community process. In addition, input from the community and partner agencies were used to refine the informational maps.

Community members review conceptual maps at an open house for the West Kaua'i Community Plan.

B. Map List

1. Town Plans
 - a. Regional
 - b. Kekaha
 - c. Waimea
 - d. Makaweli
 - e. Hanapēpē
 - f. 'Ele'ele and Port Allen
2. Heritage Resources
 - a. Natural Landscape
 - i. Regional
 - ii. Kekaha-Waimea
 - iii. Makaweli
 - iv. Hanapēpē-'Ele'ele
 - b. Cultural Landscape
 - i. Regional
 - ii. Kekaha-Waimea
 - iii. Makaweli
 - iv. Hanapēpē-'Ele'ele
3. Shared Spaces
 - a. Regional
 - b. Kekaha
 - c. Waimea
 - d. Hanapēpē-'Ele'ele
4. Hazards Exposure
 - a. Regional
 - b. Kekaha
 - c. Waimea
 - d. Makaweli
 - e. Hanapēpē-'Ele'ele

- 5. Wildfire Ignition
 - a. Regional
- 6. Public Facilities and Infrastructure
 - a. Regional
 - b. Kekaha
 - c. Waimea
 - d. Hanapēpē-‘Ele‘ele
- 7. Land Transportation and Circulation
 - a. Regional
 - b. Kekaha
 - c. Waimea
 - d. Hanapēpē-‘Ele‘ele

C. Map Descriptions

Town Plans

Town Plan maps designate future land uses for the Kekaha, Waimea, Makaweli, Hanapēpē, ‘Ele‘ele, and Port Allen town cores. The Town Plan maps are the result of an extensive year-long process of community outreach and partner agency discussions, research, and analysis. The Town Plan maps are also informed by the data and information contained in the following maps showing Hazards Exposure, Heritage Resources, and other important features of the natural, cultural, and built environment of West Kaua‘i. The Town Plan maps are also consistent with the GP while also providing more descriptive land use designations appropriate to each community.

The land use designations included in the Town Plan maps are listed in the table below.

TABLE 2 | Land Use Designations

LAND USE DESIGNATION	DESCRIPTION OF DESIGNATION
<p>Town Center</p>	<p>The Town Center is the heart of West Kaua‘i’s small towns. It is the focal point for community activity and contains a wider mix of uses that may change over time. The physical form is characterized by historic buildings that are small scale, low-rise, and mixed-use. The walkable and pedestrian-friendly scale complements the region’s rural character and setting. Commercial establishments are oriented to the street and the land use mix includes retail, office, food service and dining, compatible services, light industrial, and residential. Buildings are compatible in scale with adjacent residential areas. Parking is typically located in the rear. Increased on-street parking and/or district parking are prioritized.</p> <p>Within this designation are areas that provide a flexible environment for value-added manufacturing, artisan production, and light industrial businesses in a form that supports and reinforces the walkable character of town centers. Town Center includes some Industrial zoned areas, such as former mill sites, to encourage the development of uses compatible with a mixed-use environment. Historic preservation of existing industrial structures, such as the mills, is encouraged where environmental conditions and public health allow. Small to medium flex buildings within a walking distance of retail and commercial uses, public services, and homes are also permitted.</p>

Walkable Neighborhood	This land use is characterized by a mix of residential building types, formal and informal gathering areas, and appropriate mixed uses. Amenities and facilities to support safe and convenient pedestrian and transit circulation are emphasized. This zone supports a higher density than is found in a typical single-family residential neighborhood. The desired result is a more efficient land use pattern with diverse building and unit types.
Residential Neighborhood	These are established residential neighborhoods in the Residential R-4 or R-6 Zoning Districts. The land use pattern is primarily single-family residences. Roadway and streetscape improvements to slow vehicle traffic are encouraged. Although additional dwelling units (ADUs) and additional rental units (ARUs) are allowed, minimal change in the built environment is anticipated given the existing lot sizes and subdivision layout.
Coastal Edge	<p>The Coastal Edge land use mirrors the proposed Special Treatment Coastal Edge (ST-CE) Zoning District and identifies vulnerable and exposed coastal neighborhoods based on a managed retreat framework. It includes all State Land Use Urban District lands located makai of a public road and within the SLR-XA at 3.2 feet. The ST-CE Zoning District requires additional performance and permit processes for development to insure that development is constructed in a manner that safely mitigates impacts from coastal hazards, including but not limited to, SLR, coastal erosion, high wave run-up, passive flooding, and an increased frequency and intensity of storms.</p> <p>Infrastructure improvements such as transportation and park improvements will be allowed so long as it advances the goals of this plan related to resiliency.</p>
Resort	The Resort designation includes the region's only existing resort, Waimea Plantation Cottages, as well as the area adjacent to the west to facilitate expansion of the resort. It also includes all resort-zoned lands such as the area previously-permitted for the Kalapawai resort project. Any new development should be designed to be resilient to storm surge, passive flooding, and wave overtopping.
Plantation Camp	The Plantation Camp designation preserves the historic plantation camp communities that were constructed between 1880 and 1950. The physical pattern includes clustered plantation-style homes. These camps are dynamic communities that also remain an important source of workforce housing. Limited commercial activity is permitted in these areas where it supports the surrounding agricultural enterprise or meets the needs of its residents.

Park	Parks include both public and private shared spaces, county, and state parks. Also shown are potential opportunities for new parks, park expansion areas, or protected open spaces.
Agriculture	Agriculture lands are held in reserve for agricultural purposes with little residential development. These areas range in scale from large agricultural fields to small diversified farms. There are two Agricultural designations including general intact agricultural lands and lands designated as IAL. When development does occur, it should be related to the agricultural uses and clustered to minimize the requirements for new infrastructure.
Natural	Areas designated as Natural have either limited development capacity or are not suitable for development due to topography, hazards vulnerability, sensitive resources, or other constraints. They include all State Land Use Conservation District lands and some County Open Zoning District land. These areas include the many ridges, waterfalls, river valleys, and rugged coastlines of the island that comprise its open spaces and scenic landscapes. Very few residential uses are found in the Natural designation and are generally not encouraged.
Public Facilities	Identifies public facilities that require additional performance criteria because of their unique location. The designation recognizes that valuable social or aesthetic characteristics of the environment or community exist in the same area as the facility.
Industrial	The Industrial designation applies to areas that accommodate production-oriented and heavy industrial uses. Generally, these uses should be buffered from residential neighborhoods to mitigate noise impacts and other environmental health concerns.
Transportation	The Transportation designation applies to lands that are predominantly used for shipping and recreational boating, such as the State-managed harbors and small boat recreational facilities.
Military	The Military designation identifies PMRF at Barking Sands. These lands are under federal jurisdiction and therefore are not under State or County zoning authority. Public access is prohibited or heavily restricted.



Aerial view of Waimea Canyon.

Walkable and Mixed-Use Special Planning Areas

In order to accommodate the growth projected for West Kaua'i in an efficient land use pattern, new walkable, mixed-use SPAs are proposed. SPAs are recommended where compact, walkable neighborhoods are desired in existing town centers and their surrounding areas. The SPAs will be implemented concurrently through the adoption of the FBC, which include the transect maps. The transect maps include transect zones (t-zones) that will overlay and supersede existing zoning.

The FBC is intended to implement the goals and objectives for each community by defining permitted and conditional uses, setbacks, and other design standards. The current Euclidean zoning regime does not promote the small-town scale desired by community members. In many cases, the existing commercial zoning deems the existing historic buildings non-conforming and does not provide adequate safeguards against incompatible development. The FBC is calibrated to the existing historic towns thereby ensuring all future development reflects the character and sense of place in these key areas.

The four areas where the SPAs will be applied are:

1. Kekaha Town Center
2. Waimea Town Center
3. Hanapēpē Town Center
4. 'Ele'ele-Port Allen Town Center

The SPAs are also identified as Town Center and Walkable Neighborhood designations on the Town Plan maps and encompass the area where transect zones will be applied pursuant to the FBC. The transect zones provide a spectrum of development intensity and building forms within these walkable mixed-use communities, ranging from denser, highly mixed-uses at the core to more rural residential uses and smaller scaled structures

at the edges. The intent is to encourage the building forms that support pedestrian activity rather than a separation of land uses. The other areas such as Residential Community highlight the transition to the edge of the community and surrounding areas.

Coastal Edge Designation and Managed Retreat

The Coastal Edge designation includes exposed shoreline parcels vulnerable to climate change impacts, including but not limited to SLR and the increased frequency and intensity of storms. It also lays a foundation for managed retreat strategies.

The first step of the managed retreat framework is to direct new growth away from the most vulnerable areas. This means locating new communities inland and at higher elevations. In the WKCP, greenfield growth areas are located outside the floodplain and SLR-XA. They will not only meet the growth projections for the region, but provide areas for the potential retreat and relocation of existing development due to SLR.

The second step is to increase the resiliency of the existing built environment to SLR. The Town Plan maps designate vulnerable areas as "Coastal Edge." Various data sources, such as the SLR-XA, were considered in identifying areas vulnerable to impacts. A new ST-CE Zoning District will require additional performance and permit processes for development to insure that development is constructed in a manner that safely mitigates impacts from coastal hazards, including but not limited to, SLR, coastal erosion, high wave run-up, passive flooding, and an increased frequency and intensity of storms.

Located behind the Coastal Edge area, or in some situations behind seawall revetments, is another tier of vulnerable neighborhoods that may be appropriate to keep in place in the near term, but they will need to be re-evaluated in the future. These properties are located within the SLR-XA



The shoreline adjacent to the Kikīaola Small Boat Harbor is vulnerable to coastal hazards and climate change impacts.

(i.e., exposed to multiple potential hazards), but they are more accessible via existing roads than those in the Coastal Edge designation. In these areas, green infrastructure, low impact development, and flood proofing can improve the neighborhood's resiliency and adaptation to future changes. In these areas, additional studies and adaptive planning are needed. It is possible that over time, the Coastal Edge designation will be expanded.

Eventually, as the seas continue to rise, retreat will mean abandoning, demolishing, and moving certain buildings and infrastructure to higher ground. To incentivize timely retreat, these thresholds may be coupled with a land swap or buy-back program. Program administration and thresholds will need to be determined through a future process. The County's Shoreline Setback Ordinance serves as an interim form of retreat policy. The ordinance scrutinizes all repairs, renovations, and proposed structures located within 550 feet of the shoreline. However, the existing ordinance can be strengthened by factoring in the projected future shoreline position due to SLR.

Heritage Resources

The Heritage Resources maps depict natural, cultural, and scenic resources that are important to the West Kaua'i community. They are organized into two types: Cultural Landscapes and Natural Landscapes. Note that the maps do not show every occurrence of a historic feature because a complete inventory does not exist. The purpose of the maps is described below.

Natural Landscape Maps

The Natural Landscape maps depict topographic features such as beaches, valleys, and scenic corridors, as well as the frequency and distribution of biological resources (flora and fauna). The purpose of the Natural Landscape maps is to:

- Classify important landforms, such as pu'u, ridges, beaches, valleys, rivers, wetlands, sand dunes, scenic corridors, preserves, reserves, and waterfalls; and

- Identify concentrations and distributions of sensitive native flora and fauna (critical habitat and rare and endangered species) in order to improve management of negative impacts from natural hazards, human activity, and invasive species.

Cultural Landscape Maps

The Cultural Landscape maps depict sites, areas, and features that reveal historically significant events as well as daily life. Cultural landscapes also reveal information about a community's evolving relationship with globalization (such as in-migration and changing technologies) and with the 'āina around them. The purpose of the Cultural Landscapes maps is to identify:

Shared Resources

Heritage resources that are shared, such as parks, landmarks, town centers, large waterbodies, traditional boundaries, and resources registered under the State or National Historic Registries; and

Sacred Resources

Concentrations or clusters of historic sites, features, and storied places that are sacred, and may require improved management of negative impacts from natural hazards, human activity, and invasive species. The cultural landscape maps identify known cemetery sites. It should be noted that there are cemeteries that have not been identified or are located on private land where access may be restricted. The cemeteries managed by the County are listed in the table below.

TABLE 3 | County-Managed Cemeteries

CEMETARY	LOCATION	TAX MAP KEY
Kekaha		
Hawaiian Cemetery	'Akialoa Road	1-3-002:107
Kekaha Public Cemetery (also known as St. Theresa Church Cemetery)	'Elepaio and 'Iwa Roads	1-3-004:026
Park Hook Tong Cemetery	Kaumuali'i Highway	1-2-006:004
Japanese Cemetery (located at Park Hook Tong Cemetery)	Kaumuali'i Highway	1-2-006:004
Hanapēpē		
Hawaiian Cemetery (*also called "Filipino Cemetery")	Kaumuali'i Highway	1-8-008:025
Japanese Cemetery	Pū'olo Road	1-8-008:014
Kaua'i Veterans Cemetery	Lele Road	1-8-008:038
Filipino Cemetery (located on same parcel as the Chinese Cemetery)	Lele Road	1-8-008:018
Chinese Cemetery (*also called "Catholic/Chinese Cemetery")	Lele Road	1-8-008:018
Japanese Cemetery (*also called "Hanapēpē Heights Japanese Cemetery")	Moi Road	1-8-007:017, 1-8-007:001

*"Cemeteries of Kaua'i," Kikuchi and Remoaldo, 1992.



Brush fire above Waimea Town.



A water main in Waimea Town.

Shared Spaces

The purpose of the Shared Spaces maps are to highlight both existing and future public shared spaces throughout West Kaua'i. The maps also show existing (recorded or common) and potential connections between popular shared spaces and public destinations, like beach parks and neighborhood parks to residential areas.

Hazards Exposure

West Kaua'i is highly vulnerable to a variety of threats that result from coastal hazards, climate change, and wildfire. The purpose of the Hazard Exposure and Wildfire Ignition maps is to support the plan's policies for mitigating negative impacts to life, property, and critical infrastructure. These maps are important when considering growth areas that may be impacted by hazards. In addition, elected officials, landowners, schools, and community organizations can use these maps as a tool in evacuation planning and coordination.

Wildfire Ignition

The data used to prepare the Wildfire Ignition map was developed for the State of Hawai'i by the University of Hawai'i Cooperative Extension Service to assist with wildfire hazard planning (C. Trauernicht and M. Lucas, UH College of Tropical Agriculture and Human Resources, September 2016). Fire ignition density maps are derived from wildfire-incident records maintained by local fire response agencies. The publication documenting this data is available online.

Public Facilities and Infrastructure

The Public Facilities and Infrastructure maps show important facilities, such as fire stations, schools, and hospitals, as well as critical infrastructure like roads, transfer stations, and power plants. The relationship between facilities and infrastructure is important within town areas. However, these maps have been framed to also highlight the long distances between facilities and infrastructure and the towns they serve throughout the West Kaua'i region. Public Facilities

The Kekaha Ditch

In April 1906, work commenced on the construction of the Kekaha Ditch, designed to carry irrigation water from the upper reaches of the Waimea River down to the cane lands of Kekaha Sugar Co., then managed by the sugar pioneer H.P. Faye.

Overseeing construction was civil engineer J.S. Molony, who would employ about 600 Japanese and Korean tunnelers, masons, mechanics, explosives men and laborers to complete work on the 25-mile long ditch in just over 14 months.

On July 15, 1907, water was first admitted into the Kekaha Ditch intake on the Waimea River at the 550 feet elevation, eight miles up from the sea, and after passing through a series of 8-foot-wide by 6-foot-high tunnels inside vertical pali 600 feet high, the water was led for miles to the edge of a plateau above the river.

There, the ditch crosses Waimea Valley by means of an inverted syphon of steel pipe of 48 and 42 inches in diameter and 2,190 feet in length, by which water is delivered into tunnels 8, 9 and 10.

After emerging from those tunnels, the ditch traverses gently sloping ground, passing through tunnels 11 and 12, before reaching open ground above Waimea town, where it bends to the west and heads for Kekaha.

Thereafter, the country is broken by a series of rocky gulches, one after another, upon which water passes through tunnels 13, 14, and 15, and two inverted syphons of wooden stave pipe, each 700 feet long and 40 inches in diameter.

At Waiawa, water is dropped 280 feet to a lower ditch, nine miles long, that conveys it to Polihale at the very end of what was Kekaha Sugar Co.

The Waimea Hydropower Plant and the Waiawa Hydropower Plant were later constructed on Kekaha Ditch to supply electric power for Kekaha Sugar Co.

Kekaha Ditch, an engineering marvel, upgraded over the years, is still in operation, providing agricultural irrigation water as well as hydroelectric power west of the Waimea River.

By Hank Soboleski,
published in the TGI newspaper August 13, 2015

and Infrastructure maps are important reference tools to assess opportunities and challenges to a town's potential growth in addition to hazards mitigation planning.

Land Transportation and Circulation

The regional land transportation concepts are shown in the following area-specific Circulation maps. They include existing, planned, or in-progress projects, as well as desired roadway improvements developed through discussions with community members and public agency partners throughout the course of the plan's outreach process.



Waimea State Recreational Pier.



Flooding at Pū'olo Point.

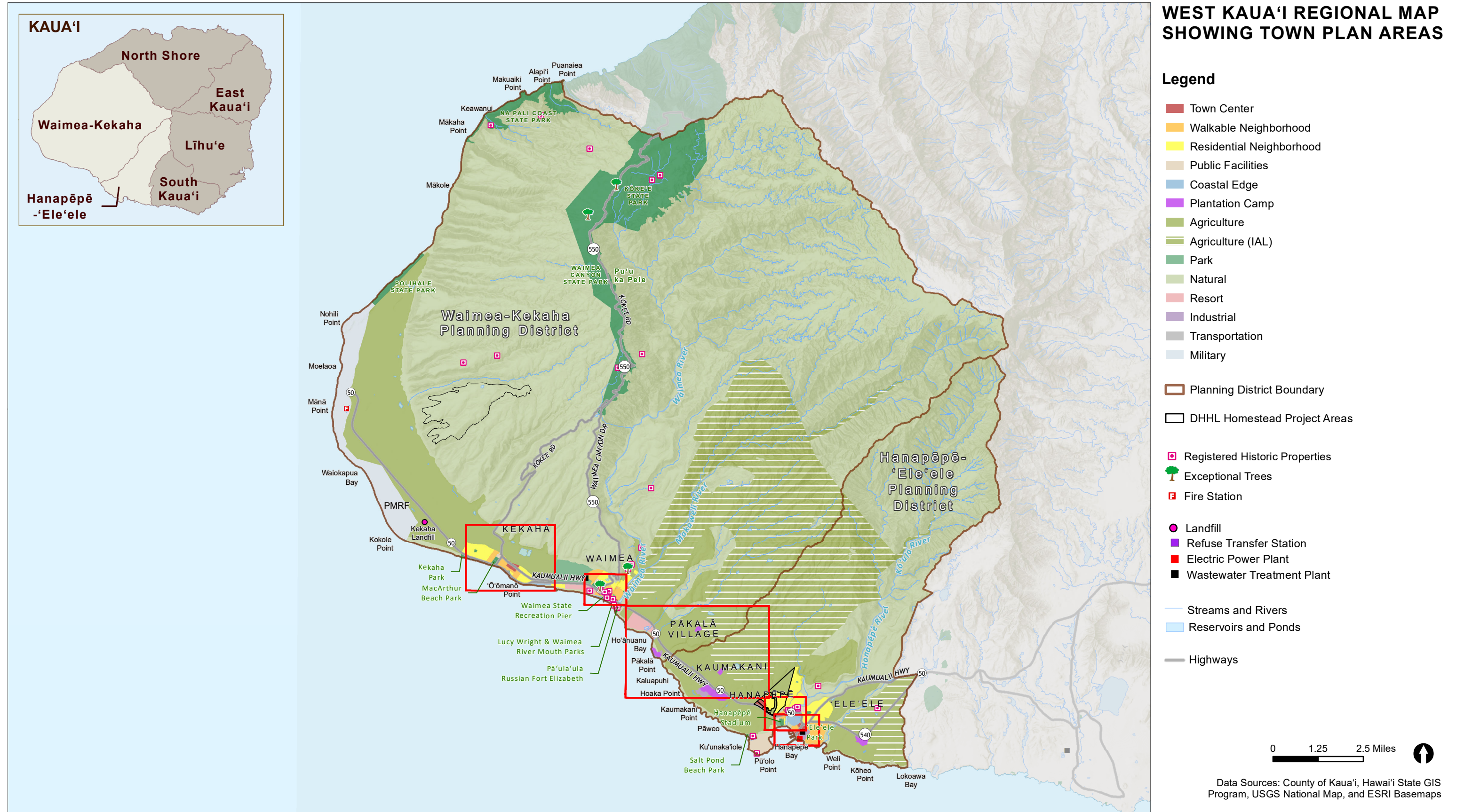


FIGURE 12 | Regional Town Plan Map

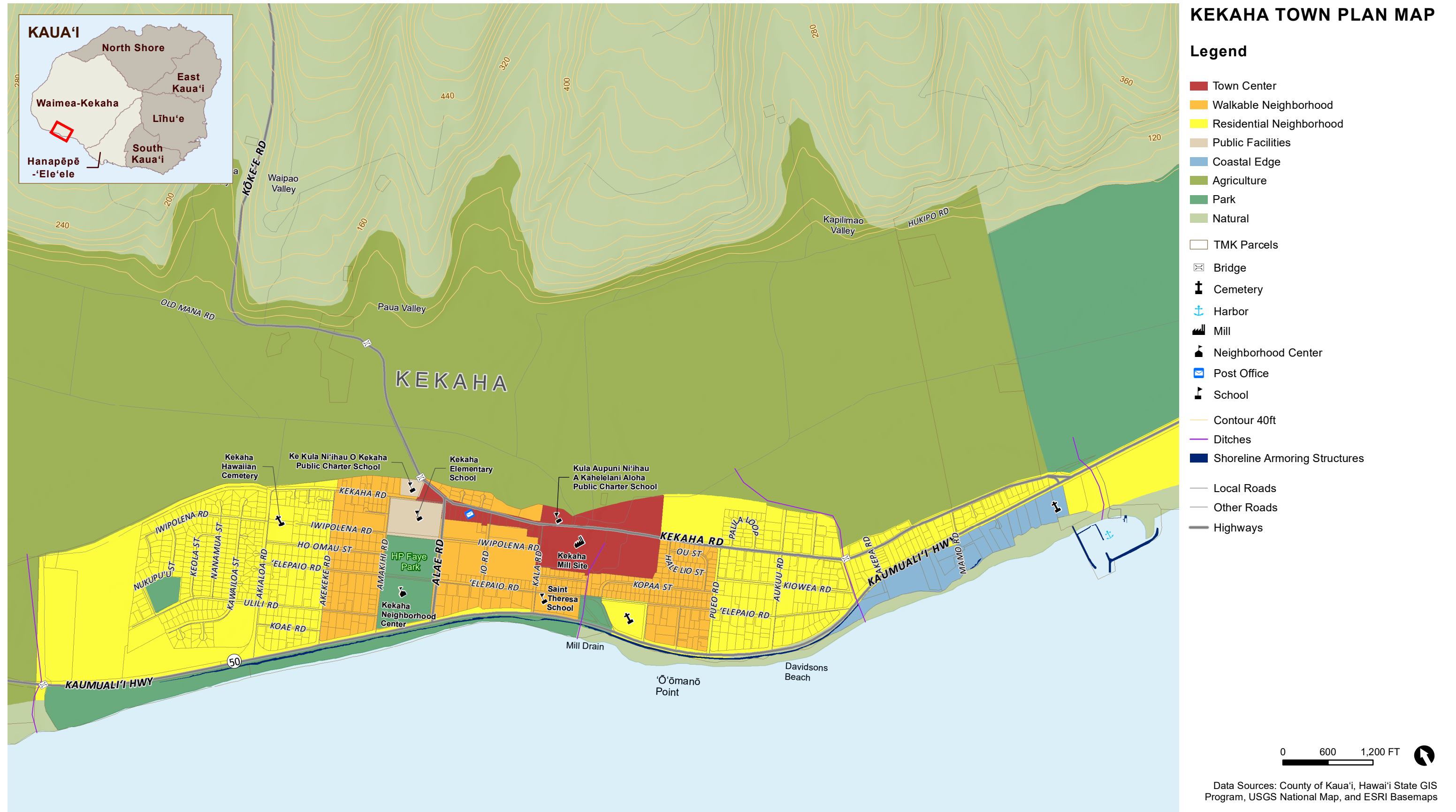


FIGURE 13 | Kekaha Town Plan Map



FIGURE 14 | Waimea Town Plan Map

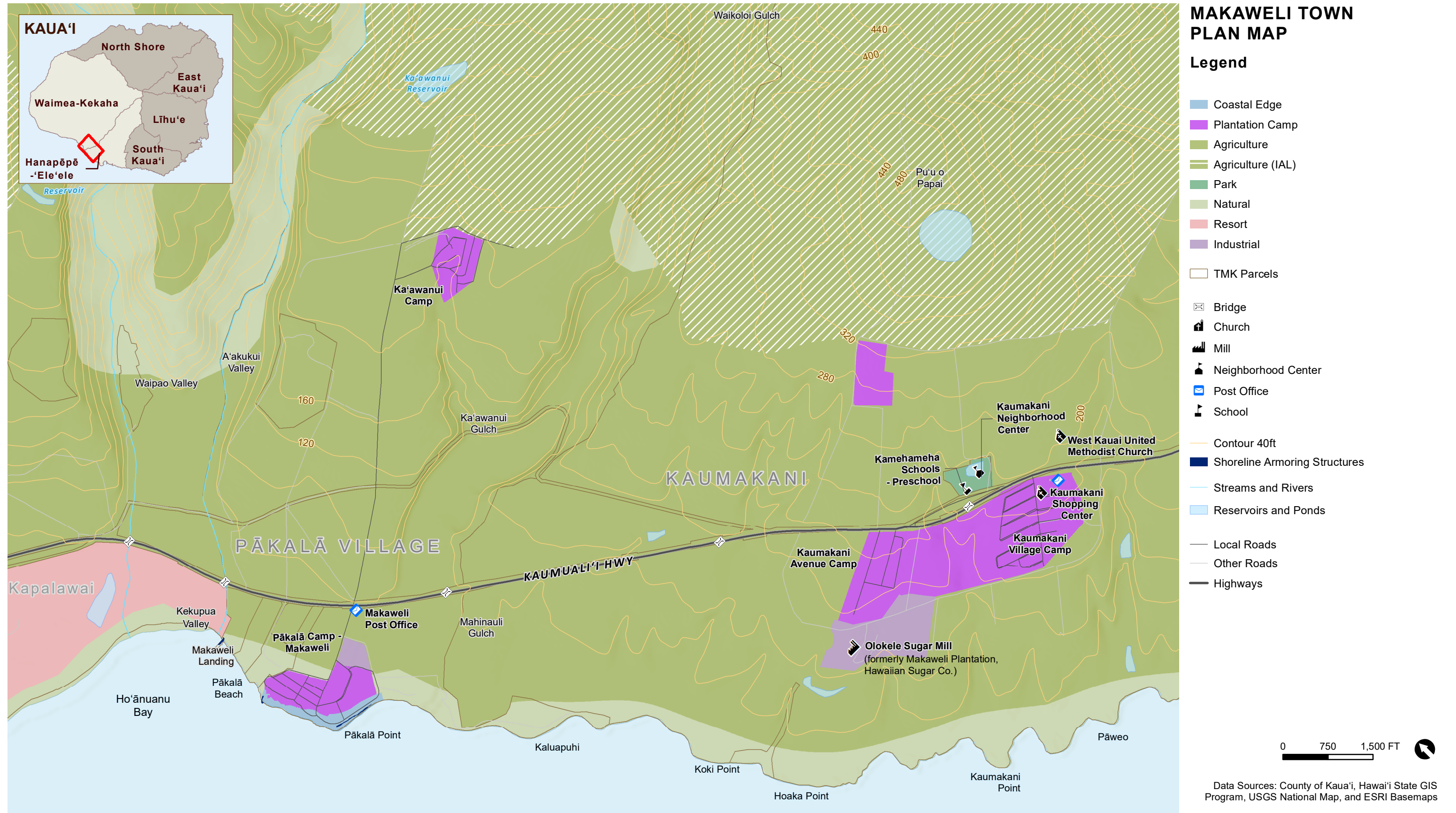


FIGURE 15 | Makaweli Town Plan Map

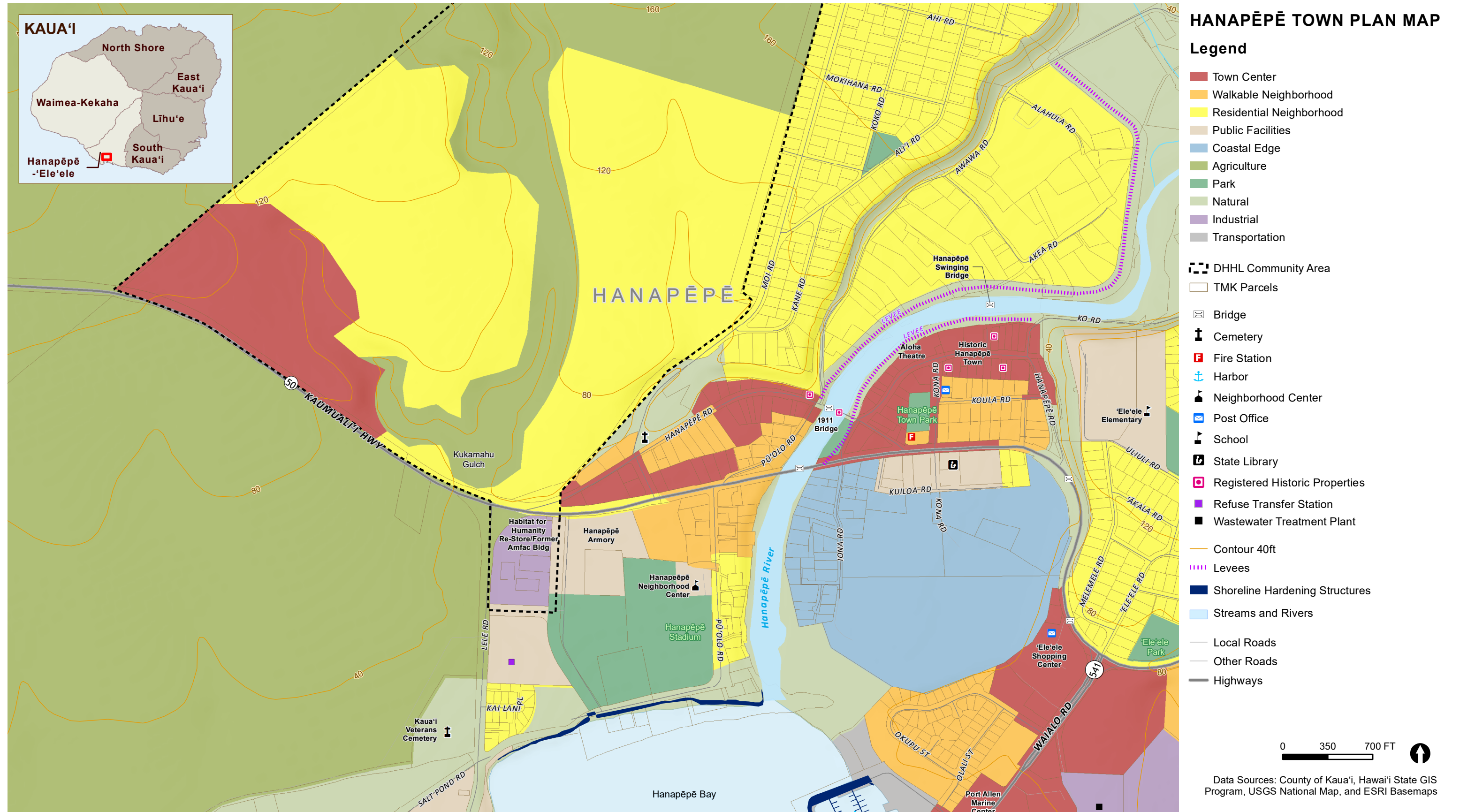


FIGURE 16 | Hanapēpē Town Plan Map

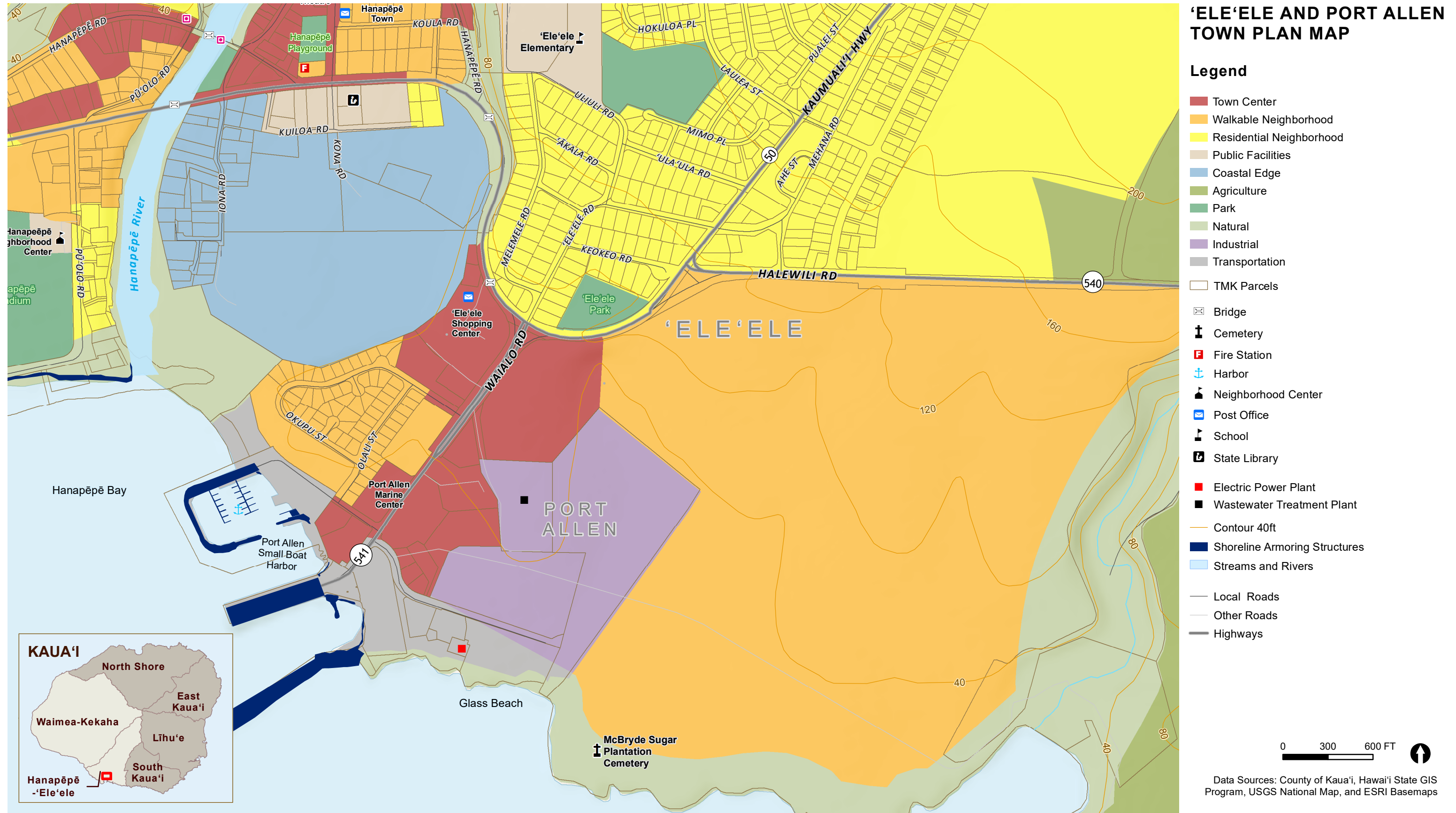


FIGURE 17 | 'Ele'ele and Port Allen Town Plan Map

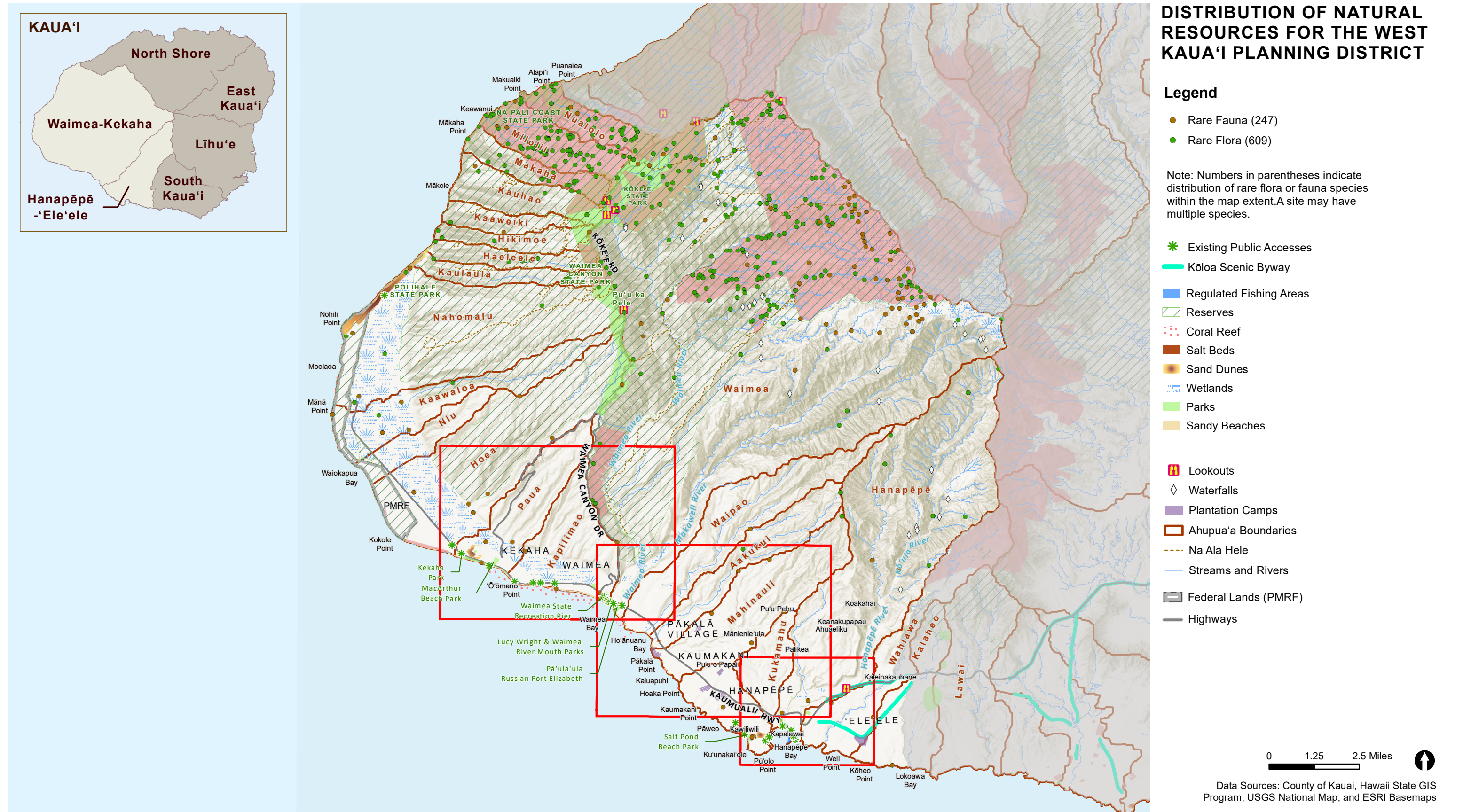


FIGURE 18 | Distribution of Natural Resources for the West Kauai Planning District

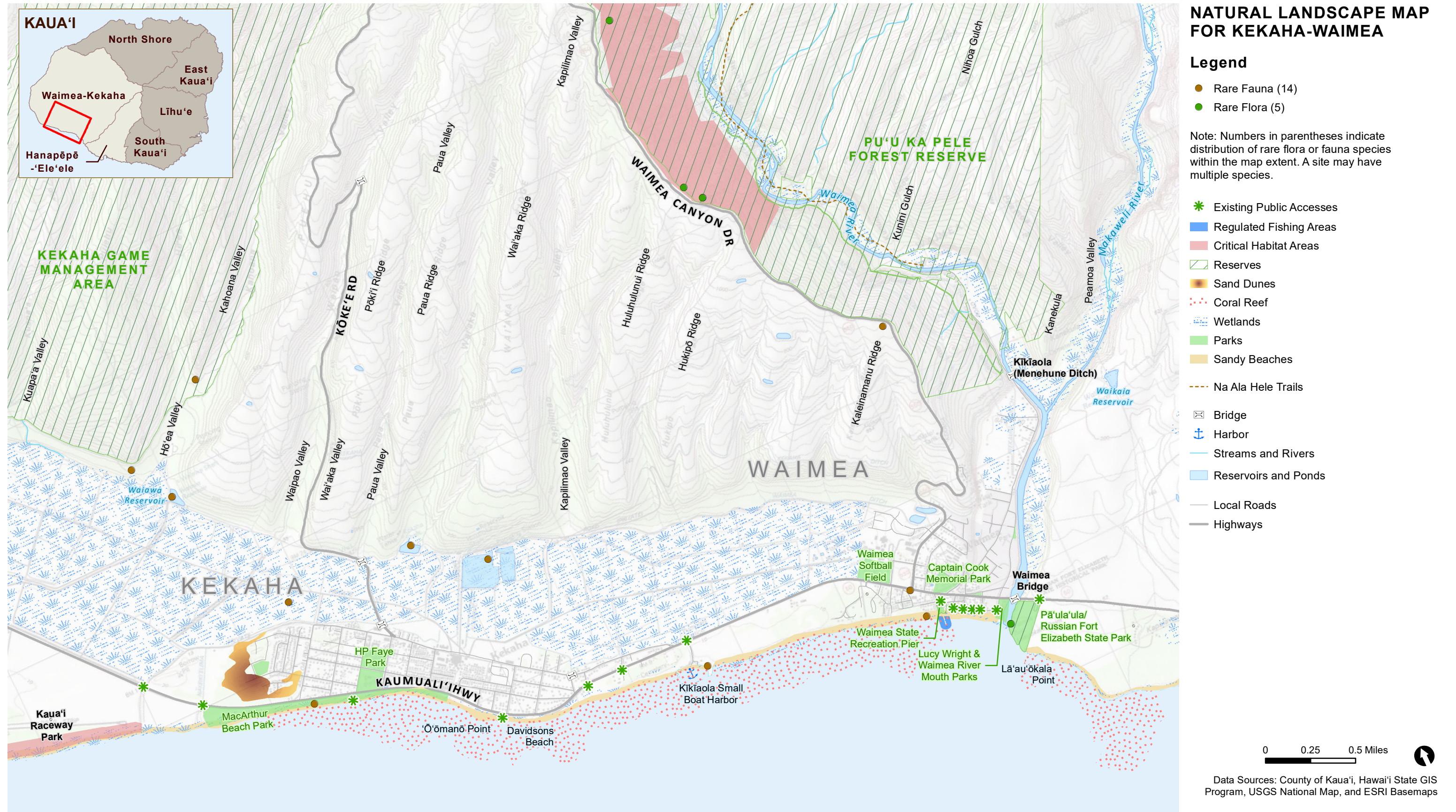


FIGURE 19 | Natural Landscape Map for Kekaha-Waimea



FIGURE 20 | Natural Landscape Map for Makaweli

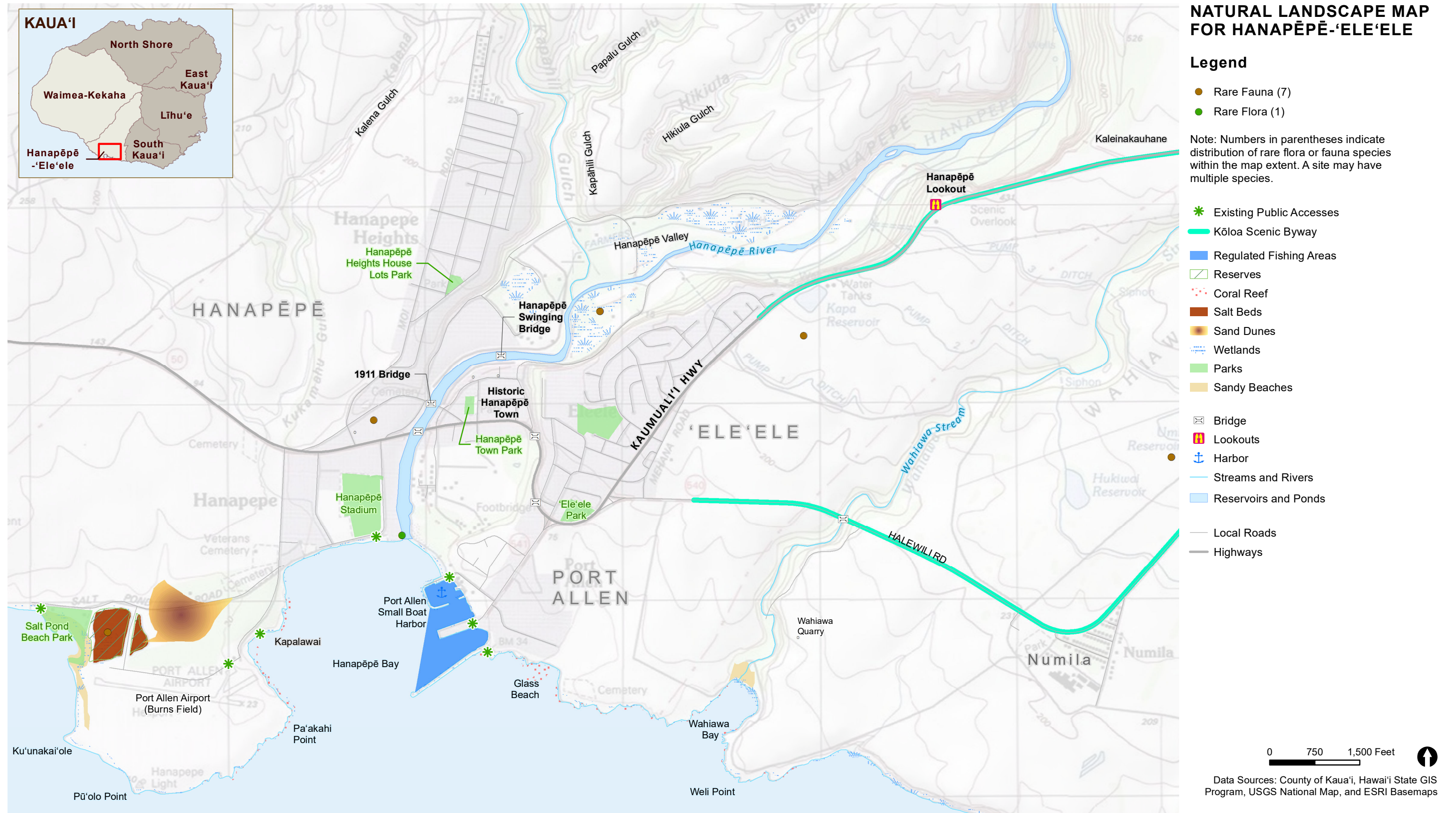


FIGURE 21 | Natural Landscape Map for Hanapēpē-'Ele'ele

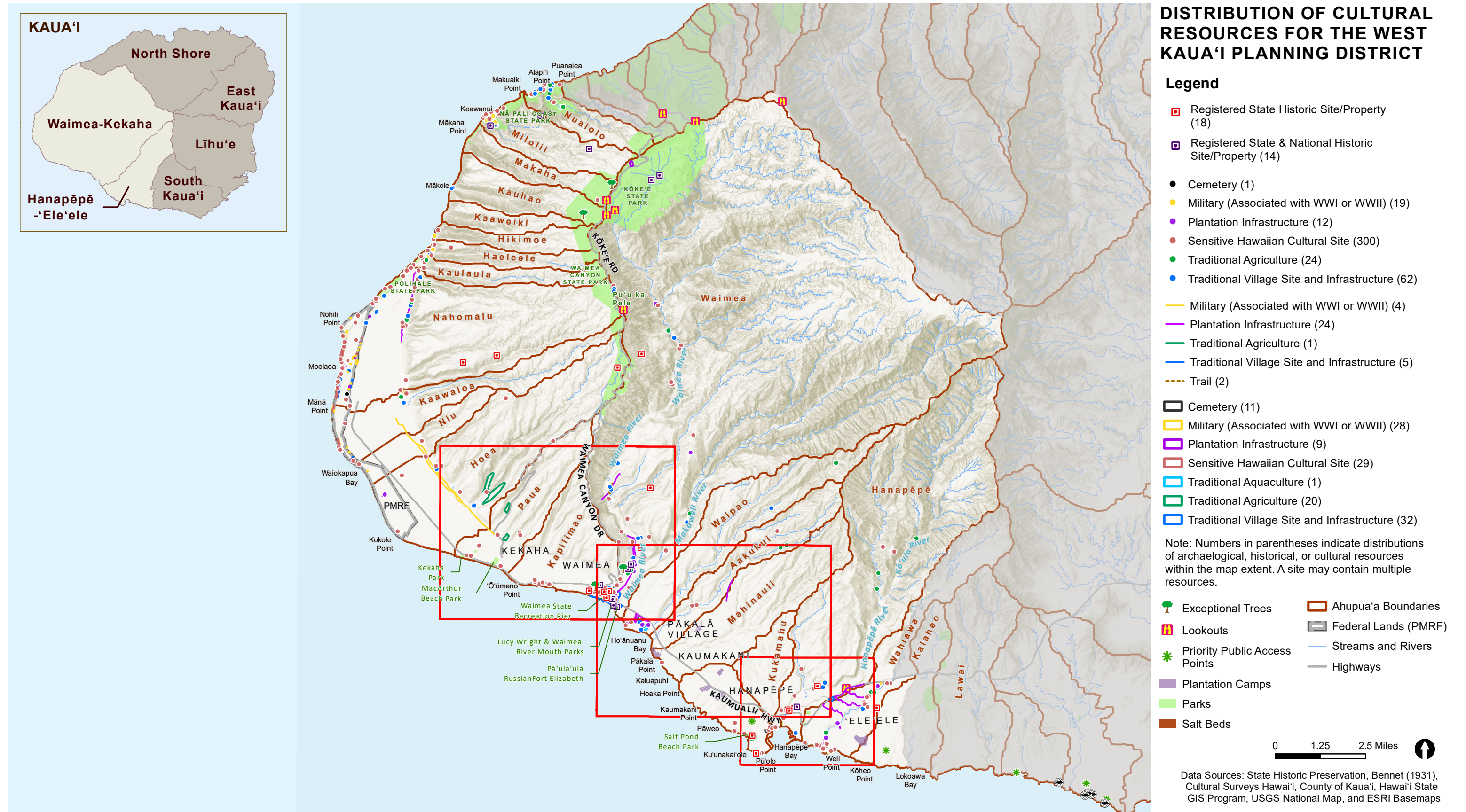


FIGURE 22 | Distribution of Cultural Resources for the West Kaua'i Planning District



FIGURE 23 | Cultural Landscape Map for Kekaha-Waimea



FIGURE 24 | Cultural Landscape Map for Makaweli

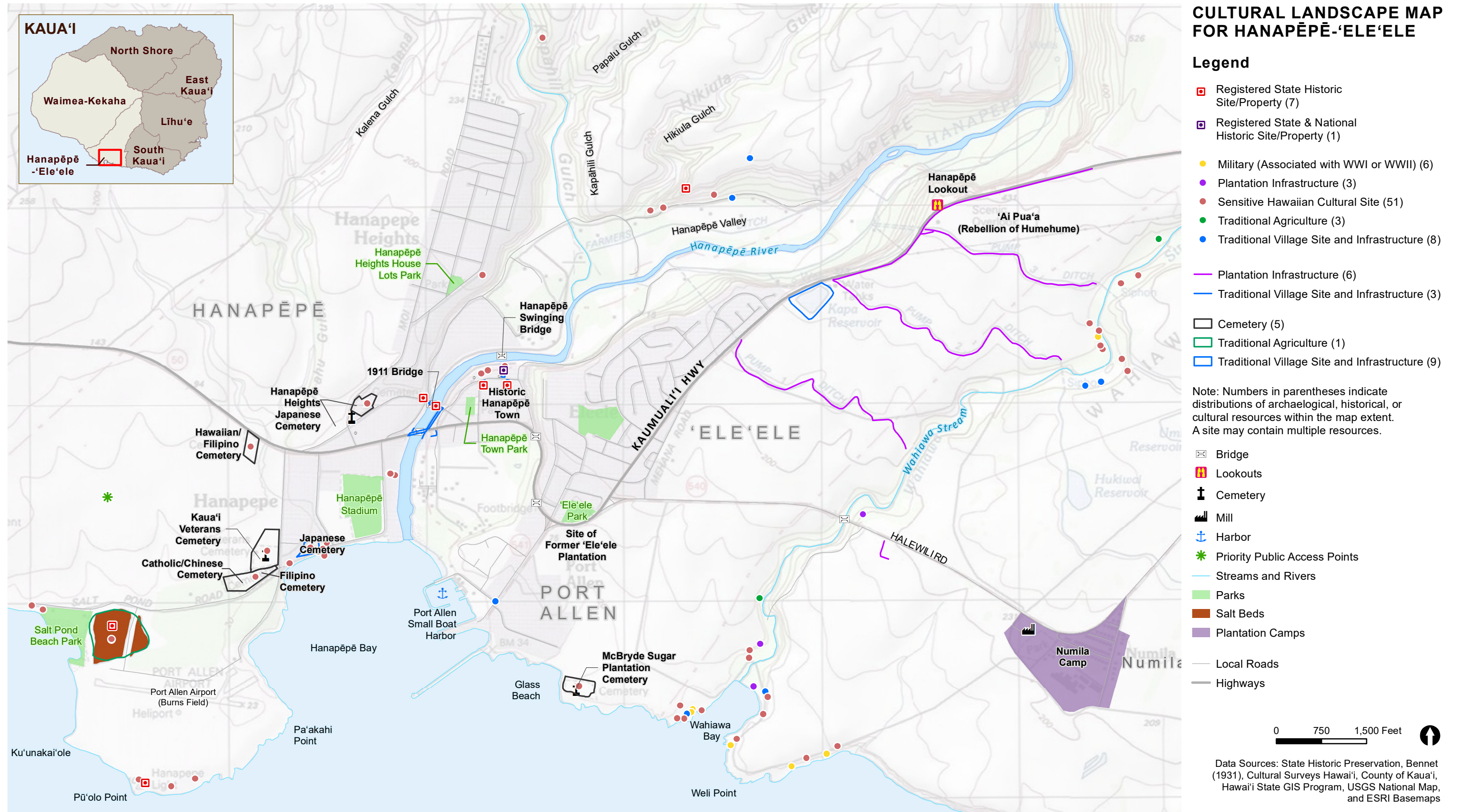


FIGURE 25 | Cultural Landscape Map for Hanapēpē-'Ele'ele

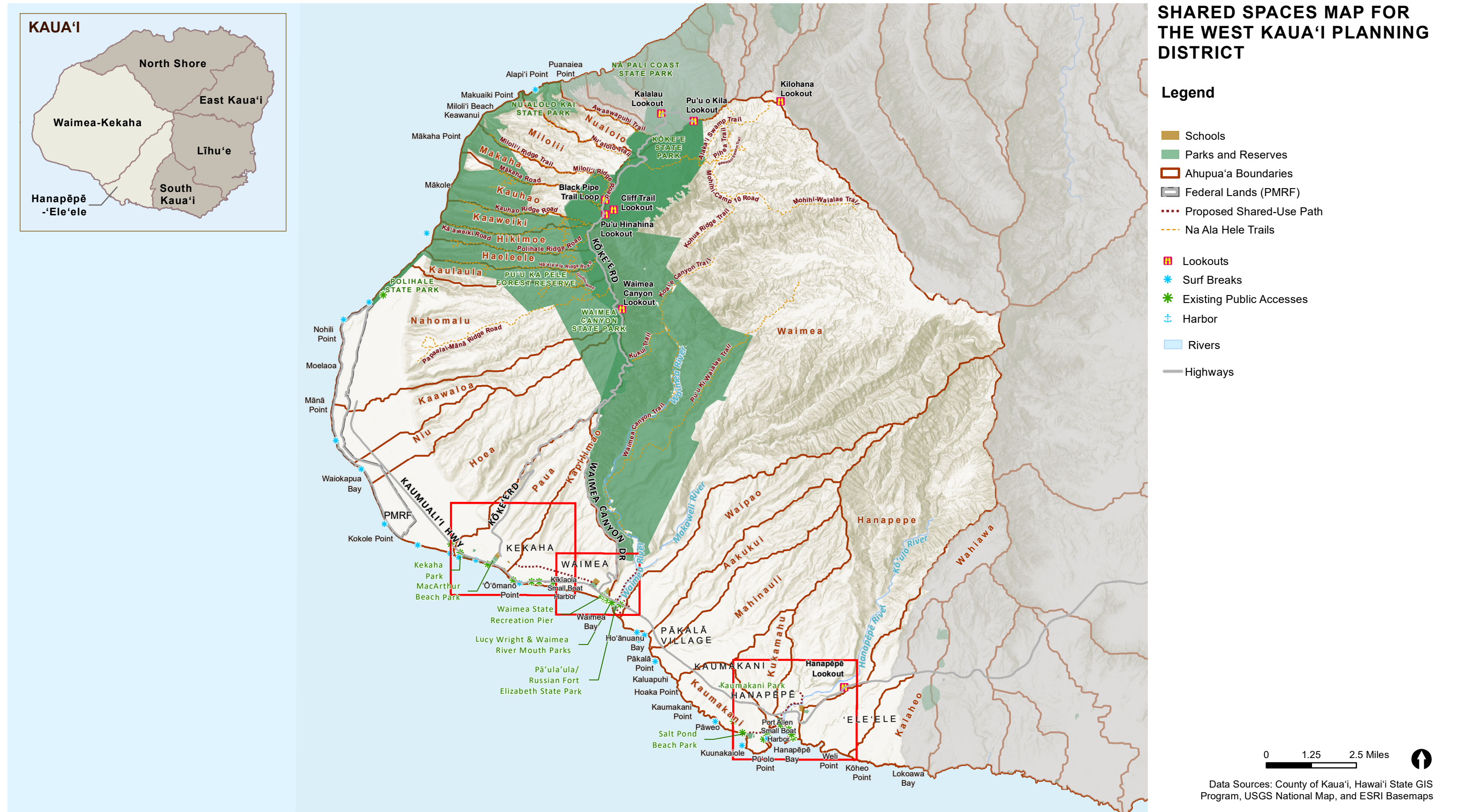


FIGURE 26 | Shared Spaces Map for the West Kaua'i Planning District



FIGURE 27 | Shared Spaces Map for Kekaha



FIGURE 28 | Shared Spaces Map for Waimea



FIGURE 29 | Shared Spaces Map for Hanapēpē-'Ele'ele



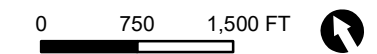
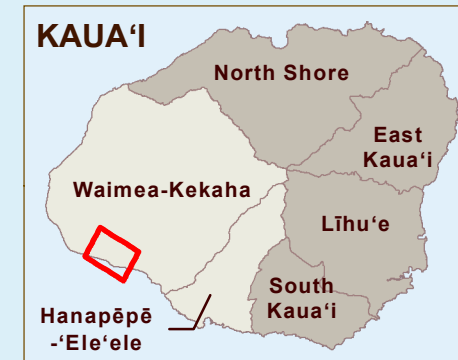
FIGURE 30 | West Kaua'i Regional Map Showing Hazards Exposure Areas



HAZARDS EXPOSURE MAP FOR KEKAHA

Legend

- Bridge
- Emergency Shelter
- Tsunami Evacuation Boundary
- Preliminary High Flood Risk Area (A & VE)
- Sea Level Rise Exposure Area (SLR-XA) - 3.2 Ft
- Existing Buildings
- Parks
- Cemetery
- Harbor
- Mill
- Neighborhood Center
- Post Office
- School
- Ditches
- Boat Launch Ramp
- Breakwater
- Dock
- Groin
- Jetty
- Retaining Wall
- Rip Rap Revetment
- Reservoirs and Ponds
- Local Roads
- Other Roads
- Highways



Data Sources: County of Kauai, Hawaii State GIS Program, USGS National Map, and ESRI Basemaps

FIGURE 31 | Hazards Exposure Map for Kekaha

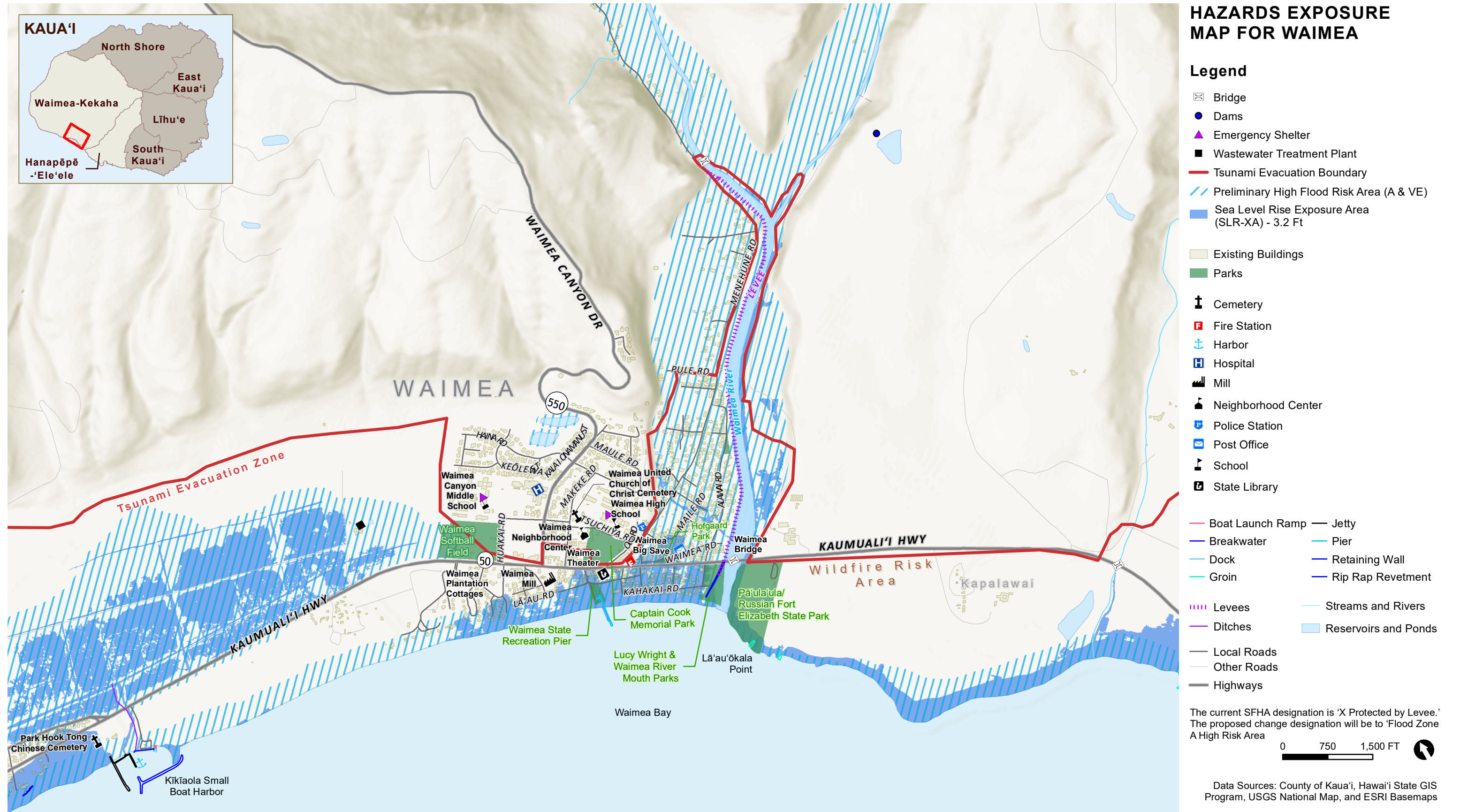


FIGURE 32 | Hazards Exposure Map for Waimea

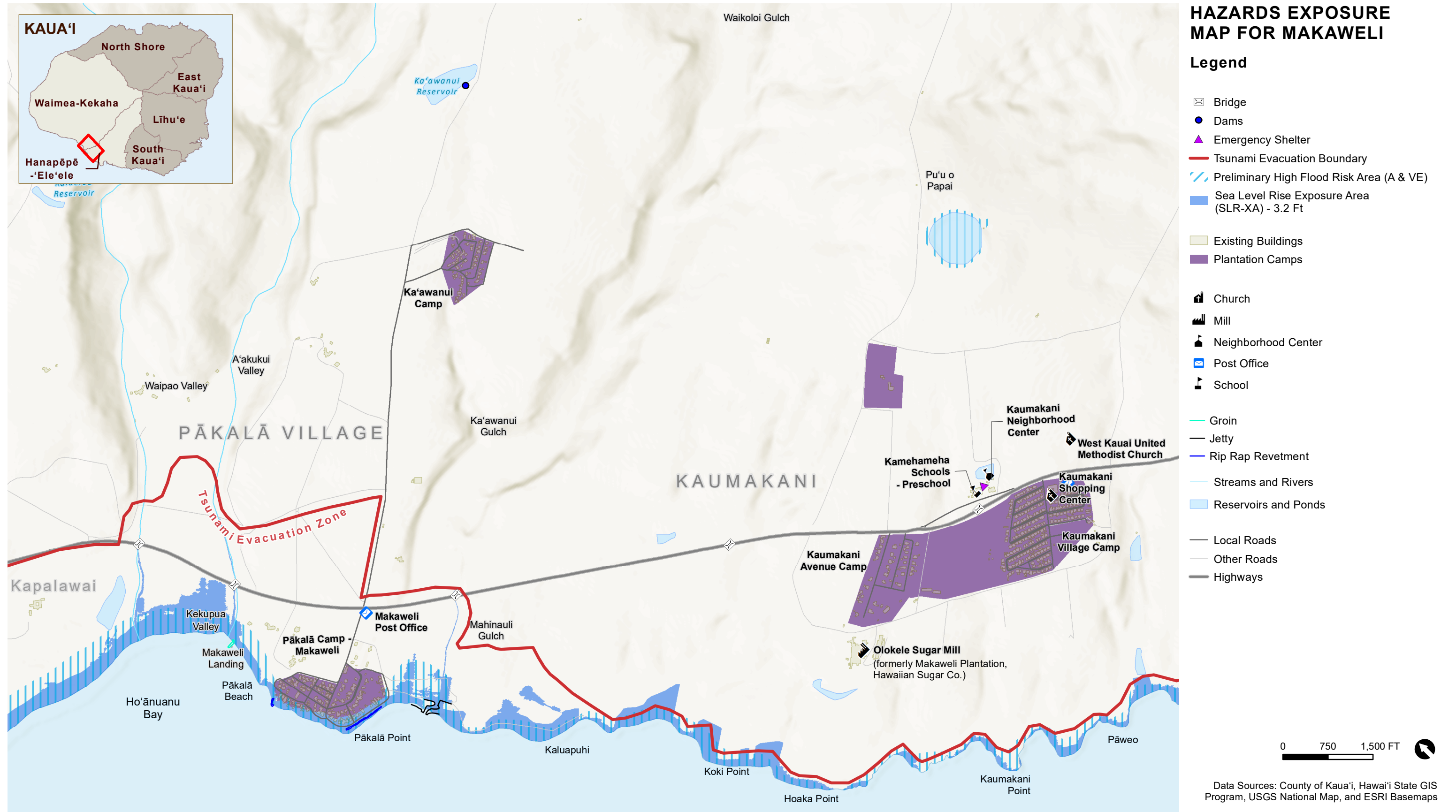


FIGURE 33 | Hazards Exposure Map for Makaweli

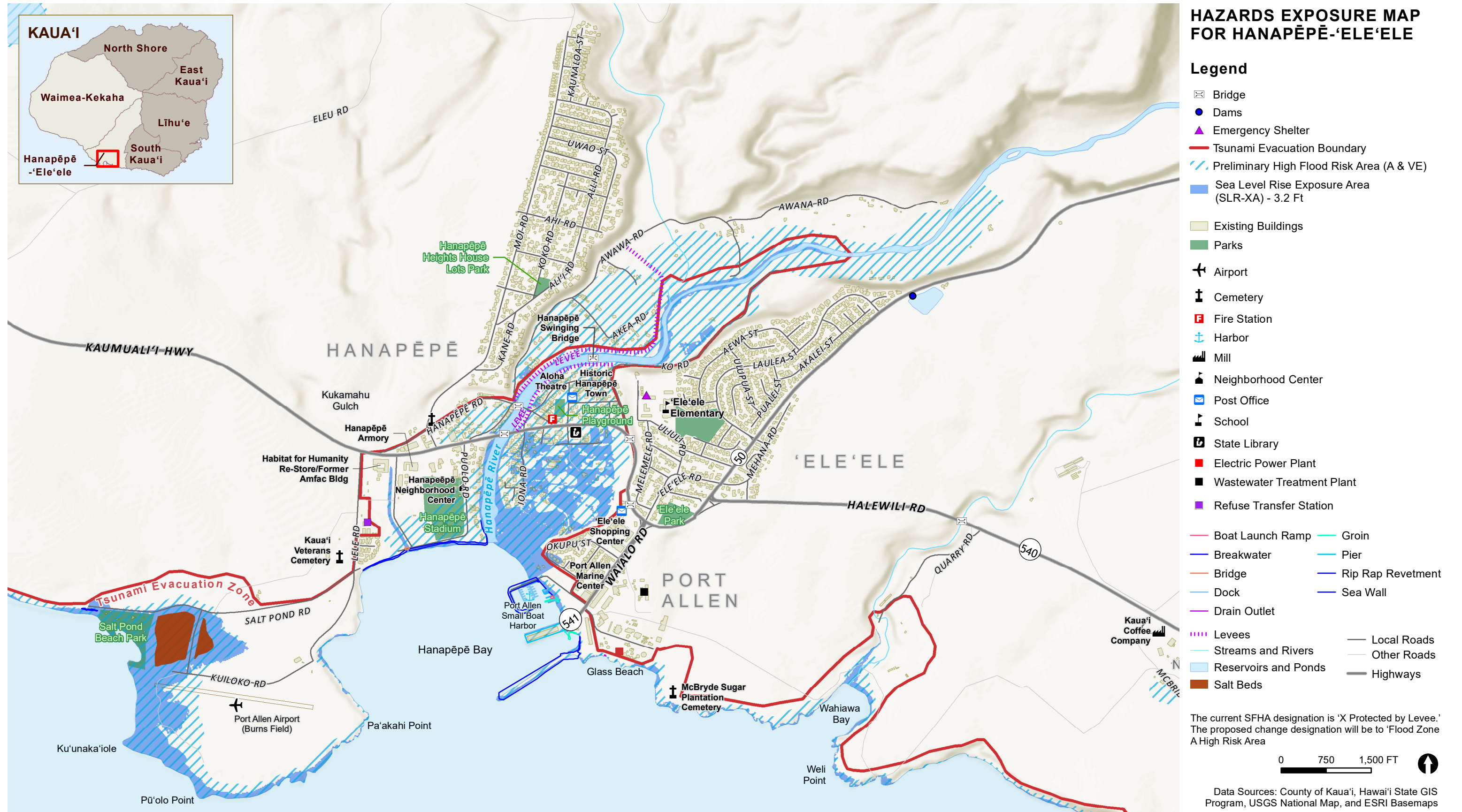


FIGURE 34 | Hazards Exposure Map for Hanapēpē-'Ele'ele

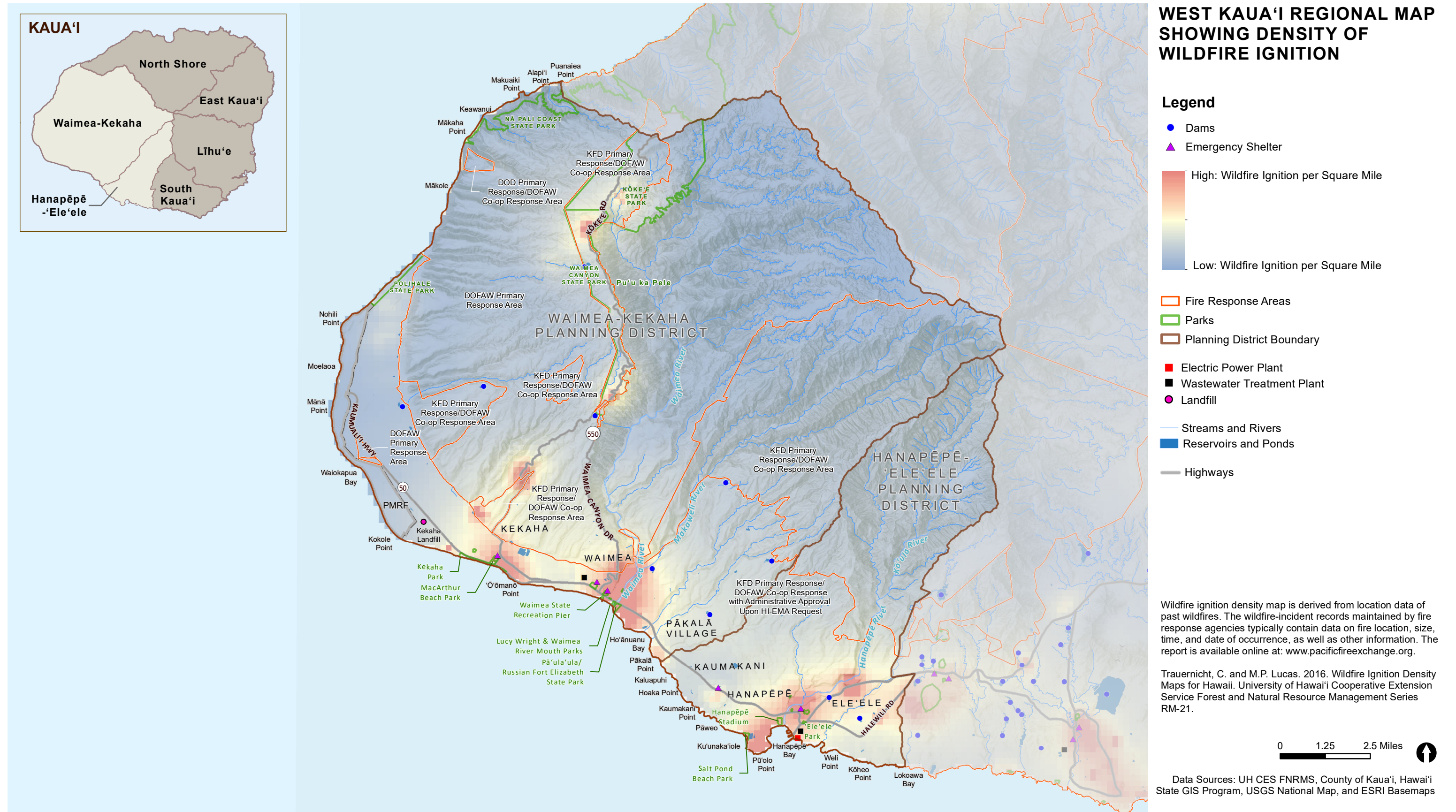


FIGURE 35 | West Kaua'i Regional Map Showing Density of Wildfire Ignition

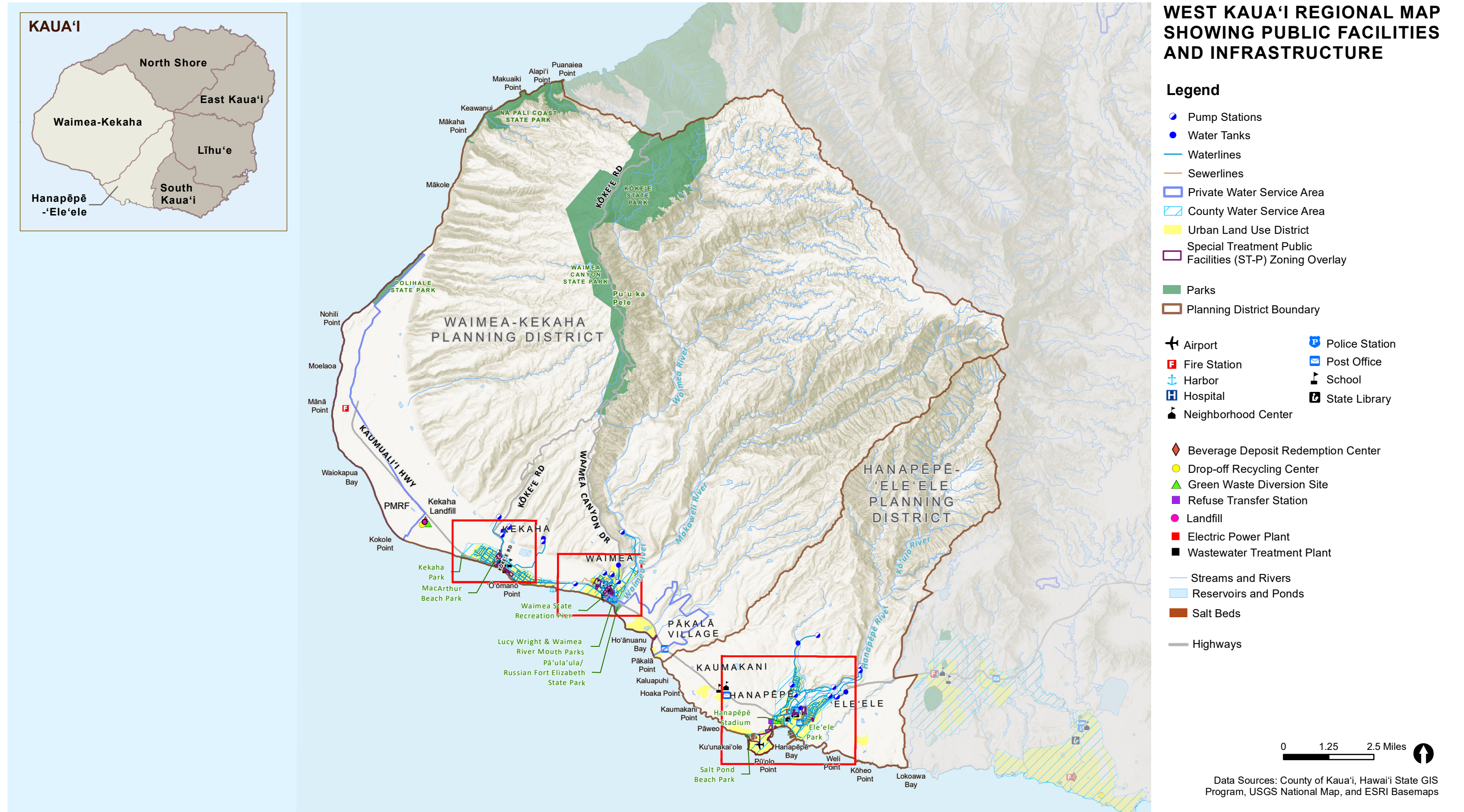


FIGURE 36 | West Kaua'i Regional Map Showing Public Facilities and Infrastructure

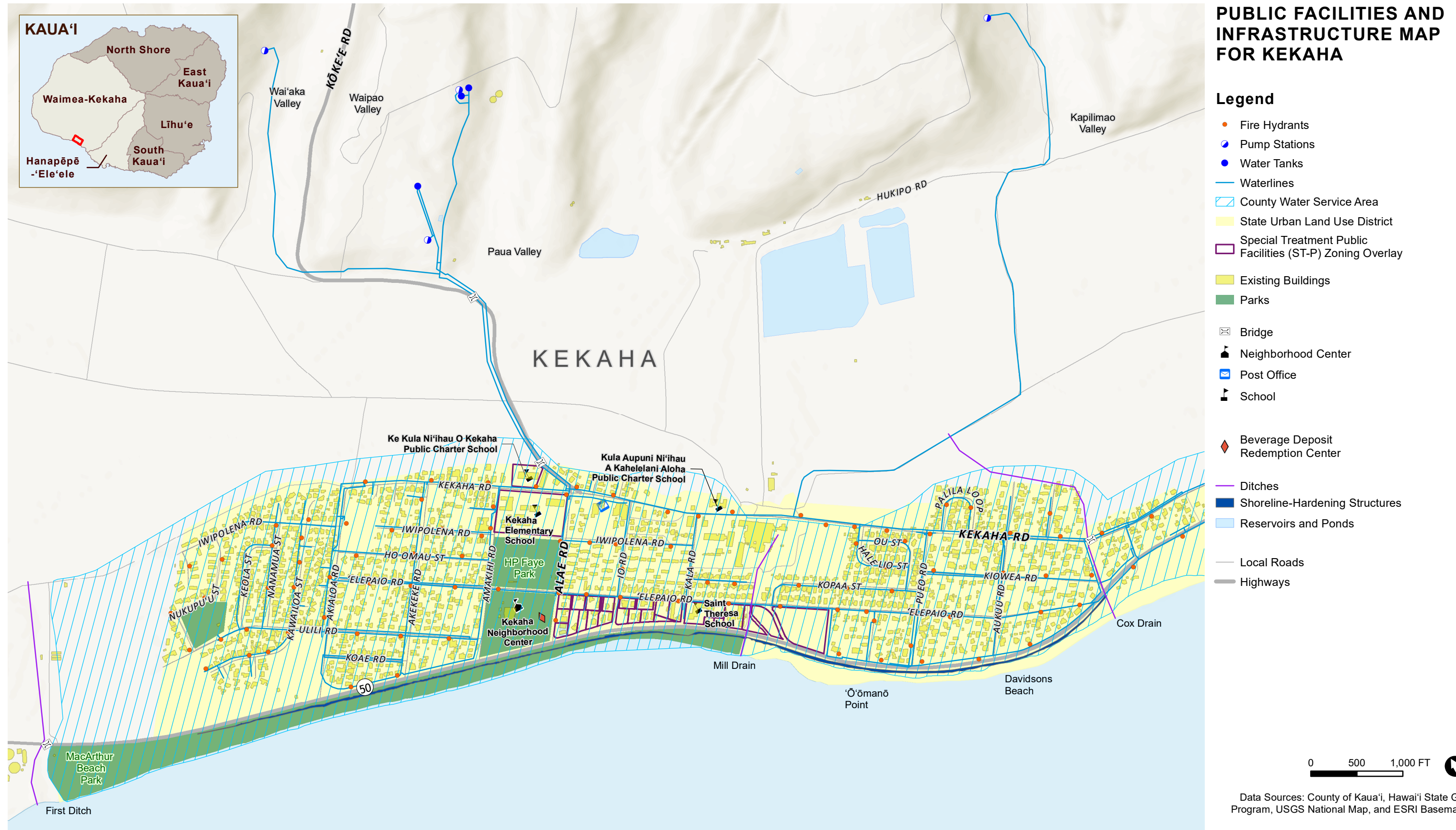


FIGURE 37 | Public Facilities and Infrastructure Map for Kekaha

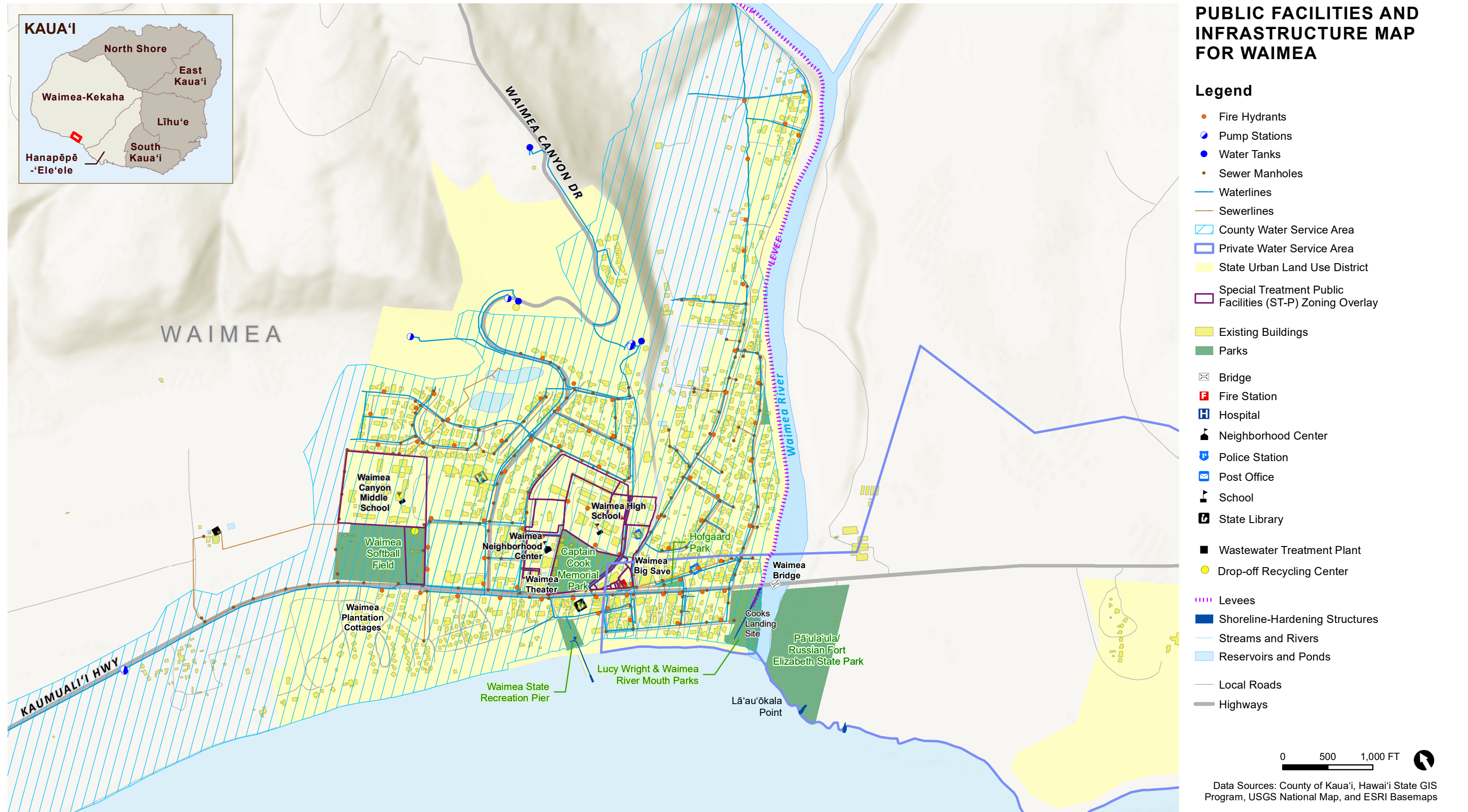


FIGURE 38 | Public Facilities and Infrastructure Map for Waimea

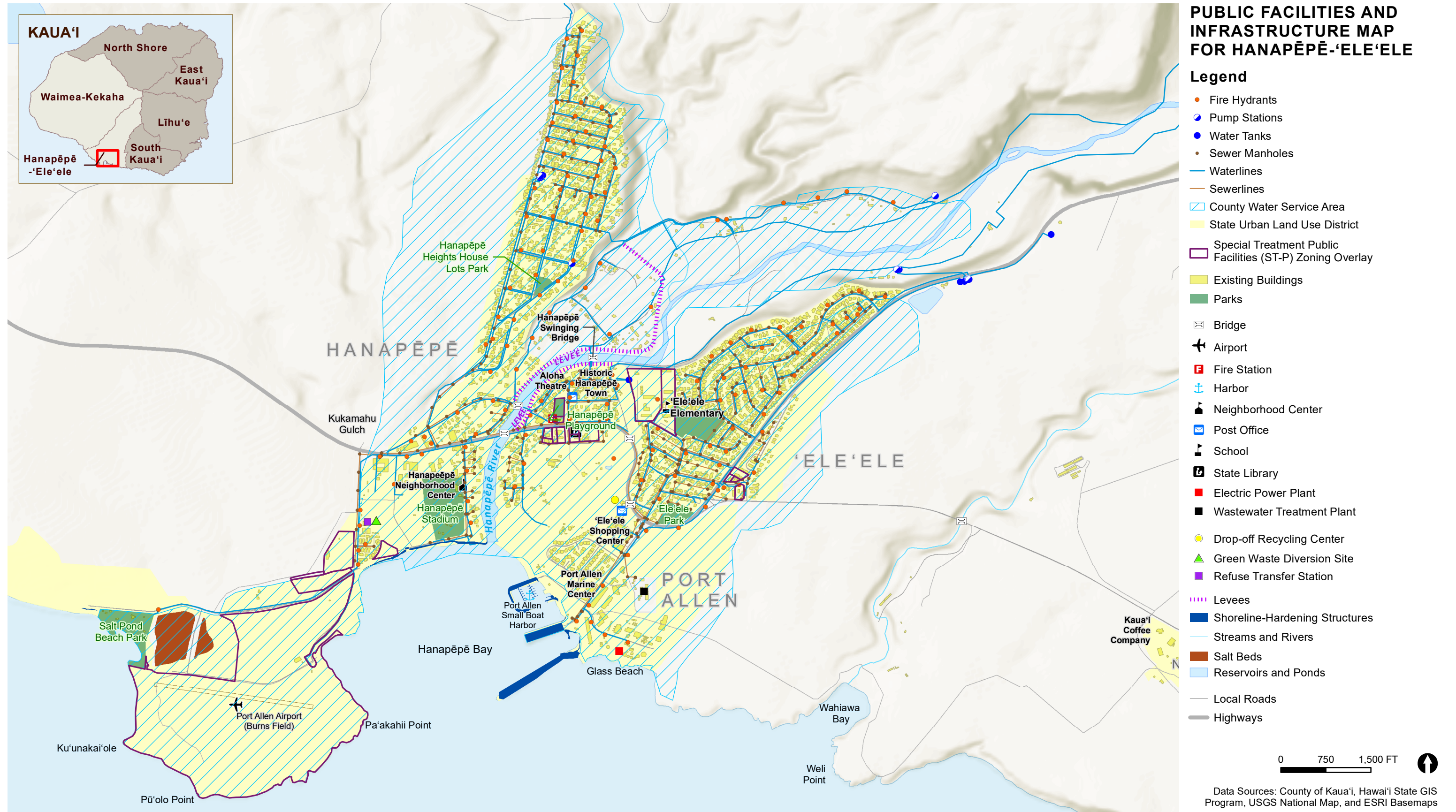


FIGURE 39 | Public Facilities and Infrastructure Map for Hanapēpē-'Ele'ele

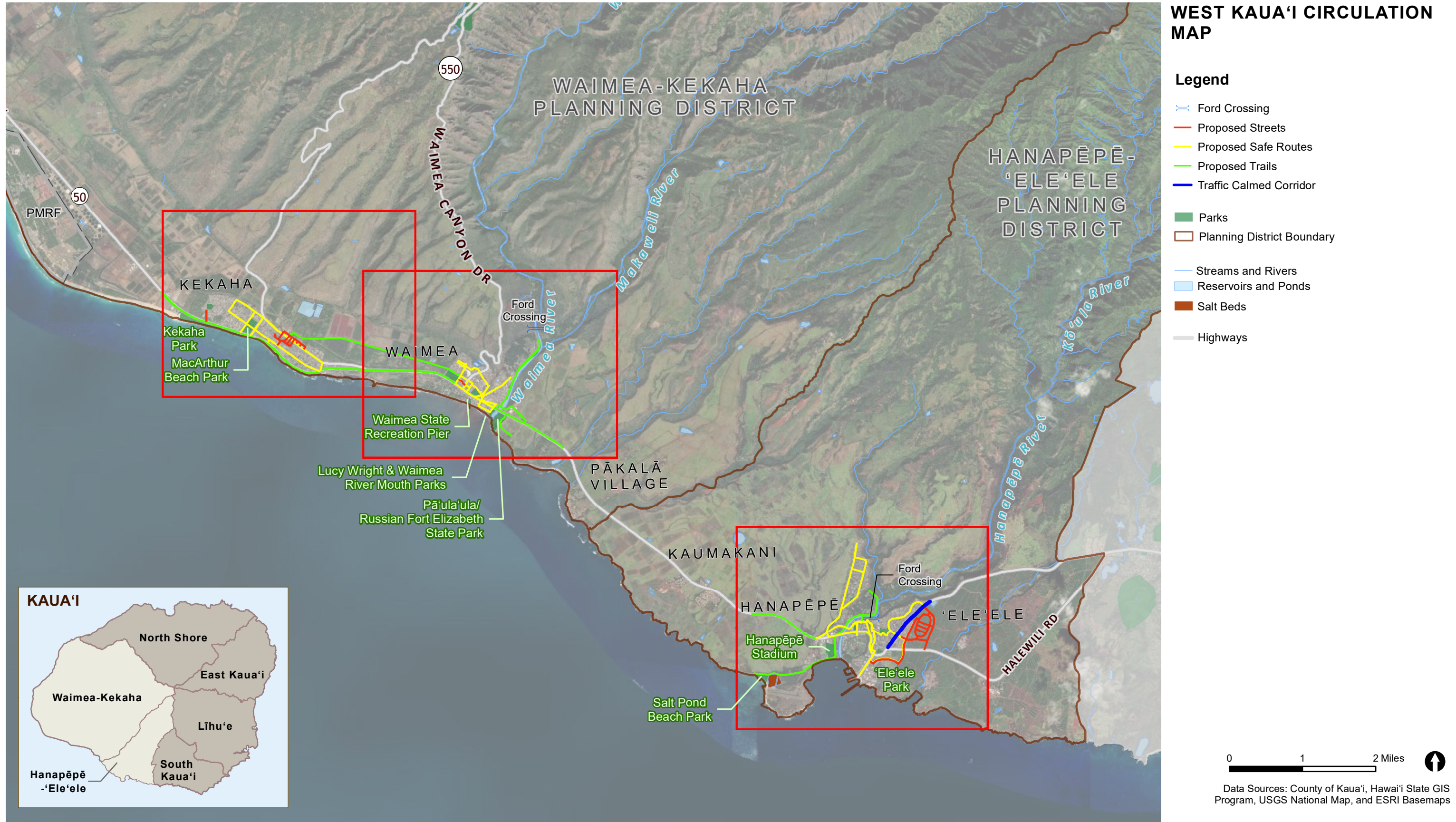


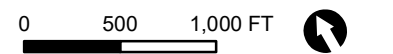
FIGURE 40 | West Kaua'i Circulation Map



KEKAHA CIRCULATION MAP

Legend

- Bus Stops
 - Kekaha Improvements
 - Roundabout
 - Proposed Streets
 - Proposed Safe Routes
 - Proposed Shared-Use Path
 - Local Roads
 - Other Roads
 - Highways
 - Parks
 - Schools/Civic Buildings
- 1 Designate a School Zone on Kaumuali'i Highway near St. Theresa School with lower Speed Limit signage. Add marked crosswalk, RRFB, and lighting at Kala Road intersection.
 - 2 Relocate crosswalk to East side of Kala Road.
 - 3 Pedestrian safety improvements on Kekaha Road near Kekaha Elementary: Relocate crosswalks. Consider restricting commercial center driveway on Kekaha Road side during school pickup and dropoff hours.
 - 4 Address drainage issues along Kekaha Road.
 - 5 Address safety improvements with installation of new intersection with Kaumuali'i Highway and Shared-Use Path.
 - 6 Consider crosswalk and RRFB across Kaumuali'i Highway at Alae Road. Move outdoor shower at the Neighborhood Center closer toward Alae Road intersection to encourage safer pedestrian access.



Data Sources: County of Kaua'i, Hawaii'i State GIS Program, USGS National Map, and ESRI Basemaps

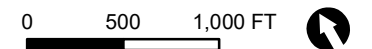
FIGURE 41 | Kekaha Circulation Map



WAIMEA CIRCULATION MAP

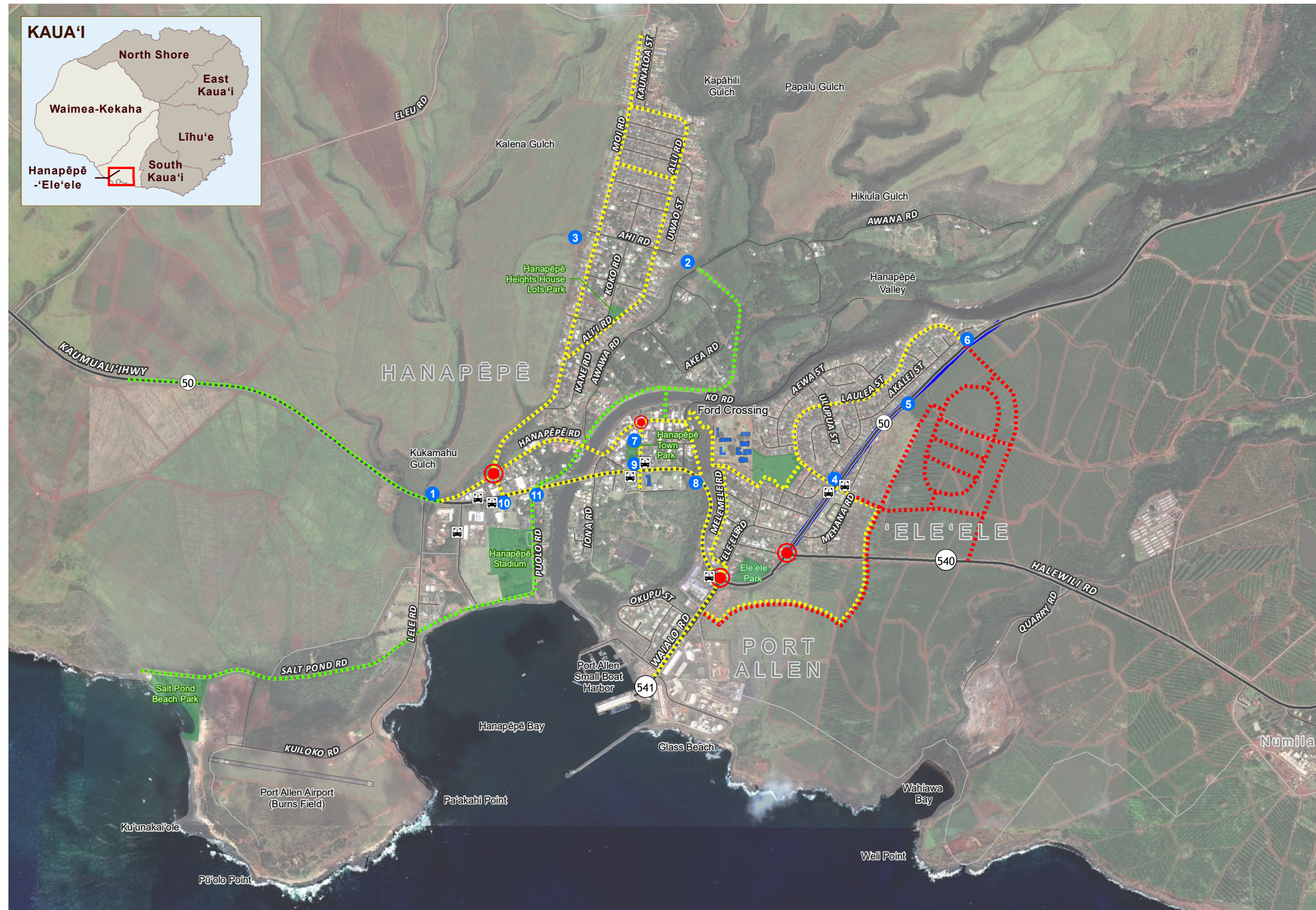
Legend

- Bus Stops
 - Waimea Improvements
 - Roundabout
 - Proposed Streets
 - Proposed Safe Routes
 - Proposed Shared-Use Path
 - Local Roads
 - Other Roads
 - Highways
 - Parks
 - Schools/Civic Buildings
- 1** Consider the design of a Shared-Use Path and bridge that can also serve as an evacuation route for vehicles in the event of an emergency.
 - 2** Short Term: HDOT will construct a traffic signal. Long Term: Consider construction of a roundabout if vehicular congestion worsens due to the traffic light.



Data Sources: County of Kaua'i, Hawai'i State GIS Program, USGS National Map, and ESRI Basemaps

FIGURE 42 | Waimea Circulation Map

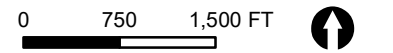


HANAPĒPĒ-'ELE'ELE CIRCULATION MAP

Legend

- Bus Stops
- Hanapēpē Improvements
- Mini Roundabout
- Roundabout
- Proposed Streets
- Proposed Safe Routes
- Proposed Trails
- Traffic Calmed Corridor
- Local Roads
- Other Roads
- Highways
- Parks
- Schools/Civic Buildings

- 1 Add left turn lanes from Kaumuali'i Highway onto Hanapēpē Road (eastbound) and Lele Road (westbound).
- 2 Consider a Shared-Use Path Connector from Hanapēpē Swinging Bridge Trail to Hanapēpē Heights.
- 3 Add a Westside Kaua'i Bus/Shuttle route serving Hanapēpē Heights.
- 4 Add lighting and safety improvements at Mahea Road and Kaumuali'i Highway intersection (ex. crosswalk, RRFB, or pedestrian hybrid beacon).
- 5 Add traffic calming devices, lower speed limit, on approach to Mahea Road intersection.
- 6 Add lighting and safety improvements at Laulea Street and Kaumuali'i Highway intersection with buildout of Lima Ola.
- 7 Add public parking improvements on Kona Road.
- 8 Intersection improvements at Hanapēpē Road and Kaumuali'i Highway: Realign Hanapēpē Road to improve visibility. Add pedestrian safety improvements or remove marked crosswalk.
- 9 Add pedestrian safety improvements at Kona Road and Kaumuali'i Highway intersection.
- 10 Consider alternative Shared-Use Path alignment and Kaumuali'i Highway crossing at the Kaua'i Soto Zen Temple Zenshuji (as opposed to the Pū'olo Road route).
- 11 Safety improvements will be required at this intersection if the Shared-Use Path crosses Kaumuali'i Highway with Pū'olo Road.



Data Sources: County of Kaua'i, Hawai'i State GIS Program, USGS National Map, and ESRI Basemaps

FIGURE 43 | Hanapēpē-'Ele'ele Circulation Map



Planning staff conducts public outreach at Hanapēpē Art Night.

Glossary of Hawaiian Words and Phrases

The following list provides Hawaiian words and phrases, and their corresponding definitions, used throughout this document. The translations are taken and adapted as necessary from **Ulukau**, the Hawaiian Electronic Library, available online at <http://wehewehe.org/> unless otherwise noted.

Ahupua‘a means a land division usually extending from the uplands to the sea, so called because the boundary was marked by a heap (ahu) of stones surmounted by an image of a pig (pua‘a), or because a pig or other tribute was laid on the altar as tax to the Chief. The boundaries of an ahupua‘a is based on the region’s watersheds.

‘Āina, literally “that which feeds,” refers to the land.

‘Ai Pua‘a is “The Rebellion of George Humehume.” In 1824, shortly after the death of King Kaumuali‘i, his son and heir Prince George Humehume joined a group of Kaua‘i chiefs in an unsuccessful rebellion against Kamehameha I, whose forces were armed with guns and other modern weapons. This war is known as ‘Ai Pua‘a or the Eating of Pork. The revolt began at Pā‘ula‘ula (Russian Fort Elizabeth) and ended about ten days later in Wahiawa. Humehume fled to the area above what is known today as Hanapēpē Cliffside. He was later found wandering about “in the most wretched situation... In a dreary wilderness, alone, destitute of food” (Samuel Whitney 1824).

‘Alaea (‘Alae) Pa‘akai means sea salt enriched with minerals. ‘Alaea, also called ‘Alae is red clay that is highly valued for its medicinal properties by traditional healers.

Hana Pa‘akai is the making of salt.

Heiau, literally “ensnare energy,” refers to a traditional place of worship or shrine; some heiau were elaborately constructed stone platforms, others simple earth terraces. Heiau are on land as well as in freshwater and ocean areas.

Iwi means bone; core (as of a speech). The bones of the dead are cherished and hidden.

Kalo (*Colocasia esculenta*) means any variety of indigenous taro.

Kanaka Maoli literally means “original man.” Here it refers to native Hawaiians.

Kiawe (*mesquite* or *Prosopis pallida*) is an invasive fauna.

Ki‘i Pōhaku means petroglyph.

Kūpuna means elders.

Lo‘i means an irrigated terrace or field, such as for taro or salt cultivation, but also for rice; paddy. Traditionally, lo‘i is the smallest unit of land.

Lo‘i kalo means a taro (*Colocasia esculenta*) terrace or field.

Maiapilo (*Capparis spinosa*) also known as the Hawaiian Caper is an endemic coastal shrub with fragrant white flowers and orange berries.

Makai means toward the ocean.

Mauka means inland or toward the upland.

‘Ohana means family and extended family.

‘Ōhai (*Sesbania tomentosa*) is an endemic coastal shrub frequently found on sand dunes. The flowers of the ‘ōhai are orange and its leaves are silvery.

‘Ōpae may refer to several types of ocean or freshwater shrimp or crayfish. However, it is the indigenous ‘ōpae‘ula, which thrive in tidal and anchialine ponds that impart color, taste, and medicinal properties to pa‘akai ‘alaea, along with the minerals found in ‘alaea clay.

Pa‘akai means sea salt.

Pōhaku means stone or rock.

Pōpolo (*Cyanea solanacea*) is an indigenous shrub with small purple berries used for medicinal purposes by traditional healers.

Pueo (*Asio flammeus sandwichensis*) is an endemic subspecies of the short-eared owl.

Pu‘u means hill.

Wahi Pana means legendary place.



The salt beds of Pū‘olo Point. Courtesy of Rick Noyle.

Glossary of Terms

The following list, in alphabetical order, provides definitions for planning terms used throughout this document.

Adaptation a process to adjust to the impacts of climate change. It includes planning actions to reduce the negative impacts of climate change and to use it as an opportunity to make improvements to areas not yet effected.

Affordable Housing housing units where the occupant is paying no more than 30 percent of gross income for housing costs, including taxes and utilities.

Agritourism a form of commercial enterprise that links agricultural production and/or processing with tourism in order to attract visitors onto a farm, ranch, or other agricultural business for the purposes of entertaining and/or educating the visitors and generating income for the farm, ranch, or business owner.

Artisan Production a production process with minimal automation, little division of labor, and a small number of highly skilled craftsman. Participants may be self-employed or employed by a smaller-scale business.

Beach Restoration includes projects that entail beach nourishment, sand pushing, sand backpassing, and sand bypassing to restore eroded areas of a beach using local sand sources that are compatible with the environment.

Boundary Amendment changes to the Hawai'i State Land Use District boundaries. Boundary amendments are approved by the State Land Use Commission.

Buffer are open spaces, landscaped areas, fences, walls, berms, or any of these in combination to physically and visually separate one property or use from another in order to mitigate the impacts of noise, light, or other nuisance.

Built Environment means all physical parts of our communities, such as buildings, streets, infrastructure, and parks.

Buy-back Program an option of managed retreat. With this option the government offers to buy certain properties from its owners in response to hazardous threat from climate change or coastal erosion effecting the property. This is in effort to protect the people from harm and to also have funds to purchase another property.

Capital Improvement Program a proposed schedule of all future projects listed in order of construction priority, along with cost estimates and the anticipated means of financing each project.

Capital Infrastructure a financial structure for future and existing improvement projects.

Cesspool any buried chamber, metal tank, perforated concrete vault (covered hollow), or excavation, which receives or discharges sanitary sewage from a building sewer for the purpose of collecting solids or discharging liquids to the surrounding soil.

Climate Change refers to any significant change in measures of climate (such as temperature, precipitation, or wind) lasting for an extended period (decades or longer). Climate change may result from natural factors, such as changes in the sun's intensity or slow changes in the earth's orbit around the sun; natural processes within the climate system (such as changes in ocean circulation); and human activities that change the atmosphere's composition (such as burning fossil fuels) and the land surface (such as deforestation, reforestation, urbanization or desertification).

Commercial Node a commercial hub or an area with a lot of commercial use.

Community Design Workshop a short-term intensive planning session where residents, designers, and others collaborate on a vision for development. It is also known by the French name, charrette. A charrette workshop is designed to stimulate ideas and involve the public in the community planning and design process.

Community Plan means a public document that provides specific proposals for future land uses, developments, and public improvements in a given community within the County of Kaua'i. In the 2000 General Plan, community plans were referred to as "Development Plans." Community plans are intended to be region specific and capture the community's vision for the area.

Community Rating System (CRS) a voluntary program that recognizes NFIP participating communities that go above and beyond the minimum requirements for floodplain management. Policyholders in participating communities are rewarded with reduced insurance premiums. CRS communities receive various credits for the floodplain management activities they implement. The more credit earned, the better the class ranking of that community. The CRS has 10 classes; a Class 10 ranking has no flood insurance premium reduction, whereas a Class 1 carries the flood maximum discount.

Complete Street a street that is designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities.

Connectivity the ease of travel between two points. Streets or areas are interconnected and easily accessible to one another by direct routes.

Design Standards specific regulations, such as form base code, within SPAs. Design Standards are intended to help to achieve the vision and character that is desired by the community.

Development any building, construction, renovation, mining, extraction, dredging, filling, excavation, or drilling activity or operation; any material change in the use or appearance of any structure or in the land itself; the division of land into parcels; any change in the intensity or use of land, such as an increase in the number of dwelling units in a structure or a change to a commercial or industrial use from a less intensive use; any activity that alters a shore, beach, seacoast, river, stream, lake, pond, canal, marsh, dune area, woodlands, wetland, endangered species habitat, aquifer or other resource area, including coastal construction or other activity (APA Website, 2016).

Development Permits (Land use and building permits collectively) any written approval or decision by a local government under its land development regulations that gives authorization to undertake some category of development, including but not limited to a building permit, zoning permit, final subdivision plat, minor subdivision, resubdivision, conditional use, variance, appeal decision, planned unit development, site plan, certificate of appropriateness, and zoning map amendment(s) by the legislative body (APA Website, 2016).

Development Plan a public document that provides specific proposals for future land uses, developments, and public improvements in a given community within the County of Kaua'i. In the 2000 General Plan, community plans were referred to as "Development Plans." Community plans are intended to be region specific and capture the community's vision for the area.

Development Standards specific regulations, such as lot coverage, building height, and setbacks that guide the placement of development per zoning district.

For example, Residential Development Section 8-4.4 of the CZO Standards states single family detached dwelling units are subject to density and acreage limitations.

Dredging to enlarge or clean out a waterbody, watercourse, or wetland.

Easement a strip of land extending along a property line or across a lot, for which a limited right of use has been or is to be granted for a public or quasi-public purpose and within which the owner of the property shall not erect any permanent structures. Commonly used to protect important open spaces, sensitive natural resources, views, building facades, or interiors.

Economic Development any change in a community that enables greater production, increased employment, and a better distribution of goods and services.

Erosion the wearing away of land by the action of wind, water, gravity or a combination of such.

Estuary a semi-enclosed, naturally existing, coastal oriented body of water in which saltwater is naturally diluted by freshwater and which ultimately has an open connection with oceanic waters.

Euclidean Zoning the most common type of zoning, as-of-right or self-executing zoning: district regulations are explicit; residential, commercial, and industrial uses are segregated; districts are cumulative; and bulk and height controls are imposed. It regulates development through land use classifications and dimensional standards with a focus on separating uses.

Floodplain an area of typically flat land that is susceptible to inundation by water from any source. Floodplains are typically fertile agricultural areas as a result of nutrient-rich sediments deposited by floodwaters.

Food Security exists when all people, at all times, have physical and economic access to sufficient, safe

and nutritious food to meet their dietary needs and food preferences for an active and healthy life.

Form-Based Code (FBC) A method of regulating development to achieve a specific urban form by controlling physical form primarily, with a lesser focus on land use. FBC address the relationship between building facades and the public realm, the form and mass of buildings in relation to one another, and the scale and types of streets and blocks.

Freeboard a factor of safety usually expressed in feet above Base Flood Elevation for purposes of floodplain management.

General Plan The general plan is the foundation for local land use planning. The plan provides a vision for the foreseeable planning horizon – usually 10 to 20 years – and translates it into goals and policies for the physical development of the city or county. All other land use ordinances and policies flow from the general plan. The general plan covers all of the land within the jurisdiction and any additional land that, in the agency's judgment, bears relation to its planning.

Grade-Separated Crossing a crossing for pedestrians that is slightly elevated from the road like a wide speed bump.

Greenfield Development development on undeveloped parcels not surrounded by existing development, or on large parcels surrounding partially developed areas or undeveloped areas.

Green Infrastructure the range of measures that use plant or soil systems, permeable pavement, or other permeable surfaces or substrates, stormwater harvest and reuse, or landscaping to store, infiltrate, or evapotranspire stormwater and reduce flows to sewer systems or to surface waters.

Groundwater water held in underground permeable rock or soil layers. When these layers hold enough water to be usefully extracted for human use, it is called an aquifer.

Hazard any substance, phenomenon, or situation that has the potential to cause disruption or damage to people, their property, their services, and/ or their environment.

Hazard Exposure the nature and degree to which a system, structure, community, or population is exposed to significant climatic hazards such as wildfire, flooding, tsunami, and SLR. Hazard exposure maps are found in Part VI of this plan.

Hazard Mitigation any sustainable action that reduces or eliminates long-term risk to people and property from future disasters. Mitigation planning breaks the cycle of disaster damage, reconstruction and repeated damage. Hazard mitigation includes long-term solutions that reduce the impact of disasters in the future.

Heritage Resources resources, both human and natural, created by activities from the past that remain to inform present and future societies of that past. These resources are tangible and ethereal. They are present in many forms such as scenic corridors, storied sites (kahi pana) and areas (wahi pana), buildings, parks and streets, and even people, especially our kūpuna.

Historic Character describes structures and features of architectural and historic interest. This can pertain to a building, a whole street, block, or area.

Historic Preservation the preservation of historically significant sites, structures, and neighborhoods, including the restoration and rehabilitation of the site(s), structure(s), and neighborhood(s) to a former condition.

Infill Development means building within existing communities. Infill development can expand housing inventory without consuming open space.

Infrastructure the foundational systems and installations necessary to maintain and enhance basic social, economic, governmental, and military functions. These include drinking water systems,

drainage systems, sewers, hurricane defenses, schools, transportation networks, electrical grids, and telecommunications networks.

Intensification to alter the character of a use to the extent that the use generates new or different impacts on the health, safety, or welfare of the surrounding neighborhood, including but not limited to the level or amount of traffic, noise, light, smoke, odor, vibration, outside storage, or other similar conditions associated with the use.

Inundation flooding, the overwhelming of an area by floodwaters.

Land Swap the exchange or “swap” of title to land in perpetuity between two or more property owners as a means to effectuate managed retreat. Land swaps can occur between a government and private landowners, like residents or businesses, or involve other parties or intermediaries, like nonprofits or land trusts.

Land Use the occupation or use of land or water area for any human activity or any purpose defined in the general plan.

Levee a linear earthen ridge that divides areas hydrologically and can be used to protect inhabited areas from flooding. The Waimea and Hanapēpē levees are man-made levees. Many natural levees have been reinforced with additional soil, rock, concrete, and/or grass. Levees are also known as dikes.

Managed Retreat an approach to the effects of climate change, SLR, and coastal erosion in an area that is no longer mitigable and no longer safe to live on or near whereby physical movement of the built environment and infrastructure is necessary. Managed retreat has implementation options, including but not limited to relocation, land swap, and buy-back program.

Mini Park a small neighborhood park of approximately one acre or less.

Mitigation use of any or all of the following actions listed in descending order of preference: (1) avoiding the impact by not taking a certain action; (2) minimizing the impact by limiting the degree or magnitude of the action by using appropriate technology or by taking affirmative steps to avoid or reduce the impact; (3) rectifying the impact by repairing, rehabilitating, or restoring the affected critical area or buffer; (4) reducing or eliminating the impact over time by preservation or maintenance operations during the life of the development proposal; (5) compensating for the impact by replacing, enhancing, or providing substitute critical areas and environments; and (6) monitoring the impact and taking appropriate corrective measures.

Mixed-Use a building or district which combines different land uses such as housing, retail, and office uses. Vertical mixed-use refers to a mix of uses on different floors in a single building. Typical early 20th century commercial buildings were designed to accommodate vertical mixed uses- stores on the first floor and residences or offices on upper floors.

Mode Shift changes in percentage of trips taken via single-occupancy vehicle to active transportation modes such as walking, biking, and transit.

Multi-Family Development development for multiple families, such as multi-family housing.

Multi-Family Housing two or more housing units within a single building, or there are separate housing units within one housing complex.

Multimodal Transportation also known as combined transportation, at least two different modes of transport.

National Flood Insurance Program (NFIP) FEMA's flood insurance coverage and floodplain management system.

Non-conforming a use or structure that was valid when brought into existence, but by subsequent regulation becomes no longer conforming. It is

a generic term and includes (1) non-conforming structures (by virtue of size, type of construction, location on land, or proximity to other structures), (2) non-conforming use of a conforming building, (3) non-conforming use of a non-conforming building, and (4) non-conforming use of land. Thus, any use lawfully existing on any piece of property that is inconsistent with a new or amended plan, and that in turn is a violation of a zoning ordinance amendment subsequently adopted in conformance with the plan, will be a non-conforming use. Typically, non-conforming uses are permitted to continue for a designated period of time, subject to certain restrictions.

Parcel any legally described piece of land designated by the owner or developer as land to be used or developed as a unit, or land that has already been developed as a unit.

Passive Flooding a static rise in water levels from SLR that has been modeled by the University of Hawai'i School of Ocean and Earth Science and Technology Coastal Geology Group using a modified "bathtub" approach. Passive flooding from SLR includes areas that are hydrologically connected to the ocean (marine flooding) and low-lying areas that are not hydrologically connected to the ocean (groundwater). Passive flooding does not include seasonal wave inundation and higher erosion due to SLR.

Planning Horizon the length of time into the future that is accounted for in a particular plan. For example, if a company wishes to make a contingency plan for the next 10 years, it is said to have a 10-year planning horizon.

Plantation Camps areas where housing was originally provided by plantation companies for their workers and respective families.

Plantation Era a distinct period of history in Hawai'i. From the year 1835 to 2009, the sugar plantations and the sugar industry played a significant role on Kaua'i.

Hapai Ko



Hapai Ko. A History of Japanese in Hawai'i (1971), [circa 1902]

For many years prior to the 1930s, when cranes with mechanical grabs were first used to load and cut sugarcane into train cars in the fields for delivery to sugar mills, large gangs of men harvested sugarcane manually.

These men would cut cane stalks close to the ground

with sharp cane knives for hapai ko (to lift sugarcane) men to raise onto their shoulders and carry to cane cars, where they would trudge up wooden ramps to drop the cane inside.

They toiled six days a week, 10 hours a day, week-in and week-out at these tough jobs, all done under the ever-watchful eyes of harvesting lunas (overseers) on horseback, ensuring the work proceeded on schedule.

Still, workers took pride in their labor, and on Kaua'i, competitions were held to determine which sugar plantation had the best hapai ko men.

One such contest occurred on May 31, 1919, in Līhu'e, beginning at 3 p.m. before several hundred spectators. Of Kaua'i's nine sugar plantations, only Waimea and Kilauea did not compete.

Each competing plantation entered at least one two-man team.

The conditions for the contest were that teams would start at the same time and continue loading cane into their cars for 30 minutes. Two hapai ko ramps were allowed per team, one for each man, which allowed the men to load from two sides of their car. Immediately after the contest, the cars would be weighed at the Līhu'e mill. The team with the greatest weight would be judged the winner.

McBryde Sugar Company's team won the contest with more than five tons (10,375 pounds) of cane loaded in 30 minutes.

By Hank Soboleski,
published in the TGI newspaper January 26, 2007

Pocket Park a small park in an urban area.

Preservation stabilizing and maintaining a structure in its existing form and preventing further change or deterioration. This allows the continued use of deteriorated old and historic buildings, sites, structures, and objects. Preservation includes restoration, rehabilitation, and adaptive reuse. The main priority is to sustain the existing form, integrity, and material of a building or structure, and the existing vegetative cover of the site. Preservation may include stabilization work and maintenance of the historic building materials.

Provisional Area an area on the Land Use Map to be defined and designated via a future Community Planning process due to the sensitivity of its potential regional impact. The regional Community Planning policy, once adopted by ordinance, is considered consistent with this plan.

Redevelopment any proposed expansion, addition, or major facade change to an existing building, structure, or parking facility.

Regional pertaining to activities or economies at a scale greater than that of a single jurisdiction, and affecting a broad geographic area.

Rehabilitation the act or process of returning a property to its functionality. The architecture of the structure is kept through repair or alteration. It creates contemporary use while preserving the historical significance, architectural significance, and cultural values throughout portions or features of the property.

Relocation an option of managed retreat. The instance where communities would relocate to another area permanently due to climate change, SLR, coastal erosion, and other hazards.

Remediation the action, measures taken or to be taken, to lessen, clean-up, remove, or mitigate the existence of hazardous materials existing on the property to such standards, specifications, or

requirements as may be established or required by federal, state, or county statute, rule, or regulation.

Resilience the capacity of individuals, communities, and systems to survive, adapt, and grow no matter what kinds of chronic stresses and acute shocks they experience.

Restoration the act or process of accurately recovering the form and details of a property and its setting as it appeared at a particular period of time, such as a house museum to the time period of a famous resident, by means of the removal of later work or by the replacement of missing earlier work.

Revetment a passive structure protecting against erosion caused by wave action, storm surge and currents. Not the same as a seawall. A seawall protects against erosion and flooding, a revetment only protects against erosion.

Revitalization re-establishing the economic and social vitality of urban areas through infill, legislation, tax incentives, commercial development, etc. within existing urban areas to take advantage of existing investments in infrastructure and reduce the negative impacts of urban sprawl.

Rezoning the action or process of assigning land or property to a different category of restrictions for its use and development.

Rock Quarry an open-pit mine where dimension stone, rock, construction aggregate, riprap, sand, gravel, or slate is excavated from the ground.

Roundabout a raised island that is usually landscaped and located at the intersection of two streets used to reduce traffic speeds and accidents without diverting traffic onto adjacent residential streets.

Rural a sparsely developed area where the land is primarily used for farming, forestry, resource extraction, very low-density residential uses (one unit per 10 acres or less), or open space uses.

Safe Routes primarily street networks that safely accommodate pedestrians and bicyclists to get from homes to schools, parks, shops, jobs, and services.

Seawall a wall or embankment designed to halt the encroachment of a waterbody.

Sea Level Rise (SLR) an increase in the mean sea level, caused by changes in air temperatures that are linked to global climate change. SLR is a growing risk to low-lying coastal communities.

Sea Level Rise Exposure Area (SLR-XA) a combined area defined by modeling three chronic flooding hazards with SLR (passive flooding, annual high wave flooding, and coastal erosion) for the Hawai'i Sea Level Rise Vulnerability and Adaptation Report (Hawai'i Climate Mitigation and Adaptation Commission, 2017). The SLR-XA is associated with long-term, chronic flooding hazards and land loss occurring on an annual to permanent basis. The three hazards were modeled at a range of future SLR scenarios.

Setback the requirement (a zoning code standard) that a building be set back a certain distance from the street or lot line.

Sewer System a wastewater treatment system, approved by the appropriate county, state, city, or federal agencies, which provides a collection network and a central wastewater treatment facility for a single development, a community, or a region.

Shared Spaces also known as “civic spaces,” these are places used for everyday community activities such as shopping, recreation, spirituality, and socializing.

Shared-Use Paths an infrastructure that supports multiple recreation and transportation opportunities, such as walking, bicycling, inline skating and people in wheelchairs.

Single-Family Housing a building consisting of only one dwelling unit designed for or occupied exclusively by one family.

Special Planning Areas (SPAs) an established area created to address local town design and land use concerns when the countywide zoning regulations could not. The SPA allows uses, regulations, and standards that would not be allowed under the countywide regulations.

Special Treatment District an additional layer of land use regulations—or relief from certain regulations—overlaid on zoning districts. Special Treatment Districts usually apply to a specific geography and can span one or more zoning districts.

Sprawl a pattern of low density development dispersed over land previously undeveloped or in agricultural use. Characteristics of sprawl include single-use zoning that often separates housing from jobs and commercial centers; low-density land use focused on single-family homes; and automobile dependent communities with extensive land devoted to parking that often require residents to commute and conduct errands by car. Sprawl tends to be more costly to serve with public infrastructure and more damaging to the natural environment than more compact, moderate, and high density development. Residents of sprawling neighborhoods tend to emit more pollution per person and suffer more traffic fatalities. Sprawl is also linked with increased obesity because walking and bicycling are often not viable commuting options. Sprawl is controversial, however, with supporters claiming that consumers prefer lower density neighborhoods and that sprawl does not necessarily increase traffic.

Stormwater the flow of water as a result of heavy rainfall.

Streetscape the character or scene observed along a street and as created by natural and manmade components, including width, paving materials,

plantings, lamp posts, traffic lights, benches, and the forms of surrounding buildings.

Subdivision means the division of land or the consolidation and resubdivision into two or more lots or parcels for the purpose of transfer, sale, lease, or building development. The term also includes a building or group of buildings, other than a hotel, containing or divided into two or more dwelling units or lodging units.

Traffic Calming the installation of speed humps, traffic circles, or similar devices intended to discourage speeding or to discourage through traffic.

Transportation the action of transporting someone or something or the process of being transported.

Town Centers/Town Cores the central part or main business and commercial area of a town.

Town Design a process of designing and shaping the physical features of cities/towns and planning the provision of municipal services to residents and visitors.

Value-Added Products/Manufacturing value-added is an economic term to express the difference between the value of goods and the cost of materials or supplies that are used in producing them. Value added includes wages, salaries, interest, depreciation, rent, taxes, and profit.

Vulnerability constraints of an economic, social, physical, or geographic nature that increase exposure to risk and/or reduce the ability to prepare for and cope with impacts of disasters and disruptions.

Walkability Communities where goods (such as housing, offices, and retail) and services (such as transportation, schools, and libraries) that a community resident or employee needs on a regular basis are located within an easy and safe walk. Walkable communities facilitate pedestrian activity, expanding transportation options, and creating a streetscape that better serves a range of users—

pedestrians, bicyclists, transit riders, and automobiles. To foster walkability, communities typically mix land uses, build compactly, and ensure safe and inviting pedestrian corridors.

Watershed an area of land that feeds water running under it into a body of water. It connects with other watersheds to form a network of rivers and streams that drain into larger water areas.

Wetlands ecosystems that are saturated with water, including bottomland hardwood forests, swamps, marshes, and bayous. The presence of water drives the nature of soil development as well as characteristic plant and animal communities living in and above soil. Wetlands are natural storm buffers that store and filter runoff. They are also habitats that support hundreds of thousands of species of plants and animals as well as myriad fishing, hunting, agriculture, and recreational uses.

Workforce Housing is housing that is affordable to workers and close to their jobs. It is housing for public employees – teachers, police officers, firefighters, and others who are integral to a community, yet who often cannot afford to live in the communities they serve.

Zoning the division of a city or county by legislative regulations into areas, or zones, that specify allowable uses for real property and size restrictions for buildings within these areas; a program that implements policies of the general plan.

Zoning Amendment means changes or additions to the County of Kaua'i CZO. Section 8-3.4 of the CZO states amendments may be made whenever public necessity, convenience, and general welfare require an amendment.

Zoning Ordinance divides a locality into discrete zones, each with specific regulations on permitted land uses and development densities.



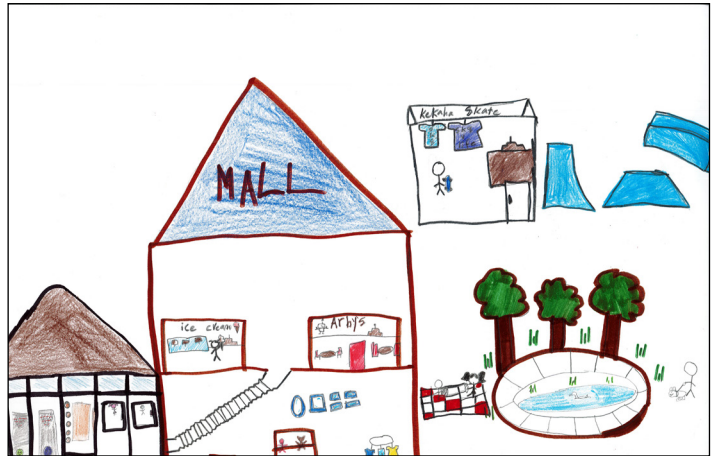
1st Place - Kaohu Nakaya, Grade K, Ke Kula Ni'ihau o Kekaha



2nd Place - Kinohi Kanahelo, Grade 1, Ke Kula Ni'ihau o Kekaha



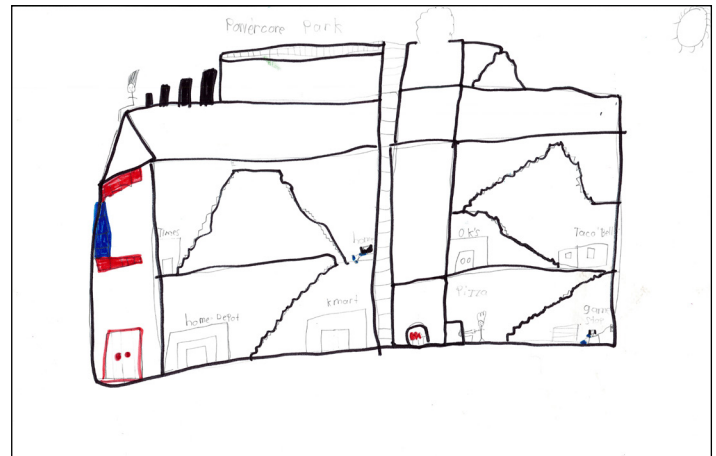
1st Place - Laulea Kauwe, Grade 2, Kekaha Elementary



2nd Place - Pialihoa Nakaya, Grade 8, Ke Kula Ni'ihau o Kekaha



1st Place - Taera Gandeza, Grade 3, Kekaha Elementary



2nd Place - Kulana N., Grade 5, Ke Kula Ni'ihau o Kekaha



1st Place - Leialoha Nakaya, Grade 8, Ke Kula Ni'ihau o Kekaha



2nd Place - Jude Bolyard, Grade 2, Kekaha Elementary



1906



1936



1939



1940



1964



1964



1992



1994



1984

- 1900** Rice cultivation declines. 1900–1930, rice fields are converted into sugar fields in Mānā.
- 1902** The Garden Island Newspaper is established.
- 1903** Korean immigrants first settle on Kauaʻi.
- 1904** H.P. Faye purchases Waimea Dairy.
- 1905** Kauaʻi County Government is established.
- 1906** **Kauaʻi Railway constructed.**
Immigrants from the Philippines first arrive on Kauaʻi.
- 1907** The first roads to accommodate automobiles are built.
- 1911** Cross-island telephone service established.
Hanapēpē Swinging Bridge is built.
- 1914** World War I (1914–1918).
- 1921** Kekaha Sugar reserves a portion of Nohili for private planes.
- 1923** Kekaha Sugar begins draining the Mānā Plains (wetlands) which covers roughly 1,700 acres from Mānā to Waimea.
C.B. Hofgaard sells his store to American Factors (Amfac) who continues to sell merchandise.
- 1924** Filipino Workers Strike against Sugar Plantations, a.k.a. “Hanapēpē Massacre.”
- 1935** Waimea High School expands from K to 12.
Port Allen (originally named ‘Eleʻele Landing) is established. It is named for Samuel Clesson Allen, a businessman and financial broker for the port.
- 1936** **Aloha Theatre in Hanapēpē Town opens.**
- 1938** Kauaʻi Veterans Memorial Hospital opens.
Waimea Theater opens.
- 1939** **World War II (1939–1945).**
- 1940** **U.S. Army takes over Nohili and renames it Mānā Airport.**
- 1941** With the attack on Pearl Harbor, the U.S. becomes involved in WWII.
- 1947** H.S. Kawakami buys and renovates the Hofgaard Store.
- 1950** Korean War (1950–1953).
First Constitutional Convention. The purpose of this event was to draft Hawaiʻi’s Constitution to become a state of the U.S.
- 1955** Vietnam War (1955–1975).
- 1959** Statehood.
- 1961** State Land Use laws adopted. Maps designating Urban, Agriculture, Rural, and Conservation Districts are established.
- 1964** PMRF and Bonham are transferred to the Navy.
Hui Hana Paʻakai o Hanapēpē is established. The Hui represents 22 ʻohana who are traditional salt makers and stewards of Pūʻolo.
- Meadow Gold purchases Waimea Dairy (company, not land) from the Faye family.**
- 1968** DuPont Pioneer begins scientific research and cultivation of corn and soybean seeds in Kekaha.
- 1969** Waimea Sugar Mill Company closes.
Kauaʻi County Charter adopted.
- 1971** Kauaʻi General Plan adopted.
- 1972** Kauaʻi County Zoning Ordinance adopted.
- 1972** Waimea Canyon Elementary School opens.
- 1973** First stoplight is installed on island. Anti-development protests begin in the early 70s.
- 1978** Second Constitutional Convention establishes state offices, budget requirements, and return of federal lands (Kahoʻolawe). The Office of Hawaiian Affairs is established.
Waimea Canyon School adds grades 7–8 and Waimea High School services grades 9–12.
- 1981** Aloha Theatre closes.
- 1982** Hurricane ʻIwa.
- 1984** **The first indigenous immersion preschool in the United States, Punana Leo Hawaiian Language Preschool, opens in Kekaha.**
- 1986** Kaʻawanui Store in Kaʻawanui Village (also known as Camp 6) closes.
- 1987** Act 57, Section 30 relating to English language in schools is repealed.
- 1989** Mānā Camp closes.
Waimea Dairy closes.
- 1992** **Hurricane ʻIniki.**
- 1993** West Kauaʻi Main Street leases Waimea Theatre and begins to restore the building in order to reopen it.
- 1994** **Amfac/JMB consolidates Kekaha Sugar with Līhuʻe Plantation.**
- 1996** McBryde Plantation closes.
- 2000** Amfac closes Kekaha Plantation.
- 2009** Gay & Robinson Plantation (last plantation on Kauaʻi) closes.



Point

DISMANTLED
MANO

Kaunoho Ridge

Polihale Ridge

Lapa Ridge

Mano Ridge

Mly Ridge

Pūu Oppa

Kaunalewa Puehu Ridge

Waikaka Valley

Waimea River

MARKING SANDS
MILITARY RESERVATION

Light

Kokole Point

Oomano Point

Laauokala

Makav